**Third Generation Partnership Project (3GPP™)**

**DRAFT Meeting Report  
for  
TSG RAN WG4  
meeting: e**

**Electronic Meeting, Online, 25/05/2020 to 05/06/2020**

Report generated on Monday, 2020-05-18 21:15 UTC

Contents:

1 Opening of the E-meeting 10

2 Approval of the agenda 11

3 Letters / reports from other groups / meetings 11

4 Rel15 New radio access technology 16

4.1 NE-DC, NGEN-DC, and NR-NR DC Maintenance [NR\_newRAT-Core] 16

4.2 System Parameters Maintenance [NR\_newRAT-Core] 17

4.3 SUL and LTE-NR co-existence maintenance [NR\_newRAT-Core] 25

4.4 UE RF requirements maintenance [NR\_newRAT] 25

4.4.1 DC combination including NR carrier and/or NR CA combination maintenance [NR\_newRAT-Core] 25

4.4.1.1 Maintenance for bands and band combinations in 38.101-1 [NR\_newRAT-Core] 25

4.4.1.2 Maintenance for bands and band combinations in 38.101-2 [NR\_newRAT-Core] 27

4.4.1.3 Maintenance for combinations in 38.101-3 [NR\_newRAT-Core] 28

4.4.2 [FR1] Maintenance for general requirements in 38.101-1 [NR\_newRAT-Core] 31

4.4.2.1 Power class related to UL MIMO and other related req. (MPR, SEM, etc) [NR\_newRAT-Core] 33

4.4.2.2 Other Tx requirements [NR\_newRAT-Core] 39

4.4.2.3 Maintenance for Receiver characteristics [NR\_newRAT-Core] 43

4.4.3 [FR2] Maintenance for general requirements in 38.101-2 [NR\_newRAT-Core] 47

4.4.3.1 Regulatory Tx/Rx spurious emission limits handling [NR\_newRAT-Core] 47

4.4.3.2 Maintenance for Transmitter characteristics [NR\_newRAT-Core] 50

4.4.3.3 Maintenance for Receiver characteristics [NR\_newRAT-Core] 56

4.4.4 Maintenance for general requirements in 38.101-3 [NR\_newRAT-Core] 57

4.4.4.1 [FR1] Maintenance for Transmitter characteristics within FR1 [NR\_newRAT-Core] 59

4.4.4.2 [FR1+FR2] Maintenance for Transmitter characteristics involving both FR1 and FR2 [NR\_newRAT-Core] 61

4.4.4.3 [FR1] Maintenance for Receiver characteristics within FR1 [NR\_newRAT-Core] 61

4.4.4.4 [FR1+FR2] Maintenance for Receiver characteristics involving both FR1 and FR2 [NR\_newRAT-Core] 63

4.4.5 Editorial CRs [NR\_newRAT-Core] 63

4.5 UE EMC [NR\_newRAT-Core] 66

4.6 BS RF [NR\_newRAT-Core] 72

4.6.1 General [NR\_newRAT-Core] 72

4.6.2 Editorial CRs [NR\_newRAT-Core] 75

4.6.3 Transmitter characteristics maintenance [NR\_newRAT-Core] 75

4.6.4 Receiver characteristics maintenance [NR\_newRAT-Core] 83

4.7 BS conformance testing [NR\_newRAT-Perf] 84

4.7.1 General [NR\_newRAT-Perf] 84

4.7.2 Editorial CRs [NR\_newRAT-Perf/Core] 85

4.7.3 BS specifications clean-ups (including conformance testing and core) [NR\_newRAT-Perf/Core] 85

4.7.3.1 eAAS specifications [NR\_newRAT-Perf/Core] 85

4.7.3.2 MSR specifications [NR\_newRAT-Perf/Core] 90

4.7.3.3 NR conformance testing specifications [NR\_newRAT-Perf] 92

4.7.4 Conducted conformance testing (38.141-1) [NR\_newRAT-Perf] 100

4.7.5 Radiated conformance testing (38.141-2) [NR\_newRAT-Perf] 101

4.8 BS EMC [NR\_newRAT-Core] 103

4.8.1 Editorial CRs [NR\_newRAT-Perf/Core] 103

4.8.2 Core requirements [NR\_newRAT-Core] 103

4.8.2.1 Emission requirements [NR\_newRAT-Core] 103

4.8.2.2 Immunity requirements [NR\_newRAT-Core] 104

4.8.3 Performance requirements [NR\_newRAT-Perf] 104

4.9 RRM core maintenance (38.133/36.133) [NR\_newRAT-Core] 105

4.9.1 General [NR\_newRAT-Core] 105

4.9.2 Editorial CRs [NR\_newRAT-Core] 105

4.9.3 UE measurement capability (38.133/36.133) [NR\_newRAT-Core] 107

4.9.4 RRM measurement and measurement gap (38.133/36.133) [NR\_newRAT-Core] 111

4.9.5 Connected state mobility (38.133/36.133) [NR\_newRAT-Core] 112

4.9.6 Timing (38.133/36.133) [NR\_newRAT-Core] 114

4.9.7 Signaling characteristics (38.133/36.133) [NR\_newRAT-Core] 114

4.9.8 Beam management based on SSB and/or CSI-RS (38.133) [NR\_newRAT-Core] 123

4.9.9 Other requirements [NR\_newRAT-Core] 126

4.10 RRM perf maintenance (38.133/36.133) [NR\_newRAT-Perf] 126

4.10.1 General [NR\_newRAT-Perf] 126

4.10.2 Editorial CRs [NR\_newRAT-Perf] 128

4.10.3 RRM test cases [NR\_newRAT-Perf] 128

4.11 Demodulation and CSI maintenance [NR\_newRAT-Perf] 147

4.11.1 Editorial CRs [NR\_newRAT-Perf] 147

4.11.2 UE demodulation and CSI (38.101-4) [NR\_newRAT-Perf] 148

4.11.3 BS demodulation (38.104) [NR\_newRAT-Perf] 151

4.12 Maintenance of the Positioning specs (36.171, 37.171 and 38.171) [NR\_newRAT-Perf or TEI] 154

4.13 Testability Maintenance (38.810) [FS\_NR\_test\_methods] 154

5 Rel-16 Work Items for LTE 155

5.1 LTE intra-band Carrier Aggregation for x CC DL/y CC UL including contiguous and non-contiguous spectrum (x>=y) [LTE\_CA\_R16\_intra] 155

5.1.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_intra-Core/Perf] 155

5.1.2 UE RF [LTE\_CA\_R16\_intra-Core] 156

5.2 LTE inter-band Carrier Aggregation for 2 bands DL with 1 band UL [LTE\_CA\_R16\_2BDL\_1BUL] 157

5.2.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_2BDL\_1BUL-Core/Perf] 157

5.2.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_2BDL\_1BUL-Core] 158

5.2.3 UE RF without specific issues [LTE\_CA\_R16\_2BDL\_1BUL-Core] 158

5.3 LTE inter-band Carrier Aggregation for 3 bands DL with 1 band UL [LTE\_CA\_R16\_3BDL\_1BUL] 158

5.3.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_3BDL\_1BUL-Core/Perf] 158

5.3.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_3BDL\_1BUL-Core] 158

5.3.3 UE RF without specific issues [LTE\_CA\_R16\_3BDL\_1BUL-Core] 158

5.4 LTE inter-band Carrier Aggregation for x bands DL (x=4, 5) with 1 band UL [LTE\_CA\_R16\_xBDL\_1BUL] 159

5.4.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_xBDL\_1BUL-Core] 159

5.4.2 UE RF with 4 LTE bands CA [LTE\_CA\_R16\_xBDL\_1BUL-Core] 159

5.4.3 UE RF with 5 LTE bands CA [LTE\_CA\_R16\_xBDL\_1BUL-Core] 159

5.5 LTE inter-band Carrier Aggregation for 2 bands DL with 2 band UL [LTE\_CA\_R16\_2BDL\_2BUL] 159

5.5.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_2BDL\_2BUL-Core] 159

5.5.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_2BDL\_2BUL-Core] 160

5.5.3 UE RF without specific issues [LTE\_CA\_R16\_2BDL\_2BUL-Core] 160

5.6 LTE inter-band Carrier Aggregation for x bands DL (x= 3, 4, 5) with 2 band UL [LTE\_CA\_R16\_xBDL\_2BUL] 161

5.6.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_xBDL\_2BUL-Core] 161

5.6.2 UE RF with MSD [LTE\_CA\_R16\_xBDL\_2BUL-Core] 161

5.6.3 UE RF without MSD [LTE\_CA\_R16\_xBDL\_2BUL-Core] 162

5.7 RRM for LTE CA basket WI-s [LTE\_CA\_R16\_xxxx] 163

5.7.1 RRM Core (36.133) [LTE\_CA\_R16\_xxxx-Core] 163

5.7.2 RRM Perf (36.133) [LTE\_CA\_R16\_xxxx-Perf] 163

5.8 Additional LTE bands for UE category M1 and/or NB1 in Rel-16 [LTE\_bands\_R16\_M1\_NB1] 163

5.8.1 RF [LTE\_bands\_R16\_M1\_NB1-Core] 163

5.8.2 Others [LTE\_bands\_R16\_M1\_NB1-Perf] 163

5.9 Additional LTE bands for UE category M2 and/or NB2 in in Rel-16 [LTE\_bands\_R16\_M2\_NB2] 164

5.9.1 RF [LTE\_bands\_R16\_M2\_NB2-Core] 164

5.9.2 Others [LTE\_bands\_R15\_M2\_NB2-Perf] 164

5.10 Additional MTC enhancements for LTE [LTE\_eMTC5] 164

5.10.1 General [LTE\_eMTC5] 164

5.10.2 Coexistence with NR [LTE\_eMTC5] 164

5.10.3 RRM core requirements (36.133) [LTE\_eMTC5-Core] 165

5.10.3.1 DL quality report in MSG3 and connected mode [LTE\_eMTC5-Core] 165

5.10.3.2 WUS [LTE\_eMTC5-Core] 166

5.10.3.3 MPDCCH performance improvement [LTE\_eMTC5-Core] 166

5.10.3.4 PUR [LTE\_eMTC5-Core] 166

5.10.3.5 Mobility enhancement [LTE\_eMTC5-Core] 168

5.10.3.6 Others [LTE\_eMTC5-Core] 170

5.10.4 Demodulation and CSI requirements (36.101/36.104) [LTE\_eMTC5-Perf] 170

5.11 Additional enhancements for NB-IoT [NB\_IOTenh3] 172

5.11.1 General [NB\_IOTenh3] 172

5.11.2 Coexistence with NR [NB\_IOTenh3] 172

5.11.3 RRM core requirements (36.133) [NB\_IOTenh3-Core] 173

5.11.3.1 Group WUS [NB\_IOTenh3-Core] 173

5.11.3.2 PUR [NB\_IOTenh3-Core] 173

5.11.3.3 Multi-carrier operations [NB\_IOTenh3-Core] 174

5.11.3.4 Others [NB\_IOTenh3-Core] 176

5.11.4 Demodulation and CSI requirements (36.101/36.104) [NB\_IOTenh3-Perf] 177

5.12 Even further Mobility enhancement in E-UTRAN [LTE\_feMob] 178

5.12.1 RRM core requirements (36.133) [LTE\_feMob-Core] 178

5.12.1.1 Conditional handover [LTE\_feMob-Core] 178

5.12.1.2 Reduction of user data interruption [LTE\_feMob-Core] 178

5.12.1.3 Others [LTE\_feMob-Core] 179

5.13 LTE-based 5G terrestrial broadcast [LTE\_terr\_bcast] 179

5.13.1 Demodulation and CSI requirements (36.101) [LTE\_terr\_bcast -Perf] 179

5.13.2 Others [LTE\_terr\_bcast -Core/Perf] 181

5.14 R16 LTE maintenance [WI code] 182

5.14.1 RF [WI code] 182

5.14.2 RRM [WI code] 183

5.14.3 Demodulation and CSI requirements [WI code] 183

6 Rel-16 non-spectrum related work items for NR 184

6.1 NR-based access to unlicensed spectrum [NR\_unlic] 184

6.1.1 System Parameters [NR\_unlic-Core] 184

6.1.2 UE RF requirements [NR\_unlic-Core] 186

6.1.2.1 Transmitter characteristics [NR\_unlic-Core] 187

6.1.2.2 Receiver characteristics [NR\_unlic-Core] 189

6.1.3 Band combination related (Analysis, TPs, etc.) [NR\_unlic-Core] 190

6.1.4 BS RF requirements [NR\_unlic-Core] 191

6.1.4.1 Transmitter characteristics [NR\_unlic-Core] 193

6.1.4.2 Receiver characteristics [NR\_unlic-Core] 194

6.1.5 RRM core requirements (38.133) [NR\_unlic-Core] 195

6.1.5.1 General (specification structure, etc) [NR\_unlic-Core] 195

6.1.5.2 Cell re-selection [NR\_unlic-Core] 196

6.1.5.3 Handover [NR\_unlic-Core] 198

6.1.5.4 RRC connection mobility control [NR\_unlic-Core] 200

6.1.5.5 SCell activation/deactivation (delay and interruption) [NR\_unlic-Core] 202

6.1.5.6 PSCell addition/release (delay and interruption) [NR\_unlic-Core] 202

6.1.5.7 Active TCI state switching [NR\_unlic-Core] 203

6.1.5.8 Interruptions due to operation in non-NR-U serving cells [NR\_unlic-Core] 204

6.1.5.9 Active BWP switching [NR\_unlic-Core] 204

6.1.5.10 RLM and link recovery procedures [NR\_unlic-Core] 206

6.1.5.11 Measurement requirements [NR\_unlic-Core] 209

6.1.5.12 Measurement capability and reporting criteria [NR\_unlic-Core] 215

6.1.5.13 Timing [NR\_unlic-Core] 216

6.1.5.14 Others [NR\_unlic-Core] 218

6.2 Cross Link Interference (CLI) handling and Remote Interference Management (RIM) for NR [NR\_CLI\_RIM] 218

6.2.1 General [NR\_CLI\_RIM-Core] 218

6.2.2 RRM core requirements maintenance (38.133) [NR\_CLI\_RIM-Core] 218

6.2.3 RRM perf. requirements (38.133) [NR\_CLI\_RIM-Perf] 219

6.2.3.1 CLI measurement accuracy [NR\_CLI\_RIM-Perf] 219

6.2.3.2 Test cases [NR\_CLI\_RIM-Perf] 219

6.2.3.3 Others [NR\_CLI\_RIM-Perf] 221

6.3 NR mobility enhancement [NR\_Mob\_enh] 221

6.3.1 General [NR\_Mob\_enh-Core] 221

6.3.2 RRM core requirements (38.133) [NR\_Mob\_enh-Core] 221

6.3.2.1 Handover with simultaneous Rx/Tx with source and target cells [NR\_Mob\_enh-Core] 221

6.3.2.2 Conditional handover [NR\_Mob\_enh-Core] 223

6.3.2.3 Conditional PSCell addition/change [NR\_Mob\_enh-Core] 224

6.3.2.4 Others [NR\_Mob\_enh-Core] 224

6.4 5G V2X with NR sidelink [5G\_V2X\_NRSL] 224

6.4.1 General [5G\_V2X\_NRSL] 224

6.4.2 System parameters [5G\_V2X\_NRSL-Core] 225

6.4.3 UE RF requirements [5G\_V2X\_NRSL-Core] 227

6.4.3.1 Transmitter characteristics [5G\_V2X\_NRSL-Core] 227

6.4.3.2 Receiver characteristics [5G\_V2X\_NRSL-Core] 230

6.4.4 Concurrent operation (scenarios, requirements, etc) [5G\_V2X\_NRSL-Core] 232

6.4.5 RRM core requirements (38.133) [5G\_V2X\_NRSL-Core] 233

6.4.5.1 Transmit timing requirements [5G\_V2X\_NRSL-Core] 233

6.4.5.2 Synchronization requirements [5G\_V2X\_NRSL-Core] 233

6.4.5.3 Measurement requirements [5G\_V2X\_NRSL-Core] 234

6.4.5.4 Interruption requirements [5G\_V2X\_NRSL-Core] 235

6.4.5.5 Others [5G\_V2X\_NRSL-Core] 237

6.5 Integrated Access and Backhaul for NR [NR\_IAB] 238

6.5.1 General [NR\_IAB-Core] 238

6.5.1.1 System parameters [NR\_IAB-Core] 238

6.5.1.2 IAB-MT class [NR\_IAB-Core] 238

6.5.1.3 IAB-MT feature list [NR\_IAB-Core] 239

6.5.1.4 Others [NR\_IAB-Core] 241

6.5.2 RF requirements [NR\_IAB-Core] 241

6.5.2.1 Conductive RF core requirements [NR\_IAB-Core] 241

6.5.2.1.1 Transmitter characteristics [NR\_IAB-Core] 241

6.5.2.1.2 Receiver characteristics [NR\_IAB-Core] 243

6.5.2.1.3 TP to TS/TR [NR\_IAB-Core] 243

6.5.2.2 Radiated RF core requirements [NR\_IAB-Core] 246

6.5.2.2.1 Transmitter characteristics [NR\_IAB-Core] 246

6.5.2.2.2 Receiver characteristics [NR\_IAB-Core] 249

6.5.2.2.3 TP to TS/TR [NR\_IAB-Core] 250

6.5.3 RRM core requirements (38.133) [NR\_IAB-Core] 253

6.5.3.1 General [NR\_IAB-Core] 253

6.5.3.2 RRC connection mobility control [NR\_IAB-Core] 254

6.5.3.3 MT timing related requirements [NR\_IAB-Core] 255

6.5.3.4 RLM requirements [NR\_IAB-Core] 256

6.5.3.5 BFR requirements [NR\_IAB-Core] 257

6.5.4 EMC core requirements [NR\_IAB-Core] 258

6.6 Multi-RAT Dual-Connectivity and Carrier Aggregation enhancements [LTE\_NR\_DC\_CA\_enh] 260

6.6.1 General [LTE\_NR\_DC\_CA\_enh-Core] 260

6.6.2 RF requirements [LTE\_NR\_DC\_CA\_enh-Core] 261

6.6.3 RRM core requirements (38.133) [LTE\_NR\_DC\_CA\_enh-Core] 265

6.6.3.1 Early Measurement reporting [LTE\_NR\_DC\_CA\_enh-Core] 265

6.6.3.1.1 NR measurements for EMR [LTE\_NR\_DC\_CA\_enh-Core] 265

6.6.3.1.2 LTE NR Inter-RAT EMR [LTE\_NR\_DC\_CA\_enh-Core] 266

6.6.3.2 Efficient and low latency serving cell configuration, activation and setup [LTE\_NR\_DC\_CA\_enh-Core] 268

6.6.3.2.1 Direct SCell activation [LTE\_NR\_DC\_CA\_enh-Core] 268

6.6.3.2.2 SCell dormancy [LTE\_NR\_DC\_CA\_enh-Core] 270

6.6.3.3 Others [LTE\_NR\_DC\_CA\_enh-Core] 273

6.7 UE power saving in NR [NR\_UE\_pow\_sav] 273

6.7.1 General [NR\_UE\_pow\_sav] 273

6.7.2 RRM core requirements (38.133) [NR\_UE\_pow\_sav-Core] 273

6.7.2.1 RRM measurement relaxation [NR\_UE\_pow\_sav-Core] 273

6.7.3 Demodulation and CSI requirements (38.101-4) [NR\_UE\_pow\_sav-Perf 277

6.8 NR Positioning Support [NR\_pos] 279

6.8.1 General [NR\_pos-Core/Perf] 279

6.8.2 RRM core requirements (38.133) [NR\_pos-Core] 280

6.8.2.1 UE requirements [NR\_pos-Core] 280

6.8.2.1.1 PRS-RSTD measurements [NR\_pos-Core] 281

6.8.2.1.2 PRS-RSRP measurements [NR\_pos-Core] 284

6.8.2.1.3 Rx-Tx time difference measurements [NR\_pos-Core] 287

6.8.2.1.4 SSB and CSI-RS RSRP/RSRQ measurements [NR\_pos-Core] 290

6.8.2.1.5 Link-level evaluations for PRS-RSTD and PRS-RSRP [NR\_pos-Core] 290

6.8.2.2 Impact on existing RRM requirements [NR\_pos-Core] 291

6.8.2.3 gNB requirements [NR\_pos-Core] 293

6.8.2.4 Others [NR\_pos-Core] 297

6.9 Physical layer enhancements for NR URLLC [NR\_L1enh\_URLLC-Core] 298

6.9.1 Demodulation and CSI requirements [NR\_L1enh\_URLLC-Perf] 298

6.9.1.1 Performance requirements with ultra-low BLER [NR\_L1enh\_URLLC-Perf] 298

6.9.1.1.1 UE demodulation and CSI requirements (38.101-4) [NR\_L1enh\_URLLC-Perf] 299

6.9.1.1.2 BS demodulation requirements (38.104) [NR\_L1enh\_URLLC-Perf] 300

6.9.1.2 Performance requirements with higher BLER [NR\_L1enh\_URLLC-Perf] 301

6.9.1.2.1 UE demodulation and CSI requirements (38.101-4) [NR\_L1enh\_URLLC-Perf] 301

6.9.1.2.2 BS demodulation requirements (38.104) [NR\_L1enh\_URLLC-Perf] 304

6.10 Single radio voice call continuity from 5G to 3G (SRVCC) [SRVCC\_NR\_to\_UMTS-Core] 306

6.10.1 RRM core requirements maintenance (38.133) [SRVCC\_NR\_to\_UMTS-Core] 306

6.10.2 RRM perf requirements (38.133) [SRVCC\_NR\_to\_UMTS-Perf] 306

6.11 Enhancements on MIMO for NR [NR\_eMIMO] 307

6.11.1 UE RF core requirements (38.101) [NR\_eMIMO-Core] 307

6.11.1.1 DMRS enhancement with PI/2 BPSK [NR\_eMIMO-Core] 307

6.11.1.2 Uplink Tx Full Power transmission [NR\_eMIMO-Core] 308

6.11.2 RRM core requirements (38.133) [NR\_eMIMO-Core] 311

6.11.2.1 L1-SINR [NR\_eMIMO-Core] 311

6.11.2.2 SCell Beam failure recovery [NR\_eMIMO-Core] 313

6.11.2.3 DL/UL beam indication with reduced latency and overhead [NR\_eMIMO-Core] 315

6.11.2.4 Others [NR\_eMIMO-Core] 315

6.11.3 Demodulation and CSI requirements (38.101-4) [NR\_eMIMO-Perf] 318

6.11.3.1 General [NR\_eMIMO-Perf] 318

6.11.3.2 Demodulation requirements [NR\_eMIMO-Perf] 318

6.11.3.3 CSI requirements [NR\_eMIMO-Perf] 320

6.12 Add support of NR DL 256QAM for FR2 [NR\_DL256QAM\_FR2] 321

6.12.1 General [NR\_DL256QAM\_FR2] 321

6.12.2 BS RF core requirements (38.104) [NR\_DL256QAM\_FR2] 321

6.12.3 UE RF core requirements (38.101-2) [NR\_DL256QAM\_FR2] 322

6.12.4 Demodulation and CSI requirements (38.101-4) [NR\_DL256QAM\_FR2-Perf] 322

6.13 RF requirements for NR frequency range 1 (FR1) [NR\_RF\_FR1] 324

6.13.1 RF core requirements [NR\_RF\_FR1] 324

6.13.1.1 Almost contiguous allocations for CP-OFDM UL for FR1 [NR\_RF\_FR1] 324

6.13.1.2 Intra-band contiguous DL CA for FR1 [NR\_RF\_FR1] 324

6.13.1.3 Intra-band contiguous UL CA for FR1 power class 3 [NR\_RF\_FR1] 325

6.13.1.4 Intra-band non-contiguous UL CA for FR1 power class 3 [NR\_RF\_FR1] 327

6.13.1.5 Switching period between case 1 and case 2 [NR\_RF\_FR1] 328

6.13.1.6 Transient period capability [NR\_RF\_FR1] 331

6.13.1.7 Time masks for ULSUP-TDM in case of UL timing misalignment [NR\_RF\_FR1] 332

6.13.2 RRM core requirements (38.133) [NR\_RF\_FR1] 332

6.13.2.1 RRM requirements for Tx switching between two uplink carriers [NR\_RF\_FR1] 332

6.14 NR RF requirement enhancements for frequency range 2 (FR2) [NR\_RF\_FR2\_req\_enh] 334

6.14.1 RF core requirements [NR\_RF\_FR2\_req\_enh] 334

6.14.1.1 FR2 MPE [NR\_RF\_FR2\_req\_enh] 334

6.14.1.2 Beam Correspondence based on configured DL RS (SSB or CSI-RS) [NR\_RF\_FR2\_req\_enh] 337

6.14.1.3 Intra-band non-cont DL CA for aggregated BW larger than 1400 MHz [NR\_RF\_FR2\_req\_enh] 340

6.14.1.4 Intra-band non-contiguous UL CA [NR\_RF\_FR2\_req\_enh] 341

6.14.1.5 Inter-band DL CA [NR\_RF\_FR2\_req\_enh] 342

6.14.1.6 Improvement of UE MPR [NR\_RF\_FR2\_req\_enh] 345

6.14.1.7 Improvement of spherical coverage requirements for PC3 [NR\_RF\_FR2\_req\_enh] 346

6.14.1.8 Multiband relaxation framework enhancement [NR\_RF\_FR2\_req\_enh] 346

6.14.1.9 FR2 Beam Squint [NR\_RF\_FR2\_req\_enh] 348

6.14.2 RRM core requirements (38.133) [NR\_RF\_FR2\_req\_enh] 349

6.14.2.1 Inter-band DL CA MRTD [NR\_RF\_FR2\_req\_enh] 349

6.15 NR RRM requirement enhancement [NR\_RRM\_Enh\_Core] 352

6.15.1 RRM core requirements (38.133) [NR\_RRM\_Enh\_Core] 352

6.15.1.1 SRS carrier switching requirements [NR\_RRM\_Enh\_Core] 352

6.15.1.2 Multiple Scell activation/deactivation [NR\_RRM\_Enh\_Core] 354

6.15.1.3 CGI reading requirements with autonomous gap [NR\_RRM\_Enh\_Core] 357

6.15.1.4 BWP switching on multiple CCs [NR\_RRM\_Enh\_Core] 361

6.15.1.5 Inter-frequency measurement requirement without MG [NR\_RRM\_Enh\_Core] 364

6.15.1.6 Mandatory MG patterns [NR\_RRM\_Enh\_Core] 366

6.15.1.7 UE-specific CBW change [NR\_RRM\_Enh\_Core] 368

6.15.1.8 Spatial relation switch for uplink [NR\_RRM\_Enh\_Core] 369

6.15.1.9 Non-simultaneous UL carrier operation in FR2 [NR\_RRM\_Enh\_Core] 371

6.15.1.10 Inter-band CA requirement for FR2 UE measurement capability of independent Rx beam and/or common beam [NR\_RRM\_Enh\_Core] 371

6.16 NR RRM requirements for CSI-RS based L3 measurement [NR\_CSIRS\_L3meas] 373

6.16.1 RRM core requirements (38.133) [NR\_CSIRS\_L3meas-Core] 373

6.16.1.1 CSI-RS measurement bandwidth [NR\_CSIRS\_L3meas-Core] 373

6.16.1.2 CSI-RS based intra-frequency and inter-frequency measurements definition [NR\_CSIRS\_L3meas-Core] 374

6.16.1.3 Measurement capability [NR\_CSIRS\_L3meas-Core] 377

6.16.1.4 Intra-frequency and inter-frequency measurement requirements [NR\_CSIRS\_L3meas-Core] 381

6.16.1.5 Others [NR\_CSIRS\_L3meas-Core] 384

6.17 NR support for high speed train scenario [NR\_HST] 385

6.17.1 RRM core requirements (38.133) [NR\_HST-Core] 385

6.17.1.1 Cell re-selection [NR\_HST-Core] 386

6.17.1.2 Cell identification delay [NR\_HST-Core] 387

6.17.1.3 RLM [NR\_HST-Core] 388

6.17.1.4 Beam management [NR\_HST-Core] 388

6.17.1.5 Inter-RAT measurement [NR\_HST-Core] 388

6.17.2 Demodulation and CSI requirements (38.101-4 / 38.104) [NR\_HST-Perf] 390

6.17.2.1 UE demodulation and CSI requirements (38.101-4) [NR\_HST-Perf] 390

6.17.2.1.1 Scenarios and transmission schemes [NR\_HST-Perf] 392

6.17.2.1.2 Requirements for HST-SFN [NR\_HST-Perf] 393

6.17.2.1.3 Requirements for HST single tap [NR\_HST-Perf] 393

6.17.2.1.4 Requirements for multi-path fading channels [NR\_HST-Perf] 394

6.17.2.1.5 Network assistance and UE capability signalling [NR\_HST-Perf] 395

6.17.2.2 BS demodulation requirements (38.104) [NR\_HST-Perf] 395

6.17.2.2.1 PUSCH requirements [NR\_HST-Perf] 396

6.17.2.2.2 PRACH requirements [NR\_HST-Perf] 401

6.17.2.2.3 UL timing adjustment requirements [NR\_HST-Perf] 403

6.18 NR performance requirement enhancement [NR\_perf\_enh-Perf] 405

6.18.1 UE demodulation and CSI requirements (38.101-4) [NR\_perf\_enh-Perf] 406

6.18.1.1 NR CA PDSCH requirements [NR\_perf\_enh-Perf] 406

6.18.1.2 PMI reporting requirements with larger number of Tx ports [NR\_perf\_enh-Perf] 408

6.18.1.3 LTE-NR co-existence for TDD [NR\_perf\_enh-Perf] 411

6.18.1.4 FR1 CA and EN-DC power imbalance requirements [NR\_perf\_enh-Perf] 411

6.18.1.5 NR CA CQI reporting requirements [NR\_perf\_enh-Perf] 413

6.18.2 BS demodulation requirements (38.104) [NR\_perf\_enh-Perf] 413

6.18.2.1 30% TP test point [NR\_perf\_enh-Perf] 413

6.18.2.2 Additional FR2 requirements [NR\_perf\_enh-Perf] 415

6.19 Over the air (OTA) base station (BS) testing TR [OTA\_BS\_testing-Perf] 415

6.19.1 General [OTA\_BS\_testing-Perf] 415

6.19.2 OTA calibration and test method procedures [OTA\_BS\_testing-Perf] 416

6.19.3 Coordinate system [OTA\_BS\_testing-Perf] 416

6.19.4 Conformance testing aspects [OTA\_BS\_testing-Perf] 416

6.19.5 MU / TT values: derivation and tables [OTA\_BS\_testing-Perf] 416

6.19.6 Annexes [OTA\_BS\_testing-Perf] 418

6.19.7 Others [OTA\_BS\_testing-Perf] 418

6.20 2-step RACH for NR [NR\_2step\_RACH-Perf] 421

6.20.1 RRM core requirements (38.133) [NR\_2step\_RACH-Core] 421

6.20.2 BS Demodulation requirements (38.104/38.141-1/38.141-2) [NR\_2step\_RACH-Perf] 423

6.20.3 Others [NR\_2step\_RACH-Perf] 425

6.21 R16 NR maintenance [WI code or TEI16] 425

6.21.1 BS RF [WI code or TEI16] 425

6.21.2 UE RF [WI code or TEI16] 425

6.21.3 RRM [WI code or TEI16] 429

6.21.4 Demodulation and CSI [WI code or TEI16] 430

7 UE feature list 430

8 Rel-16 spectrum related Work Items for NR 431

8.1 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y) [NR\_CA\_R16\_intra] 431

8.1.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_intra-Core /Perf] 431

8.1.2 UE RF for FR1 [NR\_CA\_R16\_intra-Core] 433

8.1.3 UE RF for FR2 [NR\_CA\_R16\_intra-Core] 434

8.2 NR inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1, 2) [NR\_CADC\_R16\_2BDL\_xBUL] 435

8.2.1 Rapporteur Input (WID/TR/CR) [NR\_CADC\_R16\_2BDL\_xBUL-Core/Perf] 435

8.2.2 NR inter band CA without any FR2 band(s) [NR\_CADC\_R16\_2BDL\_xBUL-Core] 436

8.2.3 NR inter band CA with at least one FR2 band [NR\_CADC\_R16\_2BDL\_xBUL-Core] 440

8.3 EN-DC of 1 LTE band and 1 NR band [DC\_R16\_1BLTE\_1BNR\_2DL2UL] 441

8.3.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core/Perf] 441

8.3.2 EN-DC without FR2 band [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core] 442

8.3.3 EN-DC with FR2 band [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core] 445

8.4 EN-DC of 2 LTE band and 1 NR band [DC\_R16\_2BLTE\_1BNR\_3DL2UL] 445

8.4.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core/Perf] 445

8.4.2 EN-DC without FR2 band [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core] 446

8.4.3 EN-DC with FR2 band [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core] 450

8.5 EN-DC of 3 LTE band and 1 NR band [DC\_R16\_3BLTE\_1BNR\_4DL2UL] 451

8.5.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core/Perf] 451

8.5.2 EN-DC without FR2 band [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core] 452

8.5.3 EN-DC with FR2 band [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core] 459

8.6 EN-DC of 4 LTE band and 1 NR band [DC\_R16\_4BLTE\_1BNR\_5DL2UL] 459

8.6.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core/Perf] 459

8.6.2 EN-DC without FR2 band [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core] 460

8.6.3 EN-DC with FR2 band [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core] 461

8.7 EN-DC of x bands (x=1,2, 3, 4) LTE inter-band CA and 2 bands NR inter-band CA [DC\_R16\_xBLTE\_2BNR\_yDL2UL] 461

8.7.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core/Per] 461

8.7.2 EN-DC including NR inter CA without FR2 band [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core] 461

8.7.3 EN-DC including NR inter CA with FR2 band [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core] 468

8.8 Band combinations for SA NR supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP) [NR\_SUL\_combos\_R16] 472

8.8.1 Rapporteur Input (WID/TR/CR) [NR\_SUL\_combos\_R16-Core/Per] 472

8.8.2 UE RF [NR\_SUL\_combos\_R16-Core] 473

8.9 NR Inter-band Carrier Aggregation for 3 bands DL with 1 band UL [NR\_CA\_R16\_3BDL\_1BUL] 473

8.9.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_3BDL\_1BUL-Core/Per] 473

8.9.2 UE RF [NR\_CA\_R16\_3BDL\_1BUL-Core] 474

8.10 NR Inter-band Carrier Aggregation for 4 bands DL with 1 band UL [NR\_CA\_R16\_4BDL\_1BUL] 476

8.10.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_4BDL\_1BUL-Core/Per] 476

8.10.2 UE RF [NR\_CA\_R16\_4BDL\_1BUL-Core] 478

8.11 NR Inter-band Carrier Aggregation/Dual connectivity for 3 bands DL with 2 bands UL [NR\_CADC\_R16\_3BDL\_2BUL] 479

8.11.1 Rapporteur Input (WID/TR/CR) [NR\_CADC\_R16\_3BDL\_2BUL-Core/Per] 479

8.11.2 UE RF [NR\_CADC\_R16\_3BDL\_2BUL-Core] 479

8.12 Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL [DC\_R16\_LTE\_NR\_3DL3UL] 481

8.12.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_LTE\_NR\_3DL3UL-Core/Per] 481

8.12.2 UE RF [DC\_R16\_LTE\_NR\_3DL3UL-Core] 482

8.13 Dual Connectivity (EN-DC) of LTE inter-band CA xDL/1UL bands (x=2,3,4) and NR FR1 1DL/1UL band and NR FR2 1DL/1UL band [DC\_R16\_xBLTE\_2BNR\_yDL3UL] 482

8.13.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_xBLTE\_2BNR\_yDL3UL-Core/Per] 482

8.13.2 UE RF [DC\_R16\_xBLTE\_2BNR\_yDL3UL-Core] 483

8.14 29dBm UE Power Class for B41 and n41 [LTE\_NR\_B41\_Bn41\_PC29dBm] 483

8.14.1 Rapporteur Input (WID/TR/CR) [LTE\_NR\_B41\_Bn41\_PC29dBm] 483

8.14.2 UE RF (36.101, 38.101-1, 38.101-3) [LTE\_NR\_B41\_Bn41\_PC29dBm] 483

8.14.3 Others [LTE\_NR\_B41\_Bn41\_PC29dBm] 486

8.15 Power Class 2 UE for EN-DC (1 LTE FDD band +1 NR TDD band) [ENDC\_UE\_PC2\_FDD\_TDD-Core] 486

8.15.1 General [ENDC\_UE\_PC2\_FDD\_TDD-Core] 486

8.15.2 UE RF requirement [ENDC\_UE\_PC2\_FDD\_TDD-Core] 487

8.15.3 Signaling [ENDC\_UE\_PC2\_FDD\_TDD-Core] 489

8.16 Introduction of NR band n259 [NR\_n259] 489

8.16.1 UE RF (38.101-2) [NR\_n259-Core] 489

8.16.2 BS RF (38.104) [NR\_n259-Core] 490

8.16.3 RRM (38.133) [NR\_n259-Core] 491

8.16.4 Others [NR\_n259-Core/Perf] 492

8.17 Adding 25MHz and 50MHz channel bandwidth in NR band n1 [NR\_n1\_BW2] 492

8.17.1 UE RF (38.101-1) [NR\_n1\_BW2-Core] 492

8.17.2 BS RF (38.104) [NR\_n1\_BW2-Core] 492

8.17.3 RRM (38.133) [NR\_n1\_BW2-Core] 493

8.17.4 Others [NR\_n1\_BW2-Core/Perf] 493

8.18 LTE/NR spectrum sharing in band 48/n48 frequency range [NR\_n48\_LTE\_48\_coex-Core] 493

8.18.1 General (such as work plan, AH minutes) [NR\_n48\_LTE\_48\_coex-Core] 493

8.18.2 Channel raster, sync raster, and UL shift [NR\_n48\_LTE\_48\_coex-Core] 493

8.19 Adding 40 MHz channel bandwidth (15, 30 and 60kHz SCS) in NR band n3 [NR\_n3\_BW] 495

8.19.1 UE RF (38.101-1) [NR\_n3\_BW] 495

8.19.2 BS RF (38.104) [NR\_n3\_BW] 496

8.19.3 RRM (38.133) [NR\_n3\_BW] 497

8.19.4 Others [NR\_n3\_BW] 497

8.20 Adding 50 MHz channel bandwidth (15, 30 and 60kHz SCS) in NR band n65 [NR\_n65\_BW] 497

8.20.1 UE RF (38.101-1) [NR\_n65\_BW] 497

8.20.2 BS RF (38.104) [NR\_n65\_BW] 497

8.20.3 RRM (38.133) [NR\_n65\_BW] 498

8.20.4 Others [NR\_n65\_BW] 498

9 Study Items for NR 498

9.1 Study on radiated metrics and test methodology for the verification of multi-antenna reception perf. of NR UEs [FS\_NR\_MIMO\_OTA\_test] 498

9.1.1 General [FS\_NR\_MIMO\_OTA\_test] 498

9.1.2 Performance metrics [FS\_NR\_MIMO\_OTA\_test] 499

9.1.3 Testing methodologies [FS\_NR\_MIMO\_OTA\_test] 499

9.1.3.1 FR1 test methodologies [FS\_NR\_MIMO\_OTA\_test] 499

9.1.3.2 FR2 test methodologies [FS\_NR\_MIMO\_OTA\_test] 499

9.1.4 Channel Models [FS\_NR\_MIMO\_OTA\_test] 502

9.2 Study on 7-24GHz frequency range [FS\_7to24GHz\_NR] 502

9.2.1 General [FS\_7to24GHz\_NR] 502

9.2.2 Regulatory survey [FS\_7to24GHz\_NR] 503

9.2.3 Deployment scenarios [FS\_7to24GHz\_NR] 503

9.2.4 RF technology aspects [FS\_7to24GHz\_NR 504

9.2.5 NR UE [FS\_7to24GHz\_NR] 504

9.2.5.1 NR UE architecture [FS\_7to24GHz\_NR] 504

9.2.5.2 TX requirements [FS\_7to24GHz\_NR] 504

9.2.5.3 RX requirements [FS\_7to24GHz\_NR] 504

9.2.6 NR BS [FS\_7to24GHz\_NR] 504

9.2.6.1 BS types, BS requirement sets [FS\_7to24GHz\_NR] 504

9.2.6.2 NR BS architecture [FS\_7to24GHz\_NR] 504

9.2.6.3 TX requirements [FS\_7to24GHz\_NR] 504

9.2.6.4 RX requirements [FS\_7to24GHz\_NR] 505

10 Rel-17 spectrum related Work Items for NR 505

10.1 Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n257 and n258 [NR\_FR2\_FWA\_Bn257\_Bn258] 506

10.1.1 UE RF (38.101-2) [NR\_FR2\_FWA\_Bn257\_Bn258] 506

10.1.2 BS RF (38.104) [NR\_FR2\_FWA\_Bn257\_Bn258] 508

10.1.3 RRM (38.133) [NR\_FR2\_FWA\_Bn257\_Bn258] 508

10.1.4 Others [NR\_FR2\_FWA\_Bn257\_Bn258] 508

10.2 Introduction of NR band n13 [NR\_n13] 508

10.2.1 UE RF (38.101-1) [NR\_n13-Core] 508

10.2.2 BS RF (38.104) [NR\_n13-Core] 509

10.2.3 RRM (38.133) [NR\_n13-Core] 509

10.2.4 Others [NR\_n13-Core/Perf] 509

11.0 Reply to ITU-R LS (RP-200042) 509

11.1 Study on IMT parameters for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz [FS\_6425\_10500MHz \_NR] 509

11.1.1 UE parameters 509

11.1.2 BS parameters 510

11.1.3 Coexistence study 511

11.1.4 Antenna characteristics 513

11.2 Reply of IMT parameters for other frequency ranges requested in RP-200042 515

12 LTE maintenance (up to Rel15) [WI code or TEI] 516

12.1 BS RF [WI code or TEI] 516

12.2 UE RF [WI code or TEI] 518

12.3 RRM [WI code or TEI] 523

12.4 Demodulation and CSI [WI code or TEI] 528

13 Liaison and output to other groups 534

14 Revision of the Work Plan 535

14.1 Simplification of band combinations in RAN4 specifications 535

14.2 R17 new proposals 537

14.2.1 Basket WI approach for adding existing channel bandwidth on existing NR bands 537

14.2.2 Proposals on adding brand new channel bandwidth 538

14.2.3 Basket WIs for LTE CA, EN-DC, NR CA and NR DC 539

14.2.4 Others 543

14.3 Others 551

15 Any other business 551

15.1 Views on workload management and meeting efficiency improvement 551

15.2 Others 552

16 Close of the E-meeting 552

## 1 Opening of the E-meeting

RAN4 Chairman (Steven Chen) opened the meeting on the RAN4 email reflector. The Chairman reminded delegates of their company's obligations under their SDO's IPR policies:

**Intellectual Property Rights Policy**

The attention of the delegates to the meeting of this Technical Specification Group was drawn to the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of.

The delegates were asked to take note that they were thereby invited:

- to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.

- to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Information Statement and the Licensing declaration forms.

**Statement regarding competition law**

The attention of the delegates to the meeting was drawn to the fact that 3GPP activities were subject to all applicable antitrust and competition laws and that compliance with said laws was therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and were invited to seek any clarification needed with their legal counsel. The leadership would conduct the present meeting with impartiality and in the interests of 3GPP. Delegates were reminded that timely submission of work items in advance of TSG/WG meetings was important to allow for full and fair consideration of such matters.

**Statement Regarding Engagement with Companies Added to the U.S. Export Administration Regulations (EAR) Entity List in 3GPP Activities**

**1. Public Information is Not Subject to EAR**

3GPP is an open platform where all contributions (including technology protected or not by patent) made by the different Individual Members under the membership of each respective Organizational Partner are publicly available. Indeed, contributions by all and any Individual Members are uploaded to a public file server when received and then the documents are effectively in the public domain.

In addition, since membership of email distribution lists is open to all, documents and emails distributed by that means are considered to be publicly available.

As a result, information contained in 3GPP contributions, documents, and emails distributed at 3GPP meetings or by 3GPP email distribution lists, because it is made available to the public without restrictions upon its further dissemination, is not subject to the export restrictions of the EAR.

Meeting minutes are maintained for 3GPP meetings. Such meeting minutes for 3GPP meetings are made available to the public without restrictions upon its further dissemination. As a result, information, including information conveyed orally, contained in 3GPP meetings is not subject to the export restriction of the EAR; this would include information conveyed during side meetings that may occur during the main meetings, if these meetings are open to any participants and the results of all said meetings are publicly available without restrictions upon their further dissemination.

