INTERNATIONAL TELECOMMUNICATION UNION

# TELECOMMUNICATION STANDARDIZATION SECTOR

# NGN-JCA 'TECHNICAL AND STRATEGIC REVIEW'

# **Doc 32**

**English only** 

**Original: English** 

STUDY PERIOD 2009-2012

Source:	NGN-GSI TSR Coordinator	
Title:	NGN-GSI TSR Meeting Report	

# 1. Items for JCA

Interoperability issue.

# 2. Key Conclusions

- Input documents which widely impacts on the NGN study have been presented and comments were received.
- Harmonization with following subjects has been identified:
  - o NGN Interoperability
  - Cloud computing
  - o Internet of Things
  - o Mobility Management

# 3. Summary of the TSR Meeting of 6<sup>th</sup> Sept. 2010

## 3.1 Approval of Agenda

The agenda, contained in TSR Doc-031 was approved without modification.

# 3.2 Document Location

The TSR Document location was confirmed to be:

http://www.itu.int/ITU-T/studygroups/com13/ngnjca/ngn-gsi-tsr/index.html

# 3.3 Review of input documents and liaisons requiring co-ordination

The meeting agreed to the TSR co-ordinator's request for presentation of the following input documents which request further coordination with NGN-GSI.

# 1) NGN interoperability issue

The following four documents were introduced consecutively.

	Number	Source	Title	Question
	153-	SG11	SG11 activity on conformance and interoperability	All ITU-T
Contact:		Duo LIU	Tel: +86 10 68094158	
		CATR of MIIT	Fax: +86 10 68034801	
		China	Email: liuduo@catr.cn	

GEN/13		issues	Study Groups, TSAG
439- GEN/NG N-GSI	Vice-chair of SG11	Discussion on creation new Recommendations for NGN end-to-end services testing	8, 9, 10/11
160- GEN/13	SG11	Reply LS for Definition of Multi-vendor interoperability	Q19/13, Q14/13, Q12/13, Q5/13, Q2/13

These three documents are regarding the SG11 activities on interoperability issues. The existing standardization SG11 body is directed to implement the purpose which is pointed out in Resolution 76 WTSA-08. During the SG11 activity in this study period some work has been progressed:

- Q.NGN interoperability would be a frame work Recommendation to specify the general aspect of NGN interoperability testing and NGN conformance testing;
- Q.VoIP conformance testing would specify the detailed technical specification for VoIP conformance testing based on ITU-T Recommendation Q.3402
- Q.3904, specifies the global approach of IMS testing based on the exist ITU and ETSI specifications and could be used for different interoperability IMS events (are expected to be approved after April 2010 SG11 meeting);
- SG11 have not, at this stage, identified the need for changes in Y.101 concerning interoperability testing definitions.

SG11 would like to collaborate to consider the harmonization with these draft Recommendations and draft Recommendations on conformance and interoperability issues which are under development in different Study Groups of ITU-T. And hope to harmonize and/or integrate the separate discussion in Q.5/13 and Q.8,9,10/11 relating to physical architecture for NGN interoperability.

During the TSR, these three documents were kindly presented by Vice-chair of SG11.

Number	Source	Title	Question
<u>167-</u> <u>GEN/13</u>	Rapporteur of Q.5/13	Rationalization of NGN interoperability projects between SG11 and SG13	2, 5/13, 8,9, 10,11/11

This document is regarding Rationalization of NGN interoperability projects between SG11 and SG13. It introduces that interoperability is primarily a protocol issue and Draft Y.phy\_arch\_ngn – Physical architecture of NGN with interoperability points is exactly the same area as that being covered by SG11 in Q.NGN Interoperability. Thus, there is overlap between the SG13 document and the SG11 document. So Q5/13 suggests that the transferral of NGN Interoperability work from SG13 to SG11which would avoid further problems if implemented prior to any further progression of the respective activities in either Study Group.

- 2 -

- 3 -

During the TSR, this document was kindly presented by Q5/13 Rapporteur.

After these four documents were presented, participants discussed this issue as followings:

- The interoperability issue is a very important subject;
- SG11 chairman welcome the transfer of Draft Y.phy\_arch\_ngn from SG13 to SG11 and think that SG11 be a better and right place to develop physical architecture for interoperability;
- The definition of multi-vendor interoperability will depend on SG11's requirement.
- Most participants support the transfer.
- Indian delegates think that Draft Y.phy\_arch\_ngn should be kept in Q5/13.

