TSG-RAN Working Group 3 meeting #6 *TSGR3#6(99)937*
Sophia Antipolis, France 23ʳᵈ - 27ᵗʰ of August 1999

Agenda Item:	10.4
Source:	**Ericsson**
Title:	RANAP information elements definition
Document for:	Decision

1 Introduction

The purpose of this contribution is to propose the definition for RANAP information elements.

2 Discussion

The definition of RANAP information elements in ref [1] contains some inconsistencies and some definitions are missing. This contribution proposes to clarify these information elements. The changes compared to the information elements definitions in ref [1] are indicated with the change bars in the following chapter.

3 Information elements definition
ref [1] 9.2.2.x   Message type

Message type uniquely identifies the message being sent. It is mandatory for all ~~elements~~messages.

ref [1] 9.2.2.x   ~~Radio Access Bearer~~ RAB ID
[Editor's note: This definition needs to be harmonized with UMTS 23.10.]

This element uniquely identifies the radio access bearer over one Iu connection. It is used in all procedures that pertain to the radio access bearer. The radio access bearer identification has only local significance.
~~ID is to identify a particular radio access bearer in Iu.~~

ref [1] 9.2.2.x   NAS Binding Information~~Binding Information~~
[Editor's note: This definition needs to be harmonized with UMTS 23.10.]

This element is provided at radio access bearer establishment~~-~~. It contains application specific information, to be used by the remote NAS entity at the UE side. It may, for example, serve as the binding to a NAS call. This

information is an information transmitted transparently to the RNC.

ref [1] 9.2.2.x   RAB/Bearer(?) parameters

The purpose of the RAB/bearer(?) parameter information element is to indicate for a given RAB all RAB specificbearer parameters for both directions, e.g. Quality of service (QoS) classes.

ref [1] 9.2.2.x   Transport address

This element is to be used for the user plane transport.

ref [1] 9.2.2.x   Iu transport association

This element is used to associate the bearer RAB ID and the corresponding user plane. connection.

ref [1] 9.2.2.x   Cause

The cause element is used to indicate the reason for a particular event to have occurred according to the cause code list.

ref [1] 9.2.2.x   Priority level and pre-emption indication

The Priority level iIndicates the priority of the request. The pre-emption indicators may (alone or along with the priority levels) be used to manage the pre-emption and retention functions.

[Note: It needs to be clarified how this parameter is in relation to priority and retention field parameters already included with the Bearer parameters.]

ref [1] 9.2.2.x   Bearer linking

This element is a common reference shared by aidentifies A group a set of RABsbearers which must be either all established, or all rejected, or all modified.

ref [1] 9.2.2.1Location Identifier

Indicates location of the UE.

[Note: The UE Location Information is proposed to be used instead of this element. If the proposal is accepted, the Location Identifier in Message Contents chapter will be replaced with the UE Location Information.]

ref [1] 9.2.2.1ref [1] 9.2.2.x   Common ID

This element is used to identify the UE commonly in UTRAN and in CN. RNC uses the common ID is common for mobile terminal and is used by the RNC to findcheck if SRB is other existing signalling connections already existing (from other NE) to of thise same UE (e.g. RRC or Iu signalling connections) when new radio access bearer is in establishment phase.

~~ref [1] 9.2.2.1~~ref [1] 9.2.2.x   CN Domain Indicator

This element ~~i~~Indicates to which ~~C~~core ~~N~~network domain (CS or~~-~~ PS) the signalling message is related to.

~~ref [1] 9.2.2.1~~ref [1] 9.2.2.x   IMSI

International Mobile Subscriber Identity~~,~~ uniquely identifies ~~a~~the subscriber.

~~ref [1] 9.2.2.1~~ref [1] 9.2.2.x   Temporary UE ID~~MSI~~

~~,~~This element is used to support the subscriber identity confidentiality. ~~to hide the identity of a subscriber.~~

~~ref [1] 9.2.2.1~~ref [1] 9.2.2.x   Paging Cause

~~Tells~~ This element indicates the cause of paging to the UE.