**2. Non-Public Information**

Non-public information refers to the information not contained or not intended to be contained in 3GPP contributions, documents or emails. Such non-public information may be disclosed during informal meetings, exchanges, discussions or any form of other communication outside the 3GPP meetings and email distribution lists, and may be subject to the EAR.

**3. Other Information**

Certain encryption software controlled under the International Traffic in Arms Regulations (ITAR), even if publicly available, may still be subject to US export controls other than the EAR.

**4. Conduct of Meetings**

The situation should be considered as "business as usual" during all the meetings called by 3GPP.

**5. Responsibility of Individual Members**

It should be remembered that contributions, meetings, exchanges, discussions or any form of other communication in or outside the 3GPP meetings are of the accountability, integrity and the responsibility of each Individual Member. In addition, Individual Members remain responsible for ensuring their compliance with all applicable export control regulations, including but not limited to EAR.

Individual Members with questions regarding the impact of laws and regulations on their participation in 3GPP should contact their companies’ legal counsels.

**Meeting Arrangements**

The meeting was conducted on three parallel sessions; Main session, RRM session and BS RF Test Demod session. The Main session was chaired by RAN4 Chairman Steven Chen (Futurewei), RRM session was chaired by RAN4 Vice Chairman Andrey Chervyakov (Intel) and BS RF Test Demod session was chaired by RAN4 ViceChairman Haijie Qiu (Samsung). The sessions were further broken down into separate email threads to address specific technical topics lead by assigned discussion moderators. Webinar sessions were used to summarize progress, resolve controversial issues and decide way forward.

## 2 Approval of the agenda

**R4-2006000 Agenda for RAN4 #95-e**

*Type: Agenda For: Approval  
 Source: RAN4 Chairman*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006001 RAN4#94-bis-e Meeting Report**

*Type: report For: Approval  
 Source: ETSI MCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 3 Letters / reports from other groups / meetings

**R4-2006115 Over-the-Air Radiated Performance Testing for 5G mm-Wave (FR2) User**

**Equipment**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN4, RAN5, cc -  
 Source: 5G Millimeter Wave Sub-Working Group*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006116 LS on requirement in Power Class 2 for UL MIMO Test cases**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN4, RAN5, cc -  
 Source: GCF-CAG*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006117 LS on publication of TS.51 V1.0**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN4, RAN5, cc -  
 Source: GSM Association*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006118 Reply LS from CTIA CCLLC OTA WG to the GCF SG Concerning Antenna**

**Performance Assessments**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN4, RAN5, cc -  
 Source: CTIA OTA Working Group*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006119 Reply LS on T\_delta in IAB**

*Type: LS in For: Information  
 Original outgoing LS: R1-2002931, to RAN2, cc RAN4  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006120 Reply LS on UE Tx switching period delay and DL interruption**

*Type: LS in For: Information  
 Original outgoing LS: R1-2002960, to RAN4, cc RAN2  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006121 LS response on secondary DRX group**

*Type: LS in For: Information  
 Original outgoing LS: R1-2002961, to RAN2, cc RAN4  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006122 LS on subcarrier spacing for CLI-RSSI measurement**

*Type: LS in For: Information  
 Original outgoing LS: R1-2002966, to RAN2, cc RAN4  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006123 Reply LS on applicable timing for pathloss RS activated/updated by MAC-CE**

*Type: LS in For: Information  
 Original outgoing LS: R1-2002967, to RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006124 LS on removing the word “candidate” in Subclause 8.1.1 of TS 38.133 v16.3.0**

*Type: LS in For: Information  
 Original outgoing LS: R1-2002992, to RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006125 LS on Signaling of Q Parameter for NR-U**

*Type: LS in For: Information  
 Original outgoing LS: R1-2003044, to RAN2, RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006126 LS on Simultaneous reception of DL signals in intra-frequency DAPS HO**

*Type: LS in For: Information  
 Original outgoing LS: R1-2003058, to RAN4, cc RAN2  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006127 LS on criterion of pathloss measurement failure for power control of SRS for positioning**

*Type: LS in For: Information  
 Original outgoing LS: R1-2003069, to RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006128 LS on updated Rel-16 RAN1 UE features lists for LTE**

*Type: LS in For: Information  
 Original outgoing LS: R1-2003070, to RAN2, cc RAN4  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006129 LS on Rel-16 RAN1 UE features lists for NR**

*Type: LS in For: Information  
 Original outgoing LS: R1-2003072, to RAN2, RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006130 Reply LS on UL LBT failure recovery for the target cell**

*Type: LS in For: Information  
 Original outgoing LS: R2-2003973, to RAN4, cc RAN1  
 Source: RAN2*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006131 LS on UE specific DRX in NB-IoT**

*Type: LS in For: Information  
 Original outgoing LS: R2-2004054, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006132 Reply LS on Handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2**

*Type: LS in For: Information  
 Original outgoing LS: R2-2004267, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006133 Reply LS on asymmetric channel bandwidths**

*Type: LS in For: Information  
 Original outgoing LS: R2-2004268, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008286 LS on positioning SRS during DRX inactive time**

*Type: LS in For: Information  
 Original outgoing LS: R2-2003877, to RAN4, cc RAN1  
 Source: RAN2*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008287 LS on NeedForGap capability**

*Type: LS in For: Information  
 Original outgoing LS: R2-2003883, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 4 Rel15 New radio access technology

### 4.1 NE-DC, NGEN-DC, and NR-NR DC Maintenance [NR\_newRAT-Core]

**R4-2006495 Introducing NE-DC combinations into specs**

*Type: discussion For: Discussion  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006649 CR for 38.101-3: Corrections for Ppowerclass and referenced sections**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0250 Cat: F (Rel-15)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006650 Mirror CR for 38.101-3: Corrections for Ppowerclass and referenced sections**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0251 Cat: A (Rel-16)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006658 On introducing NE-DC combinations into specs**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007005 CR to TS 38.101-3: Clean up the MSD test point for ENDC(three band)**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0266 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007006 CR to TS 38.101-3: Clean up the MSD test point for ENDC(three band)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0267 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.2 System Parameters Maintenance [NR\_newRAT-Core]

**R4-2006584 On default SSB for band n34, n38, n39, n40, and n50**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

30kHz SCS is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006659 Support of release independence from Rel-15**

*Type: discussion For: Approval  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006660 CR to TS 38.307 correction on support of release independence from Rel-15**

*Type: CR For: Agreement  
 38.307 v15.5.0 CR-0020 Cat: F (Rel-15)  
  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006998 Discussion on CA nominal channel spacing without common u**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006999 CR to TS 38.101-1: Correction on the CA nominal channel spacing**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0337 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007000 CR to TS 38.101-1: Correction on the CA nominal channel spacing**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0338 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007001 CR to TS 38.104: Correction on the CA nominal channel spacing**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0177 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007002 CR to TS 38.104: Correction on the CA nominal channel spacing**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0178 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007007 Discussion on SSB pattern for NR bands supporting 30kHz SSB SCS**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007027 30k SSB SCS for Band n34, n39 and n50**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0179 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to replace 15k SSB with 30k SSB SCS for n34, n39 and n50

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007028 30k SSB SCS for Band n34, n39 and n50**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0180 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to replace 15k SSB with 30k SSB SCS for n34, n39 and n50

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007029 30k SSB SCS for Band n34, n39 and n50**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0344 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to replace 15k SSB with 30k SSB SCS for n34, n39 and n50

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007030 30k SSB SCS for Band n34, n39 and n50**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0345 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to replace 15k SSB with 30k SSB SCS for n34, n39 and n50

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007031 Addition of 30k SSB SCS for Band n38**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0181 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce 30k SSB SCS for n38 consistent with the overlapping n41

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007032 Addition of 30k SSB SCS for Band n38**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0182 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce 30k SSB SCS for n38 consistent with the overlapping n41

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007033 Addition of 30k SSB SCS for Band n38**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0346 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce 30k SSB SCS for n38 consistent with the overlapping n41

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007034 Addition of 30k SSB SCS for Band n38**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0347 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce 30k SSB SCS for n38 consistent with the overlapping n41

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007552 CR to TS37.104[R15]\_Correction on the CA nominal channel spacing**

*Type: CR For: Agreement  
 37.104 v15.10.0 CR-0900 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007553 CR to TS37.104[R16]\_Correction on the CA nominal channel spacing catA**

*Type: CR For: Agreement  
 37.104 v16.5.0 CR-0901 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007554 CR to TS37.141[R15]\_Correction on the CA nominal channel spacing**

*Type: CR For: Agreement  
 37.141 v15.10.0 CR-0937 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007555 CR to TS37.141[R16]\_Correction on the CA nominal channel spacing catA**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0938 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008170 CR for 38.101-1 channel space for CA\_Rel15**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0390 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008171 CR for 38.101-1 channel space for CA\_Rel16**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0391 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008172 CR for 38.101-2 channel space for CA\_Rel15**

*Type: CR For: Agreement  
 38.101-2 v15.9.0 CR-0201 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008173 CR for 38.101-2 channel space for CA\_Rel16**

*Type: CR For: Agreement  
 38.101-2 v16.3.0 CR-0202 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008240 TS38.101-1 CR on 30KHz SSB SCS for n40**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0399 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon, CMCC*

**Abstract:**

38.101-1 CR to replace 15KHz SSB SCS for n40.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008241 TS38.101-1 CR on 30KHz SSB SCS for n40(Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0400 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon, CMCC*

**Abstract:**

38.101-1 CR to replace 15KHz SSB SCS for n40. Rel-16 Cat-A CR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008242 TS38.104 draft CR on 30KHz SSB SCS for n40**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0212 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon, CMCC*

**Abstract:**

38.104 CR to replace 15KHz SSB SCS for n40.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008243 TS38.104 draft CR on 30KHz SSB SCS for n40 (Rel-16)**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0213 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon, CMCC*

**Abstract:**

38.104 CR to replace 15KHz SSB SCS for n40. Rel-16 Cat-A CR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008244 Proposal on 30KHz SCS SSB for n50 and n38**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

In this contribution, we propose to add 30KHz SSB SCS for n50 and n38.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.3 SUL and LTE-NR co-existence maintenance [NR\_newRAT-Core]

### 4.4 UE RF requirements maintenance [NR\_newRAT]

#### 4.4.1 DC combination including NR carrier and/or NR CA combination maintenance [NR\_newRAT-Core]

##### 4.4.1.1 Maintenance for bands and band combinations in 38.101-1 [NR\_newRAT-Core]

**R4-2006135 Corrections of UE co-ex tables for Japan-related bands (R15)**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0297 Cat: F (Rel-15)  
  
 Source: SoftBank Corp., NTT docomo INC., KDDI Corporation*

**Abstract:**

Corrections for Japan band protections for 38.101-1.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006136 Corrections of UE co-ex tables for Japan-related bands (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0298 Cat: F (Rel-16)  
  
 Source: SoftBank Corp., NTT docomo INC., KDDI Corporation*

**Abstract:**

Corrections for Japan band protections for 38.101-1, designated as Cat F since additional modifications are required for R16, mainly in CA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006482 Usage of n77 in US C-band REL-15**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0312 Cat: F (Rel-15)  
  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006483 Usage of n77 in US C-band REL-16**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0313 Cat: F (Rel-16)  
  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006484 C-band co-existence aspects.**

*Type: other For: Approval  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006624 Band n77 usage in the US**

*Type: discussion For: Approval  
 Source: Apple*

**Abstract:**

This paper discusses how to implement n77 for the US

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007025 CR for [agreed] asynchronous operation for NR CA n78-n79**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0342 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007026 CR for [agreed] asynchronous operation for NR CA n78-n79**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0343 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.1.2 Maintenance for bands and band combinations in 38.101-2 [NR\_newRAT-Core]

**R4-2006496 Proposed response to RAN2 LS on Handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2**

*Type: other For: Approval  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006577 Discussion on handling of fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006578 Further reply LS on handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2**

*Type: LS out For: Approval  
 to RAN2  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006815 CR for TS 38.101-2: Intra-band non-contiguous CA configuration clarifications**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0169 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006816 CR for TS 38.101-2: Intra-band non-contiguous CA configuration clarifications**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0170 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006907 CR to TS 38.101-2 on corrections to intra-band CA band for FR2 (Rel-15)**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0178 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-2 on corrections to intra-band CA band for FR2 (Rel-15)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006908 CR to TS 38.101-2 on corrections to intra-band CA band for FR2 (Rel-16)**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0179 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-2 on corrections to intra-band CA band for FR2 (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.1.3 Maintenance for combinations in 38.101-3 [NR\_newRAT-Core]

**R4-2006137 Corrections of UE co-ex tables for Japan-related bands (R15)**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0224 Cat: F (Rel-15)  
  
 Source: SoftBank Corp., NTT docomo INC., KDDI Corporation*

**Abstract:**

Corrections for Japan band protections for 38.101-3.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006138 Corrections of UE co-ex tables for Japan-related bands (R16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0225 Cat: F (Rel-16)  
  
 Source: SoftBank Corp., NTT docomo INC., KDDI Corporation*

**Abstract:**

Corrections for Japan band protections for 38.101-3, designated as Cat F since additional modifications are required for R16.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006242 CR for TS38.101-3, Aligned IE RF-Parameters name of maxUplinkDutyCycle with RAN2**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0228 Cat: F (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006342 CR Coexistence cleanup for 38101-3 Rel15**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0231 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006452 CR for TS 38.101-3: Missing MSD due to cross band isolation**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0237 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006453 CR for TS 38.101-3: Missing MSD due to cross band isolation**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0238 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006454 CR for TS 38.101-3: MSD due to UL harmonic**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0239 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006455 CR for TS 38.101-3: MSD due to UL harmonic**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0240 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006457 CR for TR37.863-01-01: TP for missing MSD due to UL harmonic and cross band isolation for band combinations**

*Type: CR For: Agreement  
 37.863-01-01 v15.3.0 CR-0008 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006490 MOP for interband EN-DC including both FR1 and FR2 REL15**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0244 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006491 MOP for interband EN-DC including both FR1 and FR2 REL16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0245 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008229 CR for 38.101-3 Correction on EN-DC synchronous carriers (R15)**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0288 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008230 CR for 38.101-3 Correction on EN-DC synchronous carriers (R16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0289 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.4.2 [FR1] Maintenance for general requirements in 38.101-1 [NR\_newRAT-Core]

**R4-2006143 Clarification on asymmetric channel bandwidth operation in FR1**

*Type: discussion For: Endorsement  
 Source: Anritsu Corporation*

**Abstract:**

In this contribution we tried to summarize unclear points on the operation of asymmetric channel bandwidth.

Associated CR R4-2006144/6145

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006144 CR to asymmetric CBW operation in FR1**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0299 Cat: F (Rel-15)  
  
 Source: Anritsu Corporation*

**Abstract:**

Associated discussion paper - R4-2006143

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006145 CR to asymmetric CBW operation in FR1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0300 Cat: A (Rel-16)  
  
 Source: Anritsu Corporation*

**Abstract:**

Associated discussion paper - R4-2006143

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007003 CR to TS 38.101-1: Replace CBW with symbols defined in the specification.**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0339 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007004 CR to TS 38.101-1: Replace CBW with symbols defined in the specification.**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0340 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008224 CR for TS 38.101-1 UL configuration Correction for intra-band CA (R15)**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0393 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008226 CR for 38.101-1 RFC corrections (R15)**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0395 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.2.1 Power class related to UL MIMO and other related req. (MPR, SEM, etc) [NR\_newRAT-Core]

**R4-2006344 On transparent Tx\_div**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006366 Transparent Tx Diversity and Power Class 2 Ambiguity for Rel-15 NR**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006749 CR for UL MIMO requirements**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0319 Cat: F (Rel-15)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006817 NR UE power class for UL MIMO and 1-port transmission**

*Type: other For: Approval  
 38.101-1 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we propose to allow NR stand-alone UE to support PC2 UL MIMO and fall back to PC3 for 1-port transmission.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006955 Correction to uplink antenna connectors**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0332 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006956 Correction to uplink antenna connectors**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0333 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007035 Correction of transmitter characteristics for UL-MIMO: powerclass 2 and fallback**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0348 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the maximum output power requirements for UL-MIMO and the fallback requirement for all UL-MIMO transmitter characteristics

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007036 Correction of transmitter characteristics for UL-MIMO: powerclass 2 and fallback**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0349 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the maximum output power requirements for UL-MIMO and the fallback requirement for all UL-MIMO transmitter characteristics (note not cat A since additional changes in Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007037 Remove power-class ambiguity for UL-MIMO PC2 capable UE configured for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0270 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to remove power-class ambiguity for UL-MIMO PC2 capable UE configured for EN-DC (Rel-15 only)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007071 Further on Rel-15 TxD requirements**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007072 Further on EN-DC and SA power class**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007073 Reply LS on Rel-15 TxD**

*Type: LS out For: Approval  
 to RAN5, cc GCF CAG  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007074 Reply LS on Rel-15 UL MIMO power class**

*Type: LS out For: Approval  
 to GCF CAG, cc RAN5  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007075 CR on transmit signal quality requirements for single antenna port**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0355 Cat: F (Rel-15)  
  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008046 UL MIMO open items from WF and LS**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008047 CR on UL MIMO changes MPR and emissions**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0363 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008054 LS reply on requirement in Power Class 2 for UL MIMO Test cases.**

*Type: LS out For: Approval  
 to GCF-CAG, cc RAN5, PTCRB PVG  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008094 On the Need to Limit Delay for Transparent Transmit Diversity**

*Type: discussion For: Approval  
 Source: Motorola Mobility Germany GmbH*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008211 On Rel-15 PC2 power class**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008213 On Rel-15 PC2 unwanted emissions and MPR requirement**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008215 Draft CR on Rel-15 UL MIMO requirements**

*Type: draftCR For: Endorsement  
 38.101-1 v15.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008256 Discussion on SA TxD Applicability**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008257 Discussion on NSA Power Class 2 UE UL requirements for R15**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008258 Draft Reply LS on requirement in Power Class 2 for UL Test cases for GCF**

*Type: LS out For: Approval  
 to GCF-CAG, RAN5, cc PTCRB PVG  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008259 CR to 38.101-3: clarification of ENDC power class (Mirror for R16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0291 Cat: A (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008260 CR to 38.101-1: UL MIMO MPR reference table (R15)**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0401 Cat: F (Rel-15)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008261 CR to 38.101-1: UL MIMO MPR reference table (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0402 Cat: A (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008276 Considerations on the EVM Definition for an Antenna Port or a Single MIMO Layer**

*Type: discussion For: Discussion  
 Source: Motorola Mobility Germany GmbH*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008282 Remove power-class ambiguity for UL-MIMO PC2 capable UE configured for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0293 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.2.2 Other Tx requirements [NR\_newRAT-Core]

**R4-2006777 CR to 38.101-1: Revision to ULMIMO EVM spec**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0321 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

We propose that MIMO receivers in TE be used for UL MIMO compliance tests to reduce the cap between TE and deployment conditions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006778 CR to 38.101-1: Revision to ULMIMO EVM spec**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0322 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

We propose that MIMO receivers in TE be used for UL MIMO compliance tests to reduce the cap between TE and deployment conditions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006960 Correction to FR1 QPSK UL RMC**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0334 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006961 Correction to FR1 QPSK UL RMC**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0335 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007038 Introduction of the Annex modifiedMPR-Behaviour into the NR SA specification**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0350 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) into the specification of standalone operation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007039 Introduction of the Annex modifiedMPR-Behaviour into the NR SA specification**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0351 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) into the specification of standalone operation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007067 IBE measurements for half Pi BPSK with spectrum shaping**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0353 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Adopt the same changes for Pi/2 BPSK as in FR2 IBE requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007068 IBE measurements for Pi/2 BPSK with spectrum shaping**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0354 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Adopt the same changes for Pi/2 BPSK as in FR2 IBE requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008057 On the Transmit EVM Requirement for UL MIMO Transmission**

*Type: discussion For: Approval  
 Source: Motorola Mobility Germany GmbH*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008115 IBE requirement for almost contiguous allocations**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0378 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008116 IBE requirement for almost contiguous allocations**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0379 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008214 On UL MIMO Tx EVM requirement**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008231 CR for 38.101-1 correction of delta SRS (R15)**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0397 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008232 CR for 38.101-1 correction of delta SRS (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0398 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.2.3 Maintenance for Receiver characteristics [NR\_newRAT-Core]

**R4-2006383 CR to TS 38.101-1 R15: corrections on ACS for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0309 Cat: F (Rel-15)  
  
 Source: Xiaomi*

**Abstract:**

Resubmission of endorsed Draft CR R4-2005207

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006384 CR to TS 38.101-1 R16: corrections on ACS for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0310 Cat: A (Rel-16)  
  
 Source: Xiaomi*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006385 CR to TS 38.101-3 R15: corrections on ACS for intra-band contiguous EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0233 Cat: F (Rel-15)  
  
 Source: Xiaomi*

**Abstract:**

Resubmission of endorsed Draft CR R4-2005208

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006386 CR to TS 38.101-3 R16: corrections on ACS for intra-band contiguous EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0234 Cat: A (Rel-16)  
  
 Source: Xiaomi*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006953 Update of CSI-RS definition for FR1 DL RMCs**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0330 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006954 Update of CSI-RS definition for FR1 DL RMCs**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0331 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008073 CR for 38.101-1 to remove the NR CA configuration for REFSENS exception due to cross band isolation for CA**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0366 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008074 CR for 38.101-1 to remove the NR CA configuration for REFSENS exception due to cross band isolation for CA (mirror CR)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0367 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008075 CR for 38.101-1 to add the REFSENS exception for inter band CA with SDL**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0368 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008076 CR for 38.101-1 to add the REFSENS exception for inter band CA with SDL (mirror CR)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0369 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008077 CR for 38.101-1 to add requirements for inter-band CA with two UL bands**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0370 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008078 CR for 38.101-1 to add requirements for inter-band CA with two UL bands (mirror CR)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0371 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008096 CR for 38.101-1 to remove the NR CA configuration for REFSENS exception due to cross band isolation for CA**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0375 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008097 CR for 38.101-1 to add the REFSENS exception for inter band CA with SDL**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0376 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008098 CR for 38.101-1 to add requirements for inter-band CA with two UL bands**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0377 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008144 OOB blocking for n70 adjacent to n25**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0384 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008145 OOB blocking for n70 adjacent to n25**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0385 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.4.3 [FR2] Maintenance for general requirements in 38.101-2 [NR\_newRAT-Core]

**R4-2006489 CR Correction for REL16 FR2 contiguous intraband CA configuration table**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0157 Cat: F (Rel-16)  
  
 Source: Nokia, Qualcomm Inc, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007279 CR to K1 value in Annex A.3.3 of 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0189 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.3.1 Regulatory Tx/Rx spurious emission limits handling [NR\_newRAT-Core]

**R4-2006329 WRC-19 resolutions and impact to NR bands**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006785 CR to 38.101-2: NS\_202 update after changes to EU regulations**

*Type: CR For: Agreement  
 38.101-2 v15.9.0 CR-0167 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Update of NS\_202 after changes to EU regulations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006786 CR to 38.101-2: NS\_202 update after changes to EU regulations**

*Type: CR For: Agreement  
 38.101-2 v16.3.0 CR-0168 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Update of NS\_202 after changes to EU regulations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006787 Incorporating WRC19 resolutions into FR2 specifications**

*Type: other For: Discussion  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

WRC19 has determined new emissions recommendations that are expected to be adopted by various regulatory bodies. In preparation for future regulation changes, we discuss framework to accommodate changing requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006788 dCR to 38.101-2: Introduction of NS flags and A-MPR from WRC19 Resolutions**

*Type: draftCR For: Endorsement  
 38.101-2 v15.9.0  
 Source: Qualcomm Incorporated*

**Abstract:**

Introduction of NS flags and A-MPR from WRC19 Resolutions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006789 CR to 38.101-2: Introduction of NS flags and A-MPR from WRC19 Resolutions**

*Type: draftCR For: Endorsement  
 38.101-2 v16.3.0  
 Source: Qualcomm Incorporated*

**Abstract:**

Introduction of NS flags and A-MPR from WRC19 Resolutions

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006790 On obsolescence of NS\_201**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We would like to confirm that NS\_201 as defined in v15.9 of 38.101-2 is obsolete

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007077 Further on NS value report**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008277 CR for EESS protection for n257**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0206 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008278 CR for EESS protection for n257**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0207 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008279 [draft] LS for handling of WRC resolution**

*Type: LS out For: Approval  
 to RAN2  
 Source: NTT DOCOMO INC.*

**Abstract:**

According to the approved WF R4-2005738, LS will be drafted based on the discussion outcome.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008281 WRC-19 resolution for n257 and n259**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.3.2 Maintenance for Transmitter characteristics [NR\_newRAT-Core]

**R4-2006150 CR on ACLR MBW definition in FR2**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0146 Cat: F (Rel-15)  
  
 Source: Anritsu Corporation, Skyworks Solutions Inc.*

**Abstract:**

CR based on the approved WF in #94-e-bis: R4-2005213

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006151 CR on ACLR MBW definition in FR2**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0147 Cat: A (Rel-16)  
  
 Source: Anritsu Corporation, Skyworks Solutions Inc.*

**Abstract:**

CR based on the approved WF in #94-e-bis: R4-2005213

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006330 Clarification for the definition of the UL duty cycle**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006331 [draft] LS on clarification for the definition of the UL duty cycle**

*Type: LS out For: Approval  
 to RAN2  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006355 CR to 38.101-2 on correction of reference point for beam correspondence side conditions**

*Type: CR For: Agreement  
 38.101-2 v15.9.0 CR-0150 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006356 CR to 38.101-2 on correction of reference point for beam correspondence side conditions R16**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0151 Cat: A (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006427 CR to TS38.101-2 on Rel-15 beam correspondence**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0153 Cat: F (Rel-15)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006823 CR for TS 38.101-2: Correction for configured transmitted power for CA**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0171 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006824 CR for TS 38.101-2: Correction for configured transmitted power for CA**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0172 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006962 Correction to FR2 QPSK UL RMC**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0182 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006963 Correction to FR2 QPSK UL RMC**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0183 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006964 Correction of Rel-16 UL RMCs**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0184 Cat: F (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007040 Correction of Pcmax for CA**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0186 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to correct Pcmax for CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007041 Correction of Pcmax for CA**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0187 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct Pcmax for CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007076 On max reference power in UL duty cycle capability**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008044 CR on Pcmax correction for CA**

*Type: CR For: Agreement  
 38.101-2 v15.9.0 CR-0194 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008045 Conflict between agreed WF and spec**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008157 CR for for reference maximum transmission power for maxUplinkdutyCycle\_Rel-15**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0195 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008158 CR for for reference maximum transmission power for maxUplinkdutyCycle\_Rel-16**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0196 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008161 CR for intra-band CA DL Rx requirement-FR2\_Rel-15**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0197 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008162 CR for intra-band CA DL Rx requirement-FR2\_Rel-16**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0198 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008163 CR for modified MPR\_Rel-15**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0199 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008164 CR for modified MPR\_Rel-16**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0200 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008174 on reference power corresponding to maxUplinkdutyCycle**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008252 On PTRS configuration for EVM requirement**

*Type: other For: (not specified)  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008253 CR on PTRS configuration for UL RMC**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0204 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008254 CR on PTRS configuration for UL RMC**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0205 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.3.3 Maintenance for Receiver characteristics [NR\_newRAT-Core]

**R4-2006825 CR for TS 38.101-2: Clarifications on transmitter power for receiver requirements**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0173 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006826 CR for TS 38.101-2: Clarifications on transmitter power for receiver requirements**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0174 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006957 Update of CSI-RS definition for FR2 DL RMCs**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0180 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006958 Update of CSI-RS definition for FR2 DL RMCs**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0181 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008009 ACS requirement correction**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0193 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

fix CR implementation error

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.4.4 Maintenance for general requirements in 38.101-3 [NR\_newRAT-Core]

**R4-2006487 FR1+FR2 CA interband CA BCS support REL15**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0242 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006488 FR1+FR2 CA interband CA BCS support REL16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0243 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006635 CR to 38.101-3 MSD due to UL harmonics and intermodulation interference**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0247 Cat: B (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006636 CR to 38.101-3 MSD due to UL harmonics and intermodulation interference R16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0248 Cat: A (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008093 CR to 38.101-3 MSD due to UL harmonics and intermodulation interference R16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0281 Cat: B (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.4.1 [FR1] Maintenance for Transmitter characteristics within FR1 [NR\_newRAT-Core]

**R4-2006909 CR to TS 38.101-3 on configured output power relaxation due to EN-DC (Rel-15)**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0258 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-3 on configured output power relaxation due to EN-DC (Rel-15)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006910 CR to TS 38.101-3 on configured output power relaxation due to EN-DC (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0259 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-3 on configured output power relaxation due to EN-DC (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007042 Removal of the Annex modifiedMPR-Behaviour from the NSA specification**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0271 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to remove the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) from the specification of non-standalone operation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007043 Removal of the Annex modifiedMPR-Behaviour from the NSA specification**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0272 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to remove the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) from the specification of non-standalone operation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008136 DC\_2\_n78 and DC\_5\_n78 with n48 coexistence**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0283 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008141 DC\_2\_n78 and DC\_5\_n78 with n48 coexistence**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0284 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008159 CR for 38.101-3 UE coexistence for Rel-15**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0285 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008160 CR for 38.101-3 UE coexistence for Rel-16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0286 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008179 on serving cell number for ENDC power class**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008180 LS on serving cell number for ENDC power class**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008283 Coexistence DC\_2\_n78 and DC\_5\_n78 with band 48**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0294 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.4.4.2 [FR1+FR2] Maintenance for Transmitter characteristics involving both FR1 and FR2 [NR\_newRAT-Core]

##### 4.4.4.3 [FR1] Maintenance for Receiver characteristics within FR1 [NR\_newRAT-Core]

**R4-2006146 CR to out-of-band blocking for DC in FR1**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0226 Cat: F (Rel-15)  
  
 Source: Anritsu Corporation, Rohde&Schwarz, Keysight Technologies*

**Abstract:**

Associated discussion paper : R4-2000439, R4-2003327.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006147 CR to out-of-band blocking for DC in FR1**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0227 Cat: A (Rel-16)  
  
 Source: Anritsu Corporation, Rohde&Schwarz, Keysight Technologies*

**Abstract:**

Associated discussion paper : R4-2000439, R4-2003327.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006911 CR to TS 38.101-3 on REFSENS relaxation due to EN-DC (Rel-15)**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0260 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-3 on REFSENS relaxation due to EN-DC (Rel-15)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006912 CR to TS 38.101-3 on REFSENS relaxation due to EN-DC (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0261 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-3 on REFSENS relaxation due to EN-DC (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008129 OOB blocking for n70 adjacent to n25**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0381 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008130 OOB blocking for n70 adjacent to n25**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0382 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

##### 4.4.4.4 [FR1+FR2] Maintenance for Receiver characteristics involving both FR1 and FR2 [NR\_newRAT-Core]

#### 4.4.5 Editorial CRs [NR\_newRAT-Core]

**R4-2006148 CR on ACLR MBW definition in FR1**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0301 Cat: F (Rel-15)  
  
 Source: Anritsu Corporation, Skyworks Solutions Inc.*

**Abstract:**

Editorial correction

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006149 CR on ACLR MBW definition in FR1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0302 Cat: A (Rel-16)  
  
 Source: Anritsu Corporation, Skyworks Solutions Inc.*

**Abstract:**

Editorial correction

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006390 CR to TS 38.101-3: editorial corrections on wide band Intermodulation for intra-band contiguous EN-DC in FR1**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0235 Cat: D (Rel-15)  
  
 Source: Xiaomi*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006392 CR to TS 38.101-3: editorial corrections on wide band Intermodulation for intra-band contiguous EN-DC in FR1**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0236 Cat: A (Rel-16)  
  
 Source: Xiaomi*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006846 CR on minor corrections to TS 38.101-1 (Rel-15)**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0323 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR on minor corrections to TS 38.101-1 (Rel-15)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006870 CR on minor corrections to TS 38.101-1 (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0324 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR on minor corrections to TS 38.101-1 (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006903 CR on minor corrections to TS 38.101-2 (Rel-15)**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0176 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR on minor corrections to TS 38.101-2 (Rel-15)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006904 CR on minor corrections to TS 38.101-2 (Rel-16)**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0177 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR on minor corrections to TS 38.101-2 (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006905 CR on minor corrections to TS 38.101-3 (Rel-15)**

*Type: CR For: Agreement  
 38.101-3 v15.9.0 CR-0256 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR on minor corrections to TS 38.101-3 (Rel-15)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006906 CR on minor corrections to TS 38.101-3 (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0257 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR on minor corrections to TS 38.101-3 (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006939 Maintenance CR to 38101-1 on relative power tolerance R15**

*Type: CR For: Agreement  
 38.101-1 v15.9.0 CR-0326 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006940 Maintenance CR to 38101-1 on relative power tolerance R16**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0327 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006941 Maintenance CR to 38307 on a reference spec number R15**

*Type: CR For: Agreement  
 38.307 v15.5.0 CR-0021 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006942 Maintenance CR to 38307 on a reference spec number R16**

*Type: CR For: Agreement  
 38.307 v16.2.0 CR-0022 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.5 UE EMC [NR\_newRAT-Core]

**R4-2007060 CR to 38.124 on Exclusion Bands**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0003 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

This CR to 38.124 proposes a change to the UE EMC Exclusion Bands

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007061 CR to 38.124 on Emissions and Immunity Applicability and ranges**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0004 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to 38.124 includes considerations on the applicability of Emissions and Immunity tests and also updates the Frequency Ranges for RI test

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007062 CR to TS 38.124 adding Methods of measurement and limits for EMC emissions**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0005 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to TS 38.124 adding Methods of measurement and limits for EMC emissions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007063 CR to TS 38.124 on Definitions of Wired Network Port and UE**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0006 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to TS 38.124 on Definitions of Wired Network Port and UE

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007064 CR to TS 38.124 adding Methods of measurement and limits for EMC immunity**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0007 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to TS 38.124 adding Methods of measurement and limits for EMC immunity

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007065 CR to 38.124 References for Arrangements for establishing a communication link**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0008 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to 38.124 References for Arrangements for establishing a communication link

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007066 CR to 38.124 on Emission Requirements**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0009 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to 38.124 on Emission Requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007444 CR to TS 38.124: specification corrections and removal of [], Rel-15**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0010 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides required specification corrections and removal of [], based on the content of draftCR endorsed in R4-2005473, with additional corrections introduced on top of it.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007445 CR to TS 38.124: correction of UE radiated spurious emissons requirement, Rel-15**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0011 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides correction to UE radiated spur. emissons requirement, based on content of draftCR in R4-2003992 (which was NOT endorsed).

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007446 CR to TS 38.124: correction of the Rx exclusion band, Rel-15**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0012 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides correction to the Rx exclusion band section, based on the content of draftCR endorsed in R4-2003990.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007447 CR to TS 38.124: Performance assessment, Rel-15**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0013 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides content of the Performance assessment section, based on the content of draftCR endorsed in R4-2003991, with additional eridotial corrections introduced on top of it.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007448 CR to TS 38.124: Performance criteria, Rel-15**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0014 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides content of the Performance criteria section, based on the content of draftCR endorsed in R4-2003992, with additional editorial corrections introduced on top of it.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007527 [EMC] CR TS38.124 conducted emissions**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0015 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007528 [EMC] CR TS38.124 CS**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0016 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007529 [EMC] CR TS38.124 dips**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0017 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007530 [EMC] CR TS38.124 EFT**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0018 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007531 [EMC] CR TS38.124 ESD**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0019 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007532 [EMC] CR TS38.124 references**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0020 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007533 [EMC] CR TS38.124 Rx exclusion band**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0021 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007534 [EMC] CR TS38.124 spurious radiated**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0022 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007535 [EMC] CR TS38.124 surge**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0023 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007536 [EMC] CR TS38.124 vehicular environment**

*Type: CR For: Agreement  
 38.124 v15.2.0 CR-0024 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007537 [EMC]Discussion on Transients and surges in vehicular environment for NR UE\_RZ**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.6 BS RF [NR\_newRAT-Core]

#### 4.6.1 General [NR\_newRAT-Core]

**R4-2006092 CR to TR 38.817-02: Corrections of CR implementation errors**

*Type: CR For: Agreement  
 38.817-02 v15.7.0 CR-0066 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the identified CR implementation errors.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006889 Views on frequency band support for HAPS-based deployment**

*Type: discussion For: Approval  
 38.104 v..  
 Source: Google Inc., Loon Inc.*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006893 CR to TS 38.104 on frequency band support for HAPS-based deployment**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0173 Cat: F (Rel-15)  
  
 Source: Google Inc., Loon Inc.*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006896 CR to TS 38.104 on frequency band support for HAPS-based deployment**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0174 Cat: A (Rel-16)  
  
 Source: Google Inc., Loon Inc.*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006902 CR to TS 36.104 on frequency band support for HAPS-based deployment**

*Type: CR For: Agreement  
 36.104 v15.8.0 CR-4893 Cat: F (Rel-15)  
  
 Source: Google Inc., Loon Inc.*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006914 CR to TS 36.104 on frequency band support for HAPS-based deployment**

*Type: CR For: Agreement  
 36.104 v16.5.0 CR-4894 Cat: A (Rel-16)  
  
 Source: Google Inc., Loon Inc.*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007546 [R15]CR to TS 37.104 on channel spacing correction**

*Type: CR For: Agreement  
 37.104 v15.10.0 CR-0898 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007548 [R15]CR to TS 37.141 on channel spacing correction**

*Type: CR For: Agreement  
 37.141 v15.10.0 CR-0935 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007550 [R16]CR to TS 37.104 on channel spacing correction**

*Type: CR For: Agreement  
 37.104 v16.5.0 CR-0899 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007551 [R16]CR to TS 37.141 on channel spacing correction**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0936 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008099 CR to 38.104 on Removal of brackets and TBD (Rel-15)**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0206 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR removes the remaining brackets in TS 38.104, which is necessary before it is being referenced from the ITU-R IMT-2020 specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008100 CR to 38.104 on Removal of brackets and TBD (Rel-16)**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0207 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR removes the remaining brackets in TS 38.104, which is necessary before it is being referenced from the ITU-R IMT-2020 specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.6.2 Editorial CRs [NR\_newRAT-Core]

#### 4.6.3 Transmitter characteristics maintenance [NR\_newRAT-Core]

**R4-2006293 WRC-19 protection requirements for EESS operation in 36-37GHz**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006294 EESS protection requirements**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0170 Cat: F (Rel-15)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006295 EESS protection requirements**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0171 Cat: A (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006296 EESS protection requirements**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0155 Cat: F (Rel-15)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006297 EESS protection requirements**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0156 Cat: A (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007123 CR to TS 38.104: Additional OTA unwanted emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0183 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this CR co-existence requirements towards EESS are introduced

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007124 CR to TS 38.104: Additional OTA unwanted emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0184 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this CR co-existence requirements towards EESS are introduced

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007125 CR to TS 38.141-2: Additional OTA unwanted emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0163 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this CR co-existence requirements towards EESS are introduced

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007126 CR to TS 38.141-2: Additional OTA unwanted emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0164 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this CR co-existence requirements towards EESS are introduced

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007177 Unwanted emission requirements for EESS (36-37GHz) protection**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007300 CR to 38.104: Additional requirements for EESS protection**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0188 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Added the additional requirements for protection of EESS for OTA OBUE, OTA transmitter spurious, and OTA receiver spurious requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007301 CR to 38.104: Additional requirements for EESS protection**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0189 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Added the additional requirements for protection of EESS for OTA OBUE, OTA transmitter spurious, and OTA receiver spurious requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007302 CR to 38.141-2: Additional requirements for EESS protection**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0171 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Added the additional requirements for protection of EESS for OTA OBUE, OTA transmitter spurious, and OTA receiver spurious requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007303 CR to 38.141-2: Additional requirements for EESS protection**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0172 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Added the additional requirements for protection of EESS for OTA OBUE, OTA transmitter spurious, and OTA receiver spurious requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007518 [BS RF][R15]CR to TS 38.104 on EESS protection 36--37GHz catF**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0200 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007519 [BS RF][R15]CR to TS 38.104 on EESS protection catF**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0201 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007520 [BS RF][R15]CR to TS 38.141-2 on EESS protection 36--37GHz catF**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0186 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007521 [BS RF][R15]CR to TS 38.141-2 on EESS protection catF**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0187 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007522 [BS RF][R16]CR to TS 38.104 on EESS protection 36--37GHz catA**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0202 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007523 [BS RF][R16]CR to TS 38.104 on EESS protection catA**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0203 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007524 [BS RF][R16]CR to TS 38.141-2 on EESS protection 36--37GHz catA**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0188 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007525 [BS RF][R16]CR to TS 38.141-2 on EESS protection catA**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0189 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007526 [BS RF]further discussion on the EESS protection for 36--37GHz outcome of WRC-19**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008103 CR to 38.104 on Receiver spurious emissions exclusion band (Rel-15)**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0208 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The CR adds the receiver exclusion band which was missing for FR1 and was not explicit for FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008104 CR to 38.104 on Receiver spurious emissions exclusion band (Rel-16)**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0209 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The CR adds the receiver exclusion band which was missing for FR1 and was not explicit for FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008105 CR to 38.141-2 on Receiver spurious emissions exclusion band (Rel-15)**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0195 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The CR adds the receiver exclusion band which was missing for FR1 and was not explicit for FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008106 CR to 38.141-2 on Receiver spurious emissions exclusion band (Rel-16)**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0196 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The CR adds the receiver exclusion band which was missing for FR1 and was not explicit for FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008107 CR to 38.104 on EESS protection for bands n257 and n258 (Rel-15**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0210 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR introduces EESS protection an in the NR BS specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008108 CR to 38.104 on EESS protection for bands n257 and n258 (Rel-16)**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0211 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR introduces EESS protection an in the NR BS specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008109 CR to 38.141-2 on EESS protection for bands n257 and n258 (Rel-15)**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0197 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR introduces EESS protection an in the NR BS specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008110 CR to 38.141-2 on EESS protection for bands n257 and n258 (Rel-16)**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0198 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR introduces EESS protection an in the NR BS specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.6.4 Receiver characteristics maintenance [NR\_newRAT-Core]

**R4-2006917 CR to TS 38.104: Correction to out-of-band blocking requirements in subclause 7.5 and subclause 10.6**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0175 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

A corresponding draft CR was technically endoorsed in R4-2003755 at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006918 CR to TS 38.104: Correction to out-of-band blocking requirements in subclause 7.5 and subclause 10.6**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0176 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

A corresponding draft CR was technically endoorsed in R4-2003755 at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.7 BS conformance testing [NR\_newRAT-Perf]

#### 4.7.1 General [NR\_newRAT-Perf]

**R4-2007436 CR to 38.104: Annex B and C clarification on equlisation calculation (B.6, C.6)**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0193 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007437 CR to 38.141-1: Annex H clarification on equlisation calculation (H.6)**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0132 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007438 CR to 38.141-2: Annex L clarification on equlisation calculation (L.6)**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0177 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007439 Detail information on Clarification on EVM equalizer calculation for NR BS conformance testing**

*Type: discussion For: Agreement  
 Source: Keysight Technologies UK Ltd, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007481 Discussion on EVM equalization for NR BS**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.7.2 Editorial CRs [NR\_newRAT-Perf/Core]

#### 4.7.3 BS specifications clean-ups (including conformance testing and core) [NR\_newRAT-Perf/Core]

##### 4.7.3.1 eAAS specifications [NR\_newRAT-Perf/Core]

**R4-2006093 CR to TS 37.145-2: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0219 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) Include the declaration “Rated transmitter TRP declared per RIB, Prated,t,TRP” in clause 4.10.

2) For power allocation for all test configurations except ACTR4 and ATCR6, set the power of each carrier to the same level, and use “Rated transmitter TRP d

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006094 CR to TS 37.145-2: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0220 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) Include the declaration “Rated transmitter TRP declared per RIB, Prated,t,TRP” in clause 4.10.