Based on the above discussion, it is recommended to report this issue to NGN- JCA meeting for the proposal of transfer the Draft Y.phy\_arch\_ngn from SG13 to SG11 and the Indian's opinion.

#### 2) Cloud computing issue

Number	Source	Title	Question
164- GEN/13	Focus Group on Cloud Computing	First meeting of Focus Group on Cloud Computing (FG Cloud)	QALL/13
TD 415 (NGN- GSI)	Rapporteur of Q.23/13	Proposed skeleton of Guideline Document for Cloud Computing Activities in ITU-T SG13	Q.23/13

These two documents are regarding cloud computing studies in FG and Q23/13. In the last SG13 meeting, Q.23/13 was established for promoting and supporting the development of new Recommendations on Cloud Computing and to coordinate with relevant Questions in ITU-T SG13 as well as other relevant SGs and SDOs. It is also agreed that Q.23/13 will develop the guideline of Cloud Computing activities for ITU-T SG13.

During TSR, these two documents were kindly presented by Q23/13 Rapporteur. And Q23/13 Rapporteur will send emails to other Rapporteurs to collect what have been done by other questions and their ideas.

#### 3) Internet of Things issue

Number	Source	Title	Question
C-622	ETRI	Proposal for a new standardization initiative for the Internet of Things (IoT)	7/13

This contribution proposes that ITU-T SG 13 take Internet of Things standardization initiative and Q7/13 make its study plan and initiate relevant work items in terms of IPv6.

During the TSR, this contribution is well noted and all Questions were recommended to consider IoT studies.

#### 4) Other input liaisons

Number	Source	Title	Question
152-	Study Group 11	Consent of new Recommendation Q.3040 IPTV	Q14/13,

- 4 -			
GEN/13		Signalling Control Plane Architecture	Q12/13, Q5/13, Q3/13, Q1/13
154- GEN/13	ITU-T Study Group 12	iLS : One new and two revised SG 12 Questions	QALL/13
155- GEN/13	ITU-T Study Group 15	Consent of Recommendation G.9971 "Requirements of transport functions in IP home networks"	Q13/13, Q12/13, Q5/13, Q4/13
156- GEN/13	ITU-T Study Group 15	New versions of the access network transport (ANT) standardization overview and work plan	Q5/13, Q1/13
157- GEN/13	3GPP TSG-SA5	Reply to ITU-T on "Sharing draft Recommendations ITU-T Y.2233Rev.1 and Y.2111Rev.1Amd" (reply to COM 13-LS 92 Rev.1)	Q4/13, Q3/13
158- GEN/13	ITU-T Study Group 15	SG15 OTNT standardization work plan	QALL/13
159- GEN/13	ITU-T Focus Group on Smart Grid	iLS on request for input from Study Groups regarding which Recommendations have Smart Grid aspects	QALL/13
161- GEN/13	ISO/IEC JTC 1/WG 7	Establishment of JTC 1 Working Group 7 on Sensor Networks	Q5/13, Q3/13, Q2/13
162- GEN/13	3GPP TSG SA	iLS on Study on SSO Application Security for IMS - based on SIP Digest	
163- GEN/13			Q5/13, Q3/13
165- GEN/13	JCA-NID	LS to SG13 on JTC 1 WG 7 and possible duplication with SG 13 Y.2221	Q5/13, Q3/13
166- GEN/13	Q.6/17 and Q.7/17 Rapporteur Groups	LS on IPTV security work	Q12/13, Q5/13, Q1/13
168- GEN/13	3GPP SA5	Reply to ITU-T on "Sharing draft Recommendations ITU-T Y.2233Rev.1 and Y.2111Rev.1Amd" - Second step	Q4/13, Q3/13
169- GEN/13	ISO/IEC JTC1/SC29/WG1 1	LS from SC 29/WG 11 to ITU-T SG 13 on Dynamic Adaptive Streaming over HTTP	Q12/13, Q5/13, Q3/13
170- GEN/13	ITU-T Study Group 16	LS to All ITU-T SGs, TSAG, ITU-R SG 6, ITU-D SG2, IETF RAI, ISO/IEC JTC 1/SC 29, IMTC, JCA-ICT&CC, JCA-AHF on approval of a new Question on telepresence systems	QALL/13

171- GEN/13	ITU-T Study Group 16	LS to JCA-HN on overview of home network study	Q12/13, Q5/13, Q4/13
172-	ISO/IEC JTC	iLS: Liaison Statement from SC 29/WG 11 to ITU-T SG 13 on MPEG Media Transport (MMT) SC 29/WG 11 N 11543, Attachments: SC 29 N 11453	Q5/13,
GEN/13	1/SC 29/WG 11		Q3/13

These input liaisons inform us that what they are doing and some replies to our output liaisons.

