**3GPP TSG RAN2 #115-e R2-21xxxxx**

**Online, 16 – 27 August 2021**

**Agenda Item:**  **8.13.2.1 Handover related SON aspects**

**Source: Huawei (email rapporteur)**

**Title:** **Report of [AT115e][852][SONMDT] Procedures and Modeling of successful HO (Huawei)**

**Document for: Discussion and Decision**

### 1 Introduction

This is the email report of [AT115e][852] SONMDT:

* [AT115e][852][SON/MDT] Procedures and Modeling of successful HO (Huawei)

**Scope:** Focus on the agreeable proposals in R2-2108564

 **Intended outcome**: Report with Agreements

 **Deadline**: 11:00 UTC, Wednesday August 25th

The company contact list is the same as the list in R2-2108564 [1].

|  |  |  |
| --- | --- | --- |
| **Company** | **Name** | **Email Address** |
| Qualcomm | Rajeev Kumar | rkum@qti.qualcomm.com |
| OPPO | Liu yang | liuyangbj@oppo.com |
| Lenovo | Lianhai | Wulh5@lenovo.com |
| Samsung | Sangbum Kim | Sb07.kim@samsung.com |
| Huawei, HiSilicon | Jun Chen | jun.chen@huawei.com |
| NEC | Wangda | wang\_da@nec.cn |
| Sharp | Ningjuan Chang | Ningjuan.chang@cn.sharp-world.com |
| CATT | Erlin Zeng | erlin.zeng@catt.cn |
| vivo | Wen-Ming | ming.wen@vivo.com |
| Ericsson | Marco Belleschi | Marco.belleschi@ericsson.com |
| Nokia, Nokia Shanghai Bell | Malgorzata Tomala | malgorzata.tomala@nokia.com |
| LGE | SangWon Kim | sangwon7.kim@lge.com |
| ZTE | Zhihong-QIU | qiu.zhihong@zte.com.cn |

### 2 Discussion

The agreeable proposals in R2-2108564 are listed as below:

**Proposal 2: For the thresholds of T310/T312 in the source cell, the source cell configures the values.**

**Proposal 3: Introduce a UE capability indication for SHR.**

**Proposal 4: The UE may discard the SHR, i.e. release the UE variable VarSuccHO-Report, 48 hours after the SHR is stored.**

Q1: which of the above proposals are acceptable?

|  |  |  |
| --- | --- | --- |
| **Company** | **All or some** | **Comments** |
| vivo | all |  |
| Qualcomm | All |  |
| Ericsson | All |  |
| Sharp  | All  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

P1 is also an agreeable proposal in R2-2108564. In addition, some alternatives on ASN.1 definition are also provided (see section 5), so it is proposed to collect companies’ opinions on the alternatives.

**Proposal 1: Defines new values or mix of existing values and new values for the threshold, and explicit values or percentages are candidate solutions.**

Q2: Do you agree with P1? In addition, which of the alternatives (shown in section 5) are preferred?

|  |  |  |  |
| --- | --- | --- | --- |
| **Company** | **Yes/No for P1** | **Alt1, Alt2, Alt2a, or others** | **Comments** |
| vivo | Yes | Either Alt2 or Alt2a is fine to us | We prefer to adopt the options where percentage is used. This offers a cleaner and minimal signalling overheaded compared to the use of explicit values.  |
| Qualcomm | Yes | Any alternative seems okay.  | However, the threshold should be set properly. 20% seems quite low. In alternatives 2, 2a, we should remove 20%. similarly, in alternative 1, we should avoid setting a quite low value as a threshold.  |
| Ericsson | Yes | Any alternative seems ok |  |
| Sharp  | Yes  | Any alternative seems ok | Agree with Qualcomm that some quite low values may not be useful. |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### 3 Conclusion

[To be updated]

### 4 References

[1] R2-2108564 Report of [Post114-e][851][SONMDT] Procedures and Modeling of successful HO report (Huawei) Huawei discussion

### 5 Draft changes for the thresholds of T310/T312/T304

The ASN.1 definition is as below:

Alt1: explicit values

Here is an example:

ReportConfigSuccHO-Report-r17 ::= SEQUENCE {

t310\_threshold-r17 ENUMERATED {value1, value2} OPTIONAL,

t312\_threshold-r17 ENUMERATED {value1, value2} OPTIONAL,

t304\_threshold-r17 ENUMERATED {value1, value2} OPTIONAL

}

|  |
| --- |
| ***t310\_threshold***The T310\_threshold is to indicate the threshold value. |
| ***the above field descriptions can be applied for other fields***To be added |

Alt2: percentages

Here is an example:

ReportConfigSuccHO-Report-r17 ::= SEQUENCE {

t310\_threshold\_ratio-r17 ENUMERATED {20%, 40%, 60%, 80%} OPTIONAL,

t312\_threshold\_ratio-r17 ENUMERATED {20%, 40%, 60%, 80%} OPTIONAL,

t304\_threshold\_ratio-r17 ENUMERATED {20%, 40%, 60%, 80%} OPTIONAL

}

|  |
| --- |
| ***t310\_threshold\_ratio***The T310\_threshold\_ratio is to indicate the ratio of the threshold value over the siganlled T310 value. For example, if the signalled T310 value is ms100, and T310\_threshold\_ratio is 40%, the T310 theshold for the successful handover report is 40ms. |
| ***the above field descriptions can be applied for other fields***To be added |

Alt2a: a common set of percentages + a flag indicating the corresponding event

Here is an example:

ReportConfigSuccHO-Report-r17 ::= SEQUENCE {

shr\_threshold\_ratio-r17 ENUMERATED {20%, 40%, 60%, 80%} OPTIONAL,

shr\_t310\_flag-r17 ENUMERATED {true} OPTIONAL,

shr\_t312\_flag-r17 ENUMERATED {true} OPTIONAL,

shr\_t304\_flag-r17 ENUMERATED {true} OPTIONAL

}

|  |
| --- |
| ***shr\_threshold\_ratio***The shr\_threshold\_ratio is to indicate the ratio of the threshold value over the siganlled timer value. For example, if the signalled T310 value is ms100, and T310\_threshold\_ratio is 40%, the T310 theshold for the successful handover report is 40ms. |
| ***shr\_t310\_flag***The presence of the field indicates that the threshold ratio for triggering the successful HO report applies to T310. |
| ***the above field descriptions can be applied for other fields******To be added*** |