2) For power allocation for all test configurations except ACTR4 and ATCR6, set the power of each carrier to the same level, and use “Rated transmitter TRP d

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006459 TS 37.145-1: Corrections related to Foffset**

*Type: CR For: Agreement  
 37.145-1 v15.6.0 CR-0210 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

Corrections related to Foffset

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006460 TS 37.145-2: Corrections related to Foffset**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0221 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

Corrections related to Foffset

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006462 TS 37.145-1: Corrections related to Foffset**

*Type: CR For: Agreement  
 37.145-1 v16.3.0 CR-0211 Cat: A (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

Corrections related to Foffset

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006463 TS 37.145-2: Corrections related to Foffset**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0222 Cat: A (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

Corrections related to Foffset

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006915 CR to TS 37.145-2: Additional information about alignment needed for TRP measurements in Annex F.1**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0223 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

This is a resubmitted version of R4-2005518 technically endoorsed last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006916 CR to TS 37.145-2: Additional information about alignment needed for TRP measurements in Annex F.1**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0224 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This is a Cat A CR technically endorsed in R4-2005518 last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007418 CR to 37.145-1: Correction on interference level of receiver dynamic range requirement**

*Type: CR For: Agreement  
 37.145-1 v15.6.0 CR-0212 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007419 CR to 37.145-1: Correction on interference level of receiver dynamic range requirement**

*Type: CR For: Agreement  
 37.145-1 v16.3.0 CR-0213 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007420 CR to 37.145-2: Correction on interference level of receiver dynamic range requirement**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0225 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007421 CR to 37.145-2: Correction on interference level of receiver dynamic range requirement**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0226 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007459 CR to TS 37.105: removal of [], Rel-15**

*Type: CR For: Agreement  
 37.105 v15.8.0 CR-0183 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides removal of outstanding [], with additional editorials corrections introduced to TS 37.105.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007460 CR to TS 37.105: removal of [], Rel-16**

*Type: CR For: Agreement  
 37.105 v16.3.0 CR-0184 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

This CR provides removal of outstanding [], with additional editorials corrections introduced to TS 37.105.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007470 CR to 37.145-2 Corrections to OTA modulation quality test Rel-15**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0229 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces corrections to AAS specification TS 37.145-2 with introduction of reference directly to NR single RAT specification to avoid different approach in AAS and NR specification in term of test that are required.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007471 CR to 37.145-2 Corrections to OTA modulation quality test Rel-16**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0230 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces corrections to AAS specification TS 37.145-2 with introduction of reference directly to NR single RAT specification to avoid different approach in AAS and NR specification in term of test that are required.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008013 CR to TS 37.145-2: Correcting the reference angular step equations (Annex F.2.2)**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0231 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The upper limit of 15 degrees is added to the reference angular step equations for ULA in Annex F.2.2. This CR is a resubmission of endorsed CR R4-2004463 at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008015 CR to TS 37.145-2: Correcting the reference angular step equations (Annex F.2.2)**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0232 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The upper limit of 15 degrees is added to the reference angular step equations for ULA in Annex F.2.2. This CR is based on endorsed CR R4-2004463 at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.7.3.2 MSR specifications [NR\_newRAT-Perf/Core]

**R4-2006458 TS 37.141: Corrections related to Foffset**

*Type: CR For: Agreement  
 37.141 v15.10.0 CR-0929 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

Corrections related to Foffset

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006461 TS 37.141: Corrections related to Foffset**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0930 Cat: A (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

Corrections related to Foffset

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007468 CR to 37.141 Rel-15 Corrections of references in Modulation quality test for NB-IoT**

*Type: CR For: Agreement  
 37.141 v15.10.0 CR-0931 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR removes for NB-IoT carrier steps in references

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007469 CR to 37.141 Rel-16 Corrections of references in Modulation quality test for NB-IoT**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0932 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR removes for NB-IoT carrier steps in references

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007500 TS 37.141 - Issues with TC applicabilities for CS17 and CS18**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution highlights some issues with TC applicabilities for CS17 and CS18.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007501 CR to TS 37.141 Rel-15 - Issues with TC applicabilities CS17**

*Type: CR For: Agreement  
 37.141 v15.10.0 CR-0933 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

This CR is fixing the issues with TC applicabilities for CS17

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007502 CR to TS 37.141 Rel-16 - Issues with TC applicabilities CS17-CS18**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0934 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR is fixing the issues with TC applicabilities for CS17 and CS18

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008062 CR to 37.141: Rel'15 corrections**

*Type: CR For: Agreement  
 37.141 v15.10.0 CR-0939 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008063 CR to 37.141: Rel'16 corrections**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0940 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.7.3.3 NR conformance testing specifications [NR\_newRAT-Perf]

**R4-2006095 CR to TS 38.141-1: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0117 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson*

**Abstract:**

1) Remove the undefined symbol “Foffset” and clarify the wordings in the note in clause 4.7.1.

2) For NRTC3 generation, use the correct symbols “Foffset\_high“ and “Foffset\_low“ in clause 4.7.5.1 for sub-blocks generation.

3) For NRTC4 generation, clarify

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006096 CR to TS 38.141-1: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0118 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson*

**Abstract:**

1) Remove the undefined symbol “Foffset” and clarify the wordings in the note in clause 4.7.1.

2) For NRTC3 generation, use the correct symbols “Foffset\_high“ and “Foffset\_low“ in clause 4.7.5.1 for sub-blocks generation.

3) For NRTC4 generation, clarify

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006097 CR to TS 38.141-1: Clarifications and corrections on extreme test environment**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0119 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson*

**Abstract:**

Align the wording relating to extreme test environment for the conducted and OTA tests, and correct the wrong references to annexes.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006098 CR to TS 38.141-1: Clarifications and corrections on extreme test environment**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0120 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson*

**Abstract:**

Align the wording relating to extreme test environment for the conducted and OTA tests, and correct the wrong references to annexes.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006099 CR to TS 38.141-2: Correction on frequency offset symbols in test configurations**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0147 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Remove the undefined symbol “Foffset” and clarify the wordings in the note in clause 4.7.1, and use the correct symbols “Foffset\_high“ and “Foffset\_low“ in clause 4.7.2.4.1 for sub-blocks generation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006100 CR to TS 38.141-2: Correction on frequency offset symbols in test configurations**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0148 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Remove the undefined symbol “Foffset” and clarify the wordings in the note in clause 4.7.1, and use the correct symbols “Foffset\_high“ and “Foffset\_low“ in clause 4.7.2.4.1 for sub-blocks generation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006101 CR to TS 38.141-2: Correction on test procedure of OTA in-channel selectivity**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0149 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Remove the phrase that asks to repeat the test for each supported NR channel BW, to align the test procedure with those of conducted in-channel selectivity and other receiver OTA requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006102 CR to TS 38.141-2: Correction on test procedure of OTA in-channel selectivity**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0150 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Remove the phrase that asks to repeat the test for each supported NR channel BW, to align the test procedure with those of conducted in-channel selectivity and other receiver OTA requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006730 CR 38.141-1 Rel15 4.9.2.3 corrections for random data generation**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0123 Cat: F (Rel-15)  
  
 Source: Futurewei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006731 CR 38.141-1 Rel16 4.9.2.3 corrections for random data generation**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0124 Cat: A (Rel-16)  
  
 Source: Futurewei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006732 CR 38.141-2 Rel15 4.9.2.3 corrections for random data generation**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0157 Cat: F (Rel-15)  
  
 Source: Futurewei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006733 CR 38.141-2 Rel16 4.9.2.3 corrections for random data generation**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0158 Cat: A (Rel-16)  
  
 Source: Futurewei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007294 CR to TS 38.141-1: MU and TT value tables**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0130 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Added NOTE to clarify the applicability of MU and TT values in the MU and TT value tables.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007295 CR to TS 38.141-1: MU and TT value tables**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0131 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Added NOTE to clarify the applicability of MU and TT values in the MU and TT value tables.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007296 CR to TS 38.141-2: MU and TT value tables**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0167 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Added NOTE to clarify the applicability of MU and TT values in the MU and TT value tables.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007297 CR to TS 38.141-2: MU and TT value tables**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0168 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Added NOTE to clarify the applicability of MU and TT values in the MU and TT value tables.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007298 CR to TS 38.141-2: OTA receiver intermodulation interference signal type**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0169 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Note number is corrected

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007299 CR to TS 38.141-2: OTA receiver intermodulation interference signal type**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0170 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Note number is corrected

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007472 CR to 38.141-1 Rel-15 with correction to TPDR test procedure**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0135 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduce correction to clause with Total power dynamic range test procedure related to test model that used.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007473 CR to 38.141-1 Rel-16 with correction to TPDR test procedure**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0136 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduce correction to clause with Total power dynamic range test procedure related to test model that used.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007503 CR to TS 38.141-2 - Manufacturer declaration clarifications**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0184 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR is resubmission from endorsed R4-2005602 and clarifies some manufacturer declarations in TS 38.141-2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007504 CR to TS 38.141-2 - Manufacturer declaration clarifications**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0185 Cat: A (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR clarifies some manufacturer declarations in TS 38.141-2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007916 Discussion on out of band CLTA maximum height**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discussion on practical implementations of CLTA and the practicality of the current CTA definition.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008041 CR to TS 38.141-2: Adding spherical angle definitions to 3.2**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0191 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The definition of the spherical symbols (?, ?) is added to 3.2. This CR is a resubmission of endorsed draft CR R4-2005472 at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008042 CR to TS 38.141-2: Adding spherical angle definitions to 3.2**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0192 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The definition of the spherical symbols (?, ?) is added to 3.2. This CR is based on endorsed draft CR R4-2005472 at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008043 CR to TS 38.141-2: Correcting the reference angular step equations (Annex I.2.2)**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0193 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The upper limit of 15 degrees is added to the reference angular step equations for ULA in Annex I.2.2. This CR is a resubmission of endorsed draft CR R4-2004500 at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008055 CR to TS 38.141-2: Correcting the reference angular step equations (Annex I.2.2)**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0194 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The upper limit of 15 degrees is added to the reference angular step equations for ULA in Annex I.2.2. This CR is based on endorsed draft CR R4-2004500 at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.7.4 Conducted conformance testing (38.141-1) [NR\_newRAT-Perf]

**R4-2006919 CR to TS 38.141-1: Correction to out-of-band blocking requirement is subclause 7.5**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0125 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

A correspondig draft CR in R4-2003760 was technically endoorsed at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006920 CR to TS 38.141-1: Correction to out-of-band blocking requirement is subclause 7.5**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0126 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

A correspondig draft CR in R4-2003760 was technically endoorsed at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006922 CR to TS 38.141-2: Correction to out-of-band blocking requirement in subclause 7.6**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0162 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

A correspondig draft CR in R4-2003761 was technically endoorsed at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.7.5 Radiated conformance testing (38.141-2) [NR\_newRAT-Perf]

**R4-2006921 CR to TS 38.141-2: Correction to out-of-band blocking requirement in subclause 7.6**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0161 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

A correspondig draft CR in R4-2003761 was technically endoorsed at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007313 NR FR2 test models for 16QAM**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0173 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007314 NR FR2 test models for 16QAM**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0174 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007315 CR for TS 38.141-2: Total power dynamic range**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0175 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007316 CR for TS 38.141-2: Total power dynamic range**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0176 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007442 CR to TS 38.141-2: Corrections for the extreme environment testing, Rel-15**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0178 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR clarifies the ambiguity of the extreme test conditions applicability in TS 38.141-2, based on the draftCR endorsed in R4-2005571.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007443 CR to TS 38.141-2: Corrections for the extreme environment testing, Rel-16**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0179 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

This CR clarifies the ambiguity of the extreme test conditions applicability in TS 38.141-2, based on the draftCR endorsed in R4-2005571.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.8 BS EMC [NR\_newRAT-Core]

#### 4.8.1 Editorial CRs [NR\_newRAT-Perf/Core]

#### 4.8.2 Core requirements [NR\_newRAT-Core]

##### 4.8.2.1 Emission requirements [NR\_newRAT-Core]

**R4-2007449 Further clarifications to the direct field strength measurement of unwanted radiated emissions from the BS enclosure port**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Resubmission of the discussion paper on the direct field strength approach proposal to measure the EMC radiated emissions from the enclosure port of BS equipped with the antenna connectors / TAB connectors. This resubmission includes additional feedback t

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007450 CR to TS 38.113: direct field strength measurements for the EMC RE, Rel-15**

*Type: CR For: Agreement  
 38.113 v15.9.0 CR-0019 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

CR for the direct field strength measurement method to measure the EMC radiated emissions from the enclosure port of BS equipped with the antenna connectors / TAB connectors.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 4.8.2.2 Immunity requirements [NR\_newRAT-Core]

#### 4.8.3 Performance requirements [NR\_newRAT-Perf]

**R4-2007058 Proposal for EMC reduction of test configurations**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

Proposal for EMC reduction of test configurations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007059 Draft CR to 37.113 Introducing Reverberation Chamber**

*Type: CR For: Agreement  
 37.113 v15.8.0 CR-0109 Cat: F (Rel-15)  
  
 Source: Ericsson, ZTE*

**Abstract:**

A corresponding draft CR was technically endorsed in R4-2005565 at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007547 [R15]CR to TS 37.114 Add the reverberation chamber for radiated immunity testing (clause 2 & subclause 9.2.1)**

*Type: CR For: Agreement  
 37.114 v15.8.0 CR-0097 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007549 [R15]CR to TS 38.113 Add the reverberation chamber for radiated immunity testing (clause 2 & subclause 9.2.2)**

*Type: CR For: Agreement  
 38.113 v15.9.0 CR-0020 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.9 RRM core maintenance (38.133/36.133) [NR\_newRAT-Core]

**R4-2006602 Correction of CFRA RSRP threshold**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0679 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2003395.

Parameter for RSRP CFRA threshold was changed on clause 6.3.2 of 38.331 after version 15.1.0.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006603 Correction of CFRA RSRP threshold**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0680 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Mirror CR implementing endorsed draftCR R4-2003395.

Parameter for RSRP CFRA threshold was changed on clause 6.3.2 of 38.331 after version 15.1.0.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.1 General [NR\_newRAT-Core]

#### 4.9.2 Editorial CRs [NR\_newRAT-Core]

**R4-2006027 [CR] Editorial corrections for 38.133 R15 Core Part**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0594 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the editor before, we prepared this CR but didn't submit since no editorial CRs were allowed for the previous meetings.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006028 [CR] Editorial corrections for 38.133 R16 Core Part - Cat A**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0595 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the editor before, we prepared this CR but didn't submit since no editorial CRs were allowed for the previous meetings.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006029 [CR] Editorial corrections for 38.133 R16 Core Part - Cat F**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0596 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the editor before, we prepared this CR but didn't submit since no editorial CRs were allowed for the previous meetings. The errors corrected in this CR don't exist in R15 so this is a Cat F CR for R16 only.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006218 Rapportuer CR for TS38.133**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0633 Cat: D (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006880 CR on TS38.133 for modification on number of cells and number of SSB to be measured for FR2 intra-freqency measurement**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0705 Cat: F (Rel-15)  
  
 Source: Mediatek Inc., Huawei, Hisilicon, Apple, Intel*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006881 CR on TS38.133 for modification on number of cells and number of SSB to be measured for FR2 intra-freqency measurement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0706 Cat: A (Rel-16)  
  
 Source: Mediatek Inc., Huawei, Hisilicon, Apple, Intel*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007714 Editoral CR on TS 38.133 Rel-16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0781 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007715 Editoral CR on TS 38.133 Rel-15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0782 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.3 UE measurement capability (38.133/36.133) [NR\_newRAT-Core]

**R4-2006878 CR on TS38.133 for modification of the layer 3 and layer 1 measurement sharing factor when both SSB and RSSI symbol to be measured are considered**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0703 Cat: F (Rel-15)  
  
 Source: Mediatek Inc., Huawei, Hisilicon, Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006879 CR on TS38.133 for modification of the layer 3 and layer 1 measurement sharing factor when both SSB and RSSI symbol to be measured are considered**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0704 Cat: A (Rel-16)  
  
 Source: Mediatek Inc., Huawei, Hisilicon, Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007638 CR to 36.133 on NR reporting criteria**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6862 Cat: F (Rel-15)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007639 CR to 36.133 on NR reporting criteria**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6863 Cat: F (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007709 CR on NR reporting criteria for EN-DC (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0777 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007710 CR on NR reporting criteria for EN-DC**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0778 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007713 Discussion on reporting criteria for EN-DC**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007805 CR on FR2 measurement requirements outside gaps R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0820 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon, MediaTek, Ericsson, Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007806 CR on FR2 measurement requirements outside gaps R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0821 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon, MediaTek, Ericsson, Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007807 CR to remove RSTD requirements for NE-DC in 36.133 R15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6881 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007808 CR to remove RSTD requirements for NE-DC in 36.133 R16**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6882 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007809 CR on inter-RAT RSTD requirements for NE-DC in 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0822 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007810 CR on inter-RAT RSTD requirements for NE-DC in 38.133 R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0823 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007961 NR reporting criteria**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6903 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

NR reporting criteria

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007962 NR reporting criteria**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6904 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

NR reporting criteria

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.4 RRM measurement and measurement gap (38.133/36.133) [NR\_newRAT-Core]

**R4-2006185 CR on CSSF correction for R15 TS38.133**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0619 Cat: F (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006186 CR on CSSF correction for R16 TS38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0620 Cat: A (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007757 Correction on gap pattern applicability in TS 36.133 R15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6879 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007758 Correction on gap pattern applicability in TS 36.133 R16**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6880 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.5 Connected state mobility (38.133/36.133) [NR\_newRAT-Core]

**R4-2006002 [CR] RRC release with redirection 38.133 R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0590 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006003 [CR] RRC release with redirection 36.133 R15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6825 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006004 [CR] RRC release with redirection 36.133 R16 Cat A**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6826 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006005 Discussion on RRC procedure delay in RRC release with redirection**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006006 Discussion on RRC re-establishment requirement**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006007 CR on RRC re-establishment requirements R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0591 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

We still believe that the statement “There is no requirement if the target cell does not contain the UE context” should be removed since it's confusing and actually doesn't serve any need.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006008 CR on RRC re-establishment requirements R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0592 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007981 Correction to RRC release with redirection requirements in 36.133 Rel-15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6905 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correction to RRC release with redirection requirements to align T\_prach with core spec (38.133).

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007982 Correction to RRC release with redirection requirements in 36.133 Rel-16**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6906 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correction to RRC release with redirection requirements to align T\_prach with core spec (38.133).

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.6 Timing (38.133/36.133) [NR\_newRAT-Core]

**R4-2007711 CR on UE transmit timing (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0779 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007712 CR on UE transmit timing**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0780 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.7 Signaling characteristics (38.133/36.133) [NR\_newRAT-Core]

**R4-2006174 Corrections to R15 MAC-CE based TCI state switching requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006177 CR for correction to MAC-CE based TCI State switch timeline (Clause 8.10.3)**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0613 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated, MediaTek*

**Abstract:**

This CR addresses a misalignment between RAN1 and RAN4 requirements in MAC-CE based TCI state switch

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006178 CR for correction to MAC-CE based TCI State switch timeline (Clause 8.10.3)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0614 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated, MediaTek*

**Abstract:**

This CR addresses a misalignment between RAN1 and RAN4 requirements in MAC-CE based TCI state switch

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006189 On issues of R15 BWP switching delay requirement**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006190 CR on BWP switching delay requirement for R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0623 Cat: F (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006191 CR on BWP switching delay requirement for R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0624 Cat: A (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006209 CR on Active TCI State Switching requirements - Rel15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0628 Cat: F (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006210 CR on Active TCI State Switching requirements - Rel16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0629 Cat: A (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006465 CR on TCI state switch**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0662 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006466 CR on TCI state switch**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0663 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006847 CR for SCell activation delay in FR2**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0691 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006848 CR for SCell activation delay in FR2**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0692 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006891 [CR] TCI state switch delay 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0707 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006892 [CR] TCI state switch delay 38.133 R16 Cat A**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0708 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007280 CR to T parameters in 8.3.2 of 38.133**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0721 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007659 CR on LTE SCell activation and deactivation delay**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6864 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007660 CR on LTE SCell activation and deactivation delay\_r16**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6865 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007661 CR on SCell activation and deactivation delay**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0745 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007662 CR on SCell activation and deactivation delay\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0746 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007663 CR on Psharingfactor**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0747 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007664 CR on Psharingfactor\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0748 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007705 CR on CSI-RS based RLM requirement (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0773 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007706 CR on CSI-RS based RLM requirement**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0774 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007707 CR on interruption due to Acitve BWP switch (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0775 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007708 CR on interruption due to Acitve BWP switch**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0776 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007751 Correction onTCI state switching R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0798 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007752 Correction onTCI state switching R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0799 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007780 CR 38.133 (8.10.5) Corrections to RRC-based TCI state change**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0812 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Corresponding draft CR endorsed at RAN4#94-e-Bis (R4-2004417).

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007781 CR 38.133 (8.10.5) Corrections to RRC-based TCI state change**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0813 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Mirror. Corresponding draft CR endorsed at RAN4#94-e-Bis (R4-2004417).

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007783 CR 38.133 (8.3.2) Corrections to SCell Activation delay requirements**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0815 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Revision of endorsed draft CR from RAN4#94-e-Bis (R4-2005426). The revised version takes into account the agreement made during the GTW meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007784 CR 38.133 (8.3.2) Corrections to SCell Activation delay requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0816 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Mirror. Revision of endorsed draft CR from RAN4#94-e-Bis (R4-2005426). The revised version takes into account the agreement made during the GTW meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007811 Discussion on SCell activation requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007812 CR on SCell activation requirements R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0824 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007813 CR on SCell activation requirements R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0825 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007963 Clarification on RLM**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0866 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Clarification on RLM

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007964 Clarification on RLM**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0867 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Clarification on RLM

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.8 Beam management based on SSB and/or CSI-RS (38.133) [NR\_newRAT-Core]

**R4-2006187 CR on SMTC2 configuration in SSB based CBD for R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0621 Cat: F (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006188 CR on SMTC2 configuration in SSB based CBD for R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0622 Cat: A (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006849 Semi-persistent or aperiodic SSB based L1-RSRP reporting on PUSCH in FR2**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006850 CR for Semi-persistent or aperiodic SSB based L1-RSRP reporting on PUSCH in FR2**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0693 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006851 CR for Semi-persistent or aperiodic SSB based L1-RSRP reporting on PUSCH in FR2**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0694 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006852 CR on SMTC period for beam management requirements**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0695 Cat: F (Rel-15)  
  
 Source: MediaTek inc., Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006853 CR on SMTC period for beam management requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0696 Cat: A (Rel-16)  
  
 Source: MediaTek inc., Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006854 CR for CSI-RS based L1-RSRP measurement period**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0697 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006855 CR for CSI-RS based L1-RSRP measurement period**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0698 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007492 Applicability of QCL**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0737 Cat: F (Rel-15)  
  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007493 Applicability of QCL**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0738 Cat: F (Rel-16)  
  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007814 Discussion on SSB based L1-RSRP measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007815 CR on SSB based L1-RSRP measurement R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0826 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007816 CR on SSB based L1-RSRP measurement R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0827 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.9.9 Other requirements [NR\_newRAT-Core]

### 4.10 RRM perf maintenance (38.133/36.133) [NR\_newRAT-Perf]

#### 4.10.1 General [NR\_newRAT-Perf]

**R4-2006467 CR on PDSCH RMC**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0664 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006468 CR on PDSCH RMC**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0665 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007665 CR on E-UTRAN Serving Cell Parameters**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0749 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007666 CR on E-UTRAN Serving Cell Parameters\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0750 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007667 CR on Modified parameters for BFD TCs with 4Rx antenna**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0751 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007668 CR on Modified parameters for BFD TCs with 4Rx antenna\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0752 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007753 Accuracy of carrier aggregation in NR R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0800 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007754 Accuracy of carrier aggregation in NR R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0801 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.10.2 Editorial CRs [NR\_newRAT-Perf]

**R4-2006030 [CR] Editorial corrections for 38.133 R15 Perf Part**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0597 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the editor before, we prepared this CR but didn't submit since no editorial CRs were allowed for the previous meetings.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006031 [CR] Editorial corrections for 38.133 R16 Perf Part - Cat A**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0598 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the editor before, we prepared this CR but didn't submit since no editorial CRs were allowed for the previous meetings.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006064 [CR] Editorial corrections for 38.133 R16 Perf Part - Cat F**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0600 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the editor before, we prepared this CR but didn't submit since no editorial CRs were allowed for the previous meetings. The errors corrected in this CR don't exist in R15 so this is a Cat F CR for R16 only.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.10.3 RRM test cases [NR\_newRAT-Perf]

**R4-2006071 CR to Intra-frequency handover from FR1 to FR1**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0601 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Deleted Event A3 related parameters of measurement object and report configuration in Table A.6.3.1.2.2-2

Deleted PRACH configuration index from Table A.6.3.1.1.2-2 and Table A.6.3.1.2.2-2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006072 CR to Intra-frequency handover from FR1 to FR1**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0602 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Deleted Event A3 related parameters of measurement object and report configuration in Table A.6.3.1.2.2-2

Deleted PRACH configuration index from Table A.6.3.1.1.2-2 and Table A.6.3.1.2.2-2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006073 CR to SA event triggered reporting tests with per-UE gaps**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0603 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.6.6.1.3/4/6 updated CSI-RS tables to match SSB parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006074 CR to SA event triggered reporting tests with per-UE gaps**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0604 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.6.6.1.3/4/6 updated CSI-RS tables to match SSB parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006075 CR to A.6.1.2.1 Cell reselection to higher priority E-UTRAN**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0605 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.6.1.2.1, A.6.1.2.2, update E-UTRAN PRACH configuration index is depending on duplex mode

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006076 CR to A.6.1.2.1 Cell reselection to higher priority E-UTRAN**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0606 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.6.1.2.1, A.6.1.2.2, update E-UTRAN PRACH configuration index is depending on duplex mode

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006077 Correction to General test parameters in A.6.6.1.2**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0607 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.6.6.1.2, Time offsets between serving and neighbour cells are corrected

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006078 Correction to General test parameters in A.6.6.1.2**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0608 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.6.6.1.2, Time offsets between serving and neighbour cells are corrected

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006079 CR to E-UTRAN – NR PSCell FR2 DL active BWP switch with non-DRX in synchronous ENDC**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0609 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.5.5.6.2, clarify how the BWP are switched in the section of “Test Purpose and Environment”

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006080 CR to E-UTRAN – NR PSCell FR2 DL active BWP switch with non-DRX in synchronous ENDC**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0610 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.5.5.6.2, clarify how the BWP are switched in the section of “Test Purpose and Environment”

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006081 CR to SA NR- E-UTRAN event-triggered reporting in FR1**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0611 Cat: F (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Replaces the missed upload of CR R4-1914427. Same content as the agreed Rel-15 CR R4-1914426.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006082 CR to parameter for Cat-M RRM A.7.3.55**

*Type: CR For: Agreement  
 36.133 v13.18.0 CR-6829 Cat: F (Rel-13)  
  
 Source: ANRITSU LTD*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006083 CR to parameter for Cat-M RRM A.7.3.55**

*Type: CR For: Agreement  
 36.133 v14.14.0 CR-6830 Cat: A (Rel-14)  
  
 Source: ANRITSU LTD*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006084 CR to parameter for Cat-M RRM A.7.3.55**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6831 Cat: A (Rel-15)  
  
 Source: ANRITSU LTD*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006085 CR to parameter for Cat-M RRM A.7.3.55**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6832 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006086 CR to RRM MPDSCH Repetitions in CE ModeA test case**

*Type: CR For: Agreement  
 36.133 v13.18.0 CR-6833 Cat: F (Rel-13)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.8.1.26, change RMC R.11 HD-FDD -> R.25 HD-FDD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006087 CR to RRM MPDSCH Repetitions in CE ModeA test case**

*Type: CR For: Agreement  
 36.133 v14.14.0 CR-6834 Cat: A (Rel-14)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.8.1.26, change RMC R.11 HD-FDD -> R.25 HD-FDD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006088 CR to RRM MPDSCH Repetitions in CE ModeA test case**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6835 Cat: A (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.8.1.26, change RMC R.11 HD-FDD -> R.25 HD-FDD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006089 CR to RRM MPDSCH Repetitions in CE ModeA test case**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6836 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

For A.8.1.26, change RMC R.11 HD-FDD -> R.25 HD-FDD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006179 Corrections to Inter-freq SMTC configurations in A.4.7.1.2 and A.4.7.2.2**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0615 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Correction on SMTC and timing offset configuration in A.4.7.1.2 and A.4.7.2.2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006180 Corrections to Inter-freq SMTC configurations in A.4.7.1.2 and A.4.7.2.2**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0616 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Correction on SMTC and timing offset configuration in A.4.7.1.2 and A.4.7.2.2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006387 Add UE Beam assumption for RRM Test cases in A.7.3, A.7.4, A.7.7**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0650 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Add the assumption about the type of beam used by the UE for RRM test cases in A.7.3, A.7.4 and A.7.7.

All the “FFS” beam assumptions in the previous   
R4-2005285 endorsed at RAN4#94-e-bis have been replaced with “Rough”, based on the information in R4-1904

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006388 Add UE Beam assumption for RRM Test cases in A.7.3, A.7.4, A.7.7**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0651 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Add the assumption about the type of beam used by the UE for RRM test cases in A.7.3, A.7.4 and A.7.7.

All the “FFS” beam assumptions in the previous R4-2005285 endorsed at RAN4#94-e-bis have been replaced with “Rough”, based on the information in R4-1904

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006389 Add UE Beam assumption for RRM Test cases in A.5.3, A.5.4, A.5.7**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0652 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Add the assumption about the type of beam used by the UE for RRM test cases in A.5.3, A.5.4 and A.5.7.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006391 Add UE Beam assumption for RRM Test cases in A.5.3, A.5.4, A.5.7**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0653 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Add the assumption about the type of beam used by the UE for RRM test cases in A.5.3, A.5.4 and A.5.7.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006436 Update of FR2 RLM Test cases with 2 Angles of Arrival**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0654 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

a) Add a diagram to each test case showing how the downlink transmissions are time multiplexed

b) Update the Test Purpose and Environment

c) Align the OTA related cell specific test parameter tables in SA test cases to NSA

d) Update CSI-RS Reference Measu

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006437 Update of FR2 RLM Test cases with 2 Angles of Arrival**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0655 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

a) Add a diagram to each test case showing how the downlink transmissions are time multiplexed

b) Update the Test Purpose and Environment

c) Align the OTA related cell specific test parameter tables in SA test cases to NSA

d) Update CSI-RS Reference Measu

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006438 Update of Tx Timing Test cases**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0656 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

a) Update FR2 Test cases to specify SSB.4 FR2, which has one SSB per SS-burst

b) Update TDD configuration for FR2 test cases

c) Update DRX configuration

d) Update slot offset for periodicityAndOffset-p for FR2 test cases

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006439 Update of Tx Timing Test cases**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0657 Cat: F (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

a) Update FR2 Test cases to specify SSB.4 FR2, which has one SSB per SS-burst

b) Update TDD configuration for FR2 test cases

c) Update DRX configuration

d) Update slot offset for periodicityAndOffset-p for FR2 test cases

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006441 Update of FR2 RLM and BFD-LR Test cases**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0658 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Remove the row in each test case stating Correlation Matrix and Antenna Configuration = 2x2 low, as it does not make sense for over-the-air test cases.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006442 Update of FR2 RLM and BFD-LR Test cases**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0659 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Remove the row in each test case stating Correlation Matrix and Antenna Configuration = 2x2 low, as it does not make sense for over-the-air test cases.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006443 Update of FR2 SS-RSRP Test cases**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0660 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Update SS-RSRP Test cases to specify SSB.3 FR2 or SSB.4 FR2, which have one SSB per SS-burst

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006444 Update of FR2 SS-RSRP Test cases**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0661 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Update SS-RSRP Test cases to specify SSB.3 FR2 or SSB.4 FR2, which have one SSB per SS-burst.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006856 CR on RACH test cases with CSI-RS resouece R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0699 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006857 CR on RACH test cases with CSI-RS resouece R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0700 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006988 Correction of NR SA FR2 inter-freq measurement reporting**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0714 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Endorsed CR R4-2005276 without further changes

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006989 Correction of NR SA FR2 inter-freq measurement reporting**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0715 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Endorsed CR R4-2005276 without further changes

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007176 UE Beam assumption for RRM Test cases in 38.133 Annex A**

*Type: discussion For: Endorsement  
 Source: ANRITSU LTD*

**Abstract:**

The information to choose UE Beam assumption for RRM Test cases in 38.133 Annex A was previously base on R4-1901179 at RAN4#90, but this was updated in R4-1904784 at RAN4#90bis together with chairman’s notes information in the meeting report R4-1905301.

T

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007391 CR: Correction of L1-RSRP measurement period**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0726 Cat: F (Rel-15)  
  
 Source: Ericsson, Huawei, HiSilicon*

**Abstract:**

This CR corrects the L1-RSRP measurement period for FR2 EN-DC and SA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007392 CR: Correction of L1-RSRP measurement period**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0727 Cat: A (Rel-16)  
  
 Source: Ericsson, Huawei, HiSilicon*

**Abstract:**

This CR corrects the L1-RSRP measurement period for FR2 EN-DC and SA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007428 CR to TS 38.133: Correction to CSI-RS configurations in A.3.14 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0728 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007429 CR to TS 38.133: Correction to CSI-RS configurations in A.3.14 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0729 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007430 CR to TS 38.133: Correction to SMTC configuration in measurement accuracy tests (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0730 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007431 CR to TS 38.133: Correction to SMTC configuration in measurement accuracy tests (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0731 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007432 CR to TS 38.133: Clarifications to AoA setup Annex A.5 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0732 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007433 CR to TS 38.133: Clarifications to AoA setup Annex A.5 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0733 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007434 CR to TS 38.133: Clarifications to AoA setup Annex A.7 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0734 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007435 CR to TS 38.133: Clarifications to AoA setup Annex A.7 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0735 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007669 CR on BFD TCs**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0753 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007670 CR on BFD TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0754 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007671 CR on UL carrier RRC reconfiguration Delay TC**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0755 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007672 CR on UL carrier RRC reconfiguration Delay TC\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0756 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007673 CR to FR1 SCell activation delay test cases**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0757 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007674 CR to FR1 SCell activation delay test cases\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0758 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007675 CR to inter-frequency measurement TCs**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0759 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007676 CR to inter-frequency measurement TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0760 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007677 CR to interruption TCs**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0761 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007678 CR to interruption TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0762 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007679 CR to FR1 SA inter-RAT measurement TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0763 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007716 CR on RRC Connection Release with Redirection (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0783 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007717 CR on RRC Connection Release with Redirection test cases**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0784 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007718 CR on RRC Re-establishment test cases (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0785 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007719 CR on RRC Re-establishment test cases**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0786 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007720 CR on Timing advance test cases for EN-DC (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0787 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007721 CR on Timing advance test cases for EN-DC**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0788 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007722 CR on Timing test cases for NR SA (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0789 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007723 CR on Timing test cases for NR SA**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0790 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007817 CR on L1-RSRP delay tests for FR2 R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0828 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007818 CR on L1-RSRP delay tests for FR2 R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0829 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007819 CR to L1-RSRP accuracy TC for FR2 EN-DC R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0830 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007820 CR to L1-RSRP accuracy TC for FR2 EN-DC R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0831 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007821 CR to L1-RSRP accuracy TC for FR2 SA R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0832 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007822 CR to L1-RSRP accuracy TC for FR2 SA R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0833 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007823 CR to TCI state switch TC R15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0834 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007824 CR to TCI state switch TC R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0835 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.11 Demodulation and CSI maintenance [NR\_newRAT-Perf]

#### 4.11.1 Editorial CRs [NR\_newRAT-Perf]

**R4-2006688 CR for correction of Angle of Arrival for Radiated Requirements in section 4**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0048 Cat: F (Rel-15)  
  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.11.2 UE demodulation and CSI (38.101-4) [NR\_newRAT-Perf]

**R4-2006069 CR to Aperiodic Report Slot Offset for CQI report**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0039 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Aperiodic Report Slot Offset is changed from 7 to 6

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006070 CR to Aperiodic Report Slot Offset for CQI report**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0040 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Aperiodic Report Slot Offset is changed from 7 to 6

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006134 CR on DL Physical Channel EPRE Ratios**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0041 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006523 Discussion on DL physical channels power ratios**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006524 CR to TS 38.101-4: Beamforming clarification (R15)**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0043 Cat: F (Rel-15)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006525 CR to TS 38.101-4: Beamforming clarification (R16)**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0044 Cat: A (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006541 CR to TS 38.101-4: MIMO correlation matrices definition (R15)**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0046 Cat: F (Rel-15)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006542 CR to TS 38.101-4: MIMO correlation matrices definition (R16)**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0047 Cat: A (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006959 Update of DL physical channels definitions**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0049 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007226 CR: updates to NR CSI test**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0050 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Submit the formal CR as per the endorsed draftCR R4-2003699

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007227 Discussion on DL channel mapping for NR UE performance tests**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the approved WF R4-2005517, further check and share our views on the EPRE clarification in Table C.3.1-1 and Table C.5.1-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007228 CR: clarification on EPRE ratio definition**

*Type: CR For: Agreement  
 38.101-4 v15.5.0 CR-0051 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

CR on EPRE clarification in Table C.3.1-1 and Table C.5.1-1

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 4.11.3 BS demodulation (38.104) [NR\_newRAT-Perf]

**R4-2006048 CR for 38.104: Performance requirements clarification of PUSCH BS Type O-2 PT-RS configuration for MCS 2**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0163 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2005521.

This CR adds the PT-RS configuration option “Disabled” to table 11.2.2.1.1-1.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006049 CR for 38.141-2: Radiated test requirements clarification of PUSCH BS Type O-2 PT-RS configuration for MCS 2**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0144 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2005522.

This CR adds the PT-RS configuration option “Disabled” to table 8.2.1.4.2-1.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006050 CR for 38.104: Performance requirements clarification of PUSCH BS Type O-2 PT-RS configuration for MCS 2**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0164 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Category A CR.

This CR adds the PT-RS configuration option “Disabled” to table 11.2.2.1.1-1.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006051 CR for 38.141-2: Radiated test requirements clarification of PUSCH BS Type O-2 PT-RS configuration for MCS 2**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0145 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Category A CR.