During the TSR, TSR coordinator presented these documents and the related questions were recommended to consider these document.

## 3.4 Review schedule of joint Rapporteurs Meetings

TSR co-ordinator drew attention to the joint meetings carefully that Rapporteurs who have the joint meeting plan inform TSB asap.

# 4 Summary of the TSR Meeting of 14<sup>th</sup> Sept. 2010

The agenda is revised as TSR Doc-031r1 by adding cloud computing issue.

#### 4.1 Mobility management issues

Mobility management related questions of Study Group 13 had a joint meeting as a part of NGN-TSR meeting on 14th September 2010 to discuss mobility management coordination. Q.1/13 rapporteur, Mr. Imanaka, chaired the meeting.

The agenda for the meeting is to be found in TD 520 Rev.1 (NGN-GSI).

## 1) Goals of the meeting

The group met to progress the work on the following objectives:

- To discuss the mapping of Mobility Management (MM) roadmap
- To discuss the relation between mobility management work and newly proposed work such as mobile IPTV
- To decide future work plan on MM coordination.

#### 2) Summary of the results

- Reviewed the latest version of MM-roadmap document
  - No update was suggested at this meeting.
  - The latest version of MM-roadmap document for continuing work is to be found in TD 515 Rev.1 (NGN-GSI).
- Discussed the mobility-related application over the mobility management functions.
  - It was agreed not to include mobile IPTV documents, Y.miptv-scen of Q.14/13 and Y.miptv-req of Q.3/14, and mobile P2P document, Y.mobileP2P of Q.22/13, into MM-roadmap document in this stage.

## 3) Detailed results

	~	
-	٦.	

# (1) Review of Input documents

#### • Review MM-roadmap

TD146 (GEN/13)	Output Mobility Management roadmap document	Q.1/13 Rapporteur
TD515 (NGN-GSI)	Output Mobility Management roadmap document	Q.1/13 Rapporteur

These TDs were the mobility management roadmap document (MM-roadmap). TD146 (GEN/13) was the output document from the last joint meeting on mobility management coordination at the SG13 meeting in April 2010, and TD515 (NGN-GSI) is the latest version MM-roadmap, which reflected the merging Questions. This was briefly reviewed and some updates from Q.10/13 rapporteur were suggested in this meeting. TD515 Rev.1 (NGN-GSI) was updated version of MM roadmap.

#### • Discussing mobility related applications

C880 (Q14)	Proposed service scenarios for N-screen IPTV over FMC	ETRI
C845 (Q14)	Mobile IPTV deployment scenario (for Y.miptv-scn)	ETRI
C739 (Q3)	Proposed modification of Draft Recommendation Y.miptv-req	ETRI
C831 (Q3)	Proposed text of Draft Recommendation Y.miptv-req, Functional Requirements of Mobile IPTV (July 2010)	ETRI
<del>C782 (Q5)</del> Withdrawn	Proposal for new work item of Y.xyz, 'Interworking Architectures between NGN and 3GPP'	ZTE
C698 (Q22)	Proposed Charging Strategies for Interworking between WLAN and WiMAX	Korea (Republic of)
C603 (Q22)	Mobile P2P Functional Architecture	KT Corp.

These documents were the contributions which proposed new mobility-related applications. To allocate these new items into MM-roadmap document, rapporteurs informed us the latest status and the discussion results at their Questions. Followings were the comments from participants.

- C880 (Q.14/13): The proposed "N-screen IPTV" was included in Y.sof as a use case of FMC. The detail use case should be discussed further. The Y.sof is planned to be consented at the next SG13 meeting.
- C845 (Q.14/13), C739 and C831 (Q.3/13): These were related to "mobile IPTV" service. In this moment, Y.miptv-scen and Y.miptv-req were not included in MM roadmap document because the definition was not clear.

- C698 (Q.22/13): Proposals of this contribution were reflected into Y.MM-WAW, which was already allocated in MM roadmap document. Regarding accounting and charging, it was suggested to take into account Y.2233 at the next Q.22/13 discussion.
- iv. C603 (Q.22/13): It was informed that Q.22 agreed to initiate a new draft Recommendation Y.mobileP2P, and Q.22 rapporteurs invited contributions or participants for further discussion since it was very beginning stage.

