TSG-RAN Working Group 3 meeting #6
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Sophia Antipolis, France

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Agenda Item: 6.6

Source: Fujitsu

Title: Proposed Principle on the Support for RRC Connection

Document for: Discussion

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1. Introduction

When RRC Connection Setup procedure is executed, some connections are able to be setup not only with Dedicated CH but also with Common CH.

This contribution proposes the general principle on the support for RRC connection

2. Discussion

Generally, Dedicated CH is supposed to be used when

a) the real-time service is expected,
b) the service with strict QoS is required and
c) the relatively heavy traffic is drifting.

On the contrary, Common CH is supposed to be used when

d) the non real-time service is expected,
e) the service without strict QoS is required and
f) the relatively little traffic is drifting.

RRC Connection that is temporarily in out-of-synchronisation or that fails to execute the bearer reconfiguration process should be established again by the RRC Connection Re-establishment procedure. Therefore, it is important to make this procedure clear as long as it is executed when it makes sense.

For instance, suppose that the RRC connection re-establishment procedure is executed but it fails. If the Dedicated CH is used for the reasons of a) or b) above-mentioned, this bearer should be released immediately. The reasons are that it would be meaningless for the real-time connection to keep the connected state while it cannot go through and that it would be also meaningless for the strict QoS connection to keep the connected state while it cannot satisfy that QoS requirement. On the other hand, if the Dedicated CH is used for the reasons of c) above-mentioned, it would be also meaningful to re-establish the connection even if it is executed with the common CH.

Figure 1 is an example for the definite procedure;

When RRC Connection is temporarily broken, following principle are expected.

(1) To re-establish circuit mode calls and packet mode calls which are permitted to connect only with Dedicated CH

(2) To recover the RRC connection with common CH when the Re-establishment procedure fails and when there exist the packet mode calls which are permitted to connect with common CH

3. Proposal

It is proposed that the contents of section 2 of this contribution and figure 1 should be incorporated to TR 25.401 of the new section 7.2.4.12 principle on the support for RRC connection.

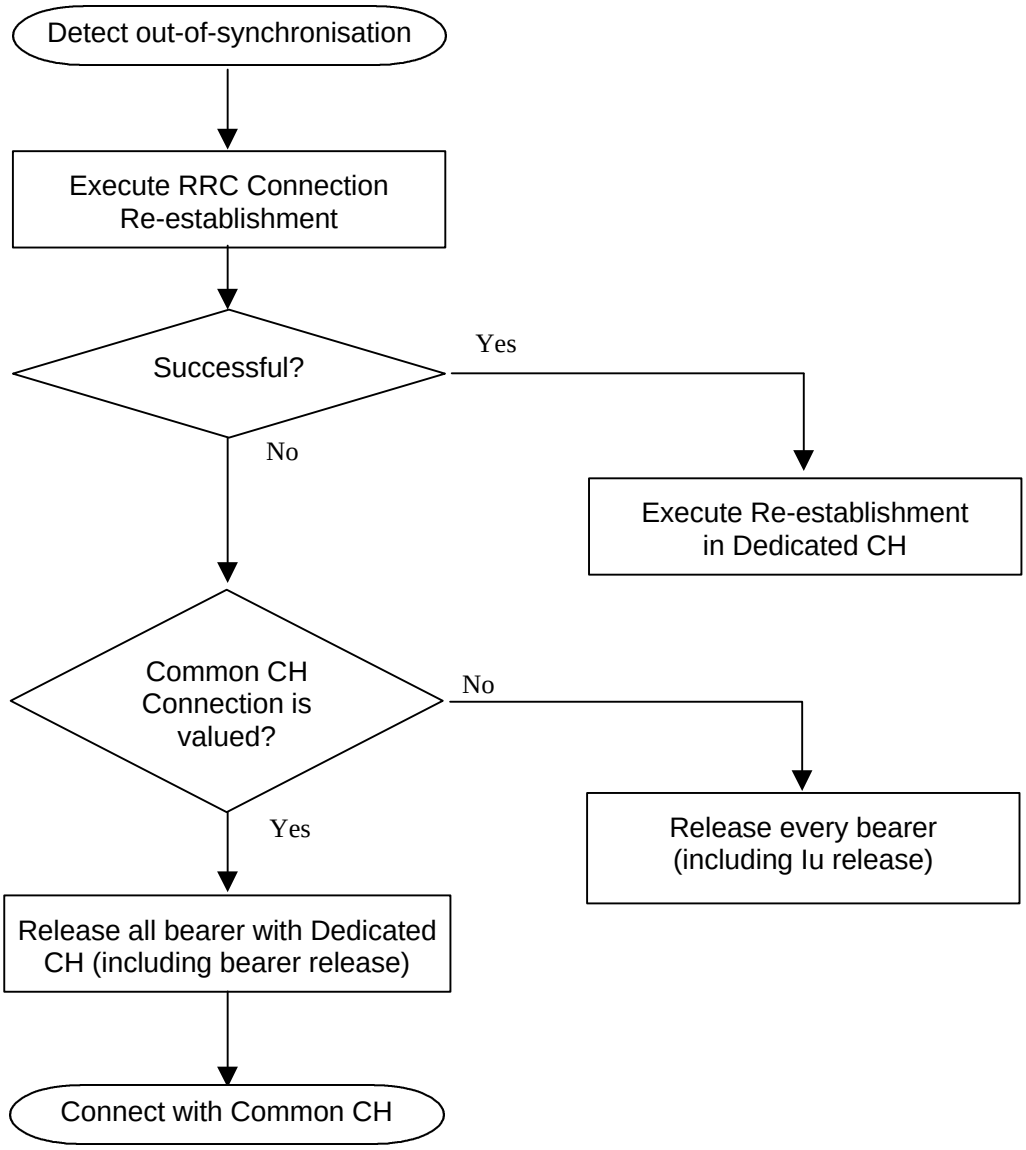

Figure 1 Example of the support for RRC connection