This CR adds the PT-RS configuration option “Disabled” to table 8.2.1.4.2-1.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006838 UCI multiplexed on PUSCH requirement**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0172 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR for 38.104 requirement of UCI multiplexed on PUSCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007461 CR to 38.104: Adding missing clause on Radiated Performance requirements for multi-slot PUCCH (11.3.1)**

*Type: CR For: Agreement  
 38.104 v15.9.0 CR-0194 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Resubmission of endorsed draft CR R4-2005469

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007462 CR to 38.104: Adding missing clause on Radiated Performance requirements for multi-slot PUCCH (11.3.1)**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0195 Cat: A (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Cat A CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007463 CR to 38.141-1: Adding missing TT value for BS demod testing (C.3)**

*Type: CR For: Agreement  
 38.141-1 v15.5.0 CR-0133 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Resubmission of endorsed draft CR R4-2005519

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007464 CR to 38.141-1: Adding missing TT value for BS demod testing (C.3)**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0134 Cat: A (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Cat A CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007465 CR to 38.141-2: Correction on required SNR value for multi-slot PUCCH testing (8.3.6) (C.3)**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0182 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Resubmission of endorsed draft CR R4-2005520

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007466 CR to 38.141-2: Correction on required SNR value for multi-slot PUCCH testing (8.3.6) (C.3)**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0183 Cat: A (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Cat A CR

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.12 Maintenance of the Positioning specs (36.171, 37.171 and 38.171) [NR\_newRAT-Perf or TEI]

**R4-2006243 CR for TS36.171, Introduction of BDS B1C in A-GNSS**

*Type: CR For: Agreement  
 36.171 v16.0.0 CR-0020 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006244 CR for TS38.171, Introduction of BDS B1C in A-GNSS**

*Type: CR For: Agreement  
 38.171 v15.3.0 CR-0011 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 4.13 Testability Maintenance (38.810) [FS\_NR\_test\_methods]

**R4-2008014 Beam correspondence – SRS configuration corrections in section 5.2.1.3.7**

*Type: CR For: Agreement  
 38.810 v16.5.0 CR-0012 Cat: F (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 5 Rel-16 Work Items for LTE

### 5.1 LTE intra-band Carrier Aggregation for x CC DL/y CC UL including contiguous and non-contiguous spectrum (x>=y) [LTE\_CA\_R16\_intra]

#### 5.1.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_intra-Core/Perf]

**R4-2006044 TR 36.716-01-01 v0.9.0 Rel-16 LTE Intra-band**

*Type: draft TR For: Agreement  
 36.716-01-01 v0.9.0  
 Source: Ericsson*

**Abstract:**

TR 36.716-01-01 v0.6.0 Rel-16 LTE Intra-band

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007596 Revised WID Basket WI for LTE Intra-band CA Rel-16**

*Type: WID revised For: Decision  
 Source: Ericsson*

**Abstract:**

Revised WID Basket WI for LTE Intra-band CA Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007600 New WID Basket WI for LTE Intra-band CA Rel-17**

*Type: WID new For: Decision  
 Source: Ericsson*

**Abstract:**

New WID Basket WI for LTE Intra-band CA Rel-17

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007604 CR introduction of Rel-16 LTE Intra-band combinations in 36.101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5637 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction of Rel-16 LTE Intra-band combinations in 36.101

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007635 CR Rel-16 for editorial corrections TS 36.101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5638 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correcting incorrect references to Table 6.2.4A.9-2 and 6.2.4A.9-3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.1.2 UE RF [LTE\_CA\_R16\_intra-Core]

**R4-2006340 CR Coexistence cleanup for 36101 Rel15**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5607 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006341 CR Coexistence cleanup for 36101 Rel16**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5608 Cat: A (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006493 CA\_48B A-MPR**

*Type: discussion For: Discussion  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.2 LTE inter-band Carrier Aggregation for 2 bands DL with 1 band UL [LTE\_CA\_R16\_2BDL\_1BUL]

#### 5.2.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_2BDL\_1BUL-Core/Perf]

**R4-2007560 Revised WID: Rel16 LTE inter-band CA for 2 bands DL with 1 band UL**

*Type: WID revised For: Decision  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007561 Introduction of Rel-16 LTE inter-band CA for 2 bands DL with 1 band UL combinations in TS36101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5633 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007562 TR 36.716-02-01-030 Rel-16 2 Bands DL and 1 Band UL CA**

*Type: draft TR For: Agreement  
 36.716-02-01 v0.10.0  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.2.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_2BDL\_1BUL-Core]

#### 5.2.3 UE RF without specific issues [LTE\_CA\_R16\_2BDL\_1BUL-Core]

### 5.3 LTE inter-band Carrier Aggregation for 3 bands DL with 1 band UL [LTE\_CA\_R16\_3BDL\_1BUL]

#### 5.3.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_3BDL\_1BUL-Core/Perf]

**R4-2008167 Introduction of completed R16 3DL band combinations to TS 36.101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5641 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008169 Revised WID for LTE inter-band CA for 3 bands DL with 1 bands UL**

*Type: WID revised For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.3.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_3BDL\_1BUL-Core]

#### 5.3.3 UE RF without specific issues [LTE\_CA\_R16\_3BDL\_1BUL-Core]

**R4-2008210 TR 36.716-03-01**

*Type: draft TR For: Agreement  
 36.716-03-01 v0.5.0  
 Source: Huawei*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.4 LTE inter-band Carrier Aggregation for x bands DL (x=4, 5) with 1 band UL [LTE\_CA\_R16\_xBDL\_1BUL]

#### 5.4.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_xBDL\_1BUL-Core]

**R4-2006583 Introduction of LTE inter-band Carrier Aggregation for x bands DL (x=4, 5) with 1 band UL to TS36.101**

*Type: draftCR For: Endorsement  
 36.101 v16.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This is a big CR for the basket work item on LTE CA 4DL/1UL and 5DL/1UL.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008059 Revised WI: Rel'16 LTE inter-band CA for x bands DL (x=4, 5) with 1 band UL**

*Type: WID revised For: Decision  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.4.2 UE RF with 4 LTE bands CA [LTE\_CA\_R16\_xBDL\_1BUL-Core]

#### 5.4.3 UE RF with 5 LTE bands CA [LTE\_CA\_R16\_xBDL\_1BUL-Core]

### 5.5 LTE inter-band Carrier Aggregation for 2 bands DL with 2 band UL [LTE\_CA\_R16\_2BDL\_2BUL]

#### 5.5.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_2BDL\_2BUL-Core]

**R4-2008233 Revised WID for LTE inter-band CA for 2 bands DL with 2 bands UL**

*Type: WID revised For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008234 Introduction of completed LTE CA for 2 bands DL with 2 bands UL into Rel-16 TS 36.101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5646 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008235 TR 36.716-02-02 Rel-16\_v0.6.0**

*Type: draft TR For: Agreement  
 36.716-02-02 v0.6.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.5.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_2BDL\_2BUL-Core]

#### 5.5.3 UE RF without specific issues [LTE\_CA\_R16\_2BDL\_2BUL-Core]

**R4-2006593 Draft CR: Correction to 2UL 2-14 and 14-30**

*Type: draftCR For: Endorsement  
 36.101 v16.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

the combos are already completed but config and MOP were missed in big CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006594 Draft CR: Inclusion of 2UL CA\_14-66 to CA\_14-66-66 and CA\_14-66-66-66**

*Type: draftCR For: Endorsement  
 36.101 v16.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

2UL CA\_14-66 to CA\_14-66-66 and CA\_14-66-66-66

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.6 LTE inter-band Carrier Aggregation for x bands DL (x= 3, 4, 5) with 2 band UL [LTE\_CA\_R16\_xBDL\_2BUL]

#### 5.6.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_xBDL\_2BUL-Core]

**R4-2006723 TR 36.716-03-02 v1.0.0 LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL in Rel-16**

*Type: draft TR For: Agreement  
 36.716-03-02 v1.0.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006724 Revised WID on LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL in Rel-16**

*Type: WID revised For: Decision  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006725 Introduction of LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL to TS36.101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5619 Cat: B (Rel-16)  
  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.6.2 UE RF with MSD [LTE\_CA\_R16\_xBDL\_2BUL-Core]

**R4-2006597 TP to TR 36.716-03-02 on 3DL/2UL CA\_2-14-66**

*Type: pCR For: Approval  
 36.716-03-02 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

3DL/2UL CA\_2-14-66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006598 TP to TR 36.716-03-02 on 4DL/2UL CA\_2-14-30-66**

*Type: pCR For: Approval  
 36.716-03-02 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

4DL/2UL CA\_2-14-30-66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006792 TP on summary of self-interference analysis for new x bands (x=3,4,5) DL with 2 bands UL**

*Type: pCR For: Approval  
 36.716-03-02 v0.11.0  
 Source: LG Electronics Polska*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.6.3 UE RF without MSD [LTE\_CA\_R16\_xBDL\_2BUL-Core]

**R4-2006595 TP to TR 36.716-03-02 on 3DL/2UL CA\_2-14-30**

*Type: pCR For: Approval  
 36.716-03-02 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

3DL/2UL CA\_2-14-30

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006596 TP to TR 36.716-03-02 on 3DL/2UL CA\_14-30-66**

*Type: pCR For: Approval  
 36.716-03-02 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

3DL/2UL CA\_14-30-66

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.7 RRM for LTE CA basket WI-s [LTE\_CA\_R16\_xxxx]

#### 5.7.1 RRM Core (36.133) [LTE\_CA\_R16\_xxxx-Core]

#### 5.7.2 RRM Perf (36.133) [LTE\_CA\_R16\_xxxx-Perf]

### 5.8 Additional LTE bands for UE category M1 and/or NB1 in Rel-16 [LTE\_bands\_R16\_M1\_NB1]

#### 5.8.1 RF [LTE\_bands\_R16\_M1\_NB1-Core]

**R4-2007587 New WID on Additional LTE bands for UE category M1 and\_or NB1 in Rel-17**

*Type: WID new For: Decision  
 Source: Ericsson*

**Abstract:**

new WID for basket work item to add NB1 and M1 is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.8.2 Others [LTE\_bands\_R16\_M1\_NB1-Perf]

**R4-2007335 Adding UE category NB1 supporting LTE band 42/43**

*Type: CR For: Agreement  
 36.307 v16.1.0 CR-4442 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.9 Additional LTE bands for UE category M2 and/or NB2 in in Rel-16 [LTE\_bands\_R16\_M2\_NB2]

#### 5.9.1 RF [LTE\_bands\_R16\_M2\_NB2-Core]

**R4-2007588 New WID on Additional LTE bands for UE category M2 and\_or NB2 in Rel-17**

*Type: WID new For: Decision  
 Source: Ericsson*

**Abstract:**

new WID for basket work item to add NB2 and M2 is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.9.2 Others [LTE\_bands\_R15\_M2\_NB2-Perf]

### 5.10 Additional MTC enhancements for LTE [LTE\_eMTC5]

#### 5.10.1 General [LTE\_eMTC5]

#### 5.10.2 Coexistence with NR [LTE\_eMTC5]

**R4-2007115 TP for TR 37.823: Power boosting for LTE-MTC**

*Type: other For: Approval  
 37.823 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

TP on power boosting for LTE-M inband allocations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007586 TP to 37.823: Conclusion**

*Type: pCR For: Approval  
 37.823 v0.4.0  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the conclusion chapter is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.10.3 RRM core requirements (36.133) [LTE\_eMTC5-Core]

##### 5.10.3.1 DL quality report in MSG3 and connected mode [LTE\_eMTC5-Core]

**R4-2006181 Corrections to DCQR in eMTC and introduction of 2-bit DCQR**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6838 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Corrections on endorsed CR terminology and introduction of 2-bit DCQR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007369 2-bit reporting table on eMTC DL quality report**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the report values for 2-bit channel quality reporting table for DL channel quality report for eMTC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007370 Introduction of DL channel quality report for eMTC**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6857 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces channel quality report mapping table and reporting accuracy requirements for eMTC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007870 Discussion on quality reporting in Rel-16 eMTC**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007871 CR on for quality reporting**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6888 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.10.3.2 WUS [LTE\_eMTC5-Core]

##### 5.10.3.3 MPDCCH performance improvement [LTE\_eMTC5-Core]

**R4-2007367 RLM for enhanced MPDCCH**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the RLM requirements due to the MPDCCH performance improvement.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007368 Introduction of RLM requirements with enhanced MPDCCH**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6856 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces the RLM requirements due to the MPDCCH performance improvement.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.10.3.4 PUR [LTE\_eMTC5-Core]

**R4-2006164 Remaining issues in PUR for eMTC**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007872 Discussion on capturing RRM requirements for PUR in Rel-16 eMTC**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007873 CR to add additional timing requirements for PUR**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6889 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007874 CR on RRM requirements for PUR**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6890 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007883 Overview of the PUR agreements for Rel-16 MTC**

*Type: discussion For: Discussion  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution, we walk through all the agreements that have been made in RAN4 for PUR and provide our view on how to capture them in the specification.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007884 Introduction of requirements for preconfigured uplink resource transmission for cat-M1**

*Type: draftCR For: Endorsement  
 36.133 v16.5.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces the support for transmissions using preconfigured uplink resources.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007919 Introduction of requirements for preconfigured uplink resource transmission for cat-M1**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6902 Cat: B (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces the support for transmissions using preconfigured uplink resources.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.10.3.5 Mobility enhancement [LTE\_eMTC5-Core]

**R4-2006165 Remaining issues on RSS-based measurements in eMTC**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007875 Discussion on remaining issues in RSS measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007885 Remaining discussions on RSS measurement support for Rel-16 MTC**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we continue the discussion on RSS based RSRP measurement adressing the open issues identified at last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007886 RSS based RSRP measurement to IDLE mode for eMTC in normal coverage**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6894 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the RSS measurement conditions in normal coverage.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007887 RSS based RSRP measurement to IDLE mode for eMTC in enhanced coverage**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6895 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the RSS measurement conditions in enhanced coverage.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007888 RSS based RSRP measurement to CONNECTED mode for eMTC**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6896 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the RSS measurement conditions in CONNECTED mode.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007889 Introduction of measurement accuracy requirements for RSS based RSRP measurements for cat-M1/M2**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6897 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the RSS measurement accuracy requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.10.3.6 Others [LTE\_eMTC5-Core]

#### 5.10.4 Demodulation and CSI requirements (36.101/36.104) [LTE\_eMTC5-Perf]

**R4-2007111 UE and BS demodulation requirements for LTE\_eMTC5**

*Type: discussion For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on open issues from RAN4 #94bis-e.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007208 Discussion on multi-TB requirements for LTE eMTC**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007209 Discussion and simulation reuslts for MPDCCH**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007210 Discussion and simulation results for PMI reporting test in eMTC**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007371 Simulation results of MPDCCH with DMRS+CRS**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution shows the simulation results of MPDCCH with DMRS+CRS according to the simulation assumption.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007372 Simulation results of CSI-RS based PMI reporting test**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution shows the simulation results of CSI-RS based PMI reporting according to the simulation assumption.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007373 Remaining open issues on eMTC demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues for UE/BS demodulation requirements for Rel-16 eMTC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007374 Introduction of enhanced MPDCCH demodulation requirements**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5630 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces the enhanced MPDCCH demodulation requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007375 Introduction of CSI-RS based PMI reporting test for non-BL UEs**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5631 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces the CSI-RS based PMI reporting test for non-BL UEs.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007376 Summary of simulation results for Rel-16 eMTC demodulation requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This spread sheet summarizes the simulation results for Rel-16 eMTC demodulation performance.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.11 Additional enhancements for NB-IoT [NB\_IOTenh3]

#### 5.11.1 General [NB\_IOTenh3]

#### 5.11.2 Coexistence with NR [NB\_IOTenh3]

**R4-2006103 CR to TS 37.141: Correction on optional support of NB-IoT operation in NR in-band with CS17**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0927 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add references to Note 6 in the "Supported configurations" row in Table 4.7.1-2 for optional support of NB-IoT operation in NR in-band with CS17.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006104 CR to TS 37.141: Clarifications on test configurations for NB-IoT operation in NR in-band**

*Type: CR For: Agreement  
 37.141 v16.5.0 CR-0928 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) Clarify the phrase to ‘RB for NB-IoT operation in NR in-band which is closest to NR minimum guard band’.

2) Clarify the channel bandwidth and SCS of the NR carrier in that bullet in TC22.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.11.3 RRM core requirements (36.133) [NB\_IOTenh3-Core]

##### 5.11.3.1 Group WUS [NB\_IOTenh3-Core]

##### 5.11.3.2 PUR [NB\_IOTenh3-Core]

**R4-2007688 CR on measurement requriements for RSRP change based TA validation**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6869 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.11.3.3 Multi-carrier operations [NB\_IOTenh3-Core]

**R4-2006166 Remaining issues on RRM measurements in non-anchor carrier for NB-IoT**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007113 On NRSRP processing in multicarrier operation**

*Type: discussion For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on combining and filtering of NRSRP in MC operation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007685 CR on downlink channel quality measurement requirement for Rel-16 NB IoT**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6866 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007686 CR on non-anchor RRM measurement requirements in enhanced coverage for Rel-16 NB IoT**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6867 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007687 CR on non-anchor RRM measurement requirements in normal coverage for Rel-16 NB IoT**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6868 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007690 Discussion on filtering of samples between carriers for Rel-16 NB-IoT**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007890 Changes on the S criterion for non-anchor carrier measurements in enhanced coverage for Rel-16 NB IoT**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6898 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Changes to the already endorsed CR to clarify the S-criterion applicability in enhanced coverage.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007891 Changes on the S criterion for non-anchor carrier measurements in normal coverage for Rel-16 NB IoT**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6899 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Changes to the already endorsed CR to clarify the S-criterion applicability in normal coverage.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007976 Changes on the S criterion for non-anchor carrier measurements in enhanced coverage for Rel-16 NB IoT**

*Type: draftCR For: Endorsement  
 36.133 v16.5.0  
 Source: Ericsson*

**Abstract:**

Changes to the already endorsed CR to clarify the S-criterion applicability in enhanced coverage.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007977 Changes on the S criterion for non-anchor carrier measurements in normal coverage for Rel-16 NB IoT**

*Type: draftCR For: Endorsement  
 36.133 v16.5.0  
 Source: Ericsson*

**Abstract:**

Changes to the already endorsed CR to clarify the S-criterion applicability in normal coverage.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.11.3.4 Others [NB\_IOTenh3-Core]

**R4-2006167 On shorter DRX cycles for NB-IoT**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007114 NTA\_offset setting for NR coexistence with NB-IoT**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0717 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson*

**Abstract:**

CR on TA offset configuration for NB-IoT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007689 CR on updating RRM requirement for new introduced UE specific DRX cycles for Rel-16 NB-IoT**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6870 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007691 Discussion on updating RRM requirement for new introduced UE specific DRX cycles for Rel-16 NB-IoT**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.11.4 Demodulation and CSI requirements (36.101/36.104) [NB\_IOTenh3-Perf]

**R4-2007112 UE and BS demodulation requirements for NB\_IOTenh3**

*Type: discussion For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on open issues from RAN4 #94bis-e.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007211 Discussion on NPDSCH performance requirements for NB-IoT additional enhancements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Share our views on NPDSCH performance requirements for NB-IOT additional enhancements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007212 Discussion on NPUSCH format 1 performance requirements for NB-IoT additional enhancements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Share our views on NPUSCH format 1 performance requirements for NB-IOT additional enhancements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007377 NPDSCH/NPUSCH demodulation requirements with multi-TB transmission**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues for UE/BS demodulation requirements for Rel-16 NB-IoT.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.12 Even further Mobility enhancement in E-UTRAN [LTE\_feMob]

#### 5.12.1 RRM core requirements (36.133) [LTE\_feMob-Core]

##### 5.12.1.1 Conditional handover [LTE\_feMob-Core]

**R4-2008193 CR on 36133 LTE CHO**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6910 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Resubmission of endorsed Draft CR R4-2005295 for LTE CHO.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.12.1.2 Reduction of user data interruption [LTE\_feMob-Core]

**R4-2006981 Sync side conditions for LTE DAPS handover**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

DAPS handover discussion

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006982 Correction to DAPS HO requirements in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6847 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Technically endorsed CR CR R4-2005425 with further updates to capture threshold between sync and async source and target cell

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007750 CR on DAPS handover**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6877 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 5.12.1.3 Others [LTE\_feMob-Core]

### 5.13 LTE-based 5G terrestrial broadcast [LTE\_terr\_bcast]

#### 5.13.1 Demodulation and CSI requirements (36.101) [LTE\_terr\_bcast -Perf]

**R4-2006720 5G broadcast simulation results collection**

*Type: discussion For: Approval  
 Source: Qualcomm, Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006721 On LTE-based 5G terrestrial broadcast demod requirement applicatioin rule**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

LTE-based 5G terrestrial broadcast demod requirement applicatioin rule

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006722 CR: 5G broadcast demod requirement**

*Type: draftCR For: Endorsement  
 36.101 v16.5.0  
 Source: Qualcomm, Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007239 Discussion and simulation results on UE performance requirements for LTE-based 5G terrestrial broadcast**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007240 CR addition on FRC and propagation conditions definition for LTE-based 5G terrestrial broadcast**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0052 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008284 CR addition on FRC and propagation conditions definition for LTE-based 5G terrestrial broadcast**

*Type: draftCR For: Endorsement  
 36.101 v16.0.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007241 CR addition on performance requirements for LTE-based 5G terrestrial broadcast**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0053 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008285 CR addition on performance requirements for LTE-based 5G terrestrial broadcast**

*Type: draftCR For: Endorsement  
 36.101 v16.0.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.13.2 Others [LTE\_terr\_bcast -Core/Perf]

**R4-2007396 Impacts on BS RF requirement of new introduced numerology**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007397 CR to 36.104: Introduction of LTE based 5G terrestrial broadcast numerologies**

*Type: CR For: Agreement  
 36.104 v16.5.0 CR-4899 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007398 CR to 36.101: Introduction of LTE based 5G terrestrial broadcast numerologies**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5632 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 5.14 R16 LTE maintenance [WI code]

#### 5.14.1 RF [WI code]

**R4-2006090 Regulatory updates for Band 24**

*Type: discussion For: Approval  
 Source: Ligado Networks*

**Abstract:**

Describes regulatory updates for Band 24 spectrum and proposals to address them.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006750 Adding Band34 for UE category 1bis into Rel-16 TS 36.101**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5620 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006751 CR for REL-16 TS36.307 for adding B34 to UE category 1bis**

*Type: CR For: Agreement  
 36.307 v16.1.0 CR-4441 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 5.14.2 RRM [WI code]

#### 5.14.3 Demodulation and CSI requirements [WI code]

**R4-2007178 CR to TS 36.104 Finalization on PUSCH performance requirements for enhanced HST scenario**

*Type: CR For: Agreement  
 36.104 v16.5.0 CR-4895 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007179 CR to TS 36.141 Finalization on PUSCH performance requirements for enhanced HST scenario**

*Type: CR For: Agreement  
 36.141 v16.5.0 CR-1254 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007180 CR to TS 36.104 Finalization on PRACH performance requirements for enhanced HST scenario**

*Type: CR For: Agreement  
 36.104 v16.5.0 CR-4896 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007181 CR to TS 36.141 Finalization on PRACH performance requirements for enhanced HST scenario**

*Type: CR For: Agreement  
 36.141 v16.5.0 CR-1255 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 6 Rel-16 non-spectrum related work items for NR

### 6.1 NR-based access to unlicensed spectrum [NR\_unlic]

#### 6.1.1 System Parameters [NR\_unlic-Core]

**R4-2006141 NR-U Punctured Channel SEM for 100 MHz Bandwidth**

*Type: discussion For: Discussion  
 Source: CableLabs*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006333 On introduction of 6GHz band for NR-U**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006334 NR-U bandwidth classes and wideband operation**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006335 In-carrier guard bands and wideband operation for 60kHz SCS**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006568 On NR-U intra-carrier guardband for 60 kHz**

*Type: discussion For: Approval  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007175 NR-U - Wideband operation and Intra-Carrier Guardbands**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007321 Further considerations of spectrum utilization for NR-U**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007322 Further considerations on guard band on wideband operation**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007323 Considerations on 100MHz CBW in NR-U**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007417 Discussion on 100MHz for NR-U**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007482 Discussion on 6 GHz NR-U band details**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell, AT&T*

**Abstract:**

In this contribution we discuss further details including band number for NR-U in 6 GHz range.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008123 NR-U 6 GHz Bands n96 and n97**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.1.2 UE RF requirements [NR\_unlic-Core]

**R4-2007610 TP for TR 37.716-11-11 to correct MSD for DC\_2\_n46**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP for TR 37.716-11-11 to correct MSD for DC\_2\_n46

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007918 TP for TR 38.716-02-00 to correct MSD for CA\_n25-n46**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP for TR 38.716-02-00 to correct MSD for CA\_n25-n46

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008126 Introduction of NR-based access to unlicensed spectrum**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.2.1 Transmitter characteristics [NR\_unlic-Core]

**R4-2007044 Transmitter characeristics for n46 including initial simulations of required MPR and A-MPR for PC5**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we present initial simulation results of required MPR and A-MPR for 5 GHz NR-U and discuss prerequisites for PC3 simulations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007045 Introduction of TX characteristics for 5 GHz and 6 GHz shared channel access**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Ericsson*

**Abstract:**

Running draft CR (placeholder for normative text) for intriducing TX requirements for n46 and 5925-6425 MHz

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007174 NR-U - Capturing Spectral Emission Mask in Specification**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007319 Discussion on NR-U UE ACLR**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007320 Considerations of in-band emissions for NR-U**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008124 NR-U In-band emissions requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008125 NR-U MPR for PC5 single carrier and wideband**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008127 NR-U A-MPR for Band n46**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008132 [NR-U] PC5 and PC3 Back-Off Measurements**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.2.2 Receiver characteristics [NR\_unlic-Core]

**R4-2006569 On NR-U UE ACS**

*Type: discussion For: Approval  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006630 ACS, In-band and Out-of-band Blocking requirement for NR-U**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006827 NR-U UE ACS and in-band blocking requirements for CA**

*Type: other For: Approval  
 38.101-1 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we provide technical justifications to support fixing the ACS and IBB interferer/blocker bandwidth at 20 MHz for CA and scaling the ACS requirements as well as the IBB wanted signal power based on the exact aggregated channel bandwid

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007046 UE RF receiver characteristics for n46 for SA and NSA**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose UE RF requirements with particular emphasis on the two wideband modes

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007047 Introduction of RX characteristics for 5 GHz and 6 GHz shared channel access**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Ericsson*

**Abstract:**

Running draft CR (placeholder for normative text) for intriducing RX requirements for n46 and 5925-6425 MHz

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007318 Discussion on NR-U UE ACS**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008122 NR-U receiver ACS and blocking**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.1.3 Band combination related (Analysis, TPs, etc.) [NR\_unlic-Core]

**R4-2006464 [DC] TP for TR 37.716-11-11 for DC\_48\_n46**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Charter Communications, Inc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006481 TP for TR 38.716-02-00 for CA\_n48-n46**

*Type: pCR For: Approval  
 38.716-02-00 v1.1.0  
 Source: Charter Communications, Inc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007107 Draft CR on Introduction of standalone NR-U combinations in Rel-16**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Ericsson*

**Abstract:**

In this draft CR, we propose some of the relevant requirements for standalone NR-U and propose to approve the related TP

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007108 TP on Inclusion of NR-U standalone combinations in TR 38 716-01-01:**

*Type: pCR For: Approval  
 38.716-01-01 v0.11.0  
 Source: Ericsson*

**Abstract:**

In this contribution, we propose some of the relevant requirements for standalone NR-U and propose to approve the related TP

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.1.4 BS RF requirements [NR\_unlic-Core]

**R4-2007414 CR to 25.104:Introduction of Band n46 in 25.104**

*Type: CR For: Agreement  
 25.104 v16.0.0 CR-0971 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007415 CR to 36.104:Introduction of Band n46 in 36.104**

*Type: CR For: Agreement  
 36.104 v16.5.0 CR-4900 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007416 CR to 37.104:Introduction of Band n46 in 37.104**

*Type: CR For: Agreement  
 37.104 v16.5.0 CR-0897 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007478 CR to TS 38.104: Introduction of NR-U in core specification**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0196 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This is draft CR with introduction of NR-U requirements to BS core specification 38.104.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007479 CR to 37.107 with introduction of NR-U feature – core part**

*Type: CR For: Agreement  
 37.107 v15.1.0 CR-0003 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This draft CR introduces NR-U feature to specification TS 37.107.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007567 CR to TS 38.104: Introduction of NR-U in core specification**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0204 Cat: B (Rel-16)  
  
 Source: Eicsson*

**Abstract:**

Introduction of NR-U requirements to BS core specification TS 38.104.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.4.1 Transmitter characteristics [NR\_unlic-Core]

**R4-2007411 NR-U BS UEM requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007412 CR tO 38.104:Introduction of NR-U BS UEM requirement into TS38.104**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0191 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007480 CR to TS 38.104 with BS NR-U operating band unwanted emissions**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0197 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This is CR to BS core specification that proposes introduction of oparting band unwanted emission requirements for NR-U.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.4.2 Receiver characteristics [NR\_unlic-Core]

**R4-2007409 NR-U BS RX REFSENS and dynamic range requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007410 NR-U BS RX ICS requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007413 CR to 38.104:Introduction of NR-U BS RX requirement into TS38.104**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0192 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007476 NR-U BS Dynamic range requirement**

*Type: other For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007477 NR-U BS REFSENS and ICS requirements**

*Type: other For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.1.5 RRM core requirements (38.133) [NR\_unlic-Core]

##### 6.1.5.1 General (specification structure, etc) [NR\_unlic-Core]

**R4-2006010 CR for spec structure to address NR-U in 38.133 v3**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0593 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006011 Discussion on approaches to address NR-U in 38.133 v3**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006976 Updates to general section for NR-U in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6846 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Technically endorsed CR R4-2005362 with additional minor updates based on agreements in RAN4#94bis-e

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006977 Updates to general section for NR-U in 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0710 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Technically endorsed CR R4-2005361 with additional minor updates based on agreements in RAN4#94bis-e

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008012 On NR-U terminology**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

NR-U terminology

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.2 Cell re-selection [NR\_unlic-Core]

**R4-2006152 Remaining issues on cell reselection in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007696 CR on introduction of RRC\_IDLE state moblity requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0769 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007697 CR on introduction of RRC\_INACTIVE state moblity requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0770 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007701 Discussion on cell reselection for NR-U**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007894 Remaining discussions on IDLE mode cell re-selection requirements for NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we discuss the remaining issues of IDLE mode requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007895 UE behaviour after measurement failure due to LBT for RRC\_IDLE state moblity requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0855 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the UE behaviour for the IDLE mode requirements.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007896 UE behaviour after measurement failure due to LBT for RRC\_IDLE state inter-RAT moblity requirements for NR-U**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6900 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the UE behaviour for the inter-RAT requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007978 UE behaviour after measurement failure due to LBT for RRC\_IDLE state moblity requirements for NR-U**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Ericsson*

**Abstract:**

CR to capture the UE behaviour for the IDLE mode requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.3 Handover [NR\_unlic-Core]

**R4-2006153 Remaining issues in NR-U HO requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007259 CR to TS 36.133: adding handover to NR-U**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6854 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document introduces a new clause to TS 36.133, for the requirements of handover to NR-U. And propose editorial corrections for clause 5.3.4. This is the formal CR submission from the endorsed draft CR: R4-2005363.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007260 CR to TS 38.133: adding NR-U Handover.**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0718 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces a new clause to TS 38.133, which captures the NR-U handover agreements. This is the formal CR submission from the endorsed draft CR: R4-2005364.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007897 Remaining discussions on handover requirements for NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we discuss the remaining issues of handover requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007898 Removal of editor’s note in NR-U inter-RAT handover requirements**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6901 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Changes to remove editors note in inter-RAT requirements CR.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007899 Removal of Editor’s note in NR-U handover requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0856 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Changes to remove editors note in IDLE mode requirements CR.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007979 Removal of editor’s note in NR-U inter-RAT handover requirements**

*Type: draftCR For: Endorsement  
 36.133 v16.5.0  
 Source: Ericsson*

**Abstract:**

Changes to remove editors note in inter-RAT requirements CR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007980 Removal of Editor’s note in NR-U handover requirements**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Ericsson*

**Abstract:**

Changes to remove editors note in IDLE mode requirements CR.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.4 RRC connection mobility control [NR\_unlic-Core]

**R4-2006009 UE behavior in RRC release with re-direction in NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses UE behavior when L2,max is exceeded in release with re-direction.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006154 On RRC release with redirection in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006563 CR to TS 38.133: RRC re-establishment with CCA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0676 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007986 Further analysis of RRC re-establishment requirements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper provides further analysis of RRC re-establishment requirements in NR-U based on latest RAN2 LS in R2-2003973.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007987 Further analysis of RRC release with redirection requirements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper provides further analysis of RRC release with redirection requirements in NR-U based on latest RAN2 LS in R2-2003973.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007988 RRC release with redirection requirements in NR-U in 38.133**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Ericsson*

**Abstract:**

This CR contains RRC release with redirection requirements in NR-U in 38.133

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007989 RRC release with redirection requirements in NR-U in 36.133**

*Type: draftCR For: Endorsement  
 36.133 v16.5.0  
 Source: Ericsson*

**Abstract:**

This CR contains RRC release with redirection requirements in NR-U in 36.133

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.5 SCell activation/deactivation (delay and interruption) [NR\_unlic-Core]

**R4-2006155 On Scell activation and deactivation requirements in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006175 Introduction of activation and deactivation delay requirements for SCells operating with CCA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0612 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

This CR introduces Scell activation/deactivation requirements for NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007968 On SCell activation delay in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On SCell activation delay in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.6 PSCell addition/release (delay and interruption) [NR\_unlic-Core]

**R4-2006156 Remaining issues on PSCell addition and release in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006176 Introduction of addition and release of NR PSCell operating with CCA in EN-DC**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6837 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

This CR introduces PSCell addition/release requirements for NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007972 On PSCell addition in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On PSCell addition in NR-U

**Discussion:**

.

**Decision:** The document was **withdrawn**.

##### 6.1.5.7 Active TCI state switching [NR\_unlic-Core]

**R4-2007143 TCI state switching under NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

Though we are waiting for RAN2 reply LS on this matter, we propose to re-think the options and discuss in RAN4 internally because declaring beam failure might not be of help to solve the problem.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007694 CR on introduction of Active TCI state switching delay with CCA Requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0767 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007704 Discussion on TCI state switch for NR-U**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007969 On active TCI state switching requirements in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On active TCI state switching requirements in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008280 TCI state switching under NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

Though we are waiting for RAN2 reply LS on this matter, we propose to re-think the options and discuss in RAN4 internally because declaring beam failure might not be of help to solve the problem.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.8 Interruptions due to operation in non-NR-U serving cells [NR\_unlic-Core]

##### 6.1.5.9 Active BWP switching [NR\_unlic-Core]

**R4-2006012 On BWP switch in NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006157 Remaining issues on new UL BWP switching requirements in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007693 CR on introduction of Active BWP switching delay requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0766 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007700 Discussion on Active BWP switch delay for NR-U**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007983 Analysis of open issues in BWP switching requirement due to consistent UL failure**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper analyzes remaining issues related to delay requirements for BWP switching in NR-U under consistent LBT failures

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007984 BWP switching interruption requirement due to consistent UL failure in 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0869 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR on interruption requirements on NR serving cells for BWP switching in NR-U under consistent LBT failures. This CR was endorsed in R4-2004404 in RAN4#94-ebis.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007985 Interruption due to BWP switching at consistent UL failure in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6907 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR on interruption requirements on LTE serving cells for BWP switching in NR-U under consistent LBT failures in 36.133. This CR was endorsed in R4-2004405 in RAN4#94-ebis.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.10 RLM and link recovery procedures [NR\_unlic-Core]

**R4-2006014 Discussion on RLM in NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006158 On RLM requirements in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006858 Discussion on RLM requirement for NR-U**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007263 CR to 38.133: clarification of RLM requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0720 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR removes the word "candidates" from the RLM requirements, following the recomendation in the incoming RAN1 LS: R4-2006124

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007264 Discussion on RLM requirements in NR-U**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document discusses RLM requirements for NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007341 On RLM for NR-U**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007387 Beam management in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the BFD and CBD requirements in NR-U.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007388 CR: Introduction of link recovery requirements with CCA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0724 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This draft CR introduces the BFD/CBD requirements with CCA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007698 CR on removing candidate in RLM requirements in Rel-15**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0771 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007699 CR on removing candidate in RLM requirements in Rel-16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0772 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007703 Discussion on RLM and link recovery for NR-U**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007970 On RLM in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On RLM in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007971 Introduction of RLM requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0868 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Introduction of RLM requirements for NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.11 Measurement requirements [NR\_unlic-Core]

**R4-2006019 Discussion on inter-RAT SFTD measurement towards NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses some pending issues in inter-RAT SFTD measurement in NR-U.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006020 CR to address NR-U in inter-RAT SFTD measurements in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6827 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Formal version of draft CR R4-2005376, which was endorsed in the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006021 L1-RSRP measurement in NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses some pending issues in L1-RSRP measurement in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006022 UE behaviour under successive UL LBT failures during event-triggered reporting**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses some pending issues left from last meeting

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006023 PBCH payload reading for SSB index identification in NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006025 CR to address NR-U in EN-DC SFTD measurements in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6828 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Formal version of draft CR R4-2004845, which was endorsed in the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006026 Pending issues on cell detection and serving cell measurement under NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses some pending issues left from last meeting

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006159 Remaining issues on measurement requirements in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006160 On RSSI and CO measurements in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006182 Remaining issues on serving cell evaluation in RRC connected mode for NR-U**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006859 Discussion on SFTD measurements towards NR-U with LBT**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006860 Discussion on Scheduling Restriction for NR-U**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006861 Discussion on RSSI measurement for NR-U**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007261 CR to TS 38.133: adding NR-U inter-frequency measurements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0719 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces a new clause to TS 38.133, which captures the NR-U inter-frequency measurement agreements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007262 CR to TS 36.133: adding inter-RAT NR-U measurements**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6855 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces new clauses to TS 36.133, to add inter-RAT NR-U measurement requiremetns.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007265 RSSI and Channel Occupancy Measurements in NR-U**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document discusses RSSI and CO measurements in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007266 SSB measurements in NR-U**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document discusses SSB measurements in NR-U.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007267 On the impact of UL LBT failure in measurement reporting**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document discusses the effect of UL LBT failure during measurement reporting

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007268 Discussion on L1-RSRP measurements in NR-U**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document discusses L1-RSRP measurements in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007389 L1-RSRP measurements in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the L1-RSRP measurement requirements in NR-U.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007390 CR: Introduction of L1-RSRP measurement requirements with CCA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0725 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This draft CR introduces the L1-RSRP measurement requirements with CCA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007692 CR on introduction of intra-frequency measurements requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0765 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007702 Discussion on measurement requirements for NR-U**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007967 On RSSI and channel occupancy measurement requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On RSSI and channel occupancy measurement requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007973 On intra-frequency measurements in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On intra-frequency measurements in NR-U

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007974 On inter-frequency measurements in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On inter-frequency measurements in NR-U

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008011 On intra-frequency and inter-frequency measurements in NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On intra-frequency and inter-frequency measurements in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.12 Measurement capability and reporting criteria [NR\_unlic-Core]

**R4-2006161 On measurement capabilities and reporting criteria in NR-U**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006183 CR on UE measurements capability and reporting criteria for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0617 Cat: B (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006775 On pending issues of reporting delay in NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007695 CR on introduction of reporting criteria for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0768 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007975 On measurement reporting criteria for NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On measurement reporting criteria for NR-U

**Discussion:**

.

**Decision:** The document was **withdrawn**.

##### 6.1.5.13 Timing [NR\_unlic-Core]

**R4-2006013 on uplink transmit timing requirements for NR-U**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006162 Remaining issues in NR-U timing requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006862 Discussion on timing requirement for NR-U**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006863 CR for timing requirement for NR-U**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0701 Cat: B (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007094 On the timing reference cell adaptation under DL LBT failure in reference cell**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

We provide our reasoning for the undecided texts in this contribution.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007097 Draft CR on UE transmit timing accuracy and timing reference cell under DL LBT failure**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Ericsson*

**Abstract:**

A draft CR has been approved in last meeting, for which some texts were in brackets. We provide our opinion in these sentences in brackets.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.1.5.14 Others [NR\_unlic-Core]

**R4-2007787 On inter-RAT SFTD for NR-U**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we are providing input to remaining issues for inter-RAT SFTD in NR-U.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.2 Cross Link Interference (CLI) handling and Remote Interference Management (RIM) for NR [NR\_CLI\_RIM]

#### 6.2.1 General [NR\_CLI\_RIM-Core]

#### 6.2.2 RRM core requirements maintenance (38.133) [NR\_CLI\_RIM-Core]

**R4-2007825 CR on CLI measurement requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0836 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.2.3 RRM perf. requirements (38.133) [NR\_CLI\_RIM-Perf]

##### 6.2.3.1 CLI measurement accuracy [NR\_CLI\_RIM-Perf]

**R4-2007826 CR on CLI measurement performance requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0837 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.2.3.2 Test cases [NR\_CLI\_RIM-Perf]

**R4-2006691 Discussion on test setup for FR2**

*Type: discussion For: (not specified)  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006692 CR for event triggered reporting tests for CLI**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0682 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007827 Discussion on AoA setup for CLI test cases**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007828 CR on test cases for SRS-RSRP measurement accuracy in FR1**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0838 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007829 CR on test cases for SRS-RSRP measurement accuracy in FR2**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0839 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007830 CR on test cases for CLI-RSSI measurement accuracy in FR1**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0840 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007831 CR on test cases for CLI-RSSI measurement accuracy in FR2**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0841 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008131 On choice of CLI test setup**

*Type: discussion For: Agreement  
 38.133 v..  
 Source: Qualcomm CDMA Technologies*

**Abstract:**

More comments are provided on choice of test setup for CLI

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.2.3.3 Others [NR\_CLI\_RIM-Perf]

### 6.3 NR mobility enhancement [NR\_Mob\_enh]

#### 6.3.1 General [NR\_Mob\_enh-Core]

#### 6.3.2 RRM core requirements (38.133) [NR\_Mob\_enh-Core]

##### 6.3.2.1 Handover with simultaneous Rx/Tx with source and target cells [NR\_Mob\_enh-Core]

**R4-2006163 Remaining issues on NR DAPS HO**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006543 Discussion on remaining issues on DAPS handover**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006544 CR to TS 38.133: DAPS handover RRM requirement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0670 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006545 Reply LS on simultaneous reception of DL signals in intra-frequency DAPS HO**

*Type: LS out For: Approval  
 to RAN1, cc RAN2  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006887 Discussion on dual active protocol stack handover**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006978 Sync side conditions for NR DAPS handover**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

DAPS handover discussion

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006979 Correction to DAPS HO requirements in 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0711 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Technically endorsed CR R4-2005307 with further updates to capture threshold between sync and async source and target cell

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007287 Discussion on remaining open issues on DAPS handover**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

In this TDoc, we provide our views on side condition and the applicability of existing interruption requirements for intra frequency and intra-band inter-frequency DAPS handover

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007759 Further discussion on remaining issues on DAPS handover**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007760 CR on DAPS handover requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0803 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007761 Draft LS on UE capabilities on DAPS HO**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008194 CR on 38133 NR DAPS handover**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0876 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correction on NR DAPS handover requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.3.2.2 Conditional handover [NR\_Mob\_enh-Core]

**R4-2006546 CR to TS 38.133: CHO RRM requirement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0671 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.3.2.3 Conditional PSCell addition/change [NR\_Mob\_enh-Core]

**R4-2007762 CR on conditional PSCell change requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0804 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.3.2.4 Others [NR\_Mob\_enh-Core]

**R4-2006980 Testcases for LTE and NR mobility enhancements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Test plan for DAPS and CHO for NR and LTE

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.4 5G V2X with NR sidelink [5G\_V2X\_NRSL]

#### 6.4.1 General [5G\_V2X\_NRSL]

**R4-2006247 Discussion on TR/TS structures and common terminology for NR V2X UE**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006745 TR update TR38.886 v1.0.0**

*Type: draft TR For: Agreement  
 38.886 v1.0.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006747 CR on NR V2X UE RF requirements for single carrier in TS38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0317 Cat: B (Rel-16)  
  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007090 Further discussion on general TR/TS structure issue and terminology for NR V2X**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.4.2 System parameters [5G\_V2X\_NRSL-Core]

**R4-2006260 Discussion on BS impact of NR V2X**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006264 CR for TS38.104, Introduce BS impact of NR V2X**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0169 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006757 Discussion on SL-Uu simultaneous transmission in a UE in licensed band in rel-16**

*Type: discussion For: (not specified)  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006762 Discussion the remaining issues for n79 NR-V2X**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007091 Revisions on the CR on NR V2X UE RF requirements for single carrier in TS38.101-1**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007092 Further discussion on the synchronization mechanism between SL and Uu in the same TDD licensed band**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008200 TP on Switching Period for Indevice Coexistence**

*Type: discussion For: (not specified)  
 Source: Futurewei Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008220 On synchronization scenario for NR V2X in licensed band**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.4.3 UE RF requirements [5G\_V2X\_NRSL-Core]

**R4-2006746 TP on remaining issues for NR V2X UE (Coexistence table to remove n47 ETSI requirements -30dBm/MHz, configured Tx power)**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.4.3.1 Transmitter characteristics [5G\_V2X\_NRSL-Core]

**R4-2006248 Discussion on switching period in ITS band for NR V2X**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006701 TP on NR V2X A-MPR for PSSCH/PSCCH**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006758 Discussion on position of Switching period between LTE V2X and NR V2X at n47**

*Type: discussion For: (not specified)  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006818 TX diversity for NR-V2X**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0383 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

We define TX diversity requirements for NR-V2X

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006819 Switching time between NR SL and LTE SL**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

Switching time for transitioning between NR SL and LTE SL is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006820 TP on 5G V2X MPR A-MPR for S-SSB transmission**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: Qualcomm Incorporated*

**Abstract:**

TP to TR 38.886 on MPR, A-MPR specifications for SSSB

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007342 On switching period for LTE SL and NR SL**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007880 TP to TR38.886 V2X PSSCH PSCCH A-MPR**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: Qualcomm Austria RFFE GmbH*

**Abstract:**

A-MPR study and spec formulation for 10 and 40 MHz V2X PSSCH PSCCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007881 TP to TR38.886 A-MPR for 10 and 40MHz V2X PSFCH**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: Qualcomm Incorporated*

**Abstract:**

A-MPR study and spec formulation for 10 and 40 MHz V2X PSFCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008079 Discussion on ETSI NS issue, NS\_33 AMPR and spurious emission for UE co-existence for V2X**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008080 TP to update MPR\AMPR requirements for both PC3 and PC2 NR V2X in band n47**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008081 DraftCR to specify MPR\AMPR requirements for PC3 NR V2X in band n47**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008082 DraftCR to specify configured transmitted power for NR V2X in band n47**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008201 Simultaneous transmission of UL and SL in a licensed carrier**

*Type: discussion For: (not specified)  
 Source: Futurewei Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008203 Reply LS to RAN2 on UL-SL Prioritization**

*Type: LS out For: Approval  
 to RAN2, RAN1  
 Source: Futurewei Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.4.3.2 Receiver characteristics [5G\_V2X\_NRSL-Core]

**R4-2006259 Discussion on remaining issues on Rx RF requirements for NR V2X**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006261 TP on remaining issues on Rx RF requirements for NR V2X**

*Type: pCR For: Approval  
 38.886 v0.6.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006262 CR for TS38.101-1, Introduce Rx RF requirements for NR V2X single carrier**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0303 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006821 REFSENS issues in V2X**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

A new values for diversity gain and n38 NF and parameters for simulating SNR is proposed for NR V2X

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008223 On remaining NR V2X Rx requirements**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.4.4 Concurrent operation (scenarios, requirements, etc) [5G\_V2X\_NRSL-Core]

**R4-2006249 Discussion on con-current operation**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006263 CR for TS38.101-1, Introduce Rx RF requirements for NR V2X con-current operation**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0304 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007093 Discussion on current operation scenario and clarification**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008219 On switching period for LTE SL and NR SL**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008221 On remaining issues of con-current operation**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008222 CR for TS 38.101-3: NR V2X con-current operation**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0287 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.4.5 RRM core requirements (38.133) [5G\_V2X\_NRSL-Core]

**R4-2006671 Discussion of remaining issues for NR V2X**

*Type: discussion For: Discussion  
 Source: LG Electronics Inc.*

**Abstract:**

It discusses remaining a few issues for NR V2X RRM requirements based on the agreed WF in last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006709 CR of NR V2X editorial correction**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0687 Cat: D (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is editorial CR for NR V2X RRM requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.4.5.1 Transmit timing requirements [5G\_V2X\_NRSL-Core]

##### 6.4.5.2 Synchronization requirements [5G\_V2X\_NRSL-Core]

**R4-2006674 Simulation results of PSBCH-RSRP measurement accuracy**

*Type: discussion For: Discussion  
 Source: LG Electronics Inc.*

**Abstract:**

It provides measurement accuracy based on simulation results for PSBCH-RSRP measurements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.4.5.3 Measurement requirements [5G\_V2X\_NRSL-Core]

**R4-2006469 Discussion on NR V2X measurement requirement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006470 CR on L1 SL-RSRP measurements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0666 Cat: F (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006471 Link-level simulation for NR V2X PSBCH RSRP**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006685 CR of NR V2X measurement accuracy requirements(SL-RSSI and L1 SL-RSRP)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0681 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is CR to introduce NR V2X measurement accuracy requirements(SL-RSSI, L1 SL-RSRP).

