

Agenda Item: 15.3
Source: Nokia
Title: **Error reporting procedure in NBAP**
Document for: Approval

1 Introduction

This paper proposes the introduction of a new procedure to be used to report errors in NBAP messages and procedures.

2 Discussion

Error handling has not been fully discussed in WG3. Some procedures include failure messages for the report of error cases, but a generic 'error reporting' message is needed to cover the cases when failure messages are not applicable.

For example, the error reporting message can be used when:

- The message is not understood or cannot be decoded by the BS. This includes the case of an unknown message ID.
- Part of the message (some information element) are not understood or cannot be decoded by the BS.

The error reporting procedure (described below) is needed for both Dedicated NBAP and Common NBAP.

2.1 Error reporting procedure

This procedure is used by BS to report detected errors or any other problems in one incoming message if they cannot be reported by any other procedure.

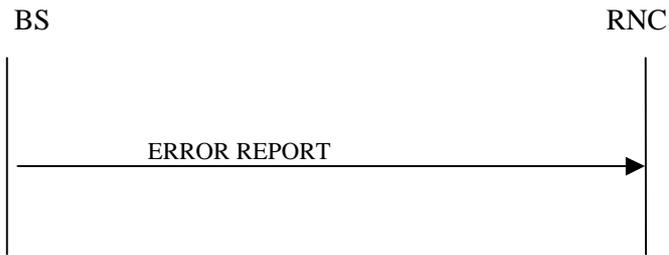
When BS detects an erroneous message (or a message, which for some other reasons cannot be processed), it sends an ERROR REPORT message with the most appropriate cause value.

The message contains as a transparent L3 information the erroneous message (coded) and CRNC communication context identifier, if the BS is able to deduce it from the erroneous message.

Possible error cause can be:

- *Unknown message ID: the message contains a message ID that is not known to the receiver*
- *Unknown Information element: the message contains an information element that is not known or cannot be interpreted by the receiver*
- *Procedural errors: the message is not compatible with the status of the receiver.*

The message is sent using the Dedicated NBAP signaling connection of the incoming message, or using the Common NBAP if the incoming message was sent via Common NBAP.



2.2 Error reporting message

2.2.1 ERROR REPORTING

Information Element	Reference	Type
Message Type		M
Message Discriminator		M
CRNC communication context id		O
Cause		M
L3 transparent information		M

2.3 L3 information parameter

L3 Information

This parameter contains the complete L3 information of one NBAP message.

3 Proposals

- Include section 2.1 of this paper in section 8.1 and 8.2 of [1]. Text in *Italic* can be omitted, because the cause values will be reported in the definition of the 'Cause' parameter.
- Include section 2.2 of this paper in section 9.1 of [1].
- Include section 2.3 of this paper in section 9.4 of [1].

4 References

- [1] 25.433: NBAP specification v.1.2.1