~~ref [1] 9.2.2.1~~ref [1] 9.2.2.x   Paging Area ID

This element uniquely identifies the area, where the paging message shall be broadcasted.

ref [1] 9.2.2.x   Trace Type

A fixed length element indicating the type of trace information to be recorded.

ref [1] 9.2.2.x   Trigger ID

A variable length element indicating the identity of the entity which initiated the trace.

ref [1] 9.2.2.x   Trace Reference

A fixed length element providing a trace reference number allocated by the triggering entity.

ref [1] 9.2.2.x   UE Identity

This element identifies the element~~s~~ to be traced i.e. the subscriber or the user equipment. ~~Indicates the identity of the UE.~~

ref [1] 9.2.2.x   OMC ID

A variable length element indicating the destination address of the Operation and Maintenance Center (OMC) to which trace information is to be sent.

ref [1] 9.2.2.x   Encryption Information

This element contains the user data encryption information (key(s) and permitted algorithms) used to control any encryption equipment at the RNC.

ref [1] 9.2.2.x   Chosen Encryption Algorithm

This element indicates the encryption algorithm being used by the RNC.

ref [1] 9.2.2.x   NAS ~~Bit String~~System Information

This element identifies system information that belongs to the non-access stratum (e.g. LAC, RA code etc). This information is transparent to R~~N~~C.

~~The NAS information peace to be broadcast. The internal structure of this bit string is not known or analysed by the RNC, and is specified as part of the CN - UE protocols.~~

ref [1] 9.2.2.x   Broadcast Area

With each NAS System Information~~bit string~~, this element identifies the geographical area where to broadcast it.

ref [1] 9.2.2.x   Categorisation parameters

With each NAS System Information~~bit string~~, this element ~~to be~~is used by the RNC to determine how to schedule the repetition cycle.

ref [1] 9.2.2.x   NAS PDU

This information element contains the CN – UE or UE – CN message that is transferred without interpretation in the RNC. Typically it contains call control, session management and mobility management messages.

ref [1] 9.2.2.x   Request Type
[Editor's note: This definition needs to be harmonized with UMTS 23.10.]

This element identifies the ~~information request the information~~ type of the UE location information that is requested by CN. ~~to be reported from RNC, e.g. to report LAI and RAI of the current UE location.~~ The possible types are radio access cell/sector or a geographic area. Other request types are FFS.

ref [1] 9.2.2.x   UE Location Information
[Editor's note: This definition needs to be harmonized with UMTS 23.10.]

This element identifies ~~information shows~~ the likely location ~~information that has been requested by the Cn~~ of the UE. This element represents either a radio access cell/sector or a geographic area depending on the UTRAN choice or the Request Type in case of Location Report. The location is coded in the same format as Cell Global Identification (CGI) for compatibility to GSM. ~~, e.g. LAI and RAI. Other types of location information are FFS.~~

[Note: A new name is proposed for this element. If the proposal is accepted, the Location Information in Message Contents chapter will be replaced with the UE Location Information.]

~~**ref [1] 9.2.2.x NAS Layer 3 Information**~~

~~This is a variable length element used to pass radio interface messages from one network entity to another.~~

[Note: The NAS PDU is proposed to be used instead of this element. If the proposal is accepted, the NAS Layer 3 Information in Message Contents chapter will be replaced with the NAS PDU.]

ref [1] 9.2.2.x   User Plane Mode

This element indicates the mode of operation of the Iu User plane requested for realising the RAB.

ref [1] 9.2.2.x   Source RNC to target RNC transparent container

This element is a container to be transferred transparently from the source RNC to the target RNC via CN node(s) during the Relocation procedure. The information contents are FFS.

[Note: A new name is proposed for this element. If the proposal is accepted, the 'Source RNC to target RNC transparent field' in Message Contents chapter will be replaced with the 'Source RNC to target RNC transparent container'.]

ref [1] 9.2.2.x   Target RNC to source RNC transparent container

This element is a container to be transferred transparently from the target RNC to the source RNC via CN node(s) during the Relocation procedure. The information contents are FFS.

[Note: A new name is proposed for this element. If the proposal is accepted, the 'Target RNC to source RNC transparent field' in Message Contents chapter will be replaced with the 'Target RNC to source RNC transparent container'.]

4 Conclusion and Proposal

It is proposed that the clarifications to the Information Elements definitions and the changes to IE names presented in the chapter 3 of this document will be introduced to the subchapters of 9.2.2 and to the Message Contents chapter 9.1.1 in the reference [1].

5 References

[1] 3GPP 25.413, UTRAN Iu Interface RANAP Signalling V1.1.1