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006711 On NR V2X measurmeent requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

NR V2X measurmeent requirement simulation results

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007763 Simulation results of PSBCH-RSRP measurement accuracy**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007764 Discussion on measurement related requirements for NR V2X**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007765 CR on PSBCH-RSRP accuracy requirements for NR V2X**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0805 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.4.5.4 Interruption requirements [5G\_V2X\_NRSL-Core]

**R4-2006222 CR on interruption requirements for NR V2X**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0636 Cat: F (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006472 Discussion on NR V2X interruption requirement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006473 CR on V2X interruption**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0667 Cat: F (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006706 CR of interruption for switching between NR SL and LTE SL**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0686 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is CR to introduce interruption requirement for switching between NR SL and LTE SL.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006712 On NR V2X interruption requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

interruption requirement, sync source change and tx switch

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007766 Discussion on interruption related issues for NR V2X**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.4.5.5 Others [5G\_V2X\_NRSL-Core]

**R4-2006696 CR of NR V2X operating band group**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0683 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is CR to introduce NR V2X operating band group.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006700 CR of Annex.B for NR V2X side conditions**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0684 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is CR to introduce NR V2X measurement conditions in Annex B.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006702 CR of NR V2X abbreviations**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0685 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is CR to introduce NR V2X abbreviations for RRM requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.5 Integrated Access and Backhaul for NR [NR\_IAB]

#### 6.5.1 General [NR\_IAB-Core]

**R4-2006378 TR38.809 V0.2.0**

*Type: draft TR For: Agreement  
 38.809 v0.2.0  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007467 Email discussion for updating IAB TS spec to capture RAN4 95 agreements**

*Type: draft TS For: Agreement  
 38.174 v0.0.2  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.1.1 System parameters [NR\_IAB-Core]

**R4-2007577 TP to TS 38.174: system parameter**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, system parameter TP is provided

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.1.2 IAB-MT class [NR\_IAB-Core]

**R4-2007399 Discussion on IAB MT class**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007401 Further discussion on IAB-MT power requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007903 IAB-MT class definitions**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss possible descriptions for the IAB-MT classes

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.1.3 IAB-MT feature list [NR\_IAB-Core]

**R4-2006279 Discussion on IAB-MT Feature list**

*Type: other For: Approval  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006657 Support of Rel-15 UE features by IAB-MTs**

*Type: discussion For: Decision  
 Source: AT&T*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006797 Further discussion on IAB-MT feature**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006798 Clarificaiton on IAB-MT channel bandwidth**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006803 On IAB feature list**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007119 IAB-MT features**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss and make proposals for rel-15 UE feature support of IAB-MT.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007131 IAB-MT Tx Features**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007317 Further discussion on R16 IAB MT RF features**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007400 Discussion on IAB MT feature list**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007571 IAB-MT madatory feature**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, the IAB MT feature is discussed.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.1.4 Others [NR\_IAB-Core]

**R4-2006799 RAN4 implication due to Sync from multiple parenets for “Case 1” OTA timing**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.5.2 RF requirements [NR\_IAB-Core]

##### 6.5.2.1 Conductive RF core requirements [NR\_IAB-Core]

###### 6.5.2.1.1 Transmitter characteristics [NR\_IAB-Core]

**R4-2006276 Discussion on IAB-MT modulation quality requirements**

*Type: other For: Approval  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006282 Discussion on IAB-MT power related issues**

*Type: other For: Approval  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007402 frequency error requirement for IAB**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007403 Further discussion on FR1 IAB-MT ACLR and ACS requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007543 [IAB RF] further discussion on IAB TX IMD**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007573 IAB-MT Frequency error**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, the IAB-MT frequency erorr on system impact is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.5.2.1.2 Receiver characteristics [NR\_IAB-Core]

**R4-2006280 Discussion on IAB-MT REFSENS**

*Type: other For: Approval  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007408 In-band blocking for IAB MT**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.5.2.1.3 TP to TS/TR [NR\_IAB-Core]

**R4-2006272 TP for TR 38.809: Transmit ON/OFF power**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006273 TP for TS 38.174: Transmit ON/OFF power**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006274 TP for TR 38.809: IAB-DU Transmitted signal quality**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006275 TP for TS 38.174: IAB-DU Transmitted signal quality**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006277 TP for TR 38.809: IAB-MT Transmitted signal quality**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006278 TP for TS 38.174: IAB-MT Transmitted signal quality**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007404 TP to TR : IAB RX IM requirement (section 8.7 and 10.8)**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007405 TP to TS 38.174: IAB RX IM requirement (section 7.7 and 10.8)**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007406 TP to TR: IAB ICS requirement (section 8.8 and 10.9)**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007407 TP to TS 38.174: IAB ICS requirement (section 7.8 and 10.9)**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007544 [IAB RF] TP to TR 38.809 IAB TX IMD**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007545 [IAB RF] TP to TS 38.174 IAB TX IMD**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007579 TP to TR 38.809: Conducted RX spurious**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the conducted spurious is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007585 TP to TS 38.174: Conducted RX spurious**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the conducted RX spurious is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.2.2 Radiated RF core requirements [NR\_IAB-Core]

###### 6.5.2.2.1 Transmitter characteristics [NR\_IAB-Core]

**R4-2006760 Discussion on IAB-MT dynamic range**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006800 Further discussion on IAB-MT transmitter requriement**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006931 IAB-MT Tx power dynamic range and power control requirements**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

IAB-MT Tx power dynamic range with dependency on the two IAB-MT classes will be discussed in this contribution.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007120 IAB-MT emission requirements**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss and make proposals for IAB-MT emission requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007121 TP to TS 38.174: Output power requirements**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this text proposal we provide specification text for output power requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007122 TP to TR 38.809: Emission requirements**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this text proposal capture to TR emission requirements related agreements and background

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007130 IAB-MT Tx Requirements**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007574 IAB-MT TX dynamic range and power control**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, IAB-MT Tx dyanmic range and power control requirment is discussed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007575 IAB-MT maximum output power**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, we present our view on maximum output power of IAB-MT for FR1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007576 IAB-MT unwanted emission for FR2 &FR1**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, we present our view on IAB-MT unwanted emission level for FR2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007904 IAB-MT min number of TRX and emissions scaling**

*Type: discussion For: Approval  
 Source: Huawei*

**Abstract:**

Discuss the min number of IAB classes and how this affects the scaling

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007909 IAB-MT TX ACLR and dynamic range**

*Type: discussion For: Approval  
 Source: Huawei*

**Abstract:**

Discuss the remaining open ACLR and Tx dynamic range issues

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.5.2.2.2 Receiver characteristics [NR\_IAB-Core]

**R4-2006801 Further discussion on REFSENS for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006932 IAB-MT blocking and selectivity requirements**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss the remaining open aspects of in-band selectivity requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007572 IAB-MT REFSENS**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, the remaining issue for IAB-MT REFSENS is discussed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007900 IAB-MT LA FR2 Rx sensitivity requirement.**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss the gain range of the IAB-MT local area node

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007901 FR1 IAB-MT sensitivity**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss the OTA REFSENS requirement applicability for FR1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007902 IAB-MT LA ACS and IBB**

*Type: discussion For: Approval  
 Source: Huawei*

**Abstract:**

Discuss the wanted signal level for ACS (and its relation to the IBB agreement)

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.5.2.2.3 TP to TS/TR [NR\_IAB-Core]

**R4-2007578 TP to TR 38.809: OTA In-band blocking**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the OTA IBB is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007580 TP to TR 38.809: radiated RX spurious**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the radiated spurious is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007581 TP to TS 38.174: OTA ACS**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the OTA ACS is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007582 TP to TS 38.174: OTA RX spurious**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the OTA RX spurious is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007583 TP to TR 38.809: OTA ACS**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the OTA ACS spurious is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007584 TP to TS 38.174: OTA Inband blocking**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, the TP for the OTA IBB is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007905 TP to TS 38.174 -IAB-DU TX dynamic range**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Huawei*

**Abstract:**

Tp to TS on clause allocated to Huawei

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007906 TP to TS 38.174 -IAB-MT TX dynamic range**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Huawei*

**Abstract:**

Tp to TS on clause allocated to Huawei

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007907 TP to TS 38.174 -IAB-DU RX sensitivity**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Huawei*

**Abstract:**

Tp to TS on clause allocated to Huawei

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007908 TP to TS 38.174 -IAB-DU Rx dynamic range**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Huawei*

**Abstract:**

Tp to TS on clause allocated to Huawei

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.5.3 RRM core requirements (38.133) [NR\_IAB-Core]

##### 6.5.3.1 General [NR\_IAB-Core]

**R4-2007269 RRM requirements in IAB TR and TS**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007991 TP to TS 38.174 v0.0.1: Adding references related to IAB**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP adds more references which are needed to remove TBDs in various parts of the spec

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008196 CR on 38174 RRM IAB TS**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0877 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correction on IAB RRM requirements

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008238 CR on 38174 RRM IAB TS**

*Type: draftCR For: Endorsement  
 38.174 v0.0.1  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correction on IAB RRM requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.3.2 RRC connection mobility control [NR\_IAB-Core]

**R4-2007189 Pending issues on RRC mobility control for IAB-MT**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007488 Discussion regarding RRC Connection Mobility Control in IAB Networks**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007489 TP for RRC Connection Mobility Control in IAB Networks**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007992 Handling 4 SMTC in RRC re-establishment and redirection for IAB MT**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper analyzes impact of IAB-MT handling up to 4 SMTC window in RRC re-establishment and RRC release with redirection requirements for IAB MT. RAN1 feature list was agreed in R1-2003073 and sent to RAN4 in LS in R1-2003072.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007993 TP to TS 38.174 v0.0.1: Updates to RRC re-establishment requirements for IAB MT**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines RRC re-establishment requirements for IAB MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007994 TP to TS 38.174 v0.0.1: Updates to RRC re-direction requirements for IAB MT**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines RRC re-direction requirements for IAB MT

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.3.3 MT timing related requirements [NR\_IAB-Core]

**R4-2008197 discussion on Tansmit Timing requirement for IAB-MT**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on transmit timing requirement for IAB-MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008198 CR on 38174 Transmit Timing requirements for IAB-MT**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0878 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correction on transmit timing requirement for IAB-MT

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2008239 CR on 38174 Transmit Timing requirements for IAB-MT**

*Type: draftCR For: Endorsement  
 38.174 v0.0.1  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correction on transmit timing requirement for IAB-MT

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.3.4 RLM requirements [NR\_IAB-Core]

**R4-2006016 on RLM requirements for IAB MT**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006017 TP for IAB RLM**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006433 Radio Link Monitoring requirement for IAB-MT**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007490 Discussion regarding RLM requirements of IAB-MTs**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007684 Discussion on RLM requirement for IAB-MT**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.5.3.5 BFR requirements [NR\_IAB-Core]

**R4-2006015 on BFD and BFR requirements for IAB MT**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006434 Link Recovery requirement for IAB-MT**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006435 TP to TS 38.174 v0.0.1: Beam Candidate Detection Requirements for IAB MT**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007486 TP regarding BFD requirements of IAB-MTs**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007487 Discussion regarding BFD and CBD requirements of IAB-MTs**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007683 Discussion on BFD and CBD requirement for IAB-MT**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.5.4 EMC core requirements [NR\_IAB-Core]

**R4-2007054 Discussion on IAB EMC requirements**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

Discussion on IAB EMC requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007055 TP to TR 38.809 on IAB EMC Emissions**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

TP to TR 38.809 including text agreements on IAB EMC Emissions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007056 TP to TR 38.809 on IAB EMC Immunity**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

TP to TR 38.809 including text agreements on IAB EMC Immunity

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007057 TP to TR 38.809 on IAB EMC General**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: Ericsson*

**Abstract:**

TP to TR 38.809 including text agreements on IAB EMC discussion

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007538 [IAB EMC]further discussion on IAB EMC emission requirement**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007539 [IAB EMC]further discussion on IAB EMC radiated immunity requirement**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007540 [IAB EMC]on how to handle IAB EMC**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007541 [IAB EMC]TP to TR IAB EMC emission requirements**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007542 [IAB EMC]TP to TR IAB EMC immunity requirements**

*Type: pCR For: Approval  
 38.809 v0.1.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.6 Multi-RAT Dual-Connectivity and Carrier Aggregation enhancements [LTE\_NR\_DC\_CA\_enh]

#### 6.6.1 General [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2006585 On p-Max for FR2**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

p-max is required for interference suppression in some deployments

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006586 Introduction of p-Max to FR2**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0159 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR to introduce p-max as TRP to FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006587 draft Reply LS on power control for NR-DC**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

asks RAN2 to revise p-Max for FR2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006655 Reconsideration of mandatory UL NR-CA and NR-DC**

*Type: discussion For: Approval  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.6.2 RF requirements [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2006451 CR for TS 38.101-1: UL harmonic MSD and OOBB exception**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0311 Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006566 Pmax in FR2**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006828 Views on P-max for FR2 in Rel-16**

*Type: other For: Approval  
 38.101-2 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we share our views on the definition of P-max and the practicality of introducing this parameter into the UE configured transmitted requirement.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006997 CR to TS38.101-1: Introduction of NR DC(Clauses 3~5)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0336 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, Ercisson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007048 The "blind" scheme for FDD-TDD EN-DC PC2 adopted for inter-band TDD-TDD EN-DC PC2**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

The "blind" scheme for FDD-TDD EN-DC only slightly modified could also become the baseline for TDD-TDD EN-DC PC2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007049 Introduction of cell-specific and UE-specific P-Max for FR2**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0352 Cat: F (Rel-16)  
  
 Source: Ericsson, Sony*

**Abstract:**

CR to introduce cell-specific and UE-specific P-Max for the MCG

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007799 CR to 38.101-1 for Introduction of requirements for NR-DC**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0362 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce requirements for NR-DC in FR1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007917 Introduction of cell-specific and user-specific P-Max for FR2**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0192 Cat: F (Rel-16)  
  
 Source: Ericsson, Sony*

**Abstract:**

CR to introduce cell-specific and UE-specific P-Max for the MCG

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008053 p-max feasibility for Fr2**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008083 Discussion on RF requirements about DC\_12\_n71**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008084 CR for 38.101-3 to specify the RF requirements for DC\_12\_n71**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0372 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008265 Further discussion on the necessity of p-UE-FR2**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008266 Draft Reply LS on power control for NR-DC**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008272 Introduction of P-max in FR2**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.6.3 RRM core requirements (38.133) [LTE\_NR\_DC\_CA\_enh-Core]

##### 6.6.3.1 Early Measurement reporting [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2007281 Early measurement reporting in MR-DC**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007965 On measurement capability for EMR**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On measurement capability for EMR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007966 Response LS on clarification of UE requirements for early measurement performance and reporting**

*Type: LS out For: Approval  
 to RAN2  
 Source: Ericsson*

**Abstract:**

Response LS on clarification of UE requirements for early measurement performance and reporting

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.6.3.1.1 NR measurements for EMR [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2007151 NR EMR requirements for 38.133**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007152 TP for NR MR-DC RRM requirements for 38.133**

*Type: discussion For: Approval  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007153 Big CR Introduction of UE requirement for MR-DC early measurement reporting in 38.133**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007832 Discussion on early measurement in NR**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007833 CR to introduce EMR in 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0842 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.6.3.1.2 LTE NR Inter-RAT EMR [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2007154 NR inter-RAT EMR requirements for 36.133**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007155 TP for NR inter-RAT EMR requirements for 36.133**

*Type: discussion For: Approval  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007156 Big CR Introduction of UE requirement for MR-DC early measurement reporting in 36.133**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007834 Discussion on LTE – NR inter-RAT EMR**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007835 CR to introduce EMR in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6883 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.6.3.2 Efficient and low latency serving cell configuration, activation and setup [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2007655 Further discussion on clarification of UE requirements for early measurement performance and reporting**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007656 Reply LS on clarification of UE requirements for early measurement performance and reporting**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.6.3.2.1 Direct SCell activation [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2006063 [CR] Delay requirements for direct SCell activation**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0599 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Formal version of draft CR R4-2005328, which was endorsed in the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006885 Discussion on LTE CRS based and NR SSB based measurement in NR IDLE/INACTIVE mode**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007343 On NR Measurement for EMR**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007654 Discussion on NR EMR measurements**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007782 CR 38.133 (8.3.4-5) Corrections to Direct SCell activation**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0814 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Corresponding draft CR was endorsed at RAN4#94-e-Bis (R4-2005327)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007785 CR 38.133 (8.3.4-5) Addition of interruption windows for Direct SCell Activation**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0817 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Interruption window for Rel-15 SCell activation was agreed at RAN4#94-e-Bis. In this CR we are providing corresponding interruption window definitions for Rel-16 Direct SCell activation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007836 CR on interruption requirements for direct SCell activation for 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0843 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007837 CR on interruption requirements for direct SCell activation for 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6884 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.6.3.2.2 SCell dormancy [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2006520 On Scell domancy RRM requirements**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006886 Discussion on NR SSB based measurement in LTE IDLE/INACTIVE mode**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007157 SCell Dormancy requirements discussion**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007282 Scell BWP dormancy**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007288 Discussion on RRM requirements for SCell dormancy**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

Provided our views on UE SCell dormancy switch delay requirements, UE requirements for a SCell dormancy and interruption requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007344 On LTE NR inter-RAT EMR**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007786 On SCell dormancy**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we are providing input on requirements for SCell dormancy.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007838 Discussion on SCell dormancy**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007839 CR on delay requirements for SCell dormancy**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0844 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007840 CR on interruption requirements for SCell dormancy**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0845 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008187 Impact analysis on dormant BWP configuration**

*Type: discussion For: Discussion  
 Source: Futurewei Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008199 Reply LS to RAN2 on dormant BWP**

*Type: LS out For: Approval  
 to RAN2, RAN1  
 Source: Futurewei Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.6.3.3 Others [LTE\_NR\_DC\_CA\_enh-Core]

### 6.7 UE power saving in NR [NR\_UE\_pow\_sav]

#### 6.7.1 General [NR\_UE\_pow\_sav]

#### 6.7.2 RRM core requirements (38.133) [NR\_UE\_pow\_sav-Core]

**R4-2006518 CR for maximum MIMO layer adaptation**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0669 Cat: F (Rel-16)  
  
 Source: vivo,CATT*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007440 CR for maximum MIMO layer adaptation**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0736 Cat: F (Rel-16)  
  
 Source: vivo,CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.7.2.1 RRM measurement relaxation [NR\_UE\_pow\_sav-Core]

**R4-2006198 On remaining issues for RRM power saving**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006219 Further discussion on the remaining issues for RRM measurement relaxation**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006220 CR on measurement relaxation in idle mode for UE power saving**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0634 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006221 CR on minimum requirement at transition period for UE power saving**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0635 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006516 On remaining issues on NR UE power savings**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006517 LS on RRM relaxation in UE power saving**

*Type: LS out For: Approval  
 to RAN2  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006519 Draft CR on IDLE state measurement relaxation for UE power saving**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006695 Performance Impact on measurement relaxation for power saving**

*Type: discussion For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006698 LS on measurement relaxation for inter-frequency on power saving**

*Type: LS out For: Approval  
 to RAN WG2  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006810 RRM measurement relaxation for UE power saving**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006884 Discussion on RRM measurement relaxation for RRC\_IDLE/INACTIVE**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006993 Draft CR on IDLE state measurement relaxation for UE power saving**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007158 RRM requirements for UE Power Saving**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007345 On RRM measurement relaxation for power saving**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007495 RRM measurement relaxation for power saving**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007728 Discussion on measurement relaxation in power saving**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007729 Discussion on the remaining issues in power saving**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007730 CR on measurement relaxation for power saving**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0791 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007892 Discussions on RRM impact of NR UE power saving**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we continue the discussions on RRM measurement relaxations based on latest agreements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007893 Measurement requirements for UEs under power saving mode**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0854 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to capture the relaxed RRM measurement requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.7.3 Demodulation and CSI requirements (38.101-4) [NR\_UE\_pow\_sav-Perf

**R4-2006199 Further discussion on demod test case with MIMO layer adaptation**

*Type: discussion For: Discussion  
 38.101-4 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006200 CR on max MIMO layer assumption in TS38.101-4**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0042 Cat: F (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006245 Further discussion on PDCCH-WUS demodulation test for power saving**

*Type: discussion For: Discussion  
 38.101-4 v..  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006246 Applicability of 4Rx demodulation performance for UEs with max MIMO layer adaption**

*Type: discussion For: Discussion  
 38.101-4 v..  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006811 Demodulation on UE power saving**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006813 Discussion on performance requirements for PDCCH-WUS**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007229 Discussion on the performance requirements for NR power saving**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007270 Discussion on demod requirement impact of UE power saving**

*Type: discussion For: Discussion  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007381 Demodulation requirements for 4Rx UEs with maxMIMO-layers**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the 4Rx UE demodulation performance for UEs with max MIMO layer adaption capability.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007494 Impact of MIMO layer adaptation on demod requirements**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.8 NR Positioning Support [NR\_pos]

#### 6.8.1 General [NR\_pos-Core/Perf]

**R4-2006560 CR to TS 38.133: Structure for NR positioning RRM requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0674 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006561 CR to TS 38.133: PRS RSTD requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0675 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006562 Views on down scoping for NR positioning remaining issues**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007271 Discussion on the SRS for positioning during the DRX inactive period**

*Type: discussion For: Discussion  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.8.2 RRM core requirements (38.133) [NR\_pos-Core]

##### 6.8.2.1 UE requirements [NR\_pos-Core]

**R4-2007952 On new measurement gaps for NR positioning**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On new measurement gaps for NR positioning

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007953 LS on measurement gaps for NR positioning**

*Type: LS out For: Approval  
 to RAN1,RAN2  
 Source: Ericsson*

**Abstract:**

LS on measurement gaps for NR positioning

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007955 Positioning measurement accuracy requirements structure in section 10**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0862 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Positioning measurement accuracy requirements structure in section 10

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.8.2.1.1 PRS-RSTD measurements [NR\_pos-Core]

**R4-2006018 PRS-RSTD measurements for NR positioning**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses the definition of intra and inter frequency RSTD measurements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006168 On PRS-RSTD measurements for NR positioning**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006232 Discussion on RSTD measurement requirements**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006304 Discussion of remaining issues for PRS-RSTD measurement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006556 Further discussion on NR PRS RSTD requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007145 Scaling of measurement period due to UE Rx beam sweeping**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

Propose to re-use R15 beam sweeping factor.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007841 Discussion on RSTD measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007842 [draft] reply LS on agreements related to NR Positioning**

*Type: LS out For: Approval  
 to RAN1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007944 On PRS RSTD measurements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS RSTD measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007945 On PRS RSTD measurement report mapping**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS RSTD measurement report mapping

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007946 Measurement report mapping for PRS RSTD**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0859 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Measurement report mapping for PRS RSTD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007949 On additional path reporting with positioning measurements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On additional path reporting with positioning measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007950 Additional path report mapping for RSTD**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0860 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Additional path report mapping for RSTD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007958 Reporting criteria for NR RSTD**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0863 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Reporting criteria for NR RSTD

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.8.2.1.2 PRS-RSRP measurements [NR\_pos-Core]

**R4-2006169 On PRS-RSRP measurements for NR positioning**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006233 Discussion on PRS-RSRP measurement requirements**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006238 CR on PRS-RSRP measurement report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0642 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006305 Discussion of remaining issues for PRS-RSRP measurement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006557 Further discussion on UE Rx-Tx time difference requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007843 Discussion on PRS-RSRP measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007844 CR for measurement requriements for PRS-RSRP**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0846 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007947 On PRS-RSRP measurements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS-RSRP measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007948 On PRS-RSRP measurement report mapping**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS-RSRP measurement report mapping

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007951 Additional path report mapping for UE Rx-Tx**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0861 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Additional path report mapping for UE Rx-Tx

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007960 Reporting criteria for PRS-RSRP**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0865 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Reporting criteria for PRS-RSRP

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.8.2.1.3 Rx-Tx time difference measurements [NR\_pos-Core]

**R4-2006170 On UE Rx-Tx time difference measurement for NR positioning**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006234 Discussion on UE Rx-Tx time difference measurement requirements**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006237 Link level simulation assumption for UE RX-Tx time difference**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007845 Discussion on Rx-Tx time difference measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007943 On UE Rx-Tx measurements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On UE Rx-Tx measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007954 Link-level simulation assumptions for UE Rx-Tx**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Link-level simulation assumptions for UE Rx-Tx

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007956 On criterion of pathloss measurement failure for power control of SRS for positioning**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

On criterion of pathloss measurement failure for power control of SRS for positioning

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007957 Response LS on criterion of pathloss measurement failure for power control of SRS for positioning**

*Type: LS out For: Approval  
 to RAN1  
 Source: Ericsson*

**Abstract:**

Response LS on criterion of pathloss measurement failure for power control of SRS for positioning

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007959 Reporting criteria for NR UE Rx-Tx**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0864 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Reporting criteria for NR UE Rx-Tx

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007995 Impact of NTA offset on UE Rx-Tx time difference measurement**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper analyzes the impact of NTA offset on UE Rx-Tx time difference measurements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007996 LS on impact of NTA offset on UE Rx-Tx time difference measurement**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Ericsson*

**Abstract:**

This LS requests RAN2 to define signaling to inform LMF the NTA offset used in a cell when UE Rx-Tx time difference measurements are performed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007997 Analysis of UE Rx-Tx Measurement Report Mapping in NR**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This paper analyzes UE Rx-Tx measurement report mappings in NR based on agreements in RAN4#94-ebis

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007998 UE Rx-Tx Measurement Report Mapping in NR in 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0870 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR defines UE Rx-Tx measurement report mappings in NR

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.8.2.1.4 SSB and CSI-RS RSRP/RSRQ measurements [NR\_pos-Core]

**R4-2007939 NR E-CID reporting criteria requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0857 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

NR E-CID reporting criteria requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007940 NR E-CID measurement requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0858 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

NR E-CID measurement requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.8.2.1.5 Link-level evaluations for PRS-RSTD and PRS-RSRP [NR\_pos-Core]

**R4-2006171 Link-level simulation assumptions for UE Rx-Tx time difference measurements**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006559 Link-level simulation assumptions for UE Rx-Tx time difference measurement**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007941 Updated link simulation results for NR RSTD**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Updated link simulation results for NR RSTD

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007942 Updated link simulation results for PRS RSRP**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Updated link simulation results for PRS RSRP

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.8.2.2 Impact on existing RRM requirements [NR\_pos-Core]

**R4-2006173 On Impact of NR positioning on existing RRM requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006236 Impact on existing RRM measurement**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006306 Discussion on impact on existing RRM requirements**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006555 Further discussion on UE RRM impacts due to NR Pos measurement**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007144 BWP switch during gaps used for PRS measurements**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007846 Impact of positioning on existing RRM requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007999 Impact of active BWP change on positioning measurements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This paper provides UE Rx-Tx measurement report mappings in NR

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.8.2.3 gNB requirements [NR\_pos-Core]

**R4-2006024 gNB requirements for NR positioning**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses some pending issues left from last meeting

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006172 on gNB requirements for NR positioning**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006235 Discussion on gNB measurement requirements**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006239 CR on UL RTOA measurement report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0643 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006240 CR on gNB Rx-Tx time difference measurement report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0644 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006241 CR on SRS RSRP measurement report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0645 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006558 Further discussion on gNB measurement requirements in NR Positioning**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007116 On gNB measurement accuracy requirements for NR positioning**

*Type: discussion For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on gNB measurement accuracy requirements for NR positioning.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007275 Optionality for positioning measurements in gNB**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Defer the decision until accuracy work has progressed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007277 Side conditions for gNB measurement accuracy**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Use the same SINR values for UE and gNB as side condition for the accuracy requirement.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007278 Beam configuration for gNB measurement accuracy**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Fixed antenna beams are assumed in gNB for deriving accuracy.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007286 PRS/SRS configurations for gNB measurement accuracy**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

PRS/SRS configurations for gNB has to declare by manufacture.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007304 Applicability of gNB Rx-Tx accuracy under TA change**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

The requirements for UE Rx-Tx time difference measurement apply, provided the TA offset has not changed during the measurement period.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007305 Accuracy for different BS types**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

The requirements for positioning should be independent of the test type "connected", "hybrid" or "over the air".

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007336 gNB Positioning Measurement Report Mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0722 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Structure expand for gNB measurements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007847 Discussion on the scope gNB requirements for NR positioning**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon, CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007848 Discussion on gNB positioning measurement requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007849 CR for gNB Rx-Tx time difference and UL-RTOA report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0847 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007850 CR for SRS-RSRP report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0848 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007851 CR for AoA/ZoA report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0849 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.8.2.4 Others [NR\_pos-Core]

**R4-2007117 On UE aspects for NR positioning**

*Type: discussion For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Disussion on UE aspects for NR positioning

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007852 Discussion on criterion for inaccurate pathloss measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007853 [draft] reply LS on criterion of pathloss measurement failure for power control of SRS for positioning**

*Type: LS out For: Approval  
 to RAN1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007854 Discussion on positioning SRS during DRX inactive time**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007855 [draft] reply LS on positioning SRS during DRX inactive time**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.9 Physical layer enhancements for NR URLLC [NR\_L1enh\_URLLC-Core]

#### 6.9.1 Demodulation and CSI requirements [NR\_L1enh\_URLLC-Perf]

**R4-2007593 Discussion on URLLC UE requirements applicability**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.9.1.1 Performance requirements with ultra-low BLER [NR\_L1enh\_URLLC-Perf]

**R4-2006526 Discussion on URLLC requirements for Ultra-low BLER**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.9.1.1.1 UE demodulation and CSI requirements (38.101-4) [NR\_L1enh\_URLLC-Perf]

**R4-2006207 On UE demodulation and CSI requirements with Ultra-low BLER**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006656 Views on URLLC Ultra-low BLER Test Cases**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007190 Discussion and simulation on URLLC UE high reliability with ultra-low BLER**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion on the open issues for URLLC high reliability with ultra-low BLER target for UE

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007933 Discussion on UE URLLC performance requirements for Ultra low BLER**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results and our views on Ultra-low BLER UE test

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.9.1.1.2 BS demodulation requirements (38.104) [NR\_L1enh\_URLLC-Perf]

**R4-2006060 On NR Rel-16 high reliability BS demodulation test feasibility and requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open NR Rel-16 high reliability BS demodulation test feasibility and requirements issues. In particular we commented on how to capture “X” in the specification, BS TDD patterns, the number of BS t

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006061 NR Rel-16 non-relaxed high reliability BS demodulation requirement simulation results**

*Type: discussion For: Information  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we provide the results of our NR URLLC performance requirements with Ultra-Low BLER simulation campaigns.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006325 Discussion and initial simulation results for URLLC ultra-low BLER requirement**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007187 Views on NR BS performance for ultra-low BLER**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007191 Discussion and simulation on URLLC BS high reliability with ultra-low BLER**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion on the open issues for URLLC high reliability with ultra-low BLER target for BS

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007364 URLLC BS ultra-low BLER test**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Proposal for the ultra-low BLER requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.9.1.2 Performance requirements with higher BLER [NR\_L1enh\_URLLC-Perf]

###### 6.9.1.2.1 UE demodulation and CSI requirements (38.101-4) [NR\_L1enh\_URLLC-Perf]

**R4-2006208 On UE demodulation and CSI requirements with higher BLER**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006527 Discussion on UE performance requirements for URLLC**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007141 Views on UE demodulation for URLLC requirements**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007192 Discussion and simulation on URLLC UE PDSCH demodulation requirements for high reliability with higher BLER**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Provide the simulation results for different MCS

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007193 Discussion and simulation on URLLC UE performance requirements for PDSCH mapping Type B and processing capabiltiy 2**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Provide the simulation results for defined test

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007194 Discussion on URLLC UE performance requirements for low latency for pre-emption**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

provide the simulation reuslts with different pre-emption periodicity and MCS

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007195 Discussion on URLLC UE CQI reporting requrements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion on the open issues.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007801 Views on URLLC High BLER Test Cases**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007929 Discussion on UE performance requirements for Pre-emption**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results, and our views on pre-emption feature for URLLC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007930 Discussion on UE URLLC performance requirements for Slot Aggregation**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results, and our views on slot aggregation feature for URLLC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007931 URLLC UE test applicability and specification layout**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper we provide our views on how URLLC testing framework should be captured in the 38.101-4 UE performance specification.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007932 Views on UE URLLC performance requirements for Type B and PDSCH capability 2**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results and our views on Type B and PDSCH processing capability 2

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.9.1.2.2 BS demodulation requirements (38.104) [NR\_L1enh\_URLLC-Perf]

**R4-2006062 On NR Rel-16 relaxed high reliability and low latency BS demodulation requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open issue in URLLC BS demodulation requirements for high reliability but with higher BLER and/or lower confidence level and low latency. In particular we commented on PUSCH aggregation factors, a

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006326 View on remain issues for URLLC performance requirements in NR Rel-16**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006528 Discussion on BS performance requirements for URLLC**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006582 NR Rel-16 relaxed high reliability and low latency BS demodulation requirement simulation results**

*Type: discussion For: Information  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we provide the results of our NR Rel-16 relaxed high reliability and low latency BS demodulation requirements simulation campaigns.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007188 Views on NR BS performance for high-reliability and low-latency**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007196 Discussion and simulation on URLLC BS PUSCH demodulation requirements for high reliability with higher BLER**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

provide the simulation results for defined test

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007197 Discussion and simulation on URLLC BS performance requirements for low latency**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

provide the simulation results for defined test

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007362 URLLC in BS specifications**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Discussion on how to capture the new requirements in the BS specs

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007363 URLLC BS demod rquirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposals for the high BLER requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.10 Single radio voice call continuity from 5G to 3G (SRVCC) [SRVCC\_NR\_to\_UMTS-Core]

#### 6.10.1 RRM core requirements maintenance (38.133) [SRVCC\_NR\_to\_UMTS-Core]

**R4-2006987 Gap applicability errors corrected for SRVCC**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0713 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Endorsed CR R4-2003097 without further changes

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.10.2 RRM perf requirements (38.133) [SRVCC\_NR\_to\_UMTS-Perf]

**R4-2006986 SRVCC test case for event triggered reporting**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0712 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Endorsed CR R4-2005333 without further chages

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007755 Test case for NR to UTRA FDD Inter-RAT handover**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0802 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.11 Enhancements on MIMO for NR [NR\_eMIMO]

#### 6.11.1 UE RF core requirements (38.101) [NR\_eMIMO-Core]

##### 6.11.1.1 DMRS enhancement with PI/2 BPSK [NR\_eMIMO-Core]

**R4-2006494 MPR With PI/2 BPSK DMRS**

*Type: discussion For: Discussion  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006822 Pi\_2 BPSK DMRS Investigation**

*Type: other For: Approval  
 38.101-3 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

Pi/2 BPSK results and spec structure are discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008216 On Pi/2 BPSK DMRS**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.11.1.2 Uplink Tx Full Power transmission [NR\_eMIMO-Core]

**R4-2006345 On UL Full Power Transmission**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006367 Discussion on Uplink Full Power Transmission (ULFPTx)**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006368 CR to TS38.101-1 on introduction of Uplink Full Power Transmission**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0308 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006369 CR to TS38.101-2 on introduction of Uplink Full Power Transmission**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0152 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006668 [NR\_eMIMO] RIMD impact on EVM and MPR for UL MIMO and Tx Diversity**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

MPR requirement needs to be revisited for PC2 using 2xPC3 PAs and especially account for reverse IMD issues inherent to UL MIMO and Tx Diversity, more specifically its impact on EVM. We have done further measurements that apply to PC2 implementations usin

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006779 CR to clarify UE SRS port configuration for UL tests**

*Type: CR For: Agreement  
 38.101-2 v16.3.0 CR-0165 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

We discuss applicability of Rel-16 PA modes to FR2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007050 Verification of FP modes and relation to Rel-15 requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose an updated test scope for the FP modes and that an additional power-class capability is introduced for UEs supporting a higher power class only for two-layer transmission

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007051 Specification framework for introduction of requirements for the FP modes**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose a specificaion framework for the FP

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007078 Further on EN-DC and SA power class (Rel-16)**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007079 CR to TS 38.101-3 EN-DC requirement alignment (R16)**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008048 eMIMO FPTX Open items for FR1**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008049 Tx diversity open items for Rel-16**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008050 draft CR to enable FPULTX**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008185 On Release 15 and 16 two Intra-band Transmit Chain Cases**

*Type: discussion For: Discussion  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

this contribution looks into all the different intra-band 2Tx cases in Release 15 and 16 for examination of potential gaps in capability signaling and requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008217 On NR eMIMO full power transmission**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008218 draft CR for TS 38.101-1 eMIMO full power transmission**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.11.2 RRM core requirements (38.133) [NR\_eMIMO-Core]

##### 6.11.2.1 L1-SINR [NR\_eMIMO-Core]

**R4-2006205 Discussion on requirements for L1-SINR measurements**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006370 Discussion on L1-SINR Measurement Requirement**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006371 CR to TS38.133 on introduction of L1-SINR Measurement Requirement (Section 3.3 and 9)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0646 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006864 Discussion on RRM requirements for L1-SINR**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007483 RRM requirements for L1-SINR estimation**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007767 Discussion on L1-SINR measurement requirements for NR eMIMO**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007768 Discussion on L1-SINR measurement accuracy for NR eMIMO**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007769 DraftCR on L1-SINR measurement accuracy requirements**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008091 Discussions on Rel-16 NR eMIMO L1-SINR measurements**

*Type: other For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

There are still a number of open issues related to L1-SINR measurement requirements.

This contribution provides our views of the above open issue.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.11.2.2 SCell Beam failure recovery [NR\_eMIMO-Core]

**R4-2006372 Discussion on SCell Beam Failure Recovery RRM Requirement**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006373 CR to TS38.133 on introduction of SCell BFD and CBD (Section 8.5)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0647 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006374 CR to TS38.133 on introduction of SCell BFRQ Procedure (Section 8.5)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0648 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006865 Discussion on RRM requirements for BFR on SCell**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007378 BFRQ on SR-like PUCCH resource**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the RRM requirements for BFRQ on SR-like PUCCH resource.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007379 Draft CR: Correction of SCell BFRQ Procedure (Section 8.5)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Ericsson*

**Abstract:**

This draft CR corrects the SCell BFRQ procedure requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007484 SCell Beam Failure Detection and Recovery**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007770 Discussion on SCell BFD and CBD requiremetns for NR eMIMO**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007771 CR on SCell BFD and CBD requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0806 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.11.2.3 DL/UL beam indication with reduced latency and overhead [NR\_eMIMO-Core]

**R4-2006375 Discussion on MAC-CE based spatial relation update for aperiodic SRS**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.11.2.4 Others [NR\_eMIMO-Core]

**R4-2006065 Discussion on applicable timing for the unknown PL RS activated by MAC-CE**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006206 Discussion on RRM requirements for Multi-TRP**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006376 Discussion on MRTD/MTTD requirement to Enable Multi-TRP Transmission**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006377 CR to TS38.133 on introduction of multi-TRP transmission (Section 7.5 and 7.6)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0649 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006866 Discussion on MRTD for multiple TRPs scenario**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006867 Discussion on PL RS activation requirement via MAC CE**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006868 CR for introduction of pathloss reference signal switching delay**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0702 Cat: B (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007380 MRTD/MTTD requirements for Multi-TRP deployment for MIMO+CA and MIMO+DC**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the MRTD/MTTD requirements for multi-TRP deployment.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007485 MRTD/MTTD in CA/DC with multiple TRPs**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007772 Discussion on MRTD and MTTD requirements for multi-TRP transmissions**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008092 Discussions on Rel-16 NR eMIMO multi-TRP transmissions**

*Type: other For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The document discusses if FR1 intra-band EN-DC MRTD/MTTD and CA MRTD requirements are affected by multi-TRP transmission.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.11.3 Demodulation and CSI requirements (38.101-4) [NR\_eMIMO-Perf]

##### 6.11.3.1 General [NR\_eMIMO-Perf]

**R4-2006627 Views on test cases for eMIMO**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.11.3.2 Demodulation requirements [NR\_eMIMO-Perf]

**R4-2006314 Test case design for PDSCH requirements with Multi-TRP/Pannel transmission**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006316 Simulation results for Multi-TRP/Pannel tranmission**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006539 Views on UE demodulation requirements for NR eMIMO**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006814 Discussion on PDSCH performance requirements for Rel-16 eMIMO**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007198 Discussion on Multi-DCI based PDSCH performance requirements for Multi-TRP in eMIMO**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007199 Discussion on test scopes and general test setup for PDSCH requirements of NR eMIMO**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007385 PDSCH requirements with multi-DCI based multi-TRP/Panel transmission**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the PDSCH demodulation requirements for eMBB multi-TRP transmission scheduled by multi-DCI.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007386 PDSCH requirements with single-DCI based multi-TRP/Panel transmission**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the PDSCH demodulation requirements for eMBB multi-TRP transmission scheduled by single-DCI.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.11.3.3 CSI requirements [NR\_eMIMO-Perf]

**R4-2006315 Test case design for PMI test case with Rel-16 Type II codebook**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006317 Simulation results for PMI test cases with Rel-16 Type II codebook**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007200 Discussion on PMI reporting test for eMIMO**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007936 Evaluation on test setup for Rel-16 Type II codebook**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper we evaluate the test setup for Rel-16 Type II codebook and provide our views

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007937 Simulation results for Rel-16 Type II codebook**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide our simulation results for Rel-16 Type II codebook

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.12 Add support of NR DL 256QAM for FR2 [NR\_DL256QAM\_FR2]

#### 6.12.1 General [NR\_DL256QAM\_FR2]

**R4-2006927 Draft TR 38.883 for FR2 DL 256QAM v1.3.0**

*Type: draft TR For: Agreement  
 38.883 v1.3.0  
 Source: China Telecom*

**Abstract:**

Update TR to implement TPs approved in last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006928 TP for TR 38.883 Editoral corrections**

*Type: pCR For: Approval  
 38.883 v1.2.0  
 Source: China Telecom*

**Abstract:**

This TP is to clean up TR 38.883

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.12.2 BS RF core requirements (38.104) [NR\_DL256QAM\_FR2]

**R4-2007128 CR to TS 38.104: Introduction of FR2 DL 256QAM**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0185 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, China Telecom, Verizon, NTT Docomo, T-Mobile, Ericsson*

**Abstract:**

Tx EVM requirement for 256QAM is added for BS type 2-O.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007129 CR to TS 38.141-2: Introduction of FR2 DL 256QAM**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0165 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, China Telecom, Verizon, NTT Docomo, T-Mobile*

**Abstract:**

FR2 DL 256QAM requirements are introduced to the conformance specification

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.12.3 UE RF core requirements (38.101-2) [NR\_DL256QAM\_FR2]

**R4-2007088 Maximum Input Level for 256 QAM FR2**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007127 CR to TS 38.101-2: Introduction of FR2 DL 256QAM**

*Type: CR For: Agreement  
 38.101-2 v16.3.0 CR-0188 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, China Telecom, Verizon, NTT Docomo, T-Mobile*

**Abstract:**

Maximum input power requirement for 256QAM and RMC for 256QAM are introduced.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.12.4 Demodulation and CSI requirements (38.101-4) [NR\_DL256QAM\_FR2-Perf]

**R4-2006041 UE demodulation and CSI reporting requirements for FR2 DL 256QAM**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006529 Discussion on UE performance requirements for FR2 DL 256QAM**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007138 Views on DL 256QAM requirements for FR2**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007230 Discussion on the performance requirements for NR DL 256QAM for FR2**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007920 TP to TR 38.883: Section 7 Demod test challenges**

*Type: discussion For: Approval  
 38.883 v..  
 Source: Ericsson*

**Abstract:**

TP to TR for 38.883 on Demod testability challanges

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.13 RF requirements for NR frequency range 1 (FR1) [NR\_RF\_FR1]

#### 6.13.1 RF core requirements [NR\_RF\_FR1]

##### 6.13.1.1 Almost contiguous allocations for CP-OFDM UL for FR1 [NR\_RF\_FR1]

##### 6.13.1.2 Intra-band contiguous DL CA for FR1 [NR\_RF\_FR1]

**R4-2008072 CR for 38.101-1 to introduce BCS2 for CA\_n78(2A).**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0365 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008146 FR1 Intra-band DLCA ACS IBB and Wideband Intermodulation**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0386 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008147 FR1 Intra-band CA ACS IBB and WB IMD**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008156 CR for 38.101-1 DL RF requirement correction**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0388 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.13.1.3 Intra-band contiguous UL CA for FR1 power class 3 [NR\_RF\_FR1]

**R4-2006637 [NR FR1 ULCA] Contiguous Intra-band ULCA Allocation Definitions**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution we provide generalized allocations parameters and inner outer allocation definitions for contiguous and non-contiguous allocations for class B and class C UL CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006638 [NR FR1 ULCA] Class B and C UL CA MPR Proposals and A-MPR Evaluation**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, a set of results are presented based on new measurements using the agreed bandwidths definitions, allocation definitions according to [3] and propose associated MPR for class B and C ULCA and provides worst case A-MPR for NS04 and NS

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008010 ACLR measurement center frequency for NR FR1 contiguous CA**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008148 on FR1 UL CA MPR requirement Rel-16**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008149 on FR1 UL CA DC location**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008153 CR on FR1 UL contiguous CA requirement**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0387 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008202 Intra-band Contiguous ULCA MBW and ACLR Offset**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008207 Intra-band Contiguous ULCA MPR**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008255 [NR FR1 ULCA] Class B and C Bandwidth Verification**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we calculate a few contiguous intra-band UL bandwidth cases to verify resulting guard bands and provide ACLR measurement bandwidth position shift.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.13.1.4 Intra-band non-contiguous UL CA for FR1 power class 3 [NR\_RF\_FR1]

