



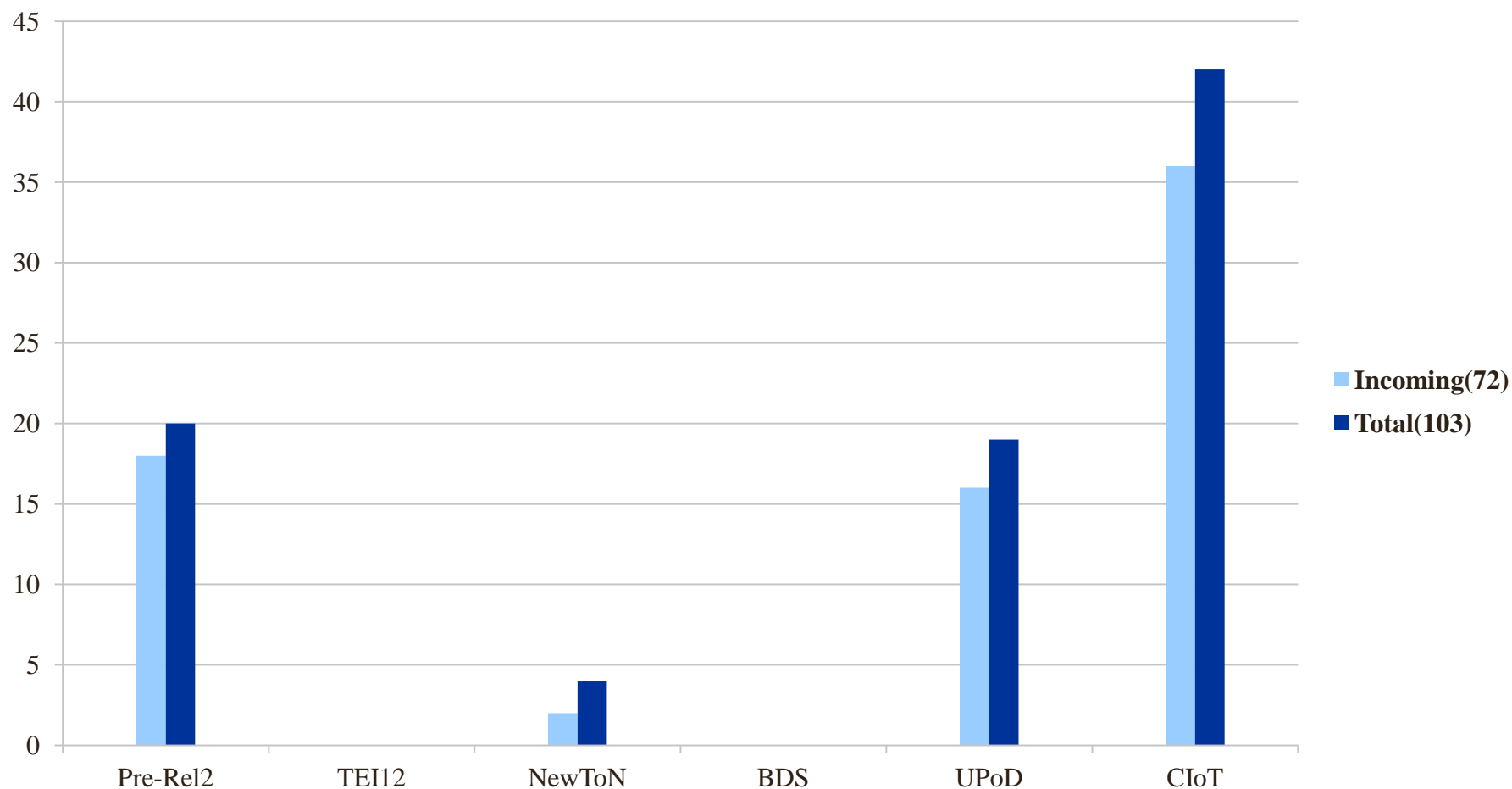
# **3GPP TSG GERAN WG2#64**

## **Chairman's Summary (GP-140971)**

**Chairman:** Yang ZHAO (Huawei Technologies)

**Secretary:** Gert THOMASEN (MCC report in GP-140972)

# Incoming Contributions



# Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00		LSs	CloT (traffic model)	CloT (misc)	
10:30		Coffee Break	Coffee Break	Coffee Break	
11:00		CloT (SI)	CloT (traffic model)	CloT (misc)	
12:30		Lunch	Lunch	Lunch	
14:00		CloT (SI)	NewTON Unn HO EARFCN	Revisions	
15:30		Coffee Break	Coffee Break	Coffee Break	
16:00		CloT (Joint session)	UPoD	Revisions	
18:00		EARFCN extension	CloT (traffic model)		

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## Pre-Rel12 Corrections.....



