## 3GPP TSG RAN WG1 Meeting #14 Oulu, Finland, 4<sup>th</sup> – 7<sup>th</sup> July 2000

## Document R1-00-508

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

CHANGE REQUEST  Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.								
		25.223	CR	007		Current Versi	on: 3.3.0	
GSM (AA.BB) or 3G (AA.BBB) specification number ↑								
For submission to: RAN#9 for approval X strategic non-strategic use of this form is available from: tp://ftp.3gpp.org/information/CR-Form.					nly)			
Proposed change affects: (at least one should be marked with an X)  (U)SIM ME X UTRAN / Radio X Core Network								
Source:	Siemens AG					Date:	27/06/2000	
Subject:	Gain Factors for	TDD Mode						
Work item:								
(only one category B	A Corresponds to a correction in an earlier release B Addition of feature C Functional modification of feature Release 96 Release 97 Release 98							
Reason for change:	Alignment with FI	OD Mode						
Clauses affected:								
			TS25.224CR0	19				
Other comments:								

help dec

<----- double-click here for help and instructions on how to create a CR.

## 6.5.1 Combination of physical channels in uplink

Figure 4 illustrates how the maximum of two different physical uplink channels are combined within one timeslot. Each complex-valued spread channel is separately weighted by a weight factor  $\underline{\gamma}_{\underline{i}}$  and combined using complex addition. After combination of Physical Channels the gain factor  $\beta_{\underline{i}}$  is applied, depending on the actual TFC as described in [10].

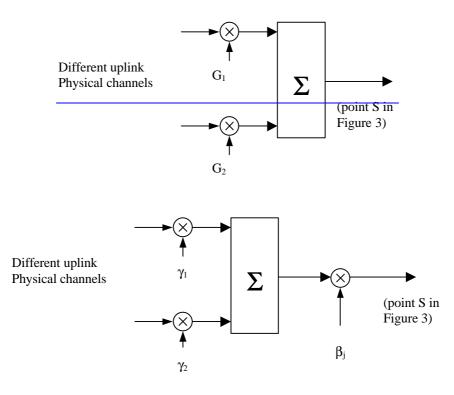


Figure 4: Combination of different physical channels in uplink

The values of  $\gamma$  are depending on the spreading factor SF of the corresponding DPCH:

SF of DPCH	$\gamma_{i}$
<u>16</u>	<u>1</u>
<u>8</u>	$\sqrt{2}$
<u>4</u>	2
2	$2\sqrt{2}$
1	4

The possible values for  $\beta_i$  are listed in table below:

Signalling value for $\beta_j$	Quantized value $\beta_j$
<u>15</u>	<u>16/8</u>
<u>14</u>	<u>15/8</u>
<u>13</u>	<u>14/8</u>
<u>12</u>	<u>13/8</u>
<u>11</u>	<u>12/8</u>
<u>10</u>	<u>11/8</u>
9	10/8
<u>8</u>	9/8

7	<u>8/8</u>
<u>6</u>	<u>7/8</u>
<u>5</u>	<u>6/8</u>
<u>4</u>	<u>5/8</u>
<u>3</u>	<u>4/8</u>
<u>2</u>	<u>3/8</u>
1	<u>2/8</u>
<u>0</u>	<u>1/8</u>