**R4-2008039 [FR1 NR ULCA] Non-contiguous UL CA Architecture, Signaling and MPR evaluation**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we discuss architecture and signaling aspects and provide first estimates for MPR. Since there was only 2 weeks available between end of last meeting our analysis is based on contiguous UL CA and ENDC data.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008150 on FR1 UL non-contiguous CA UE capability**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008151 on FR1 UL non-contiguous CA MPR requirement Rel-16**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008165 CR for intra-band UL non-contiguous CA requirement**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0389 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008208 Non-contiguous ULCA MPR and Requirements**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.13.1.5 Switching period between case 1 and case 2 [NR\_RF\_FR1]

**R4-2006032 Remaining issues for Tx switching between two uplink carriers**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006033 CR to TS 38.101-1: Switching time mask between two uplink carriers in UL CA and SUL**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0293 Cat: B (Rel-16)  
  
 Source: China Telecom, ZTE, CMCC, China Unicom, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006034 CR to TS 38.101-3: Switching time mask between two uplink carriers in EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0223 Cat: B (Rel-16)  
  
 Source: China Telecom, ZTE, CMCC, China Unicom, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006290 Requirements for suppporting Tx switching between two uplink carriers in UL CA and SUL**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0306 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006291 Requirements for suppporting Tx switching between two uplink carriers in EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0230 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006364 Views on Tx diversity and Tx carrier switching**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006513 Switching between case 1 and case 2 for two NR FR1 carriers**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006514 CR to TS 38.101-1: Time mask requirements for switching between 1Tx and 2Tx transmissions for inter-band UL CA and SUL case**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0314 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006515 CR to TS 38.101-3: Time mask requirements for switching between 1Tx and 2Tx transmissions for inter-band EN-DC without SUL**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0246 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006804 Requirements for switching between case1 and case2**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006943 Resolving remaining issues for UE switching between 1Tx carrier and 2Tx carrier**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006944 Clarification on 2Tx carrier for UE switching between 1Tx carrier and 2Tx carrier**

*Type: discussion For: Information  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006945 CR to 38101-1 on switching between 1Tx carrier and 2Tx carrier**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0328 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006946 CR to 38101-3 on switching between 1Tx carrier and 2Tx carrier**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0263 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007080 Clarification on the max Power between case1 and case2**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.13.1.6 Transient period capability [NR\_RF\_FR1]

**R4-2007132 Transient Period Capability in NR using existing window definitions**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Qualcomm Incorporated, Verizon, Dish Network, Ericsson, CMCC, Keysight Technologies, Nokia, Nokia Shanghai Bell, AT&T, ZTE, Vodafone, Orange, T-Mobile USA, Deutsche Telekom, Telecom Italia, CHTTL, China Telecom, SGS Wireless, Interdigital*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007515 UE transient time capability**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution addresses the exhaustive list of open issues raised in last RAN4 e-meeting to conclude on testability of the transient capability

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008152 On transient period UE capability**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.13.1.7 Time masks for ULSUP-TDM in case of UL timing misalignment [NR\_RF\_FR1]

**R4-2008245 Further discussion on time masks for ULSUP in R16**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

In this contribution, ULSUP time mask is discussed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008246 CR to 38.101-3 on time masks for ULSUP in R16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0290 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

CR for update the condition for ULSUP time mask requirement.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.13.2 RRM core requirements (38.133) [NR\_RF\_FR1]

**R4-2007134 RRM Requirements for the new FWA device with 23dBm TRP**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.13.2.1 RRM requirements for Tx switching between two uplink carriers [NR\_RF\_FR1]

**R4-2006035 RRM interruption requirement for switching between two uplink carriers**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006211 On DL interruption for UL Tx switching**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006572 Interruption for Tx switching between two uplink carriers**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006805 RRM requirements for switching between case1 and case 2**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007346 On interruption for FR1 Tx switching between two uplink carriers**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007731 DL interruption due to Tx switching between two uplink carriers**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007732 CR on DL interruption on LTE carriers at Tx switching between two uplink carriers**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6875 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007733 CR on DL interruption Tx switching between two uplink carriers**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0792 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.14 NR RF requirement enhancements for frequency range 2 (FR2) [NR\_RF\_FR2\_req\_enh]

#### 6.14.1 RF core requirements [NR\_RF\_FR2\_req\_enh]

**R4-2006360 Views on P-Max for FR2**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.1 FR2 MPE [NR\_RF\_FR2\_req\_enh]

**R4-2006311 Remaining issues on P-MPR reporting**

*Type: other For: Discussion  
 Source: Sony, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006332 Further considerations on the uplink duty cycle enhancements for the MPE scenario**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006510 UE FR2 MPE enhancements and solutions**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006511 [Draft] LS on MPE enhancements**

*Type: LS out For: Approval  
 to RAN2  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006579 Remaining details for P-MPR reporting**

*Type: other For: Approval  
 Source: InterDigital Communications*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006581 Introduction of P-MPR report mapping**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0677 Cat: B (Rel-16)  
  
 Source: InterDigital Communications*

**Abstract:**

Introduction of P-MPR report mapping in 38.133

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006735 Discussion about triggers for P-MPR reporting**

*Type: discussion For: Approval  
 Source: Futurewei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006737 Discussion on enhancement of MPE in Rel-16 on FR2**

*Type: other For: Approval  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006996 Enhancement on FR2 MPE mitigation**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007081 Further on MPE enhancement**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007109 Views on remaining issues of Rel-16 FR2 MPE solution**

*Type: discussion For: Discussion  
 38.101-2 v..  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008168 On MPE enhancement\_FR2**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.2 Beam Correspondence based on configured DL RS (SSB or CSI-RS) [NR\_RF\_FR2\_req\_enh]

**R4-2006319 Remaining issues in beam correspondence**

*Type: other For: Discussion  
 Source: Sony, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006357 Remaining issues with beam correspondence in Rel-16**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006358 TP to TR38.831: beam correspondence enhancement**

*Type: other For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006428 Discussion on Rel-16 beam correspondence**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006429 CR to TS38.101-2 on Rel-16 beam correspondence**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0154 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006512 FR2 Beam Correspondence enhancements**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006564 SSB based Beam Correspondence**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006738 Discussion on enhancement of BC in Rel-16 at FR2**

*Type: other For: Approval  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006900 Views on beam correspondence enhancement based on SSB in Rel-16**

*Type: discussion For: Discussion  
 38.101-2 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007082 On SSB based BC**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007083 On CSI-RS based BC**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007283 FR2 Beam Correspondence**

*Type: discussion For: Discussion  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008155 On beam correspondence enhancement**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008178 LS on CSI-RS only beam correspondence**

*Type: LS out For: Approval  
 to RAN1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008205 Remaining details on SSB based beam correspondence**

*Type: discussion For: (not specified)  
 Source: Futurewei Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.3 Intra-band non-cont DL CA for aggregated BW larger than 1400 MHz [NR\_RF\_FR2\_req\_enh]

**R4-2006567 On understanding of CC allocations in FR2 intra-band non-contiguous DL CA**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006631 CR to 38.101-2 on REFSENS for intra-band non-contiguous CA for FR2**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0160 Cat: B (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006632 [draft] LS to RAN2 on DL-only separation class**

*Type: LS out For: Approval  
 to RAN2  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006634 CR to 38.101-2 on FR2 frequency separation class enhancement**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0161 Cat: B (Rel-16)  
  
 Source: Apple Inc., Nokia, Nokia Shanghai Bell, Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006780 TP to TR38.831: FR2 UE architectures for DL Intra-band CA BW Enhancement**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

TP contains UE architecture study supporting the DL CA BW enhancement feature

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008154 On intra-band NC DL CA\_FR2**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008177 CR for 38.101-2 separation class for Rel-16**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0203 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.4 Intra-band non-contiguous UL CA [NR\_RF\_FR2\_req\_enh]

**R4-2006361 Remaining issues with non-simultaneous UL for non-contiguous UL CA in FR2**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006486 FR2 intra-band non-contiguous UL CA feature**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0156 Cat: B (Rel-16)  
  
 Source: Nokia, Qualcomm Inc. Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.5 Inter-band DL CA [NR\_RF\_FR2\_req\_enh]

**R4-2006213 On common beam management from baseband perspective**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006320 Inter-band DL CA in FR2: CBM/IBM capability and associated spherical coverage EIS tests**

*Type: other For: Discussion  
 Source: Sony, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006430 on EIS relaxation framework and PSD difference in FR2 inter-band CA**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006565 Remaining issues on FR2 inter-band DL CA**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006591 FR2 Inter-band CA**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

common and independent beam management is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006592 TP to TR 38.831 on FR2 inter-band CA**

*Type: pCR For: Approval  
 38.831 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

TP on inter-band CA requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006633 On common beam management assumptions and PSD difference in FR2 CA**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006791 On using Rel-15 CA MPR table format for FR2 NC UL CA**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We propose MPR for NC UL CA operation

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006829 FR2 inter-band DL CA requirements**

*Type: other For: Approval  
 38.101-2 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we share our views on how to distinguish CBM and IBM for band pairs and how common spherical coverage can be specified and tested in conjunction with REFSENS and EIS spherical coverage requirements under inter-band DL CA operation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008051 Inter-band CA remaining open requirements**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008052 DraftCR on Introduction of inter-band CA to 38.101-2**

*Type: draftCR For: Endorsement  
 38.101-2 v16.3.1  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008056 FR2 inter-band CA LB+HB**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008166 On inter band DL CA\_FR2**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.6 Improvement of UE MPR [NR\_RF\_FR2\_req\_enh]

**R4-2006485 FR2 new MPR and modifiedmpr**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0155 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006782 FR2 UE EIRP increase with IBE relaxation**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

For Rel-16, it was agreed that an FR2 UE’s transmit power capability could be increased if IBE requirements were relaxed. In this contribution we present a proposal for how power boost (IBE) can be incorporated into the standard.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006783 LS on UL power boost mode and IBE relaxation**

*Type: LS out For: Approval  
 to RAN2  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006784 CR to 38.101-2: FR2 UE EIRP increase with IBE relaxation**

*Type: CR For: Agreement  
 38.101-2 v16.3.0 CR-0166 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

For Rel-16, it was agreed that an FR2 UE’s transmit power capability could be increased if IBE requirements were relaxed. In this contribution we present a proposal for how power boost (IBE) can be incorporated into the standard.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.7 Improvement of spherical coverage requirements for PC3 [NR\_RF\_FR2\_req\_enh]

**R4-2006312 Further view on spherical coverage improvements for Rel-16**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006359 Views on PC3 spherical coverage requirements in Rel-16 and beyond**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007276 Further views on improvement to spherical coverage requirements for PC3**

*Type: other For: Discussion  
 Source: Sony*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.8 Multiband relaxation framework enhancement [NR\_RF\_FR2\_req\_enh]

**R4-2006313 CR to 38.101-2: Revision to Multiband Relaxations**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0148 Cat: F (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006328 [draft] LS response on Multiband relaxation for FR2**

*Type: LS out For: Approval  
 to TSG RAN WG5  
 Source: Sony, Ericsson, Samsung, Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006350 Views on MBR enhancement for FR2**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006351 [draft] LS response on Multiband relaxation for FR2**

*Type: LS out For: Approval  
 to RAN5  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006352 CR to 38.101-2 on correction of the FR2 multi-band requirement framework**

*Type: CR For: Agreement  
 38.101-2 v15.9.0 CR-0149 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006353 CR to 38.307 on clarification of the FR2 multi-band requirement framework**

*Type: CR For: Agreement  
 38.307 v16.2.0 CR-0018 Cat: F (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006354 TP to TR38.831: multi-band relaxation framework enhancement**

*Type: other For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006365 CR to 38.101-2 on correction of the FR2 multi-band requirement framework**

*Type: draftCR For: Endorsement  
 38.101-2 v15.9.1  
 Source: Sony, Ericsson, Samsung, Qualcomm*

**Abstract:**

Introduce a maximum cap on to the per-band relaxation factors, such that ?MBP,n = 0.75 dB and ?MBS,n = 0.75 dB

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2006580 CR to 38.101-2 on correction of the FR2 multi-band requirement framework**

*Type: CR For: Agreement  
 38.101-2 v15.9.1 CR-0158 Cat: F (Rel-15)  
  
 Source: Sony, Ericsson, Samsung, Qualcomm*

**Abstract:**

Introduce a maximum cap on to the per-band relaxation factors, such that ?MBP,n = 0.75 dB and ?MBS,n = 0.75 dB

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006707 MBR framework applicability**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Abstract:**

Proposals for MBR framework applicability

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.14.1.9 FR2 Beam Squint [NR\_RF\_FR2\_req\_enh]

**R4-2006327 Analysis on EIS degradation due to larger frequency separation for PC3 Ues**

*Type: other For: Discussion  
 Source: Sony, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006781 Beam squint analysis for FR2 UEs**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We discuss how beam squint impacts compliance as frequency separation increases

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006842 Views on radiative degradation mechanisms for larger frequency separation**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.14.2 RRM core requirements (38.133) [NR\_RF\_FR2\_req\_enh]

##### 6.14.2.1 Inter-band DL CA MRTD [NR\_RF\_FR2\_req\_enh]

**R4-2006212 On common beam management and MRTD for FR2 iner-band CA**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006214 CR on MRTD for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v15.9.0 CR-0630 Cat: F (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006215 CR on MRTD for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0631 Cat: A (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006571 MRTD requirements for FR2 inter-band DL CA**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007095 MRTD and MTTD requirements for FR2 inter-band DL CA**

*Type: other For: Approval  
 Source: Ericsson, , NTT DOCOMO, INC.*

**Abstract:**

In this contribution, we present our proposals on the MRTD definition for FR2 inter-band CA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007096 Updates on MRTD and MTTD requirements for FR2 inter-band DL CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0716 Cat: B (Rel-16)  
  
 Source: Ericsson, NTT DOCOMO, INC.*

**Abstract:**

There is a proposal to update the MRTD and MTTD for inter-band FR2 NR CA wrt UE implemntation. We propsoe this CR to facilitate the commomn beam management based UE implementation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007133 MRTD for FR2 Inter-band CA**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007289 Discussion on MRTD requirement for FR2 inter-band DL CA**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

MRTD requirements for FR2 inter-band DL CA is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007773 Discussion on MRTD requirements for FR2 inter-band DL CA**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007774 CR on MRTD requirements for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0807 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008195 MRTD for inter-band DL CA**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

discussion on MRTD requirement for inter-band DL CA

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.15 NR RRM requirement enhancement [NR\_RRM\_Enh\_Core]

#### 6.15.1 RRM core requirements (38.133) [NR\_RRM\_Enh\_Core]

##### 6.15.1.1 SRS carrier switching requirements [NR\_RRM\_Enh\_Core]

**R4-2006474 Discussion on Interruption at SRS carrier switch**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006713 On SRS carrier switching requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

SRS carrier switching requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007104 Interruption requirements due to SRS carrier switching**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007347 On remaining issues for SRS carrier switching**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007644 Remaining open issues on NR SRS carrier switching RRM requirements**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007645 CR to 38.133 on SRS carrier switching interruption requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0741 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007646 CR to 38.133 on impact to measurement requirements due to LTE SRS carrier switching**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0742 Cat: F (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007742 Discussion on SRS carrier switching interruption**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007743 CR on impact on NR RRM measurement due to LTE SRS carrier switching**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0797 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007744 CR on impact on LTE RRM measurement due to NR SRS carrier switching**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6876 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007756 CR on NR SRS carrier switching interruption in TS 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6878 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.2 Multiple Scell activation/deactivation [NR\_RRM\_Enh\_Core]

**R4-2006192 On remaining issues for multiple SCell activations**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006193 On activation delay requirements for multiple SCell activation**

*Type: discussion For: Approval  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006194 CR on multiple SCell activation deactivation requirement for R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0625 Cat: B (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006195 CR on multiple SCell activation interruption requirement for R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0626 Cat: B (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006196 CR on multiple NR SCell activation interruption requirement for R16 TS36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6839 Cat: B (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006475 Discussion on Multiple SCell activation**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007105 Multiple SCells Activation Delay Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007284 Multiple SCell activation in NR**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007290 Discussion on remaining open issues in delay extension of multiple SCell activation**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

We provided our views on some of the remaining open issues on delay extension of SCell activation during multiple SCell activation.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007790 On activation of multiple SCells**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we are providing input on simultaneous activation of multiple SCells.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007856 Discussion on multiple SCell activation**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007857 CR on Multiple SCell activation/deactivation delay requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0850 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007858 CR on Multiple SCell activation/deactivation interruption requirements 38133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0851 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007859 CR on Multiple SCell activation/deactivation interruption requirements 36133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6885 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.3 CGI reading requirements with autonomous gap [NR\_RRM\_Enh\_Core]

**R4-2006476 Discussion on CGI reading requirement for NR**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006714 On CGI reading requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

CGI reading requirement on MIB and SIB

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006715 CR: CGI reading**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Qualcomm, Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006970 Further considerations for CGI decoding in NR**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion on CGI reading based onm WF

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006971 LTE CGI measurements with autonomous gaps for 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0709 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

InterRAT reading of LTE CGI with NR sevring cell

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006972 NR CGI measurements with autonomous gaps for 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6845 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

InterRAT reading of NR CGI with LTE sevring cell

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007640 Remaining open issues on NR CGI reading with autonomous gaps**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007641 CR to 38.133 on CGI reading of NR cell**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0739 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007642 CR to 38.133 on interruption requirements for CGI reading**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0740 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007643 Reply LS on CGI reading with autonomous gaps**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007860 Discussion on NR CGI reading requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007861 Discussion on scope and requirements for LTE CGI reading**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007862 CR to 36.133 on interruption requirements for CGI reading**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6886 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007863 CR to 36.133 on CGI reading of LTE cell**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6887 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008188 discussion on CGI reading with autonomous gap**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

discussion on CGI reading with autonomous gap

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008189 Draft Response LS on CGI reading with autonomous gaps**

*Type: LS out For: Approval  
 to RAN2  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Draft Response LS on T321 timer value for CGI reading with autonomous gaps

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.4 BWP switching on multiple CCs [NR\_RRM\_Enh\_Core]

**R4-2006203 Discussion on requirements for BWP switching on multiple CCs**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006477 Discussion on BWP switch on multiple CC**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006522 Remaining issues on BWP switching on mulitple CCs**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006551 Discussion on RRM requirements for BWP switching on multiple CCs**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007291 Discussion on requirements for BWP switch delay on multiple CC**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

We provided our views on delay requirements for BWP switching on multiple CC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007348 On RRM requirements for BWP switching on multiple CCs**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007498 Delay requirement for simultaneous switching of multiple BWPs**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007680 CR on introduction of RRM requirements for BWP switching delay on multiple CCs**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0764 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007681 Discussion on partial overlap BWP switching on multiple CCs**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007682 Discussion on simultaneous BWP switching on multiple CCs**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007788 On simultaneous BWP switching on multiple CCs**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we are providing input on simultaneously triggered BWP switching on multiple component carriers.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007990 Analysis of open issues for partially overlapped BWP triggering on multiple CCs**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper provides further analysis of non-smultaneous BWP switching delay on multiple CCs

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008190 discussion on BWP switch on multiple CCs**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on delay requirements for BWP switch considering multiple CCs.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008191 CR on 36133 interruption requirements for BWP switching on multiple CCs**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6909 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR on 36133 interruption requirements for BWP switching on multiple CCs

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008192 CR on 38133 interruption requirements for BWP switching on multiple CCs**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0875 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR on 38133 interruption requirements for BWP switching on multiple CCs

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.5 Inter-frequency measurement requirement without MG [NR\_RRM\_Enh\_Core]

**R4-2006521 Remaining issues for inter-frequency measurement without gap**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006716 On Inter-frequency without gap requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

Inter-frequency without gap requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006806 RRM requirements on inter-frequency measurement without gap**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006807 CR on introducing inter-frequency measurements without measurement gap (9.1.5, 9.1.6, 9.3.1, 9.3.4, 9.3.5)**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0690 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006888 Discussion on inter-frequency measurement requirement without gap**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007349 On remaining issues for inter-frequency measurement without MG**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007745 [Draft] LS on inter-frequency measurement requirement without MG**

*Type: LS out For: Approval  
 to RAN2, RAN1  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007746 Discussion on inter-frequency measurement without gap**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.6 Mandatory MG patterns [NR\_RRM\_Enh\_Core]

**R4-2006717 On Mandatory gap patterns requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

Mandatory gap patterns requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006718 CR: mandatory gap pattern**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: Qualcomm, Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006767 Further discussion on mandating gap patterns for Rel-16 NR**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006874 Discussion on mandatory MG patterns**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006974 Further discussion on additional mandatory gap patterns for release 16**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion around WF in R4-2005345

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006975 Further LS on mandatory of measurement gap patterns**

*Type: LS out For: Approval  
 to RAN WG2  
 Source: Ericsson*

**Abstract:**

LS to inform RAN2 which gap patterns to specify as mandatory in R16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007159 Discussion on Mandatory Gap Patterns**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007350 On remaining issues for mandatory MG patterns**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007647 LS on mandatory of measurement gap patterns**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007648 Remaining open issues on mandatary gap patterns**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007747 Discussion on mandatory gap pattern in R-16**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007748 [Draft] LS on mandantory gap patterns**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.7 UE-specific CBW change [NR\_RRM\_Enh\_Core]

**R4-2006197 CR on UE behavior for UE specific CBW change**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0627 Cat: F (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006547 CR to TS 38.133: RRM requirement for UE-specific CBW change delay**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0672 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006548 CR to TS 38.133: RRM requirement for interruption due to UE-specific CBW change**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0673 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.8 Spatial relation switch for uplink [NR\_RRM\_Enh\_Core]

**R4-2006204 Discussion on requirements for UL spatial relation info switch**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006478 Discussion on active spatial relation switch**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006479 CR on active spatial relation switch**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0668 Cat: B (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006554 Discussion on requirements for spatial relation info switch for UL**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006875 Discussion on spatial relation switch for uplink**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007160 Discussion on UL spatial relation switch**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007496 Spatial relation switch for uplink**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007749 Discussion on spatial relation switch for uplink channels and SRS**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007789 On spatial relation switching delay requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we are providing input on spatial relation switching requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.15.1.9 Non-simultaneous UL carrier operation in FR2 [NR\_RRM\_Enh\_Core]

##### 6.15.1.10 Inter-band CA requirement for FR2 UE measurement capability of independent Rx beam and/or common beam [NR\_RRM\_Enh\_Core]

**R4-2006869 Discussion on Inter-band CA requirement for FR2**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006876 Discussion on inter-band CA requirement for FR2**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006973 RRM requirements for interband FR2 operation**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion around WF in R4-2005353

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007161 FR2 inter-band CA requirement**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007497 RRM requirements with common and independent beams in FR2 inter band CA**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007775 Discussion on RRM requirements of FR2 inter-band CA scenario**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007776 CR on interruption requirements for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0808 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007777 CR on scaling factor CSSFoutside\_gap for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0809 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007778 CR on scheduling availability requirements for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0810 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007779 CR on measurement restriction requirements for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0811 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007802 CR on SCell activation requirements for FR2 inter-band CA**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0819 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.16 NR RRM requirements for CSI-RS based L3 measurement [NR\_CSIRS\_L3meas]

#### 6.16.1 RRM core requirements (38.133) [NR\_CSIRS\_L3meas-Core]

**R4-2006216 On remaining issues for CSI-RS based L3 measurements**

*Type: discussion For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.16.1.1 CSI-RS measurement bandwidth [NR\_CSIRS\_L3meas-Core]

**R4-2006223 Discussion on the remaining issues on CSI-RS measurement configuration and definition for RRM measurement requirement**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006949 Discussion on CSI-RS parameters for RRM core requirements**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007098 Discussion on CSI-RS measurement bandwidth**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007649 Further discussion on configuration of CSI-RS based L3 measurement**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007803 Discussion on CSI-RS L3 measurement period requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.16.1.2 CSI-RS based intra-frequency and inter-frequency measurements definition [NR\_CSIRS\_L3meas-Core]

**R4-2006224 LS on CSI-RS based intra-frequency and inter-frequency Measurement definition**

*Type: LS out For: Approval  
 to RAN2  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006553 Discussion about CSI-RS L3 measurement bandwidth and definition**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006573 Definition of Intra and inter frequency for CSI-RS RRM**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006763 Further discussion on the definition of CSI-RS based intra-frequency measurements**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006950 Discussion on the definition of CSI-RS based intra-frequency and inter-frequency measurement**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007099 CSI-RS based intra-frequency measurements definition**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007292 Definition of Intra and Inter-frequency CSI-RS based L3 measurements**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

We provided our views on the definition of Intra and Inter-frequency CSI-RS based L3 measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007351 On remaining issues for definition of intra-f CSI-RS L3 measurement**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007651 Further discussion on definition of CSI-RS based RRM measurements**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007734 Definition for the CSI-RS based intra-frequency and inter-frequency measurement**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007735 [DRAFT] Reply LS on clarification about CSI-RS measurement**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007737 CR on CSI-RS based L3 measurement framework and introduction**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0793 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007738 CR on CSI-RS based intra-f and inter-f measurement definition**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0794 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008143 More comments on CSI-RS based intra-frequency and inter-frequency measurements definition**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Qualcomm CDMA Technologies*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.16.1.3 Measurement capability [NR\_CSIRS\_L3meas-Core]

**R4-2006225 Further discussion on CSI-RS based UE measurement capabilities**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006227 CR on CSI-RS based UE measurement capabilities**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0637 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006552 Discussion about CSI-RS L3 measurement capability and requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006574 Discussion on measurement capability for CSI-RS RRM**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006764 Further discussion on CSI-RS measurement capability**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006766 38.133 CR on UE measurement capability for CSI-RS measurement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0688 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007100 Discussion on the CSI-RS based measurement capability**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007352 On Measurement capability for CSI-RS L3 measurement**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007353 Draft CR on CSI-RS based L3 measurement capability(9.1.3)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007354 Draft CR on CSI-RS based L3 measurement capability(9.2.3)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007355 Draft CR on CSI-RS based L3 measurement capability(9.3.3)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007650 Further discussion on UE measurement capability of CSI-RS based RRM measurements**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007864 On CSI-RS measurement capability**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007865 CR on CSI-RS measurement capability - number of cells and beams**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0852 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007866 CR on CSI-RS measurement capability - number of layers**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0853 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007867 On time window for CSI-RS measurement**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008237 More comments on CSI-RS measurement capabilities and requirements**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Qualcomm CDMA Technologies*

**Abstract:**

CSI-RS L3, capabilities and requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.16.1.4 Intra-frequency and inter-frequency measurement requirements [NR\_CSIRS\_L3meas-Core]

**R4-2006226 Discussion on CSI-RS based measurement requirements**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006228 CR on Carrier-specific scaling factor for CSI-RS measurement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0638 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006229 CR on CSI-RS based intra-frequency measurement requirement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0639 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006230 CR on CSI-RS based inter-frequency measurement requirement**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0640 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006575 Cell identification requirements for CSI-RS RRM**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006765 Discussion on CSI-RS measurement requirements**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006841 Discussion on CSI-RS L3 measurement requirement**

*Type: discussion For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006951 Discussion on measurement requirements of CSI-RS based L3 measurement**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007101 CSI-RS based intra-frequency measurement requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007356 On measurement requirement for CSI-RS based L3 measurements**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007357 Draft CR on intra-frequency CSI-RS L3 measurement(9.2.1, 9.2.4)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007358 Draft CR on intra-frequency CSI-RS L3 measurement requirement(9.2.5)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007359 Draft CR on inter-frequency CSI-RS L3 measurements(section 9.3.1, 9.3.6)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007360 Draft CR on inter-frequency CSI-RS L3 measurements requirement(section 9.3.4, 9.3.5)**

*Type: draftCR For: Endorsement  
 38.133 v16.3.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007736 Discussion on CSI-RS based L3 measurement requirements**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007739 CR on CSI-RS based measurement requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0795 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.16.1.5 Others [NR\_CSIRS\_L3meas-Core]

**R4-2006576 Synchronization assumption for L3 CSI-RS measurement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007102 Pre-emption on CSI-RS based measurements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007103 Simulation results for CSI-RS based measurements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007868 On synchronization assumption for CSI-RS measurement requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.17 NR support for high speed train scenario [NR\_HST]

#### 6.17.1 RRM core requirements (38.133) [NR\_HST-Core]

**R4-2006719 On HST RRM requirement**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

HST RRM requirement inter-RAT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006770 Further discussion on RRM for NR high speed scenario**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006772 Discussion on SS-SINR measurement for NR HST**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006965 LS on supporting Rel-16 NR HST RRM enhanced requirements from Rel-15 UEs**

*Type: LS out For: Approval  
 to RAN2  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007272 Discussion on remaining RRM issues in NR HST**

*Type: discussion For: Discussion  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.17.1.1 Cell re-selection [NR\_HST-Core]

**R4-2006774 38.133 CR on cell re-selection requirements for Rel-16 NR HST**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0689 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007162 NR HST Serving cell and idle mode**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008040 CR for Measurement and evaluation of serving cell in HST**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0872 Cat: F (Rel-16)  
  
 Source: Nokia Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.17.1.2 Cell identification delay [NR\_HST-Core]

**R4-2006231 CR on cell identification requirements for NR HST**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0641 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006983 Requirement applicability in NR high speed**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Further considattions on note related to requirement applicability in NR high speed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007163 Connected mode HST operation with long DRX**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008090 Discussions on SS-SINR measurements for Rel-16 high speed train**

*Type: other For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

At the RAN4#94-e-bis meeting, link simulation results for SS-SINR were provided and discussed in [2]. Further discussions and link simulation results for SS-SINR are provided in this document. Based on our discussions and simulation results, we attempt to

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.17.1.3 RLM [NR\_HST-Core]

**R4-2008058 CR to TS 38.133: NR HST RLM requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0873 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR updates the RLM requirements for NR HST according to the WF on RRM for NR HST (R4-2005358) which was agreed at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.17.1.4 Beam management [NR\_HST-Core]

**R4-2008065 CR to TS 38.133: NR HST beam management requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0874 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR updates the beam management requirements for NR HST according to the WF on RRM for NR HST (R4-2005358) which was agreed at the last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.17.1.5 Inter-RAT measurement [NR\_HST-Core]

**R4-2006771 Further discussion on inter-RAT measurement requirements for NR HST**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006773 36.133 CR on cell identification in connected mode for EUTRAN-NR measurement for Rel-16 NR HST**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6840 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006984 InterRAT requirements for high speed train**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion on necessary InterRAT requirements for high speed train

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006985 Cell re-selection for EUTRAN-NR high speed in TS36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6848 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Requirements for reselection from LTE to NR for HST

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007164 Idle mode inter-RAT measurements requirements**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007165 Connected mode inter-RAT measurements**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007273 CR on cell re-selection requirement for NR-EUTRAN measurement in TS38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0723 Cat: B (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007740 Discussion on the RRM requirements in NR HST**

*Type: discussion For: Discussion  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007741 Cell identification in connected mode for NR-EUTRAN measurement in HST**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0796 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.17.2 Demodulation and CSI requirements (38.101-4 / 38.104) [NR\_HST-Perf]

##### 6.17.2.1 UE demodulation and CSI requirements (38.101-4) [NR\_HST-Perf]

**R4-2006612 Views on Tests for High Speed Train Scenarios**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006768 Further discussion on UE demodulation for NR HST**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007137 Views on applicability rule for HST demodulation requirements**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007234 Discussion on general issues for NR UE HST performance requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007274 Discussion on UE demodulation requirements for NR HST**

*Type: discussion For: Discussion  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007384 Release independence and applicability rule for NR HST demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the release independence requirements applicable for NR HST.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007921 Addition of Rel-16 HST FRC**

*Type: draftCR For: Endorsement  
 38.101-4 v16.0.0  
 Source: Ericsson*

**Abstract:**

In this contribution we provide the FRCs for the new Rel-16 HST test cases

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.1.1 Scenarios and transmission schemes [NR\_HST-Perf]

**R4-2006534 Views on DL demodulation requirements for DPS transmission scheme**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007233 Discussion on UE performance requirements for DPS transmission scheme**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007382 Transmission scheme in NR PDSCH demodulation requirements for HST**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the transmission schemes used in PDSCH demodulation requirements for NR HST.

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.1.2 Requirements for HST-SFN [NR\_HST-Perf]

**R4-2006535 Views on NR UE demodulation requirements for HST-SFN scenario**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007135 Views on HST-SFN**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007235 Discussion and simulation results on NR UE HST performance requirements for SFN**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.1.3 Requirements for HST single tap [NR\_HST-Perf]

**R4-2006536 Views on NR UE demodulation requirements for HST single tap scenario**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007136 Views on HST single-tap**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007236 Discussion and simulation results on NR UE HST performance requirements for single-tap**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007383 Discussion on PDSCH demodulation performance with HST single tap**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE receiver assumption for PDSCH demodulation performance with HST single tap.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007923 Simulation results for NR UE HST single tap**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we provide simulation results and our views on HST single tap

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.1.4 Requirements for multi-path fading channels [NR\_HST-Perf]

**R4-2006537 Simulation results for HST multi-path fading channel scenario**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007237 Simulation results on NR UE HST performance requirements for multi-path fading channel**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007922 Simulation results for HST Multipath fading channels**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we provide simulation results and our views on HST multipath

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.1.5 Network assistance and UE capability signalling [NR\_HST-Perf]

**R4-2006538 Views on UE demodulation requirements for NR HST**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.17.2.2 BS demodulation requirements (38.104) [NR\_HST-Perf]

**R4-2006254 Summary of ideal and impairment results for NR HST demodulation requirements**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006266 Discussion on high speed support declaration for NR HST**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006267 Discussion on multi-path fading channel for NR HST**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006270 CR for TS 38.141-1, Introduction of high speed support declaration for NR HST**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0122 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006271 CR for TS 38.141-2, Introduction of high speed support declaration for NR HST**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0154 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006769 Discussion on BS demodulation for NR HST**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.2.1 PUSCH requirements [NR\_HST-Perf]

**R4-2006052 On NR Rel-16 HST BS demodulation PUSCH requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open PUSCH HST issues. In particular we commented on, the applicability rules and declaration categories, the 1T1R requirement configurations, DFT-s-OFDM introduction, and multi-path requirement i

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006053 CR for 38.104: HST PUSCH demodulation requirements**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0165 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2005537.

- Updated 350kh requirement TBDs to capture values agreed in last meeting. Remains in square brackets [R4-2003270].

- Captured agreement of “The performance requirements for PUSCH for high speed train shall onl

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006054 CR for 38.104: HST PUSCH demodulation FRC and channel model annexes**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0166 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2005538.

- Removed square brackets from l0=2 or 3 option in FRC.

- fixed typo: “table A.4.2A” -> “table A.4-2A”

- Added new 500kph propagation models (NR500) with corresponding figures and text.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006258 Simulation results for NR HST PUSCH demodulation requirement**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006265 Discussion on 1T1R for tunnel scenario for NR HST PUSCH**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006268 Discussion on the introduction of DFT-s-OFDM for NR HST PUSCH**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006323 Discussion and simulation results for NR HST PUSCH**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006666 Further discussion on HST PUSCH BS demodulation requirements**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006833 Discussion on HST PUSCH remain isses**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

declarations and configurations for HST PUSCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006836 Introduction of conformance tests for 350kph and 500kph HST**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0159 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR for 38.141-2 Introduction of conformance tests for 350kph and 500kph HST

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006837 HST PUSCH demodulation FRC and channel condition annex**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0160 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR for 38.141-2 HST PUSCH demodulation FRC and channel condition annex

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007182 Views on NR PUSCH for high speed**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007183 CR for TS 38.141-1: Introduction of NR PUSCH performance requirements for HST**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0127 Cat: B (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007184 CR for TS 38.141-1: Introduction of NR PUSCH performance Annex including FRC and channel model for HST**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0128 Cat: B (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007231 Discussion and simulation results on the NR HST PUSCH performance requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007422 Views on PUSCH demodulation requirements for HST multi-path fading channel conditions**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007423 PUSCH simulation results for HST tunnel scenario**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008206 Simulation results for NR HST PUSCH performance requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.2.2 PRACH requirements [NR\_HST-Perf]

**R4-2006055 On NR Rel-16 HST BS demodulation PRACH requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open PRACH HST issues. In particular we commented on, the applicability rules and declaration categories, and TDLC300-100 propagation condition.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006667 Further discussion on HST PRACH BS demodulation requirements**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006834 Discussion on HST PRACH remain isses**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

structures, declarations and configurations for HST PRACH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007185 Views on NR PRACH for high speed**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007204 CR for 38.104 Introduction of PRACH demodulation requirements for NR HST**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0186 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Resubmission of endorsed draftCR R4-2005539

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007205 CR for 38.141-1 Introduction of PRACH conducted conformance testing for NR HST**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0129 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Resubmission of endorsed draftCR R4-2005540

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007206 CR for 38.141-2 Introduction of PRACH radiated conformance testing for NR HST**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0166 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Resubmission of endorsed draftCR R4-2005541

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007207 Discussion on open issues of NR HST PRACH**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 6.17.2.2.3 UL timing adjustment requirements [NR\_HST-Perf]

**R4-2006056 On NR Rel-16 HST BS demodulation UL timing adjustment requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open UL TA HST issues. In particular we commented on the section organization, applicability rules, and declaration categories, as well as, the inclusion of scenario X, and additional SCS.CBW comb

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006255 CR for TS 38.141-2: introduction of NR PUSCH UL timing adjustment**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0152 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006256 CR for TS 38.141-2: appendix for NR PUSCH UL timing adjustment**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0153 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006257 Simulation results for NR PUSCH UL timing adjustment demodulation requirement**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006269 Discussion on the remaining issues of NR HST PUSCH UL TA**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006321 CR on UL timing adjustment conducted performance requirement for TS 38.141-1**

*Type: draftCR For: Endorsement  
 38.141-1 v16.3.0  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006322 CR on FRC and moving progagation condition for UL timing adjustment for TS 38.141-1**

*Type: draftCR For: Endorsement  
 38.141-1 v16.3.0  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006324 Discussion and simulation results for NR HST UL timing requirement**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006664 CR for 38.104: Performance requirements for UL timing adjustment**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0187 Cat: B (Rel-16)  
  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006665 Further discussion on BS demodulation performance requirements for UL TA**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006835 Discussion on HST UL TA remain isses**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

structures, declarations and configurations for HST UL TA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007186 Views on NR PUSCH for UL timing adjustment**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007232 Discussion and simulation results on the NR HST UL timing performance requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.18 NR performance requirement enhancement [NR\_perf\_enh-Perf]

**R4-2006036 Updated CR work split for NR performance requirement enhancement WI**

*Type: discussion For: Approval  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.18.1 UE demodulation and CSI requirements (38.101-4) [NR\_perf\_enh-Perf]

**R4-2007220 Discussion on Release independent aspects for UE demod and CSI reporting requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the approved WF R4-2005545, share our view on release independent aspects for PMI reporting

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.18.1.1 NR CA PDSCH requirements [NR\_perf\_enh-Perf]

**R4-2006037 On NR CA PDSCH normal demodulation requirements**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006530 Discussion on NR CA UE demodulation requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006531 Summary of Normal CA simulation results (FR2)**

*Type: other For: Information  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006628 Simulation Results for NR CA PDSCH Demodulation Performance Tests**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006629 Views on NR CA PDSCH Demodulation Performance Tests**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006808 Test applicability rule for NR CA PDSCH normal demodulation**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007139 Views on PDSCH CA normal demodulation requirements**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007221 Discussion on HARQ timing for NR UE normal CA performance requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the approved WF R4-2005546, share our views on HARQ timing for NR CA UE performance requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007222 Discussion on PDSCH CA normal demodulation requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the approved WF R4-2005546, further share our views on left open issues

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007223 draftCR for NR FR1 PDSCH CA normal demodulation requirements with 4Rx**

*Type: draftCR For: Endorsement  
 38.101-4 v15.5.0  
 Source: Huawei, HiSilicon*

**Abstract:**

Share our views on the specification structure for NR UE CA performance requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.18.1.2 PMI reporting requirements with larger number of Tx ports [NR\_perf\_enh-Perf]

**R4-2006038 On PMI reporting requirements with larger number of Tx ports**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006318 Views and simulation results for PMI test cases**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006615 Parameters and simulation results on PMI reporting requirements with larger number of Tx ports**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007201 Simulation results for Single Panel Type I PMI reporting test with larger Tx ports**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007202 Discussion on open issues for Type II codebook PMI reporting test with larger Tx ports**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007203 Discussion on subband for Type I codebook PMI reporting test with larger Tx ports**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007924 Addition of High spatial correlation matrices for 2D antenna arrays**

*Type: draftCR For: Endorsement  
 38.101-4 v16.0.0  
 Source: Ericsson*

**Abstract:**

In this contribution we provide the equation for 2D antenna array correlation matrices for high correlation

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007925 Addition of Rel-16 PMI FRC**

*Type: draftCR For: Endorsement  
 38.101-4 v16.0.0  
 Source: Ericsson*

**Abstract:**

CR with addition of FRC for new PMI testing for 16, and 32 Tx ports

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007926 Addition of Rel-16 SP type I PMI tests**

*Type: draftCR For: Endorsement  
 38.101-4 v16.0.0  
 Source: Ericsson*

**Abstract:**

CR with addition of PMI tests for SP Type I 16, and 32Tx ports

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007927 Simulation results for CSI PMI SP type I test cases**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results, and our views on SP Type I requirements for 16, and 32Tx ports

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007928 Summary of simulation results of NR UE CSI PMI with 16, and 32Tx antennas**

*Type: discussion For: Information  
 Source: Ericsson*

**Abstract:**

In this paper we provide a summary of simulations for result collection and requirement alignment.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007934 Evaluation on test setup for Rel-15 Type II codebook**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper we evaluate the test setup for Rel-15 Type II codebook and provide our views

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007935 Simulation results for Rel-15 Type II codebook**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide our simulation results for Rel-15 Type II codebook

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.18.1.3 LTE-NR co-existence for TDD [NR\_perf\_enh-Perf]

**R4-2006532 CR to TS 38.101-4: CR on TDD LTE-NR coexistence requirements finalization**

*Type: CR For: Agreement  
 38.101-4 v16.0.0 CR-0045 Cat: F (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.18.1.4 FR1 CA and EN-DC power imbalance requirements [NR\_perf\_enh-Perf]

**R4-2006039 FR1 CA PDSCH demodulation requirement with power imbalance**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006533 Discussion on FR1 CA and EN-DC power imbalance requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006809 Discussion on FR1 CA and EN-DC power imbalance requirements**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007140 Views on power imbalance requirement**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007224 Discussion on UE power imbalance requirements for FR1 CA and EN-DC**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Share our evaluations on power imbalance for intra-band contiguous CA for left open issues.

Views on intra-band non-contiguous EN-DC

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007882 Views on Power Imbalance Tests**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.18.1.5 NR CA CQI reporting requirements [NR\_perf\_enh-Perf]

**R4-2006040 On NR CA CQI reporting requirements**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007142 Views on UE demodulation requirements for CA CQI**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007225 Discussion on CA CQI reporting requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Share our views on CA CQI reporting requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008113 Views on CA CQI Reporting Tests**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.18.2 BS demodulation requirements (38.104) [NR\_perf\_enh-Perf]

##### 6.18.2.1 30% TP test point [NR\_perf\_enh-Perf]

**R4-2006057 On NR Rel-16 performance requirement enhancement BS demodulation 30% TP test point**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on the remaining task for BS demodulation performance enhancement. In particular we recommended to confirm the simulation results in the summary tables, and proposed a formulation of the agreed applicability

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006250 Summary of ideal and impairment results for NR PUSCH with 30% throughput test point**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006251 CR for TS 38.104: Introduce PUSCH performance requirements at 30% throughput test point**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0168 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006252 CR for TS 38.141-1: Introduce PUSCH performance requirements at 30% throughput test point**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0121 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006253 CR for TS 38.141-2: Introduce PUSCH performance requirements at 30% throughput test point**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0151 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 6.18.2.2 Additional FR2 requirements [NR\_perf\_enh-Perf]

**R4-2006058 CR for 38.104: Performance requirements for FR2 PUSCH 2T2R 16QAM**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0167 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2003898.

