

3GPP TSG_CN / SMG3
Plenary Meeting #7, Madrid, Spain
13th – 15th March 2000.

Tdoc NP-000060

Source: CN OSA ADHOC CONVEYOR
Title: REPORT CN OSA AD HOC #03, TILBURG, THE NETHERLANDS
Agenda item: 5.5
Document for: INFORMATION

TSG_CN OSA#03/ETSI SPAN3
Tilburg, The Netherlands
6 – 7 January 2000

N-OSA-00027

Source: MCC
Franco.Settimo@etsi.fr
Title: Draft meeting report

1 Opening of the meeting and approval of the agenda

Yun Chao Hu welcomed participants on behalf of Ericsson and asked for approval of the agenda. Frans Haerens indicated his wish to discuss better the working methodology, since this is considered to be a high priority item. An appropriate Agenda item (5) was consequently defined.

The meeting was chaired by Yun Chao Hu (Ericsson) for the first day and Frans Haerens (Alcatel) for the second day.

2 Introduction & grouping of contributions

3 Reports

3.1 Report back from CN Plenary meeting, Nice (December 1999)

The Chairman reported about the major outcomes. CN debated at length the scope of OSA, in particular whether it is realistic to achieve results by next March. It was eventually agreed to continue and assess the results in March: the Plenary will decide whether OSA will be a part of Release 99 or moved to Release 2000. Cooperation with SPAN3 was encouraged from 3GPP. Some concerns with ITU-T was raised since there is no formal relationship between 3GPP and ITU-T. CN agreed in the parallel evolution of Stage 2 and Stage 3 specification. The CN will decide in March whether the OSA ad hoc group will be integrated in some other technical body.

Action Point to Franco Settimo: OSA ad hoc meeting invitations have to be sent to S2 and to N2 as well.

Frans Haerens, SPAN 3 Chairman, reported that ITU-T recommended that ETSI have a leading role in the specification production. It was agreed at the last SG11 December 1999 meeting that the API question for the ITU next study period, should mention in a roadmap the ETSI protocol work, avoiding duplication of protocol

work in ETSI (3GPP, SPAN3) and ITU-T. This will entail that also US and Japan can benefit from this effort, provided the information is made openly available on the ETSI server. It was agreed by the organisations present that the ETSI protocol specification work on API should only be defined in ETSI and should be referenced by the relevant ITU-T recommendations.

Frans Haerens has created a folder in the SPAN area and requested that the OSA documents are copied there. This will be arranged internally in ETSI (**Action Point** to Franco Settimo). An email was sent to SPAN3 delegates, in order to request whether there are objections against public availability of the API material.

3.2 Report back from ITU-T SG11 meeting (December 1999)

BT made a brief report. It was agreed to create two parts of the draft Specification on API. At the next meeting of Question 1/11 references to ETSI standards will be introduced, draft text will be removed, keeping it as a place holder for further achievements.

4 Input liaison statements

Tdoc OSA-00003

Received from S2. Lack of charging support for GPRS and SMS was identified by S2. Ericsson will present a contribution quickly. No further action required (at least for the moment, but Marconi noted that future work will be based of further progress from S2). Noted.

Tdoc OSA-00004

LS received from S2. Noted.

Tdoc OSA-00006

LS from S3 on security in VHE-OSA, presented by Ericsson. An LS in response (022) will be drafted by Ericsson, and will cope with the missing issues highlighted in the discussion.

Frans Haerens noted that the security aspects of the User Agents connected with the fixed networks need to be further investigated.

Tdoc OSA-00007

The Chairman observed that probably the meaning of capability negotiation mechanism in the original LS from OSA ad hoc group was misunderstood. The LS was noted but it was agreed that a protocol version negotiation mechanism (at least for registration and discovery interfaces) is needed: this conclusion differs from the S2 conclusion.

Tdoc OSA-00008

LS from S2 on on the interaction between MMS, SAT, MExE, non-MExE terminals and CAMEL/Open Service Architecture, sent to N1, in copy to OSA ad hoc group. MMS as a service requirement for OSA cannot be included in Release 99: this has impact on the Message Transfer SCF.

