Service flow management for RS

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Kenji Saito, Takashi Inoue
KDDI R&D Laboratories Inc.
Hikarino-oka 7-1, Yokosuka, Kanagawa 239-0847
Japan

Voice: +81 46 847 6347
Fax: +81 46 847 0947
E-mail: saito@kddilabs.jp

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Purpose:

Discuss and adapt proposed text and message format.

Service flow management for RS

Main features

- ✓Centralized scheduling
  - ➢RS only forwards the DSx messages between BS and MS.
  - ➢BS needs to check whether the QoS requirements can be supported both on relay link (BS-RS) and on access link (RS-MS).
- ✓Distributed scheduling
  - ✓RS can check whether the QoS requirements can be supported on access link (RS-MS).
  - ✓BS only check it on relay link (BS-RS).

Service flow management for RS

DSA initiated from SS through RS (Centralized scheduling case)

SS		RS		BS
New service flow needed				
Check if resource are available				
Send DSA-REQ	--DSA-REQ-->	Receive / Send DSA-REQ	--DSA-REQ-->	Receive DSA-REQ
Set Timers T7 and T14				
Timer T14 Stops	<--DSX-RVD--	Receive / Send DSX-RVD	<--DSX-RVD--	DSA-REQ integrity valid
				Check whether SS is authorized for Service
				Check whether service flow QoS can be supported both on relay link and on access link
				Create SFID
				If uplink AdmittedQoSParamSet is non-null, map service flow to CID
				If uplink ActiveQoSParamSet is non-null, Enable reception of data on new uplink service flow
Receive DSA-RSP	<--DSA-RSP--	Receive / Send DSA-RSP	<--DSA-RSP--	Send DSA-RSP
Timer T7 Stops				
If ActiveQoSParamSet is non-null, Enable transmission and/or reception of data on new service flow				
Send DSA-ACK	--DSA-ACK-->	Receive / Send DSA-ACK	--DSA-ACK-->	Receive DSA-ACK
				If downlink ActiveQoSParamSet is non-null, Enable transmission of data on new downlink service flow

Service flow management for RS

DSA initiated from SS through RS (Distributed scheduling case)

SS		RS		BS
New service flow needed				
Check if resource are available				
Send DSA-REQ	--DSA-REQ-->	Receive / Send DSA-REQ		
Set Timers T7 and T14		Check whether service flow QoS can be supported on access link (RS~SS)		
		If the QoS can not be supported, reply DSX-RVD (CC=reject) to SS		
Receive DSX-RVD (CC=reject)	<--DSX-RVD--	Send DSX-RVD (CC=reject)		
			--DSA-REQ-->	Receive DSA-REQ
Timer T14 Stops	<--DSX-RVD--	Receive / Send DSX-RVD	<--DSX-RVD--	DSA-REQ integrity valid
				Check whether SS is authorized for Service
				Check whether service flow QoS can be supported on relay link (BS~RS)
				Create SFID
				If uplink AdmittedQoSParamSet is non-null, map service flow to CID
				If uplink ActiveQoSParamSet is non-null, Enable reception of data on new uplink service flow
Receive DSA-RSP	<--DSA-RSP--	Receive / Send DSA-RSP	<--DSA-RSP--	Send DSA-RSP
Timer T7 Stops				
If ActiveQoSParamSet is non-null, Enable transmission and/or reception of data on new service flow				
Send DSA-ACK	--DSA-ACK-->	Receive / Send DSA-ACK	--DSA-ACK-->	Receive DSA-ACK
		Update service flow on access link (RS~SS)		If downlink ActiveQoSParamSet is non-null, Enable transmission of data on new downlink service flow