TSG-RAN Working Group 1, Meeting #11 San Diego, USA, February 29 – March 3, 2000

TSG RAN WG1 (00)0441

Agenda Item:Source:Samsung Electronics Co. Ltd.Title:Proposal for Work Item Description 'Serially Concatenated
Convolutional Codes (SCCC)'Document for:Discussion

Work Item Description

Title

Serially Concatenated Convolutional Codes (SCCC)

Intended Output

Modification of the specifications to include support for SCCC.

| TS | 25.212 | Multiplexing and Channel Coding (FDD) | |
|----|--------|---------------------------------------|--|
| TS | 25.222 | Multiplexing and Channel Coding (TDD) | |

Impact on Other Technical Specification and Technical Reports

There may be impact on the following technical specifications and technical reports.

| TS | 25.101 | UE Radio Transmission and Reception (FDD) | |
|----|--------|---|--|
| TS | 25.102 | UE Radio Transmission and Reception (TDD) | |
| TS | 25.104 | UTRA (BS) FDD; Radio Transmission and Reception | |
| TS | 25.105 | UTRA (BS) TDD; Radio Transmission and Reception | |

Technical Scope

In the preparation of Release99, this feature has been shown to have the potential of efficiently enhancing the performance of high data transmission compared with PCCC (turbo codes) when UE and UTRA require BER less than 10^{-6} . Actually, it has been determined that this feature would be treated as a feature of Release2000. In order to support the general mechanism for a channel coder, this work will affect the specifications for physical layer as well as testing.

Schedule on Task to be performed

The following time schedule is planned in WG1:

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