3GPP TSG-RAN WG3 Meeting #113-e R3-21xxxx

Online, 16 – 27 August 2021

**Agenda item: 19.2.3**

**Source: Nokia, Nokia Shanghai Bell, Ericsson, Huawei, Qualcomm, ZTE**

**Title:** **(TP for NR\_pos\_enh BL CR for TS 38.455) Pre-defined PRS configurations for on-demand PRS**

**Document for: Discussion**

# 1 Introduction

Appendix A captures a TP for TS 38.455 BL CR for the following RAN3 agreement:

**Enhance the TRP Information Exchange procedure to** **support pre-defined PRS configuration.**

# A Appendix: Text Proposal for TS 38.455 BL CR

*Start of Text Proposal for TS 38.455 BL CR*

#### 9.1.1.14 TRP INFORMATION REQUEST

This message is sent by an LMF to request information for TRPs hosted by an NG-RAN node.

Direction: LMF ® NG-RAN node.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Message Type | M |  | 9.2.3 |  | YES | reject |
| NRPPa Transaction ID | M |  | 9.2.4 |  | - |  |
| **TRP List** |  | *0 ..1* |  |  | YES | ignore |
| **>TRP Item** |  | *1 .. <maxnoTRPs>* |  |  | EACH | ignore |
| >>TRP ID | M |  | 9.2.24 |  | - |  |
| **TRP Information Type List** |  | *1* |  |  |  |  |
| **>TRP Information Type Item** |  | *1 .. <maxnoTRPInfoTypes>* |  |  | EACH | reject |
| >>TRP Information Type Item | M |  | ENUMERATED (nr pci, ng-ran cgi, nr arfcn, prs config, ssb config, sfn init time, spatial direction info, geo-coordinates, …, on-demand prs) |  |  |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoTRPs | Maximum no. of TRPs in a NG-RAN node. Value is 65535 |
| maxnoTRPInfoTypes | Maximum no of TRP information types that can be requested and reported with one message. Value is 64. |

*Next Change*

### 9.2.25 TRP Information

The *TRP Information* IE contains information for one TRP within an NG-RAN node.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description |
| TRP ID | M |  | 9.2.24 |  |
| **TRP Information Type** |  | *1 .. <maxnoTRPInfoTypes>* |  |  |
| >CHOICE *TRP Information Item* | M |  |  |  |
| >>NR PCI | M |  | INTEGER (0..1007) | NR Physical Cell ID |
| >>NR CGI | M |  | 9.2.9 |  |
| >>NR ARFCN | M |  | INTEGER (0..3279165) |  |
| >>PRS Configuration | M |  | 9.2.44 |  |
| >>SSB Information | M |  | 9.2.54 |  |
| >>SFN Initialisation Time | M |  | Relative Time 1900  9.2.36 |  |
| >>Spatial Direction Information | M |  | 9.2.45 |  |
| >>Geographical Coordinates | M |  | 9.2.46 |  |
| >>On-demand PRS Information | M |  | 9.2.x |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoTRPInfoTypes | Maximum no of TRP information types that can be requested and reported with one message. Value is 64. |

*Next Change*

9.2.x On-demand PRS Information

This IE contains on-demand PRS information for the TRP.

Editor’s Note: All details of this IE are FFS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

*End of Text Proposal for TS 38.455 BL CR*