This CR removes the square brackets around the recently introduced [R4-2002403] SNR values of performance requirements for FR2 PUSCH 2T2R 16QAM in section 11.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006059 CR for 38.141-2: Radiated test requirements for FR2 PUSCH 2T2R 16QAM**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0146 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR implementing endorsed draftCR R4-2003899.

This CR removes the square brackets around the recently introduced [R4-2002404] SNR values of performance requirements for FR2 PUSCH 2T2R 16QAM in section 8.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.19 Over the air (OTA) base station (BS) testing TR [OTA\_BS\_testing-Perf]

#### 6.19.1 General [OTA\_BS\_testing-Perf]

**R4-2007566 TP to TR 37.941: Improvement of technical background information in Clause 6**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Ericsson, Rohde & Schwarz*

**Abstract:**

In this contribution we have provided a text proposal to improve the readability by adding missing information, aligning information and correcting error

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008137 TP to TR 37.941: editorial cleanup**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Huawei*

**Abstract:**

TP to TR 37.941 for the general cleanup, before the submission to June RAN for Approval of the Rel-15 version of the TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.19.2 OTA calibration and test method procedures [OTA\_BS\_testing-Perf]

**R4-2007568 TP to TR 37.941: Improvement of the Clause 6.3.3**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Ericsson*

**Abstract:**

In this contribution we have provided a text proposal to improve the applicability and readability of the clause by including interpolation, removing the misleading text and correcting the text according to the figure data.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.19.3 Coordinate system [OTA\_BS\_testing-Perf]

#### 6.19.4 Conformance testing aspects [OTA\_BS\_testing-Perf]

#### 6.19.5 MU / TT values: derivation and tables [OTA\_BS\_testing-Perf]

**R4-2007595 TP to 37.941: MU tables for additional Tx test cases for PWS**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: ROHDE & SCHWARZ*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007910 TX directional FR2 MU budget spreadsheet**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Update of the FR2 Tx direction budget with new TE values

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007911 TP to TR 37.941 FR2 TX directional**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Huawei*

**Abstract:**

Add the FR2 Tx direction MU tables to the TR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007912 RX directional FR2 MU budget spreadsheet**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Update of the FR2 Rx direction budget with new TE values

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007913 TP to TR 37.941 FR2 RX directional**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Huawei*

**Abstract:**

Add the FR2 Rx direction MU tables to the TR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007914 TP to TR 37.941 MU budget procedure update**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Huawei*

**Abstract:**

Update procedure to explain the single table approach with 2 table used for EIRP only

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007915 TP to TR 37.941 EIRP MU budget procedure update**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: Huawei*

**Abstract:**

Update EIRP section with 2 tables as per the updated procedure

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.19.6 Annexes [OTA\_BS\_testing-Perf]

#### 6.19.7 Others [OTA\_BS\_testing-Perf]

**R4-2007451 CR to TR 37.842: internal TR references corrections and content redundancy removal (wrt. TR 37.941 for OTA BS testing), Rel-15**

*Type: CR For: Agreement  
 37.842 v13.3.0 CR-0016 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TR 37.842 and removes technical content already captured in the TR 37.941.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007452 CR to TR 37.843: internal TR references corrections and content redundancy removal (wrt. TR 37.941 for OTA BS testing), Rel-15**

*Type: CR For: Agreement  
 37.843 v15.6.0 CR-0040 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TR 37.843 and removes technical content already captured in the TR 37.941.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007453 CR to TR 38.817-02: internal TR references corrections and content redundancy removal (wrt. TR 37.941 for OTA BS testing), Rel-15**

*Type: CR For: Agreement  
 38.817-02 v15.7.0 CR-0067 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TR 38.817-02 and removes technical content already captured in the TR 37.941.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007454 CR to TS 37.145-2: internal TR references corrections (wrt. TR 37.941 for OTA BS testing), Rel-15**

*Type: CR For: Agreement  
 37.145-2 v15.6.0 CR-0227 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TS 37.145-2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007455 CR to TS 37.145-2: internal TR references corrections (wrt. TR 37.941 for OTA BS testing), Rel-16**

*Type: CR For: Agreement  
 37.145-2 v16.3.0 CR-0228 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TS 37.145-2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007456 CR to TS 38.141-2: internal TR references corrections (wrt. TR 37.941 for OTA BS testing), Rel-15**

*Type: CR For: Agreement  
 38.141-2 v15.5.0 CR-0180 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TS 38.141-2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007457 CR to TS 38.141-2: internal TR references corrections (wrt. TR 37.941 for OTA BS testing), Rel-16**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0181 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TS 38.141-2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007458 CR to TS 37.114: internal TR reference corrections, Rel-15**

*Type: CR For: Agreement  
 37.114 v15.8.0 CR-0096 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

This CR provides corrections to the internal TR references in TS 37.114 (AAS BS EMC specification).

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008005 TP to TR 37.941 on editorial corrections for PWS references**

*Type: pCR For: Approval  
 37.941 v0.2.0  
 Source: ROHDE & SCHWARZ*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 6.20 2-step RACH for NR [NR\_2step\_RACH-Perf]

#### 6.20.1 RRM core requirements (38.133) [NR\_2step\_RACH-Core]

**R4-2006601 CR to TS 38.133: introducing 2-step RACH core requirements**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0678 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, ZTE*

**Abstract:**

The CR introduces the 2-step RACH core requirements section on TS 38.133.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006605 On RRM core requirements for 2-step RA type**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion paper on the RRM core requirements for 2-step RA type

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007293 Discussion on RRM Requirements for 2-step RACH**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

RRM requirements for 2-Step RACH are discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007491 RRM core requirements for 2-step RACH**

*Type: discussion For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007652 Remaining open issues on RRM requirements for 2-step RACH**

*Type: discussion For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007653 CR to 38.133 on UE transmit timing requirements for 2-step RACH**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0743 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007869 discussion on 2-step RA requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008000 On defining 2-step RA and 4-step RA in exisitng RRM requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper analyzes the impact of 2-step RACH on existing RRM requirements (Handover, RRC re-establishment, RRC release with redirection, PSCell addition)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008001 Applicability of 2-step RA and 4-step RA in RRM requirements in 38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0871 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR defines the impact of 2-step RACH on existing RRM requirements (Handover, RRC re-establishment, RRC release with redirection, PSCell addition)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008002 Applicability of 2-step RA and 4-step RA in RRM requirements in 36.133**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6908 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR defines the impact of 2-step RACH on existing RRM requirements (Handover, RRC release with redirection, PSCell addition)

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.20.2 BS Demodulation requirements (38.104/38.141-1/38.141-2) [NR\_2step\_RACH-Perf]

**R4-2006540 Views on BS demodulation requirements for NR 2-Step RACH**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006604 On 2-step RACH BS demodulation requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion paper on configuration parameters for the 2-step RACH BS demodulation work.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006661 Initial simulation results on BS demodulation for 2-step RACH**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006662 Further discussion on BS demodulation performance requirements for 2-step RACH**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007238 Discussion on NR 2-step RACH performance requirements**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007365 2-step RACH parameter proposals**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposals for parameters for the 2 step RACH requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.20.3 Others [NR\_2step\_RACH-Perf]

### 6.21 R16 NR maintenance [WI code or TEI16]

**R4-2008212 On EN-DC power class**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008225 CR for TS 38.101-1 UE co-existence correction (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0394 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008227 CR for 38.101-1 RFC corrections (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0396 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.21.1 BS RF [WI code or TEI16]

#### 6.21.2 UE RF [WI code or TEI16]

**R4-2006497 Proposed response to RAN2 LS on asymmetric channel bandwidths**

*Type: other For: Approval  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006617 Update 4Rx Requirement for Band n30**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0315 Cat: F (Rel-16)  
  
 Source: AT&T, Nokia, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006744 CR to 38.101-2 to correct Link and Meas Angles**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0164 Cat: A (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Several link and measurement angle in the requirements definitions needed to be corrected and/or clarified

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006759 CR to 38.101-1: Introduce an operating band list and NR bands to UL MIMO**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0320 Cat: B (Rel-16)  
  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006938 CR on blocking requirements for n91 n92 n93 and n94**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0325 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006947 Endorsed CR on default AMPR signaling for n91 n92 n93 and n94**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0329 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007334 Reply LS on asymmetric channel bandwidths**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008086 CR on introduce delta-MPR for inter-band CA in band n28 and review value with brackets**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0373 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008114 CR for Band 53 NS\_45 requirement and OOB blocking**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5639 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Align B53 requirements with n53 requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008118 UE perspective of Band n77 for US C-band**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated, Verizon, T-Mobile USA, AT&T, Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008119 Addition of UE coexistence between US bands and NR Band n77**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5640 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated, Verizon, T-Mobile USA, AT&T, Apple, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008120 Addition of mutual UE coexistence between US bands and NR Band n77**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0380 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated, Verizon, T-Mobile USA, AT&T, Apple, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008121 Addition of UE coexistence between US DC combinations and NR Band n77**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0282 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated, Verizon, T-Mobile USA, AT&T, Apple, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008176 CR for power class fallback enhancement**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0392 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008267 Further discussion on linear method for power class fall back optimization**

*Type: discussion For: Discussion  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.21.3 RRM [WI code or TEI16]

**R4-2006184 CR on measurement gap applicability in TS38.133 for R16**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0618 Cat: F (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006217 Rapportuer CR for TS38.133**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0632 Cat: D (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006616 On potential enhancement for TCI switching**

*Type: discussion For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007657 CR to 38.133 on intra frequency measurements without gaps**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0744 Cat: F (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 6.21.4 Demodulation and CSI [WI code or TEI16]

## 7 UE feature list

**R4-2006348 Further views on NR UE feature list for FR1**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006349 Further views on NR UE feature list for FR2**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006901 RAN4 UE features list for Rel-16**

*Type: discussion For: Information  
 Source: NTT DOCOMO, INC.*

**Abstract:**

RAN4 UE feature list in Rel-16.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007637 Views on Rel-16 NR/LTE UE feature list**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008251 On Rel-16 feature list**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Provide our view on feature list.

**Discussion:**

.

**Decision:** The document was **not treated**.

## 8 Rel-16 spectrum related Work Items for NR

**R4-2006844 LTE / NR Spectrum sharing in Band 40/n40**

*Type: discussion For: Agreement  
 Source: Reliance Jio*

**Abstract:**

LTE / NR Spectrum sharing in Band 40/n40

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007636 CR Rel-16 for editorial corrections TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0279 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Removing duplicate combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.1 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y) [NR\_CA\_R16\_intra]

#### 8.1.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_intra-Core /Perf]

**R4-2006045 TR 38.716-01-01 v0.12.0 Rel-16 NR Intra-band**

*Type: draft TR For: Agreement  
 38.716-01-01 v0.12.0  
 Source: Ericsson*

**Abstract:**

TR 38.716-01-01 v0.10.0 Rel-16 NR Intra-band

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007597 Revised WID NR Intra-band Rel-16**

*Type: WID revised For: Decision  
 Source: Ericsson*

**Abstract:**

Revised WID NR Intra-band Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007601 New WID NR Intra-band Rel-17**

*Type: WID new For: Decision  
 Source: Ericsson*

**Abstract:**

New WID NR Intra-band Rel-17

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007605 CR introduction completed band combinations 38.716-01-01 -> 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0360 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-01-01 -> 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007606 CR introduction completed band combinations 38.716-01-01 -> 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v16.3.0 CR-0190 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-01-01 -> 38.101-2

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.1.2 UE RF for FR1 [NR\_CA\_R16\_intra-Core]

**R4-2006066 Corrections to CA n48**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0294 Cat: F (Rel-16)  
  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006343 CR Coexistence cleanup for 38101-3 Rel16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0232 Cat: A (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006347 CR Coexistence cleanup for 38101-1 Rel16**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0307 Cat: F (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006425 TP for TR 38.716-01-01 CA\_n77(2A)\_UL\_n77(2A)**

*Type: pCR For: Approval  
 38.716-01-01 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006426 TP for TR 38.716-01-01 CA\_n78(2A)\_UL\_n78(2A)**

*Type: pCR For: Approval  
 38.716-01-01 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006492 CA\_n48B A-MPR**

*Type: other For: Approval  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008038 DraftCR for TS 38.101-1 intra-band UL contiguous CA combinations CA\_n79C**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon, CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.1.3 UE RF for FR2 [NR\_CA\_R16\_intra-Core]

**R4-2006704 CR to 38.101-2: Introduce mmWave intra-band uplink CA configurations**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0162 Cat: B (Rel-16)  
  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006708 CR to 38.101-2: Conrrection of aggregated bandwidth for CA\_n261(2A-G) in Table 5.5A.2-2**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0163 Cat: F (Rel-16)  
  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006830 CR for TS 38.101-2: Intra-band non-contiguous CA configuration clarifications**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0175 Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.2 NR inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1, 2) [NR\_CADC\_R16\_2BDL\_xBUL]

#### 8.2.1 Rapporteur Input (WID/TR/CR) [NR\_CADC\_R16\_2BDL\_xBUL-Core/Perf]

**R4-2006872 TR 38.716-02-00 v120**

*Type: draft TR For: Agreement  
 38.716-02-00 v1.2.0  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007019 Revised WID on Rel-16 NR Inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1,2)**

*Type: WID revised For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007020 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0341 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007021 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0268 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.2.2 NR inter band CA without any FR2 band(s) [NR\_CADC\_R16\_2BDL\_xBUL-Core]

**R4-2006067 Corrections to n29-n66 CA combinations**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0295 Cat: F (Rel-16)  
  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006298 Draft CR on introducing CA\_n41C-n79A**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006393 darft CR for 38.101-1 to introduce UL CA configuration for inter-band NR CA**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006606 TP to TR 38.716-02-00 for CA\_n5-n66 with dual UL**

*Type: pCR For: Approval  
 38.716-02-00 v1.1.0  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006690 TP for TR 38.716-02-00: CA\_n2-n77**

*Type: discussion For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006693 TP for TR 38.716-02-00: CA\_n5-n77**

*Type: discussion For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006694 TP for TR 38.716-02-00: CA\_n66-n77**

*Type: discussion For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006748 CR to add simultaneous RXTX capability for CA\_n41-n79**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0318 Cat: F (Rel-16)  
  
 Source: CMCC, ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006937 TP to TR 38.716-02-00 CA\_n78(2A)-n92A**

*Type: pCR For: Approval  
 38.716-02-00 v1.1.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007009 Draft CR to TS38.101-1: CA\_n28A-n75A**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007010 Draft CR to TS 38.101-1: Updated the MSD values for NR CA n3-n41**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007011 TP for TR 38.716-02-00:CA\_n38A-n78A**

*Type: pCR For: Approval  
 38.716-02-00 v1.1.0  
 Source: ZTE Corporation, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007326 TP to TR 38.716-02-00 for CA\_n38-n78**

*Type: pCR For: Approval  
 38.716-02-00 v1.1.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007624 TP for TR 38.716-02-00 to include CA\_n5-n7**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 38.716-02-00 to include CA\_n5-n7

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007625 TP for TR 38.716-02-00 to include CA\_n3-n7**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: Ericsson, Telstra, BT plc*

**Abstract:**

TP for TR 38.716-02-00 to include CA\_n3-n7

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007626 draft Rel-16 CR to 38.101-1 to add CA\_n1A-n7B, CA\_n7B-n28A**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Ericsson, Telstra*

**Abstract:**

draft Rel-16 CR to 38.101-1 to add CA\_n1A-n7B, CA\_n7B-n28A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008036 Draft CR for 38.101-1 to add configuration CA\_n75A-n78(2A) and simplify the REFSENS for inter band CA with SDL**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon,Etisalat*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008089 CR for 38.101-1: to add some missing sub-clause title for NR inter-band CA**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0374 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.2.3 NR inter band CA with at least one FR2 band [NR\_CADC\_R16\_2BDL\_xBUL-Core]

**R4-2006622 Draft CR for 38.101-3: Support of n78C in the DC\_n78-n257 and CA\_n78-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SK Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006673 Draft CR for TS 38.101-3: Support of DC\_n3-n257 and DC\_n28-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006697 TP for TR 38.716-02-00: CA\_n77-n261**

*Type: discussion For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.3 EN-DC of 1 LTE band and 1 NR band [DC\_R16\_1BLTE\_1BNR\_2DL2UL]

**R4-2008135 DC\_12\_n71 Single Uplink Operation**

*Type: discussion For: Approval  
 38.101-3 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.3.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core/Perf]

**R4-2006845 TR 37.716-11-11 v.1.3.0 Rel.16 1 LTE band + 1 NR band EN-DC**

*Type: draft TR For: Agreement  
 37.716-11-11 v1.1.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006890 Big CR on introduction of completed EN-DC of 1 band LTE and 1 band NR**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0255 Cat: B (Rel-16)  
  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006895 Revised WID on EN-DC for 2 bands DL with 2 bands UL (1 LTE band + 1 NR band)**

*Type: WID revised For: Decision  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.3.2 EN-DC without FR2 band [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core]

**R4-2006142 TP for TR 37.716-11-11: DC\_48A-48A\_n71A and DC\_48A-48A-48A\_n71A**

*Type: discussion For: Approval  
 Source: CableLabs, Comcast*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006456 CR for TS 38.101-3: Adding missing MSD due to UL harmonic for DC\_28\_n50**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0241 Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006618 Draft CR for 38.101-3: Support of n78C in DC\_5\_n78, and DC\_7\_n78**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SK Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006686 TP update for TR 37.716-11-11: DC\_42\_n28**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006687 TP update for TR 37.716-11-11: DC\_11\_n28**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: SoftBank Corp., LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006699 TP for TR 37.716-11-11: DC\_13\_n2**

*Type: discussion For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006877 Draft CR to 38.101-3 on the correction of DC\_48D\_n48A**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006926 TP for TR 37.716-11-11: some corrections for TR 37.716-11-11**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006952 Correction to EN-DC coexistence requirements**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0264 Cat: F (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007012 Draft CR to TS 38.101-3: Editorial corrections on the MSD values due to cross bands isolation for DC\_1-n3 and DC\_3-n41**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007170 TP for 37.716-11-11 to introduce DC\_5\_n5**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007611 TP for TR 37.716-11-11 to include 2\_n2**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Ericsson, AT&T, Nokia, Verizon*

**Abstract:**

TP for TR 37.716-11-11 to include 2\_n2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007612 TP for TR 37.716-11-11 to include 14\_n66**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-11-11 to include 14\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007613 TP for TR 37.716-11-11 to include 14\_n2**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-11-11 to include 14\_n2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007623 TP for TR 37.716-11-11 to include DC\_12\_n71**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37.716-11-11 to include DC\_12\_n71

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008016 TP for TR 37.716-11-11: DC\_7A\_n20A**

*Type: pCR For: Approval  
 37.716-11-11 v1.1.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.3.3 EN-DC with FR2 band [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core]

### 8.4 EN-DC of 2 LTE band and 1 NR band [DC\_R16\_2BLTE\_1BNR\_3DL2UL]

#### 8.4.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core/Perf]

**R4-2007337 TR 37.716-21-11 v0.11.0**

*Type: draft TR For: Agreement  
 37.716-21-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007338 Revised WID: Dual Connectivity (EN-DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007339 CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#94bis-e and RAN4#95-e into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0275 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.4.2 EN-DC without FR2 band [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core]

**R4-2006395 TP for TR 37.716-21-11 DC\_3-41\_n28 update**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006498 TP for TR 37.716-21-11: DC\_2-29\_n66 and DC\_2-2-29\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006499 TP for TR 37.716-21-11: DC\_29-66\_n2 and DC\_29-66-66\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006619 Draft CR for 38.101-3: Support of n78C in DC\_1-5\_n78, DC\_1-7\_n78, DC\_3-5\_n78, DC\_3-7\_n78, and DC\_5-7\_n78**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SK Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006672 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1-42\_n77, DC\_3-42\_n77 and DC\_8-42\_n77**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006679 TP for TR 37.716-21-11: EN-DC\_1-42\_n28**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006681 TP for TR 37.716-21-11: EN-DC\_3-42\_n28**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006682 TP for TR 37.716-21-11: EN-DC\_8-42\_n28**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006689 TP update for TR 37.716-21-11: DC\_1-11\_n3**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: SoftBank Corp., LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006934 TP to TR 37.716-21-11 DC\_3C-20A\_n41A**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007614 TP for TR 37.716-21-11 to include 2-14\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 2-14\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007615 TP for TR 37.716-21-11 to include 2-14\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 2-14\_n2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007616 TP for TR 37.716-21-11 to include 14-66\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 14-66\_n2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007617 TP for TR 37.716-21-11 to include 46-66\_n5**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 46-66\_n5

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007618 TP for TR 37.716-21-11 to include 14-66\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 14-66\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008017 TP for TR 37.716-21-11: DC\_3A-(n)41AA\DC\_3A-(n)41CA\DC\_3A-(n)41DA**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Huawei, HiSilicon,Etisalat*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008018 TP for TR 37.716-21-11: DC\_3A-41A\_n41A\DC\_3A-41C\_n41A\DC\_3A-41D\_n41A**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.4.3 EN-DC with FR2 band [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core]

**R4-2006394 Draft CR for 38.101-3 to introduce new UL EN-DC configuration for DC\_1-11\_n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006396 TP for TR 37.716-21-11 DC\_11-18\_n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006397 TP for TR 37.716-21-11 DC\_18-41\_n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007619 TP for TR 37.716-21-11 to include 2-46\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 2-46\_n260

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007620 TP for TR 37.716-21-11 to include 46-66\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-21-11 to include 46-66\_n260

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.5 EN-DC of 3 LTE band and 1 NR band [DC\_R16\_3BLTE\_1BNR\_4DL2UL]

#### 8.5.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core/Perf]

**R4-2006046 TR 37.716-31-11 v0.12.0 Rel-16 DC combinations LTE 3DL and one NR band**

*Type: draft TR For: Agreement  
 37.716-31-11 v0.12.0  
 Source: Ericsson*

**Abstract:**

TR 37.716-31-11 v0.10.0 Rel-16 DC combinations LTE 3DL and one NR band

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007598 Revised WID LTE 3DL and one NR band Rel-16**

*Type: WID revised For: Decision  
 Source: Ericsson*

**Abstract:**

Revised WID LTE 3DL and one NR band Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007602 New WID LTE 3DL and one NR band Rel-17**

*Type: WID new For: Decision  
 Source: Ericsson*

**Abstract:**

New WID LTE 3DL and one NR band Rel-17

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007607 CR introduction completed band combinations 37.716-31-11 -> 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0277 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 37.716-31-11 -> 38.101-3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.2 EN-DC without FR2 band [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core]

**R4-2006418 TP for TR 37.716-31-11 DC\_1-11-18\_n77**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006419 TP for TR 37.716-31-11 DC\_1-11-18\_n78**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006421 TP for TR 37.716-31-11 DC\_1-18-41\_n3**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006422 TP for TR 37.716-31-11 DC\_1-18-41\_n77**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006423 TP for TR 37.716-31-11 DC\_1-18-41\_n78**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006500 TP for TR 37.716-31-11:DC\_2A-29A-66A\_n66A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006501 TP for TR 37.716-31-11:DC\_29A-30A-66A\_n66A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006502 TP for TR 37.716-31-11:DC\_29A-30A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006503 TP for TR 37.716-31-11:DC\_2A-29A-30A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006504 TP for TR 37.716-31-11:DC\_2A-29A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006505 TP for TR 37.716-31-11:DC\_2A-30A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006506 TP for TR 37.716-31-11:DC\_29A-30A-66A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006507 TP for TR 37.716-31-11:DC\_2A-29A-66A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006508 TP for TR 37.716-31-11:DC\_2A-30A-66A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006620 Draft CR for 38.101-3: Support of n78C in DC\_1-3-5\_n78, DC\_1-3-7\_n78, DC\_1-5-7\_n78, and DC\_3-5-7\_n78**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SK Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006670 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1-3-8\_n77 and DC\_1-8-42\_n77**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006676 TP for TR 37.716-31-11: EN-DC\_1-3-8\_n28**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006831 TP for TR 37.716-31-11: UE requirements for DC\_3A-7A-8A\_n77A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006935 TP to TR 37.716-31-11 DC\_1A-3C-20A\_n41A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007171 TP for 37.716-31-11 to introduce DC\_2-5-66\_n2**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007172 TP for 37.716-31-11 to introduce DC\_2-5-66\_n5**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007173 TP for 37.716-31-11 to introduce DC\_2-13-66\_n2**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007621 TP for TR 37.716-31-11 to include 2-14-66\_n66**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Ericsson, AT&T*

**Abstract:**

TP for TR 37.716-31-11 to include 2-14-66\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007622 TP for TR 37.716-31-11 to include 2-14-66\_n2**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Ericsson, AT&T*

**Abstract:**

2A-14A-66A\_n2A, 2A-14A-66A-66A\_n2A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007634 draft Rel-16 CR to 38.101-3 to add DC\_3C-7C-20A\_n1A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Ericsson, BT plc*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add DC\_3C-7C-20A\_n1A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008019 TP for TR 37.716-31-11: DC\_1A-3A-7A\_n8A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008020 TP for TR 37.716-31-11: DC\_1A-3A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008021 TP for TR 37.716-31-11: DC\_1A-7A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008022 TP for TR 37.716-31-11: DC\_3A-7A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008023 TP for TR 37.716-31-11: DC\_1A-7A-8A\_n3A**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008024 TP for TR 37.716-31-11: DC\_1A-20A\_(n)38AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008025 TP for TR 37.716-31-11: DC\_1A-3A-32A\_n78A\DC\_1A-3A-32A\_n78(2A)**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Huawei, HiSilicon, CKH IOD UK*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.3 EN-DC with FR2 band [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core]

**R4-2006420 TP for TR 37.716-31-11 DC\_1-11-18\_n257**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006424 TP for TR 37.716-31-11 DC\_1-18-41\_n257**

*Type: pCR For: Approval  
 37.716-31-11 v0.11.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.6 EN-DC of 4 LTE band and 1 NR band [DC\_R16\_4BLTE\_1BNR\_5DL2UL]

#### 8.6.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core/Perf]

**R4-2007166 Revised Rel-16 WID on Dual Connectivity (EN-DC) of 4 bands LTE inter-band CA (4DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Decision  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007167 CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0274 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007168 draftTR 37.716-41-11 v0.10.0**

*Type: draft TR For: Agreement  
 37.716-41-11 v0.10.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Implementation of TPs from RAN4#95 for email approval after the meeting

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.6.2 EN-DC without FR2 band [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core]

**R4-2006509 TP for TR 37.716-41-11:DC\_2A-29A-30A-66A\_n2A**

*Type: pCR For: Approval  
 37.716-41-11 v0.9.0  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006621 Draft CR for 38.101-3: Support of n78C in DC\_1-3-5-7\_n78**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SK Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008026 TP for TR 37.716-41-11: DC\_1A-3A-7A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-41-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.6.3 EN-DC with FR2 band [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core]

### 8.7 EN-DC of x bands (x=1,2, 3, 4) LTE inter-band CA and 2 bands NR inter-band CA [DC\_R16\_xBLTE\_2BNR\_yDL2UL]

#### 8.7.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core/Per]

**R4-2006726 TR 37.716-21-21 v1.0.0 update: LTE(xDL/1UL)+ NR(2DL/1UL) DC in Rel-16**

*Type: draft TR For: Agreement  
 37.716-21-21 v1.0.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006727 Revised WID on LTE (xDL/UL x=1.2,3,4) with NR 2 bands (2DL/1UL) EN DC in Rel-16**

*Type: WID revised For: Decision  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006728 Introducing CR on new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in Rel-16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0252 Cat: B (Rel-16)  
  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.7.2 EN-DC including NR inter CA without FR2 band [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core]

**R4-2006410 TP for TR 37.716-21-21 DC\_18\_n3-n77 update**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006412 TP for TR 37.716-21-21 DC\_41\_n3-n77 update**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006413 TP for TR 37.716-21-21 DC\_41\_n3-n78 update**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006589 TP to TR 37.716-21-11: DC\_20\_n1-n7**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Nokia, Nokia, Shanghai Bell, BT plc*

**Abstract:**

DC\_20\_n1-n7

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006590 TP to TR 37.716-21-11: DC\_3-20\_n1-n7**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Nokia, Nokia, Shanghai Bell, BT plc*

**Abstract:**

DC\_3-20\_n1-n7

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006675 TP for TR 37.716-21-21: EN-DC\_1-3\_n28-n77**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006677 TP for TR 37.716-21-21: EN-DC\_1-8\_n3-n28**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006678 TP for TR 37.716-21-21: EN-DC\_1-8\_n28-n77**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006680 TP for TR 37.716-21-21: EN-DC\_3-8\_n28-n77**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006684 TP for TR 37.716-21-21: EN-DC\_42\_n28-n77**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006729 TP on summary of self-interference analysis for new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in Rel-16**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006936 TP to TR 37.716-21-21 DC\_20A\_n78(2A)-n92A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007013 TP for TR37.716-21-21: DC\_1A-3A-20A\_n38A-n78A**

*Type: draftCR For: Endorsement  
 37.716-21-21 v1.0.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007014 TP for TR37.716-21-21\_ DC\_3A-20A\_n38A-n78A**

*Type: draftCR For: Endorsement  
 37.716-21-21 v1.0.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007327 TP for TR 37.716-21-21: DC\_2A\_n38A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007328 TP for TR 37.716-21-21: DC\_66A\_n38A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007329 TP for TR 37.716-21-21: DC\_2A-66A\_n38A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007330 TP for TR 37.716-21-21: DC\_5\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007331 TP for TR 37.716-21-21: DC\_12\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007332 TP for TR 37.716-21-21: DC\_66\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007333 TP for TR 37.716-21-21: DC\_2\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Bell Mobility, TELUS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008027 TP for TR 37.716-21-21: DC\_1A\_n75A-n78A\DC\_1A\_n75A-n78(2A)**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, CKH IOD UK*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008028 TP for TR 37.716-21-21: DC\_3A\_n75A-n78A\DC\_3A\_n75A-n78(2A)**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, CKH IOD UK*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008029 TP for TR 37.716-21-21: DC\_1A-3A\_n41A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008030 TP for TR 37.716-21-21: DC\_1A-20A\_n41A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008031 TP for TR 37.716-21-21: DC\_3A-20A\_n41A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008032 TP for TR 37.716-21-21: DC\_1A-7A\_n3A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, Telefonica*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008033 TP for TR 37.716-21-21: DC\_3A-20A\_n7A-n28A/DC\_3C-20A\_n7A-n28A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008034 TP for TR 37.716-21-21: DC\_1A-3A-20A\_n41A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008035 TP for TR 37.716-21-21: DC\_(n)41AA-n78A\DC\_(n)41CA-n78A\DC\_(n)41DA-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.11.0  
 Source: Huawei, HiSilicon,Etisalat*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.7.3 EN-DC including NR inter CA with FR2 band [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core]

**R4-2006398 TP for TR 37.716-21-21 DC\_1\_n28-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006399 TP for TR 37.716-21-21 DC\_1-3\_n28-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006400 TP for TR 37.716-21-21 DC\_1-3-41\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006401 TP for TR 37.716-21-21 DC\_1-3-41-42\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006402 TP for TR 37.716-21-21 DC\_1-3-42\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006403 TP for TR 37.716-21-21 DC\_1-41\_n28-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006404 TP for TR 37.716-21-21 DC\_1-41\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006405 TP for TR 37.716-21-21 DC\_1-41-42\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006406 TP for TR 37.716-21-21 DC\_3\_n28-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006407 TP for TR 37.716-21-21 DC\_3-41\_n28-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006408 TP for TR 37.716-21-21 DC\_3-41\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006409 TP for TR 37.716-21-21 DC\_3-41-42\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006411 TP for TR 37.716-21-21 DC\_18-41\_n3-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006414 TP for TR 37.716-21-21 DC\_41\_n3-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006415 TP for TR 37.716-21-21 DC\_41\_n28-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006416 TP for TR 37.716-21-21 DC\_41\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006417 TP for TR 37.716-21-21 DC\_41-42\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-11 v0.10.0  
 Source: Samsung, KDDI*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006623 Draft CR for 38.101-3: Support of n78C in the DC configurations including 1, 3, 5, 7, n78 and n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SK Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006669 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1-8-11\_n77-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.8 Band combinations for SA NR supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP) [NR\_SUL\_combos\_R16]

#### 8.8.1 Rapporteur Input (WID/TR/CR) [NR\_SUL\_combos\_R16-Core/Per]

**R4-2008066 Revised WID on Band combinations for SA NR Supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP)**

*Type: WID revised For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008067 TR 37.716-00-00 v0.7.0**

*Type: draft TR For: Agreement  
 37.716-00-00 v0.7.0  
 Source: Huawei, HiSilicon*

**Abstract:**

To capture the approved TPs in this meeting

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008068 CR on Introduction of completed SUL band combinations into TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0364 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008070 CR for 38.101-3: to clean up for SUL band combinations**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0280 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.8.2 UE RF [NR\_SUL\_combos\_R16-Core]

**R4-2006948 Endorsed CR to 38307 on applicable SUL requirements**

*Type: CR For: Agreement  
 38.307 v16.2.0 CR-0023 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008069 TP for TR 37.716-00-00 for SUL\_n41A-n95A**

*Type: pCR For: Approval  
 37.716-00-00 v0.6.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008071 Draft CR for 38.101-1 to correct UL configuration for SUL band combinations**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.9 NR Inter-band Carrier Aggregation for 3 bands DL with 1 band UL [NR\_CA\_R16\_3BDL\_1BUL]

#### 8.9.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_3BDL\_1BUL-Core/Per]

**R4-2006281 Revised WID on Rel-16 NR inter-band CA for 3 bands DL with 1 band UL**

*Type: WID revised For: Decision  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006283 TR 38.716-03-01 0.8.0**

*Type: draft TR For: Agreement  
 38.716-03-01 v0.8.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006284 Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0305 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006285 Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0229 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.9.2 UE RF [NR\_CA\_R16\_3BDL\_1BUL-Core]

**R4-2006068 Correction to n29-n66-n70 CA combination**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0296 Cat: F (Rel-16)  
  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006832 TP for TR 38.716-03-01: UE requirements for CA\_n1A-n78A-n257A**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006839 TP for TR 38.716-03-01: UE requirements for CA\_n1A-n78A-n257A**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006913 CR to TS 38.101-3 on corrections to 3BDL and 1BUL inter-band CA configurations between FR1 and FR2 (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0262 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-3 on corrections to 3BDL and 1BUL inter-band CA configurations between FR1 and FR2 (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007627 TP for TR 38.716-03-01 to include CA\_n1-n3-n7**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: Ericsson, Telstra, BT plc*

**Abstract:**

TP for TR 38.716-03-01 to include CA\_n1A-n3A-n7A, CA\_n1A-n3A-n7B

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007628 TP for TR 38.716-03-01 to include CA\_n3-n7-n28**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: Ericsson, Telstra*

**Abstract:**

CA\_n3A-n7A-n28A, CA\_n3A-n7B-n28A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007629 TP for TR 38.716-03-01 to include CA\_n3-n7-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: Ericsson, Telstra, BT plc*

**Abstract:**

CA\_n3A-n7A-n78A, CA\_n3A-n7B-n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007630 TP for TR 38.716-03-01 to include CA\_n7-n28-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.7.0  
 Source: Ericsson, Telstra*

**Abstract:**

CA\_n7A-n28A-n78A, CA\_n7B-n28A-n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.10 NR Inter-band Carrier Aggregation for 4 bands DL with 1 band UL [NR\_CA\_R16\_4BDL\_1BUL]

#### 8.10.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_4BDL\_1BUL-Core/Per]

**R4-2006047 TR 38.716-04-01 v0.5.0 Rel-16 NR Inter-band 4 bands CA**

*Type: draft TR For: Agreement  
 38.716-04-01 v0.5.0  
 Source: Ericsson*

**Abstract:**

TR 38.716-04-01 v0.3.0 Rel-16 NR Inter-band 4 bands CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007599 Revised WID 4 bands NR CA Rel-16**

*Type: WID revised For: Decision  
 Source: Ericsson*

**Abstract:**

Revised WID 4 bands NR CA Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007603 New WID 4 bands NR CA Rel-17**

*Type: WID new For: Decision  
 Source: Ericsson*

**Abstract:**

New WID 4 bands NR CA Rel-17

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007608 CR introduction completed band combinations 38.716-04-01 -> 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0361 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-04-01 -> 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007609 CR introduction completed band combinations 38.716-04-01 -> 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0278 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-04-01 -> 38.101-3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.10.2 UE RF [NR\_CA\_R16\_4BDL\_1BUL-Core]

**R4-2006611 TP to TR 38.716-04-01 for CA\_n7-n25-n66-n78**

*Type: pCR For: Approval  
 38.716-04-01 v0.4.0  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007631 TP for TR 38.716-04-01 to include CA\_n1-n3-n7-n28**

*Type: pCR For: Approval  
 38.716-04-01 v0.4.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 38.716-04-01 to include CA\_n1A-n3A-n7A-n28A, CA\_n1A-n3A-n7B-n28A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007632 TP for TR 38.716-04-01 to include CA\_n1-n3-n7-n78**

*Type: pCR For: Approval  
 38.716-04-01 v0.4.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 38.716-04-01 to include CA\_n1A-n3A-n7A-n78A, CA\_n1A-n3A-n7B-n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007633 TP for TR 38.716-04-01 to include CA\_n3-n7-n28-n78**

*Type: pCR For: Approval  
 38.716-04-01 v0.4.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 38.716-04-01 to include CA\_n3A-n7A-n28A-n78A, CA\_n3A-n7B-n28A-n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.11 NR Inter-band Carrier Aggregation/Dual connectivity for 3 bands DL with 2 bands UL [NR\_CADC\_R16\_3BDL\_2BUL]

#### 8.11.1 Rapporteur Input (WID/TR/CR) [NR\_CADC\_R16\_3BDL\_2BUL-Core/Per]

**R4-2006873 TR 38.716-03-02 v070**

*Type: draft TR For: Agreement  
 38.716-03-02 v0.7.0  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007558 Revised WID on Rel-16 NR Inter-band Carrier Aggregation/Dual Connectivity for 3 bands DL with 2 bands UL**

*Type: WID revised For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.11.2 UE RF [NR\_CADC\_R16\_3BDL\_2BUL-Core]

**R4-2006607 TP to TR 38.716-03-02 for CA\_n7-n25-n66**

*Type: pCR For: Approval  
 38.716-03-02 v0.6.0  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006608 TP to TR 38.716-03-02 for CA\_n7-n66-n78**

*Type: pCR For: Approval  
 38.716-03-02 v0.6.0  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006609 TP to TR 38.716-03-02 for CA\_n25-n66-n78**

*Type: pCR For: Approval  
 38.716-03-02 v0.6.0  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006610 TP to TR 38.716-03-02 for CA\_n5-n66-n78**

*Type: pCR For: Approval  
 38.716-03-02 v0.6.0  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006929 TP for TR 38.716-03-02 CA\_n1A-n3A-n78A with 2UL**

*Type: pCR For: Approval  
 38.716-03-02 v0.6.0  
 Source: China Telecom*

**Abstract:**

This TP is to finish the ?TIB,c, ?RIB,c values and MSD requirements for CA\_n1A-n3A-n78A with 2UL.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007556 CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0357 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007557 CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0276 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008037 TP for TR 38.716-03-02: CA\_n28A-n41A-n78A with two UL bands**

*Type: pCR For: Approval  
 38.716-03-02 v0.6.0  
 Source: Huawei, HiSilicon,Etisalat*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.12 Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL [DC\_R16\_LTE\_NR\_3DL3UL]

#### 8.12.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_LTE\_NR\_3DL3UL-Core/Per]

**R4-2007022 Revised WID on Rel-16 Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL**

*Type: WID revised For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007023 CR to reflect the completed ENDC combinations for 3 bands DL with 3 bands UL into Rel16 TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0269 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007024 TR 37.716-33 v0.3.0: Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL**

*Type: draft TR For: Agreement  
 37.716-33 v0.2.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.12.2 UE RF [DC\_R16\_LTE\_NR\_3DL3UL-Core]

**R4-2007015 TP for TR37.716-33\_ DC\_3A\_n40A-n258A**

*Type: draftCR For: Endorsement  
 37.716-33 v0.2.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.13 Dual Connectivity (EN-DC) of LTE inter-band CA xDL/1UL bands (x=2,3,4) and NR FR1 1DL/1UL band and NR FR2 1DL/1UL band [DC\_R16\_xBLTE\_2BNR\_yDL3UL]

#### 8.13.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_xBLTE\_2BNR\_yDL3UL-Core/Per]

**R4-2006992 Revised WID Dual Connectivity (EN-DC) of LTE inter-band CA xDL1UL bands (x=2,3,4) and NR FR1 1DL1UL band and NR FR2 1DL1UL band**

*Type: WID revised For: Decision  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006994 Updated TR 37.716-41-22**

*Type: draft TR For: Agreement  
 37.716-41-22 v0.1.0  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006995 CR for introduce new EN-DC of LTE 2,3,4 band + NR FR1 1UL/1DL band + NR FR2 1UL/1DL band for TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0265 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.13.2 UE RF [DC\_R16\_xBLTE\_2BNR\_yDL3UL-Core]

### 8.14 29dBm UE Power Class for B41 and n41 [LTE\_NR\_B41\_Bn41\_PC29dBm]

#### 8.14.1 Rapporteur Input (WID/TR/CR) [LTE\_NR\_B41\_Bn41\_PC29dBm]

**R4-2006643 Revised WID for 29 dBm UE Power Class for LTE Band 41and NR Band n41**

*Type: WID revised For: Decision  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.14.2 UE RF (36.101, 38.101-1, 38.101-3) [LTE\_NR\_B41\_Bn41\_PC29dBm]

**R4-2006346 PC1.5 UL MIMO**

*Type: discussion For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006639 [29dBm] RIMD impact on EVM and MPR for UL MIMO and Tx Diversity**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

RIMD impact to EVM in UL MIMO and TX diversity is discussed and measurements resukts in this contribution provide proposals to the MPR related to EVM.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006644 CR for 38.101-1: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0316 Cat: B (Rel-16)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006645 CR for 38.101-3: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0249 Cat: B (Rel-16)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006647 LS to RAN4 on New UE capabilities for Power Class 1.5**

*Type: LS out For: Approval  
 to RAN2  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006648 29 dBm Power Class number revisited**

*Type: discussion For: Approval  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006752 CR for Alloc\_aware\_ENDC\_MPR for 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0253 Cat: C (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006794 Remaining issues for Rel-16 B41/n41 intra-band EN-DC requirements**

*Type: other For: Approval  
 Source: LG Electronics Polska*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006795 Analysis of MPR and EVM based on reverse IMD for PC1.5 UL-MIMO**

*Type: other For: Discussion  
 Source: LG Electronics Polska*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006796 CR for NS\_04 A-MPR for B41n41 intra-band EN-DC in Rel-16**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0254 Cat: C (Rel-16)  
  
 Source: LG Electronics Polska*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006897 Clarification of 29dBm transmission for EN-DC UE**

*Type: discussion For: Approval  
 Source: KDDI Corporation*

**Abstract:**

Clarification of 29dBm transmission for EN-DC UE

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008117 A-MPR for PC2/1.5 EN-DC**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008204 MPR and NS\_04 A-MPR for 29 dBm UL-MIMO**

*Type: discussion For: Approval  
 Source: T-Mobile USA Inc.*

**Abstract:**

Initial Proposal for MPR and NS\_04 A-MPR for 29 dBm UL-MIMO

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.14.3 Others [LTE\_NR\_B41\_Bn41\_PC29dBm]

**R4-2006646 CR for 38.307: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 38.307 v16.2.0 CR-0019 Cat: B (Rel-16)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.15 Power Class 2 UE for EN-DC (1 LTE FDD band +1 NR TDD band) [ENDC\_UE\_PC2\_FDD\_TDD-Core]

#### 8.15.1 General [ENDC\_UE\_PC2\_FDD\_TDD-Core]

**R4-2006379 Further consideration on remaining issues from PC2 FDD-TDD ENDC**

*Type: discussion For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006381 Discussion on the remain issues for NSA high power UE**

*Type: other For: Approval  
 Source: Xiaomi*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006614 On proceeding of EN-DC PC2 FDD + TDD HPUE**

*Type: discussion For: Approval  
 Source: China Unicom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006843 Further discussion on blind scheme of FDD-TDD EN-DC High Power UE**

*Type: discussion For: Approval  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008228 On FDD\_TDD EN-DC HPUE**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008264 CR for adding SAR solutions for FDD+TDD EN-DC PC2 UE**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0292 Cat: B (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.15.2 UE RF requirement [ENDC\_UE\_PC2\_FDD\_TDD-Core]

**R4-2006380 Draft CR for TS 38.101-3 to introduce power class for PC2 FDD-TDD ENDC**

*Type: draftCR For: Endorsement  
 38.101-3 v16.3.0  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006382 MSD analysis on high power UE for DC\_3\_n41**

*Type: other For: Approval  
 Source: Xiaomi*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006654 UE based SAR control for Power Class 2 EN-DC FDD+TDD**

*Type: discussion For: Approval  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007008 Discussion on MSD for HPUE 3+n41**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007052 EN-DC Power Class 2 for FDD-TDD band combinations without required CG coordination**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose a specification framework for EN-DC power class 2 for FDD-TDD combination based on both duty-cycle indication and reducing the FDD power feasible for networks with and without strict scheduler coordination between CGs

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007053 Introduction of EN-DC power class 2 for FDD-TDD band combinations**

*Type: CR For: Agreement  
 38.101-3 v16.3.0 CR-0273 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce requirements for EN-DC power class 2 for FDD-TDD band combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.15.3 Signaling [ENDC\_UE\_PC2\_FDD\_TDD-Core]

**R4-2008262 On EN-DC (FDD+TDD) HPUE fall back schemes**

*Type: discussion For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008263 Draft LS on UE capability for PC2 inter-band EN-DC (LTE FDD+NR TDD)**

*Type: LS out For: Approval  
 to RAN2  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.16 Introduction of NR band n259 [NR\_n259]

**R4-2007800 Updated TR 38.887**

*Type: draft TR For: Agreement  
 38.887 v0.4.0  
 Source: Ericsson*

**Abstract:**

Updated TR

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.16.1 UE RF (38.101-2) [NR\_n259-Core]

**R4-2006990 CR for the introduction of n259**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0185 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007087 EESS protection of n259 UE RF requirements**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007793 TP to TR 38.887 on UE RF requirements**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on multiband relaxation

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007795 CR to 38.101-2 for Introduction of band n259**

*Type: CR For: Agreement  
 38.101-2 v16.3.1 CR-0191 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.16.2 BS RF (38.104) [NR\_n259-Core]

**R4-2007792 TP to TR 38.887 on BS RF requirements**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on BS RF requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007796 CR to 38.141-2 for Introduction of band n259**

*Type: CR For: Agreement  
 38.141-2 v16.3.0 CR-0190 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007797 CR to 38.104 for Introduction of band n259**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0205 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.16.3 RRM (38.133) [NR\_n259-Core]

**R4-2007794 TP to TR 38.887 on RRM**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on RRM

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007798 CR to 38.133 for Introduction of band n259**

*Type: CR For: Agreement  
 38.133 v16.3.0 CR-0818 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.16.4 Others [NR\_n259-Core/Perf]

### 8.17 Adding 25MHz and 50MHz channel bandwidth in NR band n1 [NR\_n1\_BW2]

#### 8.17.1 UE RF (38.101-1) [NR\_n1\_BW2-Core]

**R4-2007324 CR for TS 38.101: adding 50 MHz CBW for n1**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0356 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon, China unicom*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.17.2 BS RF (38.104) [NR\_n1\_BW2-Core]

**R4-2007325 CR for TS 38.104: adding 50 MHz CBW for n1**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0190 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon, China unicom*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.17.3 RRM (38.133) [NR\_n1\_BW2-Core]

#### 8.17.4 Others [NR\_n1\_BW2-Core/Perf]

### 8.18 LTE/NR spectrum sharing in band 48/n48 frequency range [NR\_n48\_LTE\_48\_coex-Core]

#### 8.18.1 General (such as work plan, AH minutes) [NR\_n48\_LTE\_48\_coex-Core]

#### 8.18.2 Channel raster, sync raster, and UL shift [NR\_n48\_LTE\_48\_coex-Core]

**R4-2006336 LTE/NR spectrum sharing in band 48/n48 frequency range (channel raster)**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **revised to   
R4-2008288**.