Tdoc OSA-00009

Response from S2 to an LS on security issues. It identifies a further level of security, not yet addressed. Observed that it was already discussed in Geneva, and consequently noted. Frans Haerens observed that there is some security overlap between 3GPP and IETF (e.g. SIP). Proper alignment is required by other groups.

Tdoc OSA-00011

LS sent in copy to OSA ad hoc. Noted.

5 Working methodology - ETSI SPAN 3 and 3GPP CN OSA

Tdoc OSA-00010

Presented for information by Lucent who was requested to elaborate a comparison between Parlay API and the 3GPP OSA. With reference to the Tables in the document, Marconi noted that Call Gapping is one of the adopted methods to cope with Call Overload in Release 99 (specific CRs to 23.078 and 29.078 will be discussed in Kyoto, N2A meeting).

Lucent aims at maintaining the document as a living document to include v. 2.0 of Parlay. It could be an informative annex to Part 2 of the SPAN3 output. Lucent volunteered in maintaining it as such.

N.B. - *Parlay*: an industry initiative to abstract Service Creation from the Network Functionality, similar to what is being done in the OSA ad hoc group, but not publicly available.

Tdoc OSA-00014

The document *Proposed methodology for 3GPP VHE/OSA for Stage 3* was presented by Ericsson. UML is the methodology proposed to specify class diagrams and OMG IDL is proposed as the interface definition language. The References section needs to be revised (*in* parameters passed by value and *out* parameters by reference): Ericsson volunteered to do it. The example provided at the end of the document illustrates the proposed methodology. Spaces not allowed in the naming scheme: it is implicit, but a textual hint would be helpful (Ericsson volunteered to add it). The package name could be shortened, by removing VHE, limiting the reference to OSA.

Tdoc OSA-00020

An informative document titled "Discussion of the relationship between use cases, Sequence flows, State transition diagrams and SDLs with the respect of the behaviour Requirement Documenting" was presented by Lucent. SDL is not currently part of UML but this does not seem to be a major issue for concern. The popularity of SDL in the telecommunication context is well known. Sequence Diagrams is a consolidated technique, but difficult to use it as an exclusive tool for complex system. State Transition Diagrams can have shortcomings, related to usage of the concept of superstate (however it was noted that it might be avoided or used cautiously).

The document raised some detailed discussion on the available tools, but the Chairman noted that before choosing a tool, the modelling methodology needs to be selected.

State Transition Diagram vs SDL: the latter was explicitly supported by Nokia, but it was observed that, for example, CAMEL cannot be taken as a significant example of SDL implementation. As a matter of fact, SDL diagrams are proposed, approved, modified but never simulated and validated. It was remarked that Message Sequence Charts diagrams are necessary to validate protocols. None of the two methodologies seems to be in advantage, in terms of effort needed for completing the work by next March. By that time, a description that can be simulated needs to be achieved. Hence, a decision is necessary immediately because at the next meeting, actual contributions, based on an agreed methodology, must be discussed.

Concerning documentation, there will be one Master API Document: SPAN3 will take the responsibility of this document (joint effort). Furthermore, five mapping documents will be produced:

- API for INAP (SPAN3 prime responsible)
- API for CAP (the joint activity will take responsibility of this document provided that it is a subset of the INAP)
- API for WAP (joint activity)
- API for MAP (joint activity)
- API for SAT (SIM Application Toolkit).

During the second meeting day, Frans Haerens expressed his intention to include in the SPAN 3 the material from Parlay Stage 2. The reference person for this will be Richard Stretch (BT) but Chelo Abarca (Alcatel) volunteered in assisting in this job.

The issue of SDL or State Transition Model was raised again and it was eventually decided to use SDL to describe valid and invalid behaviour. This will allow simulation and validation of the protocol behaviour. Marconi asked whether this will compromise (because of the amount of work) meeting the targets for March. Frans Haerens replied that the deadline needs to be respected, through an additional development effort. Decisions on

modelling are urgent and strategic because the intention of Frans is that future meetings are spent mostly for Stage 3 implementation. Only if the results achieved by March are not completely satisfactory, the produced diagrams will be classified as informative annex, with a disclaimer that indicates that further work is needed. Nokia expressed their preference for SDL and the recommendation that the work is performed mostly within the OSA ad hoc group. The usefulness of State Transition Tables as a complement to explained SDL diagrams was however recognised: Nokia agreed, suggesting that SDL is the normative reference method and that Transition Tables represent some kind of informative support material.