## Rel-12 Work.....



## Rel-13 Work.....

## 7.2.5.1 Pre-Rel12 corrections

### ➤ Corrections on unnecessary HO report

#### ➤ GERAN#63

- 0699, 0709 CRs on **48.008** agreed since **Rel-10**: to add TAI and source EUTRAN CGI of the source cell for unnecessary Handover report.
- 0701, 0710, 0711 CRs on **48.018** agreed since **Rel-10**: to add TAI and source EUTRAN CGI of the source cell for unnecessary Handover report.
- Corresponding LS in 0651 is sent to RAN3

#### ➤ GERAN#64

- LS received from RAN3 in **0803** indicating necessity of carrying Global eNB ID
- **0936, 0937, 0938** CRs on **48.008** **agreed** since **Rel-10**: to add source eNB ID in routing address for unnecessary IRAT HO.
- **0958, 0940, 0941** CRs on **48.018** **agreed** since **Rel-10**: to add source eNB ID in routing address for unnecessary IRAT HO.
- Corresponding LS in **0951** is sent to RAN3

## 7.2.5.1 Pre-Rel12 corrections

### ➤ EARFCN Extension

#### ➤ GERAN#62

- ALT1: local mapping of EARFCN values in the extended range (> 65535) to 16-bit encoded EARFCN code points
- ALT2: Extending the EARFCN numbering space beyond 16 bits

#### ➤ GERAN#63

- No conclusion on selection of the two alternatives

#### ➤ GREAN#64

- Further discussion on ALT2:
  - Option 1: all UEs read SI23 to get extended EARFCNs. See [0942](#).
  - Option 2: only UEs supporting network sharing read SI23 to get extended EARFCNs, and UEs not supporting network sharing or UEs supporting network sharing without SI23 broadcast from the network read SI2quater to get extended EARFCNs. See [0846](#).
- G2 agreement: Option 2 is adopted.
  - CRs [0959](#), [0931](#) on **44.018** since **Rel-11** postponed: one more meeting cycle to allow companies to review (0847 merged into 0959)
  - CRs [0960](#), [0961](#) on **44.060** since **Rel-11** postponed: one more meeting cycle to allow companies to review
  - [0964](#) Draft CR on **24.008** **Endorsed**: Capability indicator for supporting extended EARFCN
- Adapt changes to support EARFCN extension for unnecessary HO
  - [0932](#), [0933](#) CR on **48.008** / [0962](#), [0963](#) CR on **48.018** since **Rel-11** **agreed**: to introduce extended EARFCN in IRAT HO IE

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Pre-Rel12 Corrections.....



Rel-12 Work.....



Rel-13 Work.....

## 7.2.5.2.3 New Training Sequence

### ➤ Introduction of extended TSC sets

#### ➤ GERAN#62:

- 0382 CR on 44.018, 0383 CR on 44.060 postponed: proposes to introduce new TSC sets in signaling
  - Pending on WG1 discussion

#### ➤ GERAN#63

- 0619 CR on **44.018**, 0658 CR on **44.060** Conditionally agreed: to introduce extended TSC sets in signaling
- 0595 Draft CR on **24.008** Endorsed: to introduce capability indication of NewToN for mobiles

#### ➤ GERAN#64

- **0955** CR on **44.018**, **0956** CR on **44.060** **Conditionally agreed**: to introduce extended TSC sets in signaling
- **0957** LS to CT1 to introduce capability indication of NewToN: sent to plenary, pending on G1 status



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## Pre-Rel12 Corrections



## Rel-12 Work



## Rel-13 Work

## 7.2.5.3.3 Power Saving for MTC Devices(1/3)

- Meeting Minutes of uPoD Telco#3 in 0983 noted
- Work Plan in 0824 noted
- TR update in 0823 noted
- Discussion
  - Use case and Traffic model
    - GERAN#63
      - Traffic models agreed in 0659 for network-triggered and mobile-originated reporting
      - PCR of clarification for Use cases and traffic models agreed in 0708
      - High/Medium Mobility, Active timer usage and requirements for Software upgrades remain FFS
    - GERAN#64
      - No input on OPEN issues

## 7.2.5.3.3 Power Saving for MTC Devices(2/3)

### ➤ Discussion (Cont')

#### ➤ Solution

- ALT1: event-triggered measurements
  - 0859 Discussion on event-triggered measurements mechanism
    - More investigation needed on the number of decoding failures
- ALT2: Long DRX with short sync
  - 0894 Discussion on Supporting eDRX for uPoD
    - More investigation needed on the CN impact
    - The solution principle is adopted in PCR 0966
  - 0895 Discussion on Realizing eDRX for uPoD noted
    - More investigation needed
  - 0896 Optimized Trigger Delivery for uPoD noted
    - Potential impact is foreseen to SA2, CT1/CT4, SA3 etc., more investigation needed
  - 0898 Discussion on Identifying uPoD Devices noted
    - Concerns raised on backward compatibilities
  - 0899 Discussion on Scope of Device Capability for uPoD noted
    - More investigation needed
    - PCR in 0900 noted

