

Source: Siemens AG
Title: Work Item Description 'Hybrid ARQ II/III'
Document for: Decision

Work Item Description

Title

Hybrid ARQ type II/III

1 3GPP Work Area

| | |
|---|--------------|
| X | Radio Access |
| | Core Network |
| | Services |

2 Linked work items

none

3 Justification

This feature has been shown to have the potential of efficiently enhancing the performance of packet data transmission by transmitting incremental redundancy at the request of the receiver.

4 Objective

In order to support the general mechanism, required signalling, and combining of existing information with incremental redundancy, the specifications for physical layer, as well as for higher layers and testing will be changed and/or extended. Note that Hybrid ARQ type I with soft combining is a special case of Hybrid ARQ type II.

The following time schedule is considered for TSG RAN:

| Task | Planned Start | Planned Finish |
|---|----------------------|-----------------------|
| Work Item Creation | 3/2000 | 3/2000 |
| Work Item Approval | | 3/2000 |
| Drafting and discussion | 4/2000 | 6/2000 |
| Updates of Specifications | 6/2000 | 9/2000 |
| Submission to TSG RAN for approval | | 9/2000 |
| Possible remaining corrections and clarifications | 09/2000 | 12/2000 |

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

| Affects: | USIM | ME | AN | CN | Others |
|-------------------|-------------|-----------|-----------|-----------|---------------|
| Yes | | X | X | | |
| No | X | | | X | |
| Don't know | | | | | |

10 Expected Output and Time scale (to be updated at each plenary)

| New specifications | | | | | | |
|---|-------|--|----------------------|---|-------------------------|----------|
| Spec No. | Title | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| | | | | | | |
| | | | | | | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | | Comments |
| 25.211 | | Physical channels and mapping of transport channels onto physical channels (FDD) | | RAN #9 | | |
| 25.212 | | Multiplexing and Channel Coding (FDD) | | RAN #9 | | |
| 25.214 | | Physical Layer Procedures (FDD) | | RAN #9 | | |
| 25.221 | | Physical channels and mapping of transport channels onto physical channels (TDD) | | RAN #9 | | |
| 25.222 | | Multiplexing and Channel Coding (TDD) | | RAN #9 | | |
| 25.224 | | Physical Layer Procedures (TDD) | | RAN #9 | | |
| 25.301 | | Radio Interface Protocol Architecture | | RAN #9 | | |
| 25.302 | | Services provided by the physical layer | | RAN #9 | | |
| 25.303 | | Interlayer procedures in connected mode | | RAN #9 | | |
| 25.304 | | UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode | | RAN #9 | | |
| 25.321 | | MAC Protocol Specification | | RAN #9 | | |
| 25.322 | | RLC Protocol Specification | | RAN #9 | | |
| 25.331 | | RRC Protocol Specification | | RAN #9 | | |
| 25.401 | | UTRAN Overall Description | | RAN #9 | | |
| 25.420 | | UTRAN Iur Interface: General Aspects and Principles | | RAN #9 | | |
| 25.423 | | UTRAN Iur Interface RNSAP Signalling | | RAN #9 | | |
| 25.425 | | UTRAN Iur interface user plane protocols for CCH data streams | | RAN #9 | | |
| 25.430 | | UTRAN Iub Interface: General Aspects and Principles | | RAN #9 | | |

| | | | | |
|--------|--|---|--------|--|
| 25.433 | | UTRAN Iub Interface NBAP Signalling | RAN #9 | |
| 25.435 | | UTRAN Iub interface user plane protocols for CCH data streams | RAN #9 | |

11 Work item rapporteurs

yet to be decided

12 Work item leadership

to be decided at RAN

13 Supporting Companies

Interdigital Communications, Nokia, NTT DoCoMo, Siemens

14 Classification of the WI (if known)

| | |
|--|----------------------------|
| | Feature (go to 14a) |
| | Building Block (go to 14b) |
| | Work Task (go to 14c) |

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)