This position was agreed. The event that support Tables can be generated by SDLs would be very useful but need to be verified with Telelogic. Lucent was requested to devote some manpower to the SDL implementation, taking into account that Alcatel (Chelo Abarca) will take care of the framework in general. The SDLs should be delivered also in pdf version. Summarising:

- SDLs will be normative
- State diagrams will appear at least in the main text
- State transition tables will be included when they are automatically generated from SDLs
- Message Sequence Charts should be included as a result of the simulation.

For the OSA ad hoc#4 meeting (end of January), the first priority of the work should be based on the inputs from the Stage 2 3GPP to be incorporated into the Main Document, which will contain the complete Parlay Phase 2 specifications, if available. It was decided that the following topics will be discussed at the OSA ad hoc#4 meeting: framework, capability features, Call Control, User Interaction, Mobility Management.

Ericsson volunteered to provide the State Transition Diagrams.

6 Contributions related to Release 99

Tdoc OSA-00012

Stage 2 document, presented by Ericsson. Some changes to Sect. 5 were reported. Among these: the concept of Authorisation has been better clarified. Route Call Origination was removed. Some Sequence Diagrams for Call Control were added. A new Service Capability Requirement, concerning Load Balancing, was added. Annex B, no longer a correct example, was removed.

An update is expected during the next S2 meeting, Mexico, and will be sent to MCC in time for discussing it during the next OSA ad hoc meeting, taking place at the end of the same week.

Tdoc OSA-00013

The most recent changes to Parlay Phase 2 were presented by Ericsson. No action specifically required.

Tdoc OSA-00016

Parlay Phase 2 requirements (ver 0.05) were illustrated by BT. Vers 0.06 should be produced in a short time and put on the web site. Noted.

Tdoc OSA-00018

The document was noted as a good source of information and a basis for the OSA future work, e.g. the Master Document. It is expected to include it in the Master document before the next meeting.

Tdoc OSA-00019

Document SPAN- EN SPAN3 0-3070 Part 2 Mapping INAP to the API for Access to Third Service Applications was illustrated by BT.

The Call Flow diagram originated a lengthy discussion. At the end, it was agreed that the protocol description will be from a gateway perspective towards an API interface, ignoring the network side and leaving for further study the definition of the network primitives.

6.1 Framework SCF

Tdoc OSA-00015

Ericsson presented a text proposal for Call Control framework and User Interaction. Diagrams, data definitions and IDLs were provided. Some inconsistencies in the figures were identified and corrected.

It was agreed that the document will include all the Stage 3 information, for convenience of consultation. After the Class Diagrams, State transition diagrams and SDL diagrams are necessary and will be added for every interface class. Other additions were identified and should be implemented for the next meeting. Ericsson also volunteered to provide the Call Control definition for the Main Document and Alcatel (Chelo) will provide the framework. User Interaction and Mobility Management will be provided by Ericsson. Charging was not assigned, for the moment.

Separated documents for CAP and INAP will be provided. It was agreed that the INAP mapping should be a superset of the CAP mapping assuring total convergence between fixed and mobile networks. France Telecom and Nokia supported separation already for Release 99, since CAP is very specific to 3GPP. Merging documents might be reconsidered in the future. Frans Harens clarified that INAP CS2 already includes CAMEL, although Nokia expressed some doubt about full inclusion.

At the next meeting mapping for CAP and WAP, MAP etc, if available, will be considered. If not available, the INAP work will be progressed in SPAN3 (beginning of February) for CS2 and CS3 and the results will be made available for the Antwerp OSA ad hoc#5 meeting.

