

To : TSG RAN WG2
Source: TSG RAN WG1

Liaisons Statement on CPCH channel assignment and emergency stop procedure

Introduction.

- WG1 would like to inform WG2 on the agreements related to the CPCH channel assignment operation as well as other procedures like emergency stop procedure and asks WG2 to update the WG2 specifications accordingly.
- WG1 also received the liaisons statement from WG2 and answers are given as well to the questions.

CPCH Channel Assignment (CA) Operation.

With respect to the CPCH Channel Assignment (CA) operation WG1 reached an agreement how to reduce the reliability problem with the CA message. The framework agreed is as follows:

1. The UE Channel Selection method will remain as it was before, except that the Start of Message Indicator is added to provide further protection as will be described in connection with the emergency stop procedure. CSICH carries the information on availability of each PCPCH channel.
2. For the CA method, the transmission of availability of each PCPCH with CSICH is used to resolve the false mobile issue by verification of the CA message against information on CSICH. Thus with CA method the CSICH is exactly the same as with UE channel selection e.g. CSICH carrier the information on availability of each PCPCH channel.

Also the details for the CSICH were agreed and WG1 specifications will be updated accordingly. TSG RAN WG2 is kindly asked to update the CPCH model and other mapping information accordingly.

It should be noted that UE will select the PCPCH to be used for access attempt based on the CSICH information and on the system information providing the Transport Format(s) allowed for each PCPCH channel.

Emergency stop procedure and start of message indicator

WG1 would like to inform that the frame work was agreed which allows UTRAN (NodeB) to send on the downlink DPCH the following information:

1. In the first frame, start of message indication is provided. If this is not detected by the UE, the UE will end the transmission.
2. In case of emergency shut down, the corresponding bit pattern is transmitted on the DPCH fields and UE will upon detection of the pattern shut down the uplink transmission.
3. Otherwise the corresponding DPCH field is empty.

WG1 would like WG2 to inform if there are problems with the agreed emergency stop procedure framework. WG1 will update the WG1 specifications according to the presented framework and decide whether DPCH field will be extended accordingly or whether the information will be transmitted on the DPCH.

Answer to TSG RAN WG2 Liaison statement

The Liaison statement from WG2 was received after the Ad Hoc on CPCH was held. With respect to the question from WG2, WG1 sees that information on CSICH for the availability of each PCPCH is important for the reliability of the CA procedure.

Having the information on the maximum available bit can be provided on the CSICH in addition to the availability of each PCPCH.

For certain cases it may not be beneficial to send the maximum available data rate, for example in case of a single data rate for all CPCHs, there is no added value.

The accommodation of the maximum data rate will also reduce the bits available on CSICH for the status information for each PCPCH and thus require either higher power or results in the lower reliability of the CSICH transmission.

If really needed from the PCPCH model perspective, the maximum data rate transmission may be always present.

WG1 assumes that mapping of the status information is carried out by the higher layers and this mapping is made available for Layer 1 to be used on the CPCH access procedure. In principle, the contents of the status broadcast can be flexibly configured by higher layers within the limits for the available power and number of bits on the CSICH. However, WG1 considers that the presence of the PCPCH availability information on CSICH should be mandatory to avoid the problems with CA procedure reliability.