3GPP TSG-RAN WG2 #127 R2-240xxxx

**Maastricht, Netherlands, 19th - 23rd Aug 2024**

**Agenda Item: 7.7.2**

**Source: OPPO**

**Title: Report of [AT127][303][R18 NR NTN] Stage 2 text for trigger conditions (OPPO)**

**Document for: Discussion and Decision**

# Introduction

This document is to kick off the following offline discussion.

* [AT127][303][R18 NR NTN] Stage 2 text for trigger conditions (Oppo)

Scope: Continue the discussion on the actual wording of the change for the Stage 2 description on trigger conditions without RSRP-based trigger conditions.

Intended outcome: report of offline discussion

Deadline for companies' feedback: Thursday 2024-08-22 20:00

Deadline for rapporteur's summary (in R2-2407614): Friday 2024-08-23 08:00

# 2. Contact information

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| Company | Delegate contact |
| COMPANY\_NAME | NAME ([email@address.com](mailto:email@address.com)) |
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# Discussion

For time or location-based CHO trigger conditions, below is the proposed change by Ericsson in R2-2407238.

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| Time-based or location-based trigger conditions may be configured independently from RRM measurement-based condition in some scenarios. One such example scenario is a service link switch with a zero or negligible service discontinuity gap time length. |

During online discussion, following comments were noted.

[R2-2407238](file:///C:\\Data\\3GPP\\Extracts\\R2-2407238%20-%20Remaining%20open%20issues%20for%20NR%20NTN%20enhancements.docx" \o "C:Data3GPPExtractsR2-2407238 - Remaining open issues for NR NTN enhancements.docx) Remaining open issues for NR NTN enhancements Ericsson discussion NR\_NTN\_enh-Core

Proposal 1 Satellite switch with resync related capabilities (softSatelliteSwitchResyncNTN and hardSatelliteSwitchResyncNTN) are defined per UE.

Proposal 2 Adopt the following clarification to Stage 2 related to the independent configuration of time or location-based CHO trigger conditions from RSRP-based trigger conditions.

- HW agrees we could fix this but the current proposal is also misleading

- vivo thinks the current spec is ok

- QC also thinks we can live with the existing text (saying “at least...”)

- Oppo and Nokia think that some clarification is needed

* RAN2 agrees that a correction to the existing Stage 2 description is needed and continue in offline 303 to discuss the actual change

The main point in capturing in stage-2 spec is that time or location-based trigger condition can be configured independently from the RRM-based condition. If companies think Ericsson’s TP is still misleading, maybe another **alternative and compromise** is to not list any example scenario at all in the spec, although this is not fully aligned with the RAN2#122 meeting agreements “We add a description/note saying in which scenarios this is reasonable, e.g. at least hard-switch case where gap is assumed to be zero/negligible”.

As a compromise, the below wording is proposed.

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| Time-based or location-based trigger conditions may be configured independently from the RRM measurement-based trigger conditions for CHO in NTN in some scenarios. |

**Question 1: Companies please indicate which wording is preferred/acceptable?**

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| **Company** | **Wording in R2-2407238?**  **or**  **Compromised wording suggested by rapporteur?** | **Any other comments?** |
| Apple | Compromised wording with some change | Time-based or location-based trigger conditions may be configured independently from the RRM measurement-based trigger conditions for CHO in NTN in some scenarios (e.g. satellite switch scenario as specified in clause 16.14.3.2)  >>Rapp: referring to 16.14.3.2 is not correct. CHO is still L3 mobility, however 16.14.3.2 avoids L3 mobility. |
| Lenovo | **Compromised wording suggested by rapporteur with some clarification.** | “Some scenarios” seems not very clear to us and additional clarification could be useful like “(e.g., when the service discontinuity gap time length is zero or negligible)” |
| Ericsson | Agree with rapporteur´s proposal. | Also fine with Lenovo’s suggestion. |
| Nokia | Disagree with Apple’s suggestion, OK to adopt Rapp’s proposal with Lenovo’s change | If we end the statement with “in some scenarios” then it is not a very solid information. So OK to clarify as Lenovo suggests. |
| Google | Agree with Lenovo’s suggestion. |  |
| vivo | Comments | We are not fine with the “in some scenarios”. It is hard to clearly describe the intended use cases. For simplicity, we may just say,  Time-based or location-based trigger conditions may be configured independently from the RRM measurement-based trigger conditions for CHO in NTN. |
| Qualcomm | Comments | Ok with Lenovo’s suggestion. |
| ZTE | Agree | Lenovol’s addition or vivo’s suggestion is also fine for us. |
| Sequans | Comments | OK with rapporteur, Lenovo or vivo suggestions, NOK with Apple suggestion. |
| CMCC | Comments | Ok with vivo’s suggestion. |

# 4. Summary and Proposals

This section summarizes the main proposals: