

**Study item request for Fast Cell Selection (FCS) for HS-DSCH**

Source: Motorola

**Work Item Description**

**Title**

Fast Cell Selection for HS-DSCH

**1 3GPP Work Area**

X	Radio Access
	Core Network
	Services

**2 Linked work items**

*None*

**3 Justification**

In RAN#7 a study item on High Speed Downlink Packet Access was approved for consideration. FCS was one of the features for HS-DSCH. However, RAN1 recommended that both intra and inter Node-B FCS should be studied further during Release#5 HSDPA work so that it can be a part of Release-6 specification.

**4 Objective**

Initial simulation studies on HSDPA indicate that FCS provides some benefit in average throughput in certain cases. However, the results were not conclusive. As such, a FCS study item is proposed for Rel-5 so that its benefits w.r.t HSDPA can be fully evaluated. The following analysis should be part of the study item on FCS:

1. Investigate the benefits of FCS with full motion simulator instead of the quasi-motion simulator (users experience Rayleigh faded but do not move) as used in the previous study.
2. Model integrated voice and data, different traffic models (web browsing, WAP, video streaming etc.) and TCP/IP in the system simulator.
3. Model the handoff process in the system simulator.

**5 Service Aspects**

*Probably none– better support of existing packet data services*

**6 MMI-Aspects**

*None*

**7 Charging Aspects**

*None– uses existing packet data charging schemes*

**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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR	Evaluation of FCS for HS-DSCH	R1	R2, R3, R4	RAN #11	RAN #14	New technical report
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments

The technical report should present the results of the study and make a recommendation for which techniques should be incorporated into future releases of the standard. The report should also detail the work items descriptions necessary to continue this work.

**11 Work item rapporteurs**

**Robert Love, Motorola**

**12 Work item leadership**

TSG-RAN WG1

**13 Supporting Companies**

Motorola, Nokia, T-Mobil, Ericsson

**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)