6.2 Call Control SCF

Tdoc OSA00017

A set of Parlay Stage 2 documents were briefly illustrated by BT. Connectivity Management does not seem essential to Release 99, maybe for Release 2000. SPAN3 will take care of Connectivity Management based on H.323 and IETF network (e.g. for differentiated services) architectures after March 2000, not at the next SPAN 3 meeting.

6.3 Charging SCF

6.4 User Interaction SCF

6.5 Terminal Capability SCF

6.6 User Location SCF

6.7 User Status SCF

6.8 Message Transfer SCF

6.9 Data Download SCF

6.10 User Profile Management SCF

7 Any other business

8 Approval of output documents (Liaison statements, and formal endorsement of CRs already agreed under earlier agenda items)

8.1 Output liaison statements

Tdoc OSA-00022

Response LS on Security issues, prepared by Ericsson, in agreement with the decision taken during the first day of the meeting.

Agreed but the last sentence is to be cancelled.

Tdoc OSA-00024

Presented by Marconi and approved.

8.2 Output Documents

Tdoc OSA-00023

Presented by Ericsson, who revised Tdoc 014 (Proposed methodology for 3GPP VHE/OSA stage3) in agreement with yesterday's decisions. This document will be incorporated in the main document as one of the first sections.

The meeting agreed that the State Transition Diagrams and the SDL diagrams need to be provided. It was also noted that these diagrams are not available for most SCFs from the Parlay documents (Version 2.0). However, it is noted that the OSA activity needs to be focused on the provisioning of the State Diagrams (as normative part of the document) and if time permits provide the SDL diagrams. In case the SDL is complete it will overrule the STDs, if not they will be as an informative appendix.

In release 2000, the SDLs certainly will have to be completed for all SCFs and be normative, overruling the STDs.

9 Review of dates and hosts for future meetings

Two more meetings for the OSA ad hoc, namely #4 and #5, have been planned so far. The next one will take place in **Sophia Antipolis (27 and 28 January)**, hosted by ETSI. The other one will be hosted by Alcatel in **Antwerp (28, 29 Feb and 1 March)**. Further meetings in the year 2000 are subject to CN decision.

In Annex D the draft agenda for the OSA ad-hoc#4 meeting is included.

For SPAN 3 the approval of the API work is proposed to be held during the meeting scheduled for 20 and 21 March 2000.

10 Closing of the meeting

The Chairman expressed his appreciation to the Host for the meeting organisation.

A N N E X A

Source: TSG-N OSA Convenor

Yun-Chao.Hu@era.ericsson.se

Title: Proposed meeting agenda

- 1 Opening of the meeting and approval of the agenda (9:00 Thursday)**
- 2 Introduction & grouping of contributions**
- 3 Reports**
 - 3.1 Report back from CN Plenary meeting, Nice (December 1999)
- 4 Input liaison statements: allocation to subgroups as appropriate**
- 5 Contributions related to Release 99**
 - 5.1 Framework SCF
 - 5.2 Call Control SCF
 - 5.3 Charging SCF
 - 5.4 User Interaction SCF
 - 5.5 Terminal Capability SCF
 - 5.6 User Location SCF
 - 5.7 User Status SCF
 - 5.8 Message Transfer SCF
 - 5.9 Data Download SCF
 - 5.10 User Profile Management SCF
- 6 Any other business**
- 7 Approval of output documents (Liaison statements, and formal endorsement of CRs already agreed under earlier agenda items)**
 - 7.1 Output liaison statements
 - 7.2 Output Documents
- 8 Review of dates and hosts for future meetings**
- 9 Closing of the meeting (16:00 Friday)**

The proposed time plan is attached; a separate contribution showing the proposed allocation of documents to agenda items will be tabled at the beginning of the meeting.

