Status Report for SI to TSG

Agenda Item: 8.7.11

Study Item Name: "Early Mobile Handling in UTRAN"

SOURCE: Rapporteur TSG: RAN

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Ref. to WI sheet: RAN_Work_Items.doc

Progress Report since the last TSG (for all involved WGs):

a. Work has been carried out on agreeing 'technically endorsed' CR's following signaling mechanisms as given below:

a. Early Uu indication of a bitmap of mobiles faults in RRC

- b. Early Uu delivery of a compressed IMEI-SV
- c. IMEI-SV via the CN to the RAN
- d. Bitmap via the CN to the RAN

Note: The semantics of the 'bitmap' mentioned in a. and d. needs still to be defined

b. RAN specific TR was not created due to development of TR within SA2, covering overall architectural aspects that should be considered when selecting a solution(s). There is a dependency between RAN and CN groups and SA2 for signalling mechanisms involving the CN.

List of Completed elements (for complex work items):

Technically endorsed CR's are available for all methods mentioned above:

The lists of CRs per each method is the following:

. . .

a. Early Uu indication of a bitmap of mobiles faults in RRC

R2-023239 Technically endorsed CR 1758 Rev2 to 25.331 [R'99] on Early UE Specific Behaviour Information in RRC Connection Request / inter RAT info

R2-023240 Technically endorsed CR 1759 Rev2 to 25.331 [Rel-4 shadow] on Early UE Specific Behaviour Information in RRC Connection Request / inter RAT info

R2-023241 Technically endorsed CR 1760 Rev2 to 25.331 [Rel-5 shadow] on Early UE Specific Behaviour Information in RRC Connection Request / inter RAT info

R2-023242 Technically endorsed CR 1761 Rev1 to 25.331 [R'99] on Early UE Specific Behaviour Information in Handover Complete / Setup Complete

R2-023243 Technically endorsed CR 1762 Rev1 to 25.331 [Rel-4 shadow] on Early UE Specific Behaviour Information in Handover Complete / Setup Complete

R2-023244 Technically endorsed CR 1763 Rev1 to 25.331 [Rel-5 shadow] on Early UE Specific Behaviour Information in Handover Complete / Setup Complete

And either

a.i nothing else (the RRC container is sufficient)

a.ii or, if there is a requirement from GSM and this requirement is fulfilled by the RANAP container

¹ If there is a requirement that the GSM BSS needs to use the UE conformance state information for a possible specific behaviour such as subsequent GSM-to-UMTS handover procedure

R3-022549 Technically endorsed CR 539 to 25.413 R99 Inclusion of UE Specific Behaviour Information in RANAP containers for usage in GSM-BSS

a.iii or, as an alternative of RRC transparent container agreed by above mentioned RAN WG2 CRs (in this case, RAN2 CRs must be revised)

R3-02604 Technically endorsed CR 538 r2 to 25.413 R99 Inclusion of UE Specific Behaviour Information in RANAP containers as an alternative of RRC transparent container

b. Early Uu delivery of a compressed IMEI-SV

R2-023236 Technically endorsed CR 1788 Rev1 to 25.331 [R'99] on compact IMEI-SV transfer across Uu and within RRC containers

R2-023237 Technically endorsed CR 1789 Rev1 to 25.331 [Rel-4 shadow] on compact IMEI-SV transfer across Uu and within RRC containers

R2-023238 Technically endorsed CR 1790 Rev1 to 25.331 [Rel-5 shadow] on compact IMEI-SV transfer across Uu and within RRC containers

And either

b.i nothing else (the RRC container is sufficient)

b.ii or , if there is a requirement from GSM and this requirement is fulfilled by the RANAP container R3-022549 Technically endorsed CR 539 to 25.413 R99 Inclusion of UE Specific Behaviour Information in RANAP containers for usage in GSM-BSS

b.iii or, as an alternative of RRC transparent container agreed by above mentioned RAN WG2 CRs (in this case, RAN2 CRs must be revised)

R3-022556 Technically endorsed CR 540 to 25.413 R99 Inclusion of IMEI-SV based "UE Specific Behaviour Information" in "Source RNC to Target RNC Transparent Container" for handling of early mobiles

c. IMEI-SV via the CN to the RAN

R3-022560 Technically endorsed CR 541 to 25.413 Early UE handling: Transfer of IMEISV across the lu

d. Bitmap via the CN to the RAN

R3-022497 Technically endorsed CR 520 Rev 1 to 25.413 R99 Transfer of Faults Bitmap over lu for the handling of early mobiles

List of open issues:

 RAN needs to select the most appropriate method(s) that can allow good handling of early mobiles.

Estimates of the level of completion (when possible):

- Uu changes may be complete depending upon decision made in RAN.
- o Container from CN provided, may need further work in CN/SA2.
- No expected changes required on lur at present.

SI completion date review resulting from the discussion at the working group:

- SA2 TR containing architectural issues for early UE handling superseded RAN TR.
- TR was expected to be presented TSG RAN#18 Solutions are provided directly.

References to WG's internal documentation and/or TRs:

- o S2-023660 Coversheet for TR listing open S2 issues
- S2-020661 S2 TR on early UE handling
- S2-023664 LS to RAN