## • Future coordination work

Chairman of this meeting, Q.1/13 rapporteur, proposed that any further joint meeting on mobility management coordination would not be needed if no big issues arise, and the MM-roadmap would be reviewed and discussed at the next NGN-TSR meeting. There are no objections at the meeting, and the discussion on MM-related coordination would be held at NGN-TSR in the next NGN-GSI January 2011.

## (2) Output documents

Location of Docs.	Document No.	Title
None		

#### (3) Outgoing Liaisons

Location of Docs.	Title	То
None		

#### 4) Future meeting plan

- No joint meeting
- Discussion on coordination of mobility management and MM-roadmap at the NGN-TSR meeting during the next NGN-GSI meeting in 18-28 January 2011 (Geneva, Switzerland).

Note: If any big issues for MM-related coordination arise before the next NGN-GSI meeting, a joint meeting among MM-related questions is arranged.

## 5) Work Plan

None

#### 6) Acknowledgements

The Q.1, 3, 4, 5, 8, 11 and 14/13 leaders would like to thank all participants for their hard work and support. In addition, Q.1/13 rapporteur would like to thank NGN-TSR coordinator, Ms, Duo Liu, for taking discussion time for MM-related coordination during the TSR session.

In addition, Mr. Hideo Imanaka as Q.1/13 rapporteur would like to terminate his role of rapporteur. The new Q.1/13 rapporteur will be determined at the next SG13 meeting in January 2011. Until then, Mr. Yoshinori Goto would be an acting rapporteur and he would lead the mobility management coordination work.

- 7 -

#### 4.2 Cloud computing issues

#### • TD 526/NGN-GSI: Guideline for Cloud Computing Activities in ITU-T SG13

This document has intent to provide basic guideline for the contributor and Rapporteur to handle the cloud computing issues in SG13 with two notes which are Note1: This document is not intended to be Recommendation or Supplement of ITU-T, and will be made public in another way (e.g. ITU-T Web site).Note2: Although this document is planned to be completed at January 2011, contributors are advised to follow this guideline from now on.

During the TSR, this document was kindly presented by Q23/13 Rapporteur. Some comments and clarifications were raised including followings:

- The necessity and the date of completion for this guideline document;
- If other Questions can handle new draft recommendations on Cloud Computing?
- The relationship with FG on Cloud Computing.

It is clarified that this guideline document does not limit other Questions to study related cloud computing issue, the date of completion should consider the FG time plan, Focus Group can't delay SG's work and should work for SGs. This guideline document is the first draft document and it is encouraged that all Rapporteurs and participates to involve the further development.

#### • TD 525/NGN-GSI: Revised Question Description of Question 23

This document is the revised Question 23's description. The changes include followings:

- Motivation: This Question is intended to <u>develop</u> new Recommendations on cloud computing and to coordinate with relevant Questions in ITU-T SG13 as well as other relevant SGs and SDOs.
- Questions: What is new impact on cloud computing from telecommunication perspectives?
- Tasks:
  - Identify classification of cloud based services and models from telecommunication perspectives and development of related new Recommendations
  - Identify challenges and directions for addressing these challenges for global expansion of cloud services beyond telecommunication environment and development of related new <u>Recommendations</u>
  - <u>Identify requirements, capabilities, use cases, and architecture of cloud computing from</u>
    <u>telecommunication perspectives and development of relevant new Recommendations in</u>
    <u>cooperation with relevant Questions</u>

During the TSR, this document was kindly presented by Q23/13 Rapporteur. Some comments and clarifications were raised including followings:

What is the relationship between Q23 and other existing questions on requirements, architecture, use cases, etc..?

**Deleted:** promote and support the development of

**Deleted:** such as Fixed Cloud, Personal Cloud, Mobile Cloud, etc.

- 8 -

What is the relationship between Q23 and FG for development new Recommendation? Should the description be changed after FG is finished and output documents of FG are distributed?

All related concerns were noted by TSR meeting. And participants were informed that Q23 will discuss this description on Wednesday morning, so it is recommended all participants to join their discussion. The final revised description of Q23 will be discussed at SG13 plenary meeting on Thursday afternoon.

#### 4.3 Any other Business

Chaesub LEE required that the final version of all candidate documents to be consented or approved and output liaison from SG13 should be ready by 18:00 on Wednesday.

#### 4.4 Next TSR meeting

Next January meeting is a normal SG13 meeting and SG11 will be held on the second week, so next TSR meeting will be at the last session on 17<sup>th</sup> January of 2011.

## 5 Closing

The rapporteurs and participants were thanked for their inputs and hard work. Special thanks to secretariat of ITU-T TSB on their hard and excellent work to properly prepared.

- 9 -