	Thursday	Friday
9:00 Session 1 10:30	Opening business (1, 2, 3) Input liaison statements (4)	Input Contributions (5)
Break		
11:00 Session 2 12:30	Input Contributions (5)	Any Other Business (6)
Lunch		
14:00 Session 3 15:30	Input Contributions (5)	Approval Output Documents (7) Closing Business (8, 9)
Break		
16:00 Session 4 17:30	Input Contributions (5)	

ANNEX B
List of Participants

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ANNEX C

3GPP TSG_CN OSA#03

OSA Ad-hoc Meeting, *Tilburg*, Holland

6 ÷ 7 January, 2000

Tdoc # NP- OSA-00	Title	Source	Status
001	Draft Agenda	Chairman	Revised
002	Tdoc allocation to agenda items	Chairman	Noted
003	Answer to "Liaison Statement on online charging support in VHE/OSA stage2"	TSG S2	Noted
004	Answer to "Liaison Statement on VHE/OSA principles"	TSG-S2	Noted
005	Answer to "Liaison Statement on online charging support in VHE/OSA stage2"	TSG S2	Withdrawn
006	Liaison Statement on security issues in VHE/OSA	TSG S3	LS drafted (022)
007	Response to Liaison Statement on mandatory requirement for a capability negotiation mechanism for OSA	TSG S2	Noted
008	Liaison Statement response to 'Liaison statement on the interaction between MMS, SAT, MExE, non-MExE terminals and Camel/Open Service Architecture'	TSG S2	
009	Response to Liaison Statement on security issues in VHE/OSA	TSG S2	Noted
010	A Comparison of the ETSI SPAN3 API and the OSA API	Lucent	
011	Response to liaison statement on the interaction between MMS, SAT, MExE, non-MExE terminals and Camel/Open Service Architecture	T3	Noted
012	Revised Stage2 23.127 v1.1.1	Stage 2 Editor	
013	Changes to PARLAY	Ericsson	Noted
014	Proposed methodology for 3GPP VHE/OSA for Stage 3	Ericsson	Revised to 023
015	Proposed text for Call Control framework and User Interaction	Ericsson	
016	Parlay API –Phase 2 Requirements	BT	Noted
017	Set of 5 documents	BT	
018	SPAN- EN SPAN3 0-3070 Part 1	BT	Noted
019	SPAN- EN SPAN3 0-3070 Part 2	BT	
020	Discussion of the relationship between use causes, Sequence flows, State transition diagrams and SDLs with the respect of the behaviour Requirement Documenting	Lucent Technologies	
021	CN report	MCC	
022	Response LS to S3	Ericsson	Approved
023	Revision of 014	Ericsson	Approved
024	LS to S2 on Annex A of VHE/OSA Stage 2 (3G TS 23.127 v 1.1.1)	Marconi	Approved

A N N E X D

Source: TSG-N OSA Convenor

frans.haerens@alcatel.be

**Title: Proposed agenda for the OSA ad hoc#4 meeting on 27 and 28
January 2000**

- 1 Opening of the meeting and approval of the agenda (9:30 Thursday)**
- 2 Introduction & grouping of contributions**
- 3 Reports**
- 4 Input liaison statements**
- 5 Consideration on contributions related to Release 99 in accordance with the agreements of the OSA ad hoc#3 meeting**
 - 5.1 Framework SCF**
 - 5.2 Call Control SCF**
 - 5.3 Charging SCF**
 - 5.4 User Interaction SCF**
 - 5.5 Terminal Capability SCF**
 - 5.6 User Location SCF**
 - 5.7 User Status SCF**
 - 5.8 Message Transfer SCF**
 - 5.9 Data Download SCF**
 - 5.10 User Profile Management SCF**
- 6 SDL Modelling (4th session of 27 January 2000)**
- 7 API Mapping**
- 8 Any other business**
- 9 Approval of output documents**
 - 9.1 Output liaison statements**
 - 9.2 Output Documents**
- 10 Review of dates and hosts for future meetings**
- 11 Closing of the meeting (16:00 Friday)**

The proposed time plan is attached; a separate contribution showing the proposed allocation of documents to agenda items will be tabled at the beginning of the meeting.

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9:00 Session 1 10:30	Opening business (1, 2, 3) Input liaison statements (4) Input contributions (5)	Input Contributions (5)
Break		
11:00 Session 2 12:30	Input Contributions (5)	Input Contributions (5)
Lunch		
14:00 Session 3 15:30	Input Contributions (5)	API Mapping (7) Approval of Output Documents (9) Closing Business (10)
Break		
16:00 Session 4 17:30	Input Contributions (5)	