

26<sup>th</sup> – 29<sup>th</sup> July 1999

Queensferry

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**Agenda Item:**

**Source:** Fujitsu, NEC, NTT DoCoMo, Panasonic

**Title:** Proposal for Receiver Dynamic range of BS

**Document for:** Discussion & Decision

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## 1 Introduction

This paper proposes requirements and definitions for the BS Receiver Dynamic range.

## 2 Discussion

The receiver dynamic range is the input power range at each BS antenna connector over which the BER does not exceed a specific rate.

As the result of our study, estimated value of 40dB is necessary. The basis for this value is explained as follows;

the finite difference spreading factor=4 and spreading factor=256: about 18dB,

the increment when capacity is full: about 10dB,

for shadowing: about 10dB,

margin: 2dB,

the total comes to 40dB.

## 3 Text Proposal

The following is a text proposal for relevant part in Document 25.104 , “Radio Transmission and Reception (FDD)”.

### 7.4 Dynamic range

The receiver dynamic range is the input power range at each BS antenna connector over which the ~~FER~~/BER does not exceed a specific rate.

The static ~~BER~~/FER reference performance as specified in clause 7.3.1 should be met over a receiver input range of ~~30~~40 dB above the specified reference sensitivity level for ~~channel type ffs~~ 12.2kbps channel.