Source:	SA5 (Telecom Management)
Title:	WID WT Delta synchronization between IRP Manager and IRP Agent
Document for:	Approval
Agenda Item:	7.5.3

3GPP TSG-SA5 (Telecom Management)   **S5-050284**
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

Work Item Description

Title:	**Delta synchronization between IRP Manager and IRP Agent**
Acronym:	**OAM7-NIM**
Unique_ID:	**35048**

1   3GPP Work Area

X	Radio Access
X	Core Network
	Services

2   Linked work items

still to be defined:

OAM&P (Operations, Administration, Maintenance & Provisioning) (Feature: OAM)

WI	Unique_ID
OAM7	35041

Network Infrastructure Management (BB: OAM-NIM)

WI	Unique_ID
OAM7-NIM	35042

3   Justification

If the connection between the IRPManager and the IRPAgent was lost, then currently the only way for the IRPManager to synchronize again after re-establishment of the connection is to synchronize the complete data.
This can be a huge amount of data, both and individually for Configuration Management (CM) and Fault Management (FM) data, even if only very little data actually has changed in the meantime. This puts an unnecessary load on both the IRPManager and the IRPAgent and can take a long time – even if there was only a short interruptions of the connection.

Other cases where synchronization is needed are e.g.:

- IRPAgent does not send notifications;
- IRPManager does not evaluate notifications;
- loss of notifications on IRPManager side because of system problems;
- inability to generate notifications on IRPAgent side because of system problems.

A mechanism allowing to synchronize only the changed, i.e. new/modified/deleted data, will be beneficial.

4   Objective

a) Identify data which requires synchronization of only changed data
b) Define requirements for synchronization of only changed data
c) Define methods to allow synchronization of only changed data, both for CM and FM
d) Define methods to allow synchronization of only changed data other than CM and FM data

5   Service Aspects
None
6   MMI-Aspects
None
7   Charging Aspects
None
8   Security Aspects
None
9   Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes			X	X	
No	X	X			X
Don't know					

10   Expected Output and Time scale (to be updated at each plenary)

The result of this work might be a usage guide (TR).
Information produced within this work may eventually become consolidated into particular IRP specifications (TSs).

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 32.8xy	Usage Guide for Delta Synchronisation between IRP Manager and IRP Agent	SA5		09/2005	12/2005	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32.111-n		Add capability for delta synchronization between IRP Manager and IRP Agent		12/2005	Impact on these TSs depends on SA5's chosen functionality and function split	
32.60n		Add capability for delta synchronization between IRP Manager and IRP Agent		12/2005	Impact on these TSs depends on SA5's chosen functionality and function split	
Note:	For n = 1 to 5					

11   Work item rapporteur(s)
Clemens SUERBAUM, Siemens (clemens.suerbaum@siemens.com)
12   Work item leadership
SA5
13   Supporting Companies
Siemens, Huawei, ZTE, Motorola, Alcatel, China Mobile
14   Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	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)

still to be defined:

Network Infrastructure Management (BB: OAM-NIM)

WI	Unique_ID
OAM7-NIM	35042