**R4-2006337 LTE/NR spectrum sharing in band 48/n48 frequency range (UL shift)**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006338 LTE/NR spectrum sharing in band 48/n48 frequency range (sync pattern)**

*Type: discussion For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **revised to   
R4-2008289**.

**R4-2006588 Views on band 48/n48 spectrum sharing**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

no change is raster is proposed. Sync pattern B has benefit in 4-port LTE deployment.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006871 Views on dynamic spectrum sharing between LTE band 48 and NR band n48**

*Type: discussion For: Approval  
 38.104 v..  
 Source: Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007086 DSS in band n48**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007441 On LTE/NR spectrum sharing in band 48/n48**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007791 UL shift for LTE/NR spectrum sharing in band 48/n48**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Paper for approval. UL shift

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008288 LTE/NR spectrum sharing in band 48/n48 frequency range (channel raster)**

*Type: discussion For: Decision  
 Source: Apple Inc.*

(Replaces   
R4-2006336)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008289 LTE/NR spectrum sharing in band 48/n48 frequency range (sync pattern)**

*Type: discussion For: Decision  
 Source: Apple Inc.*

(Replaces   
R4-2006338)

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.19 Adding 40 MHz channel bandwidth (15, 30 and 60kHz SCS) in NR band n3 [NR\_n3\_BW]

#### 8.19.1 UE RF (38.101-1) [NR\_n3\_BW]

**R4-2007506 CR to TS 38.101-1 - Add 40 MHz CBW in band n3**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0137 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support of 40 MHz CBW to band n3 in TS 38.101-1

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007569 CR to TS 38.101-1 - Add 40 MHz CBW in band n3**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0358 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support of 40 MHz CBW to band n3 in TS 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007879 Band n65 – wider CBW – UE RF requirements – A-MPR simulation results**

*Type: other For: Agreement  
 Source: Ericsson*

**Abstract:**

This contribution provides our A-MPR simulation results and proposes A-MPR regions and corresponding values

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008134 [NR\_n3] 40MHz REFSENS Measurements**

*Type: discussion For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.19.2 BS RF (38.104) [NR\_n3\_BW]

**R4-2007505 CR to TS 38.104 - Add 40 MHz CBW in band n3**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0198 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support of 40 MHz CBW to band n3 in TS 38.104

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.19.3 RRM (38.133) [NR\_n3\_BW]

#### 8.19.4 Others [NR\_n3\_BW]

### 8.20 Adding 50 MHz channel bandwidth (15, 30 and 60kHz SCS) in NR band n65 [NR\_n65\_BW]

#### 8.20.1 UE RF (38.101-1) [NR\_n65\_BW]

**R4-2007508 CR to TS 38.101-1 - Add 50 MHz CBW in band n65**

*Type: CR For: Agreement  
 38.141-1 v16.3.0 CR-0138 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support of 50 MHz CBW to band n65 in TS 38.101-1

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2007570 CR to TS 38.101-1 - Add 50 MHz CBW in band n65**

*Type: CR For: Agreement  
 38.101-1 v16.3.0 CR-0359 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support of 50 MHz CBW to band n65 in TS 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008133 [NR\_n65\_BW] Back-off Measurements**

*Type: discussion For: Discussion  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.20.2 BS RF (38.104) [NR\_n65\_BW]

**R4-2007507 CR to TS 38.104 - Add 50 MHz CBW in band n65**

*Type: CR For: Agreement  
 38.104 v16.3.0 CR-0199 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support of 50 MHz CBW to band n65 in TS 38.104

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.20.3 RRM (38.133) [NR\_n65\_BW]

#### 8.20.4 Others [NR\_n65\_BW]

## 9 Study Items for NR

### 9.1 Study on radiated metrics and test methodology for the verification of multi-antenna reception perf. of NR UEs [FS\_NR\_MIMO\_OTA\_test]

#### 9.1.1 General [FS\_NR\_MIMO\_OTA\_test]

**R4-2006307 TR38.827 v1.4.0 NR MIMO OTA**

*Type: draft TR For: Agreement  
 38.827 v1.4.0  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006308 TP to TR 38.827 v1.3.0 on RMC**

*Type: pCR For: Approval  
 38.827 v1.3.0  
 Source: CAICT*

**Abstract:**

correct RMC error

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006440 LTE/NR spectrum sharing in Band 40/n40**

*Type: discussion For: Agreement  
 Source: Reliance Jio*

**Abstract:**

LTE/NR spectrum sharing in Band 40/n40

**Discussion:**

.

**Decision:** The document was **withdrawn**.

#### 9.1.2 Performance metrics [FS\_NR\_MIMO\_OTA\_test]

**R4-2006310 FR1 MIMO OTA measurement results**

*Type: discussion For: Discussion  
 38.827 v..  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006431 Discussion on SNR analysis for FR2 3D-MPAC**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.1.3 Testing methodologies [FS\_NR\_MIMO\_OTA\_test]

##### 9.1.3.1 FR1 test methodologies [FS\_NR\_MIMO\_OTA\_test]

##### 9.1.3.2 FR2 test methodologies [FS\_NR\_MIMO\_OTA\_test]

**R4-2006740 FR2 Quality of Quiet Zone Procedure**

*Type: other For: Approval  
 38.827 v..  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is discussing different options for the 3D MPAC quality of quiet zone procedure. The recommendation is to leverage the FR2 UE RF and RRM quality of quiet zone procedure.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006741 On FR2 PSP Validation**

*Type: other For: Approval  
 38.827 v..  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is an update of the last meeting’s PSP validation approach using a two-step process to obtain the PAS for the PSP calculation [1] while utilizing the MUSIC algorithm. Additionally, this contribution also provides a comparison with the ap

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006742 TP to 38.827 to add PSP validation procedure**

*Type: other For: Approval  
 38.827 v..  
 Source: Keysight Technologies UK Ltd, Spirent Communications*

**Abstract:**

This text proposal adds the PSP validation procedure to TR38.827.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006743 On FR2 3D MPAC Ambiguities and Blocking**

*Type: other For: Approval  
 38.827 v..  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is addressing two topics on ambiguities of relative positioning and blocking effects captured in the WF of the previous meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007084 Dynamic testing for FR2**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007085 Uplink communication path placement for FR2 3D-MPAC**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007285 FR2 MIMO-OTA Test Methodologies**

*Type: discussion For: Approval  
 38.827 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007563 TP to TR38.827 on FR2 test procedure**

*Type: pCR For: Approval  
 38.827 v1.3.0  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007592 PSP validation discussion**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

Observation 1. PSP validation most likely need some phase taper correction technique.

Observation 2. If the number of measurement time is limited, number of virtual elements will also become limiter mandating to use some super-resolution technique to esti

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007594 TP on Verification of Channel Model implementation in TR38.827, PSP**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

In the last RAN4 e-meeting, verification of channel model implementation for FR2 MPAC was discussed [2] and agreed that PSP verification needs to be clarified with steps. The proposed changes in [1] are for chapter 7.4.1.6.

Proposal: Include the followi

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007658 DUT relative orientation to channel model**

*Type: discussion For: Approval  
 38.827 v..  
 Source: ROHDE & SCHWARZ*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008273 TP to TR38.827 to avoid ambiguities for FR2 MIMO OTA Testing**

*Type: other For: Approval  
 38.827 v..  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This TP is to capture agreements to avoid ambiguities of relative positioning between probes, the 36 test points, the UE, and the channel model

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.1.4 Channel Models [FS\_NR\_MIMO\_OTA\_test]

### 9.2 Study on 7-24GHz frequency range [FS\_7to24GHz\_NR]

#### 9.2.1 General [FS\_7to24GHz\_NR]

**R4-2008138 TP to TR 38.820: editorial cleanup**

*Type: pCR For: Approval  
 38.820 v1.3.0  
 Source: Huawei*

**Abstract:**

TP to TR 38.820 for the general cleanup, before the submission to June RAN for Approval of the Rel-16 version of the TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.2.2 Regulatory survey [FS\_7to24GHz\_NR]

**R4-2008140 TP to TR 38.820: clarification on WRC-19 resolution for IMT for fixed wireless broadband in fixed services bands**

*Type: pCR For: Approval  
 38.820 v1.3.0  
 Source: Huawei*

**Abstract:**

TP to TR 38.820 provides clarification to the WRC-19 resolution COM6/18 on the IMT for fixed wireless broadband in fixed services bands.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.2.3 Deployment scenarios [FS\_7to24GHz\_NR]

**R4-2008139 TP to TR 38.820: deployment scenarios cleanup**

*Type: pCR For: Approval  
 38.820 v1.3.0  
 Source: Huawei*

**Abstract:**

TP to TR 38.820 provides cleanup of the deployments scenarios section, introducing additional text on the inter-relations among the FWA, fixed wireless broadband, and IAB scenarios.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.2.4 RF technology aspects [FS\_7to24GHz\_NR

#### 9.2.5 NR UE [FS\_7to24GHz\_NR]

##### 9.2.5.1 NR UE architecture [FS\_7to24GHz\_NR]

##### 9.2.5.2 TX requirements [FS\_7to24GHz\_NR]

##### 9.2.5.3 RX requirements [FS\_7to24GHz\_NR]

#### 9.2.6 NR BS [FS\_7to24GHz\_NR]

##### 9.2.6.1 BS types, BS requirement sets [FS\_7to24GHz\_NR]

##### 9.2.6.2 NR BS architecture [FS\_7to24GHz\_NR]

**R4-2006925 TP to TR 38.820: Addition of antenna parameter selection guideline in subclause 7.2.3**

*Type: pCR For: Approval  
 38.820 v1.3.0  
 Source: Ericsson*

**Abstract:**

In this contribution a text proposal for TR 38.820, subclause 7.2.3 with additional technical background for how to determine antenna parameters for different array geometries is prepared. The text proposal is attached at the end of the contribution and i

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 9.2.6.3 TX requirements [FS\_7to24GHz\_NR]

**R4-2006105 TP to TR 38.820: Summary Tables for Transmitter Requirements**

*Type: pCR For: Approval  
 38.820 v1.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The BS classes section 7.3 in TR 38.820 for 7 - 24 GHz frequency range remains to be filled in. This contribution provides a TP to fill in this section in the TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006106 TP to TR 38.820: Summary Tables for Receiver Requirements**

*Type: pCR For: Approval  
 38.820 v1.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The BS classes section 7.3 in TR 38.820 for 7 - 24 GHz frequency range remains to be filled in. This contribution provides a TP to fill in this section in the TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 9.2.6.4 RX requirements [FS\_7to24GHz\_NR]

## 10 Rel-17 spectrum related Work Items for NR

**R4-2006613 FR2 for NR based Satellite networks**

*Type: WID new For: Decision  
 Source: HUGHES Network Systems Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006894 Possible bands for NR based satellite networks**

*Type: discussion For: Information  
 Source: THALES, HUGHES Network Systems Ltd, Intelsat*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007938 FR1**

*Type: WID new For: Decision  
 Source: Intelsat*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008142 FR1/FR2**

*Type: WID new For: Decision  
 Source: Intelsat*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 10.1 Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n257 and n258 [NR\_FR2\_FWA\_Bn257\_Bn258]

#### 10.1.1 UE RF (38.101-2) [NR\_FR2\_FWA\_Bn257\_Bn258]

**R4-2006432 Discussion on new FR2 FWA UE**

*Type: discussion For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006703 Spherical EIRP EIS of FR2 FWA UE with maximum TRP of 23dBm**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Abstract:**

Proposals for spherical EIRP EIS of FR2 FWA UE with maximum TRP of 23dBm

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006705 MBR of FR2 FWA UE with maximum TRP of 23dBm**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Abstract:**

Proposals for MBR of FR2 FWA UE with maximum TRP of 23dBm

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006776 FR2 23dBm FWA pk. EIRP and REFSENS budgets**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

On peak EIRP and Refsens budgets

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007106 On power class definition for FR2 FWA UE**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

We provide our explanation on the need for defininf the new UE power class related to this new WI.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007110 UE RF requirements for new FR2 FWA use case**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008006 Power class on new FR2 FWA UE**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

new power class is proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008007 Beam correspondence requirement on FR2 FWA UE**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

BC bit-0 should not be allowed for FWA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008008 Multiband relaxation for FWA UE**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MBR shall not be larger than PC3

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008175 on new FR2 FWA UE requirement**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008274 New power class feature for FWA**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.1.2 BS RF (38.104) [NR\_FR2\_FWA\_Bn257\_Bn258]

#### 10.1.3 RRM (38.133) [NR\_FR2\_FWA\_Bn257\_Bn258]

**R4-2007804 Discussion on RRM impact due to introduction of new FR2 FWA UE**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.1.4 Others [NR\_FR2\_FWA\_Bn257\_Bn258]

### 10.2 Introduction of NR band n13 [NR\_n13]

#### 10.2.1 UE RF (38.101-1) [NR\_n13-Core]

**R4-2007311 Draft CR to TS 38.101-1: introduction of NR band n13**

*Type: draftCR For: Endorsement  
 38.101-1 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008209 n13 AMPR**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.2.2 BS RF (38.104) [NR\_n13-Core]

**R4-2007312 Draft CR to TS 38.104: introduction of NR band n13**

*Type: draftCR For: Endorsement  
 38.104 v16.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.2.3 RRM (38.133) [NR\_n13-Core]

#### 10.2.4 Others [NR\_n13-Core/Perf]

### 11.0 Reply to ITU-R LS (RP-200042)

### 11.1 Study on IMT parameters for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz [FS\_6425\_10500MHz \_NR]

#### 11.1.1 UE parameters

**R4-2006286 BS parameters for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007306 UE IMT technology related parameters**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007511 SI on IMT parameters - UE parameters for 6.425-7.025GHz / 7.025-7.125 / 10.0 – 10.5 GHz**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution is discussing and proposing the remaining UE parameters values for the SI on IMT parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007514 TP to TR for SI on IMT parameters - UE parameters**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This TP to TR (on the SI on IMT parameters) captures the current agreements made on UE parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 11.1.2 BS parameters

**R4-2006287 UE parameters for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007307 BS IMT technology related parameters**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007510 SI on IMT parameters - BS parameters for 6.425-7.025GHz / 7.025-7.125 / 10.0 – 10.5 GHz**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution is discussing and proposing the remaining BS parameters values for the SI on IMT parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007513 TP to TR for SI on IMT parameters - BS parameters**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This TP to TR (on the SI on IMT parameters) captures the current agreements made on BS parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 11.1.3 Coexistence study

**R4-2006107 TP to TR 38.9xx: System level simulation methodology and assumptions for study on IMT parameters for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides proposals to finalize the simulation assumptions of the BS noise figure at 7GHz and the uplink transmission power control model, and a TP to record the system level simulation methodology and assumptions in the agreed TR skeleto

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006108 Urban Macro Downlink Coexistence Simulation Results for Frequency Ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides the urban macro downlink coexistence simulation results according to the agreed assumptions.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006109 Indoor Downlink Coexistence Simulation Results for Frequency Ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides the indoor downlink coexistence simulation results according to the agreed assumptions.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007308 TP on co-existence simulation assumption on 6.425-7.125GHz and 10.0-10.5GHz**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007394 Discussion on simulation assumption for 6425-7125MHz and 10-10.5GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007395 Simulation results for 6425-7125MHz and 10-10.5GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007509 SI on IMT parameters - simulation assumptions**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution is proposing the remaining assumptions for the system simulations needed for the SI on IMT parameters

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007512 TP to TR for SI on IMT parameters - simulation assumptions**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This TP to TR (on the SI on IMT parameters) captures the current agreements made on simulation assumptions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008095 Dense Urban Downlink Coexistence Simulation Results for Frequency Ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides the dense urban downlink coexistence simulation results according to the agreed assumptions.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 11.1.4 Antenna characteristics

**R4-2006110 AAS BS antenna characteristics for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides proposals to decide on the FFS AAS BS antenna parameters in the agreed WF for frequency ranges 6.425-7.125GHz and 10.0-10.5GHz.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006288 Antenna characteristics**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006924 Array antenna model parameters**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we present representable AAS array antenna parameter sets for in ITU-R WP 5D given deployments scenarios. This information in this contribution is relevant for frequency range below 6 GHz as well below 10 GHz, hence the contribution i

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007309 Antenna characteristics on 6.425-7.025GHz, 7.025-7.125GHz and 10.0-10.5 GHz**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007393 Discussion on NR BS antenna parameters**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 11.2 Reply of IMT parameters for other frequency ranges requested in RP-200042

**R4-2006111 AAS BS antenna characteristics for frequency ranges below 6GHz**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides proposals to decide on the FFS AAS BS antenna parameters in the agreed WF for frequency ranges below 6 GHz.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006289 Open issue on IMT parameters for other frequency ranges below 6GHz**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006761 discussion on the remaining issues for IMT parameters below 6GHz spectrum**

*Type: discussion For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006923 Array antenna model parameters**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we present representable AAS array antenna parameter sets for in ITU-R WP 5D given deployments scenarios. This information in this contribution is relevant for frequency range below 6 GHz as well below 10 GHz, hence the contribution i

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007089 Reply of IMT parameters for frequency ranges below 6GHz**

*Type: discussion For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007310 IMT parameters for other frequency ranges below 5 GHz**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008111 Draft LS to Parameters of terrestrial component of IMT for sharing and compatibility studies in preparation for WRC-23 (below 6 GHz)**

*Type: LS out For: Approval  
 to ITU-R WP5D  
 Source: Ericsson*

**Abstract:**

The LS is a proposal for response to the ITU-R request for IMT parameters.

**Discussion:**

.

**Decision:** The document was **not treated**.

## 12 LTE maintenance (up to Rel15) [WI code or TEI]

### 12.1 BS RF [WI code or TEI]

**R4-2006112 CR to TS 36.141: Corrections on table note index for test models**

*Type: CR For: Agreement  
 36.141 v14.10.0 CR-1251 Cat: F (Rel-14)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Align the note index to ‘1’ in tables 6.1.1.2-1 and 6.1.1.6-1. Typo are also corrected.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006113 CR to TS 36.141: Corrections on table note index for test models**

*Type: CR For: Agreement  
 36.141 v15.8.0 CR-1252 Cat: A (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Align the note index to ‘1’ in tables 6.1.1.2-1 and 6.1.1.6-1. Typo are also corrected.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006114 CR to TS 36.141: Corrections on table note index for test models**

*Type: CR For: Agreement  
 36.141 v16.5.0 CR-1253 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Align the note index to ‘1’ in tables 6.1.1.2-1 and 6.1.1.6-1. Typo are also corrected.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007474 CR to TS 37.107 with correction to interfering signal for conformance test for energy detection accuracy to align withTS 37.213**

*Type: CR For: Agreement  
 37.107 v15.1.0 CR-0002 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR introduces corrrection for interfering signal for test of energy detection accuracy to align with RAN1 specification TS 37.213.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007475 Discussion on interfering signal for conformance test for ED accuracy for eLAA**

*Type: other For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008101 CR to 37.104 on Removal of TBD for NB-IoT (Rel-15)**

*Type: CR For: Agreement  
 37.104 v15.10.0 CR-0902 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR removes the TBDs for NB-IoT in TS 37.104 for the submission of specs to ITU-R.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008102 CR to 37.104 on Removal of TBD for NB-IoT (Rel-16)**

*Type: CR For: Agreement  
 37.104 v16.5.0 CR-0903 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The Draft CR removes the TBDs for NB-IoT in TS 37.104 for the submission of specs to ITU-R.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 12.2 UE RF [WI code or TEI]

**R4-2006445 NBIOT standalone operation for FCC regulation considerations**

*Type: discussion For: Discussion  
 36.101 v..  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006446 CR for TS 36.101: CR for category NB1 against FCC regulation in standalone mode**

*Type: CR For: Agreement  
 36.101 v14.14.0 CR-5609 Cat: F (Rel-14)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006447 CR for TS 36.101: CR for category NB1 against FCC regulation in standalone mode**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5610 Cat: A (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006448 CR for TS 36.101: CR for category NB1 against FCC regulation in standalone mode**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5611 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006449 CR for TS 36.101: CR for spec corrections for MSD table**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5612 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006450 CR for TS 36.101: CR for spec corrections for MSD table**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5613 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006599 Corrections of CA band combo table**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5614 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CA bands are corrected

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006600 Corrections of CA band combo table**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5615 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CA bands are corrected

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006651 CR for 36.101: fix modifiedMPRbehavior for NS\_31**

*Type: CR For: Agreement  
 36.101 v14.14.0 CR-5616 Cat: F (Rel-14)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006652 CR for 36.101: fix modifiedMPRbehavior for NS\_31**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5617 Cat: F (Rel-15)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006653 Mirror CR for 36.101: fix modifiedMPRbehavior for NS\_31**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5618 Cat: A (Rel-16)  
  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007564 Exclusion 100KHz for NB-IoT to meet FCC band-edge requirements**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007589 CR to remove TBD and braket on CAT-M2**

*Type: CR For: Agreement  
 36.101 v14.14.0 CR-5634 Cat: F (Rel-14)  
  
 Source: Ericsson*

**Abstract:**

The TBD and bracket related to CAT-M2 is removed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007590 CR to remove TBD and braket on CAT-M2 Type A for Rel-15**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5635 Cat: A (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The TBD and bracket related to CAT-M2 is removed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007591 CR to remove TBD and braket on CAT-M2 Type A for Rel-16**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5636 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The TBD and bracket related to CAT-M2 is removed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008181 CR for 36.101 MPR for cat-NB Rel-13**

*Type: CR For: Agreement  
 36.101 v13.18.0 CR-5642 Cat: F (Rel-13)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008182 CR for 36.101 MPR for cat-NB Rel-14**

*Type: CR For: Agreement  
 36.101 v14.14.0 CR-5643 Cat: A (Rel-14)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008183 CR for 36.101 MPR for cat-NB Rel-15**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5644 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008184 CR for 36.101 MPR for cat-NB Rel-16**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5645 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008275 on cat-NB MPR for 3 tones and 6 tones allocation**

*Type: other For: (not specified)  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 12.3 RRM [WI code or TEI]

**R4-2006966 Finalisation of requirements in 36.133 R15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6841 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Remove square brackets and TBDs ready for ITU submission

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006967 Finalisation of requirements in 36.133 R16**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6842 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Remove square brackets and TBDs ready for ITU submission

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006968 Editorial correction of E-UTRAN FDD – UTRAN TDD Measurements**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6843 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correction of title and spelling errors in testcase A.8.7.A in 36.133

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006969 Editorial correction of E-UTRAN FDD – UTRAN TDD Measurements**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6844 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correction of title and spelling errors in testcase A.8.7.A in 36.133

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007118 Correction of subclause references in clause 5**

*Type: CR For: Agreement  
 36.133 v13.18.0 CR-6849 Cat: F (Rel-13)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Subclause referencing for handover clause corrected.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007146 Number of carriers to measure in euCA**

*Type: discussion For: Discussion  
 36.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007147 CR on Number of carriers to monitor for IDLE mode measurements**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6850 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007148 CR on Number of carriers to monitor for IDLE mode measurements**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6851 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007149 CR clarifying S-measure thresholds for EMR carriers**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6852 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007150 CR clarifying S-measure thresholds for EMR carriers**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6853 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007424 CR to TS 36.133: Change of SR-ConfigIndex in eMTC RLM DRX test cases (Rel-13)**

*Type: CR For: Agreement  
 36.133 v13.18.0 CR-6858 Cat: F (Rel-13)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007425 CR to TS 36.133: Change of SR-ConfigIndex in eMTC RLM DRX test cases (Rel-14)**

*Type: CR For: Agreement  
 36.133 v14.14.0 CR-6859 Cat: A (Rel-14)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007426 CR to TS 36.133: Change of SR-ConfigIndex in eMTC RLM DRX test cases (Rel-15)**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6860 Cat: A (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007427 CR to TS 36.133: Change of SR-ConfigIndex in eMTC RLM DRX test cases (Rel-16)**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6861 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007724 CR on NB-IoT cell reselection margin in enhanced coverage in Rel-13**

*Type: CR For: Agreement  
 36.133 v13.18.0 CR-6871 Cat: F (Rel-13)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007725 CR on NB-IoT cell reselection margin in enhanced coverage in Rel-14 (Cat A)**

*Type: CR For: Agreement  
 36.133 v14.14.0 CR-6872 Cat: A (Rel-14)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007726 CR on NB-IoT cell reselection margin in enhanced coverage in Rel-15 (Cat A)**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6873 Cat: A (Rel-15)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007727 CR on NB-IoT cell reselection margin in enhanced coverage in Rel-16 (Cat A)**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6874 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007876 Correction to eMTC inter-frequency reselection margin R14**

*Type: CR For: Agreement  
 36.133 v14.14.0 CR-6891 Cat: F (Rel-14)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007877 Correction to eMTC inter-frequency reselection margin R15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6892 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007878 Correction to eMTC inter-frequency reselection margin R16**

*Type: CR For: Agreement  
 36.133 v16.5.0 CR-6893 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 12.4 Demodulation and CSI [WI code or TEI]

**R4-2007213 CR: Updates to FeNB-IoT NPRACH TDD performance requirements in TS 36.104 (Rel-15)**

*Type: CR For: Agreement  
 36.104 v15.8.0 CR-4897 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Update related performance requirements after more simulation results provided

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007214 CR: Updates to FeNB-IoT NPRACH TDD performance requirements in TS 36.104 (Rel-16)**

*Type: CR For: Agreement  
 36.104 v16.5.0 CR-4898 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007215 CR: Updates to FeNB-IoT NPRACH TDD conformance testing in TS 36.141 (Rel-15)**

*Type: CR For: Agreement  
 36.141 v15.8.0 CR-1256 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Update related performance requirements after more simulation results provided

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007216 CR: Updates to FeNB-IoT NPRACH TDD conformance testing in TS 36.141 (Rel-16)**

*Type: CR For: Agreement  
 36.141 v16.5.0 CR-1257 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007217 Summary of simulation results for Rel-15 FeNB-IoT NPRACH TDD formats**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Collect simulation results requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007218 CR: Updates to FeNB-IoT UE performance requirements in 36.101 (Rel-15)**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5621 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Remove the square brackets of some performance requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007219 CR: Updates to FeNB-IoT UE performance requirements in 36.101 (Rel-16)**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5622 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007242 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-8)**

*Type: CR For: Agreement  
 36.141 v8.12.0 CR-1258 Cat: F (Rel-8)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

correct the mislignment between TS 36.104 and TS 36.141

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007243 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-9)**

*Type: CR For: Agreement  
 36.141 v9.11.0 CR-1259 Cat: A (Rel-9)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007244 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-10)**

*Type: CR For: Agreement  
 36.141 v10.13.0 CR-1260 Cat: A (Rel-10)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007245 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-11)**

*Type: CR For: Agreement  
 36.141 v11.16.0 CR-1261 Cat: A (Rel-11)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007246 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-12)**

*Type: CR For: Agreement  
 36.141 v12.13.0 CR-1262 Cat: A (Rel-12)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007247 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-13)**

*Type: CR For: Agreement  
 36.141 v13.13.0 CR-1263 Cat: A (Rel-13)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007248 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-14)**

*Type: CR For: Agreement  
 36.141 v14.10.0 CR-1264 Cat: A (Rel-14)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007249 CR: Correction on LTE SRS configuration for UL timing adjustment conformance testing (Rel-15)**

*Type: CR For: Agreement  
 36.141 v15.8.0 CR-1265 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007250 CR: Updates to LTE CQI test cases 9.2.1.7 and 9.2.1.8 (Rel-12)**

*Type: CR For: Agreement  
 36.101 v12.24.0 CR-5623 Cat: F (Rel-12)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Resubmission of endorsed draftCR R4-2005523

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007251 CR: Updates to LTE CQI test cases 9.2.1.7 and 9.2.1.8 (Rel-13)**

*Type: CR For: Agreement  
 36.101 v13.18.0 CR-5624 Cat: A (Rel-13)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007252 CR: Updates to LTE CQI test cases 9.2.1.7 and 9.2.1.8 (Rel-14)**

*Type: CR For: Agreement  
 36.101 v14.14.0 CR-5625 Cat: A (Rel-14)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007253 CR: Updates to LTE CQI test cases 9.2.1.7 and 9.2.1.8 (Rel-15)**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5626 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007254 CR: Updates to LTE CQI test cases 9.2.1.7 and 9.2.1.8 (Rel-16)**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5627 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007255 CR: Introduction for intra-band contiguous CA performance requirements for FDD with minimum channel spacing (Rel-15)**

*Type: CR For: Agreement  
 36.101 v15.10.0 CR-5628 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Resubmission of endorsed draftCR R4-2005524

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007256 CR: Introduction for intra-band contiguous CA performance requirements for FDD with minimum channel spacing (Rel-16)**

*Type: CR For: Agreement  
 36.101 v16.5.0 CR-5629 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007366 Simulation results on NB-IoT NPRACH demodulation performance for TDD**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution shows TDD NPRACH simulation results according to TS36.104.

**Discussion:**

.

**Decision:** The document was **not treated**.

## 13 Liaison and output to other groups

**R4-2006570 Reply LS on Handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2**

*Type: LS out For: Approval  
 to RAN2  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006625 Draft Reply LS on Handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2 (R2-2004267)**

*Type: LS out For: Approval  
 to RAN2  
 Source: Apple*

**Abstract:**

Draft Reply LS on Handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2 (R2-2004267)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006882 Reply LS on NeedForGap capability**

*Type: LS out For: Approval  
 to RAN2  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006883 Discussion on NeedForGap capability**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 14 Revision of the Work Plan

### 14.1 Simplification of band combinations in RAN4 specifications

**R4-2006626 Simplification of band combination tables in 38.101**

*Type: discussion For: Approval  
 Source: Apple*

**Abstract:**

This paper proposes to use Excel for replacing the band combinations tables in 38.101

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006663 Consideration on potential e-meeting improvement**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006734 Discussion about Band combination spreadsheet formats**

*Type: discussion For: Approval  
 Source: Futurewei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006840 Considerations on simplification of EN-DC configuration including FR2**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Abstract:**

Considerations on simplification of EN-DC configuration including FR2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008064 On new format for band combinations**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008085 Further discussion on improvement of request, SR and BC basket WID index table**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008112 Simplification of band combinations**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 14.2 R17 new proposals

#### 14.2.1 Basket WI approach for adding existing channel bandwidth on existing NR bands

**R4-2006933 UE bandwidths for SUL bands**

*Type: discussion For: Information  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007516 Motivation slides for the new basket WI adding existing channel BW support and the proposals included**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution motivates the new basket WI on adding new channel BW in existing NR bands, and also the 2 proposals already included in this basket WI

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007517 New basket WI adding existing channel BW support in existing NR bands**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

New basket WID to manage more efficiently all requests related to adding channel bandwidth(s) support in existing NR bands. 2 such proposals are included.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008250 Re-consideration of adding UE 100MHz channel bandwidth for n40**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Propose to add 100MHz channel bandwidth for n40.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 14.2.2 Proposals on adding brand new channel bandwidth

**R4-2006339 Non-standard spectrum allocations for NR bands**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006640 New SID: Efficient utilization of licensed spectrum that is not aligned with existing NR channel bandwidths**

*Type: SID new For: Decision  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006641 Motivation for new SID on Efficient utilization of licensed spectrum that is not aligned with existing NR channel bandwidths**

*Type: discussion For: Information  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006642 On efficient utilization of licensed spectrum that is not aligned with existing NR channel bandwidths**

*Type: discussion For: Information  
 Source: T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006812 Discussion on scalable solutions to handle brand new channel bandwidth**

*Type: discussion For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008247 New WID proposal: introduction of brand new channel bandwidths for NR**

*Type: other For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

New WID for brand new channel bandwidth for NR.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 14.2.3 Basket WIs for LTE CA, EN-DC, NR CA and NR DC

**R4-2006299 Rel-17 NR inter-band CA for 3 bands DL with 1 band UL**

*Type: WID new For: Decision  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006736 New WID onon LTE x bands (xDL/1UL x=1.2,3,4) with NR 2 bands (2DL/1UL) EN DC in Rel-17**

*Type: WID new For: Decision  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006793 New WID on LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL in Rel-17**

*Type: WID new For: Decision  
 Source: LG Electronics Polska*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006802 Proposal on new Rel-17 Basket: NR inter-band Carrier Aggregation and Dual connectivity for DL 4 bands and 2UL bands**

*Type: WID new For: Decision  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006898 New WID on Rel.17 EN-DC and NE-DC for 2 bands DL with 2 bands UL (1 LTE band + 1 NR band)**

*Type: WID new For: Decision  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006930 New WID on Power Class 2 UE for NR inter-band CA and SUL band combination with 2 bands UL**

*Type: WID new For: Decision  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006991 New WID: Dual Connectivity (EN-DC) of LTE inter-band CA xDL/1UL bands (x=2,3,4) and NR FR1 1DL/1UL band and NR FR2 1DL/1UL band**

*Type: WID new For: Decision  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007016 Proposed new WID on Rel-17 EN-DC of x bands (x=1,2,3) LTE inter-band CA (xDL/1UL) and 3 bands NR inter-band CA (3DL/1UL)**

*Type: WID new For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007017 Proposed new WID on Rel-17 NR Inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1,2)**

*Type: WID new For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007018 Proposed new WID on Rel-17 Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL**

*Type: WID new For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007169 Draft Rel-17 WID on Dual Connectivity (EN-DC) of 4 bands LTE inter-band CA (4DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID new For: Decision  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007340 New Rel-17 WID: Dual Connectivity (EN-DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID new For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007499 Rel-17 WID on Dual Connectivity (DC) of 4 bands LTE inter-band CA (4DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID new For: Decision  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

New WID capturing combinations requested for the RAN4#95 meeting

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007559 Proposed new WID on Rel-17 NR Inter-band Carrier Aggregation/Dual Connectivity for 3 bands DL with 2 bands UL**

*Type: WID new For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007565 New WID: Rel17 LTE inter-band CA for 2 bands DL with 1 band UL**

*Type: WID new For: Decision  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008061 New WID: LTE Advanced inter-band CA Rel-17 for x bands DL (x=4, 5) with 1 band UL**

*Type: WID new For: Decision  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008087 New WI Rel-17 on Band combinations for SA NR Supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP)**

*Type: WID new For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008088 New WI Rel-17 NR inter-band CA for 5 bands DL with x bands UL (x=1, 2)**

*Type: WID new For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008186 new WID: Rel-17 LTE inter-band CA for 3 bands DL with 1 band UL**

*Type: WID new For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008236 New WID for Rel-17 LTE inter-band CA for 2 bands DL with 2 bands UL**

*Type: WID new For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 14.2.4 Others

**R4-2006042 Motivation for further enhancement on NR demodulation performance requirements**

*Type: discussion For: Information  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006043 Draft WID: Further enhancement on NR demodulation performance requirements**

*Type: discussion For: Information  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006091 New WID proposal: Modification of LTE Band 24 specifications to comply with updated regulatory emission limits**

*Type: WID new For: Decision  
 Source: Ligado Networks*

**Abstract:**

WI proposal for modifying Band 24 RF specifications to comply with recent regulatory updates

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006139 New WID proposal for Introduction of NR band n24**

*Type: WID new For: Decision  
 Source: Ligado Networks*

**Abstract:**

Introduction of NR Band n24

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006140 New WID: introduction of NR 47 GHz band**

*Type: WID new For: Decision  
 Source: T-Mobile USA Inc., Dish Network*

**Abstract:**

The US FCC had auctioned the 47 GHz band (47.2-48.2 GHz.) It should be standardized as a 3GPP FR2 operating band.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006201 Motivation paper on Rel-17 further RRM enhancement**

*Type: discussion For: Information  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006202 WID of R17 NR RRM further enhancement**

*Type: discussion For: Information  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006292 Study on support of unsynchronized operation between TDD bands**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006300 Motivation on NR RRM requirement enhancement in Rel-17**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006301 New WID on NR RRM requirement enhancement in Rel-17**

*Type: WID new For: Decision  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006302 Motivation on basket WI on V2X band combination**

*Type: discussion For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006303 New basket WID: V2X band combination for supporting co-current operation between Uu frequency bands and V2X bands**

*Type: WID new For: Decision  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006309 New WID on Verification of Multiple Input Multiple Output (MIMO) Over-the-Air (OTA) performance of NR UEs**

*Type: WID new For: Decision  
 Source: CAICT*

**Abstract:**

Follow-up WID of Rel-16 NR MIMO OTA SI

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006362 Further views on NR FR1 TRP/TRS**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006363 FR2 RF enhancements for Rel-17**

*Type: discussion For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006480 Motivation paper on R17 RRM enh**

*Type: other For: Information  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006549 Motivation to introduce new SI of MG enhancement**

*Type: other For: Information  
 Source: Intel Corporation, Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006550 New SI Proposal Study on measurement gap enhancement**

*Type: other For: Information  
 Source: Intel Corporation, Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006683 New SID on high-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12 and in Band 5**

*Type: SID new For: Decision  
 Source: US Cellular Corporation*

**Abstract:**

Support for fixed wireless and vehicle mounted user equipment usage scenarios, with broader rural coverage and higher data rates is envisioned as part of deployment configurations in LTE band 12 and band 5. Improvements in coverage, and availability.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006710 Motivation on NR RRM requirement for UE different RX beam sets in FR2**

*Type: discussion For: Discussion  
 Source: LG Electronics Inc.*

**Abstract:**

It is motivation paper to introduce new WID on NR RRM requirement for UE different RX beam sets in FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006739 New WID proposal on introduction of 1.6 GHz NR SUL band with same uplink frequency range of Band 24**

*Type: WID new For: Decision  
 Source: Ligado Networks*

**Abstract:**

A new WID to standardize the UL of Band 24 as a supplemental uplink band.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006753 Motivation for new WI on air-to-ground network for NR**

*Type: WID new For: Decision  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006754 New WID on air-to-ground network for NR**

*Type: WID new For: Decision  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006755 New WID on introduction of 1880-1920MHz SUL band for NR**

*Type: WID new For: Decision  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006756 New WID on introduction of 2300-2400MHz SUL band for NR**

*Type: WID new For: Decision  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2006899 Motivation for WI: Verification of Multiple Input Multiple Output (MIMO) Over-the-Air (OTA) performance of NR UEs**

*Type: discussion For: Information  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007069 New SID on NR FR1 and EN-DC FR1 UE TRP and TRS**

*Type: SID new For: Decision  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007070 Motivation of NR FR1 TRP TRS new study item**

*Type: discussion For: Information  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007257 New WID on UE performance for advanced recevier with soft IC for inter-stream interference and IRC for inter-cell interference**

*Type: WID new For: Decision  
 Source: Huawei, HiSilicon*

**Abstract:**

WID on advanced receiver for soft IC and IRC.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007258 Motivation paper of new WID on UE performance for advanced recevier with soft IC for inter-stream interference and IRC for inter-cell interference**

*Type: other For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

Motivation paper for soft IC receiver and IRC recevier

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2007361 LTE/NR spectrum sharing in Band 38/n38**

*Type: discussion For: Information  
 Source: VODAFONE Group Plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008128 New WID: FR1/FR2 for NR based HAPS networks**

*Type: WID new For: Decision  
 Source: Intelsat LLC, Loon LLC, Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008248 New WID proposal: supporting overlapping CA for LTE**

*Type: other For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

New WID for overlapping CA for LTE.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008249 Motivation on WID of further enhancement of FR1 RF requirement**

*Type: other For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

Propose for Rel-17 FR1 enhancement WID.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008268 [draft] New SID: Optimizations on power class fall back**

*Type: SID new For: Decision  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008269 Consideration on NR SISO OTA WI**

*Type: discussion For: Discussion  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008270 Motivation for NR FR1 UE TRP and TRS**

*Type: discussion For: Discussion  
 Source: vivo, CMCC, CAICT, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008271 New WID: NR FR1 UE SA and EN-DC TRP and TRS**

*Type: WID new For: Decision  
 Source: vivo, CMCC, CAICT, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 14.3 Others

## 15 Any other business

### 15.1 Views on workload management and meeting efficiency improvement

**R4-2008003 Proposals for Managing RAN4 work load**

*Type: other For: Approval  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, ZTE, Mediatek, Qualcomm, Verizon, AT&T, T-Mobile, Softbank, KDDI, NTT DoCoMo, Rohde & Schwarz, KT, SKT*

**Abstract:**

This document contains proposals for managing RAN4 work load by reducing and avoiding redundant contributions. The proposals are applicable fot both F2F and e-meetings

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008004 Proposals to improve e-meeting efficiency**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This document contains proposals for improving efficiency in e-meetings.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2008060 Views on workload management and meeting efficiency improvement**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 15.2 Others

## 16 Close of the E-meeting

Report prepared by: Kai-Erik Sunell