## 7.2.5.3.3 Power Saving for MTC Devices(3/3)

### ➤ Discussion (Cont')

#### ➤ Evaluations

- 0905 Energy Consumption Evaluation for RAU procedure [noted](#)
- 0906 Energy Consumption Evaluation for PDP context Activation [noted](#)
- 0907 Energy Consumption Evaluation for data transfer in uPoD devices [noted](#)
- 0908 Energy Consumption Evaluation for GPRS Attach and Authentication procedures [noted](#)
- 0910 MS Energy Consumption Evaluation, PSM vs. eDRX [noted](#)
- More investigation needed on DL monitoring, neighbor cell measurements, processing time etc.

#### ➤ TR updated in [0968](#) as the baseline for future discussion

## 7.2.5.3.4 Cellular IoT (1/3)

- Meeting Minutes of CloT Telco#4, #5, #6 **noted** (G1&G2 joint session)
- Work Plan in **0820 noted**
  - G2 agreement: GERAN#64 is the final call for new PHY concept
  - Telco#8 on Dec 16<sup>th</sup> addressing RACH aspect
- TR Update in **0814**
- Discussion
  - Architecture
    - **0922 noted**: proposal to consider Gb architecture only
    - **0952 noted**: Evaluation of Transmission Efficiency on Gb and S1
      - More investigation needed on RRC signalling optimization and IP header compression
      - Agreed WA on transmission efficiency:
        - $E_{\text{transmission}} = D_{\text{application}} / (D_{\text{application}} + H_{\text{CN}} + H_{\text{access}} + S_{\text{radio}} + H_{\text{signaling}})$
        - Evaluation only needed on MAR periodic traffic model

## 7.2.5.3.4 Cellular IoT (2/3)

### ➤ Discussion (Cont')

#### ➤ Traffic model

- Various proposals in 0816, 0909, 0981
- G2 agreed working assumptions in 0970

#### ➤ Idle mode behaviour

- 0924, 0858, 0854 noted: various proposals on paging.
  - WA agreed: paging mechanism needs to be optimized for different coverage classes.
- 0858 noted: proposal on PSM and paging, WA agreed as follows:
  - WA1: Network Command model without any latency requirement and MAR periodic model only apply PSM.
  - WA1.1: set Active timer as 0 for power consumption evaluation for Gb and S1.
  - WA2: with requirement of medium latency for Network Command model in a range of minutes, e.g. 1-30 minutes, optimization of current DRX/paging cycle is needed.
  - WA3: with requirement of low latency for Network Command model in a range of seconds, e.g. 1-30 seconds, the current DRX/paging cycle applies.

## 7.2.5.3.4 Cellular IoT (3/3)

- **Discussion (Cont')**
  - **System Information**
    - 0853 noted: proposal of SI design
    - 0925 noted: proposal on network sharing consideration
    - WA agreed in 0969
  - **Due to time limitation and extensive discussion on traffic models, around 16 contributions cannot be treated.**
- **TR update in 0822 as the baseline for future discussion -> sent to plenary**

## 7.2.5.3.6 Other

### ➤ Introduction of new RSRQ measurements definition

- GERAN#63: LS from RAN4 to GREAN2: requesting GERAN2 to consider possibility for network to indicate to UE(s) in connected mode that whether the UE(s) shall utilize new RSRQ measurement method and whether a new indication of UE capability is needed.
- GERAN#64: 0804 LS from RAN4 to GERAN2: to develop the signalling and procedures for the new RSRQ measurement based on the answers.
  - Input expected at next meeting

### ➤ EAB initiation in BSC

- 0805 LS on Reply EAB initiation in BSC from SA2, asking clarification on the absence of low access priority indication over A interface
  - Input expected at next meeting

### ➤ simple encryption procedure for IoT device security

- 0802 LS from ITU-T Study Group 17 requesting GERAN's view on simple encryption procedure
- Out of GERAN scope and forwarded to SA3, reply LS in 0967

### ➤ Smart Grid

- 0799 reply LS on preliminary draft new ITU-R report on the smart grid project -> sent to plenary



# Outgoing LSs

## ➤ Source GERAN2

- GP-140951 Reply LS on the routing information for the Unnecessary HO to another RAT detection

## ➤ Source GERAN

- GP-140967 Reply LS on new work item on simple encryption procedure for IoT device security

# Next Meetings

- WG1&2 adhoc      02 - 05 Feb 2015,      Sophia Antipolis, France
- GERAN2#65      09 - 13 Mar 2015,      Shanghai, China
- WG1&2 adhoc      20 - 23 April 2015,      EU
- GERAN2#66      25 - 29 May 2015,      EU



**Thank You**