# Telecommunications and Information Exchange Between Systems ISO/IEC JTC 1/SC 6

Document Number:	N14023
Date:	2009-08-18
Replaces:	
Document Type:	Meeting report
Document Title:	Results of SC6/WG7 interim meeting with ITU-T Q.6/17 (February 2009)
Document Source:	SC 6/WG 7 Convenor
Project Number:	
Document Status:	For your information.
Action ID:	FYI
Due Date:	
No. of Pages:	21

ISO/IEC JTC1/SC6 Secretariat Ms. Jooran Lee, KSA (on behalf of KATS)

Korea Technology Center #701-7 Yeoksam-dong, Gangnam-gu, Seoul, 135-513, Republic of Korea;

Telephone: +82 2 6009 4808; Facsimile: +82 2 6009 4819; Email: jooran@kisi.or.kr

7TOK-25

Title: Results of SC6/WG7 interim meeting with ITU-T Q.6/17 (Feb. 2009)

Source: Convenor of JTC 1/SC 6/WG 7

JTC 1/SC 6/WG 7 and ITU-T Q.6/17 has been agreed to develop USN security framework as a common text standard for both standardization bodies. Based on the meeting agreements, SC 6/WG 7 had its interim Rapporteur meeting with ITU-T Q.6/17 in February 2009 in Geneva.

This document describes results of SC 6/WG 7 interim meeting with ITU-T Q.6/17 on security issues of USN framework and multicast. This document refers ITU-T SG17 meeting document TD 0212 Rev.5 as attached to this document. The major joint meeting result can be found in clause 4.1.2 of the TD 0212 Rev.5.

# STUDY GROUP 17 TD 0212 Rev.5

# TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2009-2012

**English only** 

**Original: English** 

**Question(s):** 6/17 Geneva, 11-20 February 2009

TEMPORARY DOCUMENT

**Source:** Rapporteur Q.6/17, Associate Rapporteur Q.6/17

**Title:** Report of Q.6/17 meeting

# 1 Question 6/17: Security Aspects of Ubiquitous Telecommunication Services

### 2 Rapporteurship

### 2.1 Rapporteur

Jong Hyun Baek
Korea Information Security Agency
78, Garak-Dong, Songpa-Gu, Seoul, Repubic of
Korea

Tel: +82 2 405 5330
Fax: +82 2 405 5219
Email: jhbaek@kisa.or.kr

#### 2.2 Associate Rapporteur

Yutaka Miyake
KDDI Corporation
2-1-15 Ohara, Fujimino-shi, Saitama 356-8502

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Japan

#### 3 Documents considered

# 3.1 Reports

Document Number	Source	Title
COM17-R40	Study Group 17	Report of the Plenary of Study Group 17, Security, Languages and Telecommunication Software (Geneva, 15-19 September 2008)
COM17-R42	Study Group 17	Report of Working Party 2/17, Telecommunication Security (Geneva, 15-19 September 2008)
TD 4152r2	Rapporteur of Q.9/17	Report of Q.9/17 meeting (Geneva, 15-19 September 2008)
TD 0027	Rapporteur of former Q.9/17	Q.6/17 meeting report (IPTV-GSI event, Geneva, 24-28 November 2008)

### 3.2 Recommendation already consented (11)

Question	Question Title	Existing Recommendation
6/17	Security Aspects of	X.1111, Framework of security technologies for home network
	Ubiquitous	X.1112, Device Certificate profile for the home network

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Telecommunication	X.1113, Guideline on user authentication mechanisms for home network
Services	service
	X.1114, Authorization framework for home network
	X.1121, Security framework for mobile end-to-end data communication
	X.1122, Guideline for implementing secure mobile systems based on PKI
	X.1123, Differentiated security service for secure mobile end-to-end data
	communication
	X.1124, Authentication architecture for mobile end-to-end data
	communication
	X.1125, Correlative reacting system in mobile network
	X.1171(draft), Threats and requirements for protection of personally
	identifiable information in applications using tag-based identification
	X.1191(draft), Functional requirements and architecture for IPTV
	security aspects

# 3.3 Contributions (21)

The following twenty one O.6/17 specific Contributions are identified for discussion.

Document Number	Source	Title			
[69]	Korea	Proposal of the first draft text for Recommendation X.usnsec-3: Secure routing mechanisms for wireless sensor network			
[65]	Korea	X.usnsec-2 : A proposal for first draft text on USN middleware security guidelines			
[64]	Korea	$X.603.1 \mid ISO/IEC\ 16512-2\ draft\ Amd.1:$ Proposed revisions of RMCP-2 security extensions			
[63]	Korea	Recommendation X.mcsec-1: Proposal for new clauses 10 and 11			
[62]	Korea	Recommendation X.mcsec-1 : Proposed modifications to clauses 7 to 9			
[60]	Korea	Proposed text for clauses 6 and 7 of draft Recommendation X.usnsec-2			
[54]	Korea	Proposal for the third draft text on Recommendation X.iptvsec-3: Key management framework for secure IPTV services			
[52]	Korea	Proposal for the second revised draft text of Recommendation X.usnsec-1: Security framework for ubiquitous sensor network			
[50]	Korea	Check-list for Recommendation X.iptvsec-2			
[49]	Korea	Proposed text for Appendix to Recommendation X.iptvsec-2			
[48]	Korea	Relation between X.iptvsec-2 and X.iptvsec-5			
[39]	France Telecom	Comments on Rec. ITU-T X.1191 under TAP consultation			
[34]	France	Comments on Rec. ITU-T X.1171 under TAP consultation			
[32]	Deutsche Telecom	Comments on draft Recommendation X.1191(X.iptvsec-1) Functional requirements and architecture for IPTV security aspects			
[31]	NTT, Softbank BB	Clarification proposal of scope and requirements in X.iptvsec-2.			
[26]	France Telecom	Comments related to draft Rec. X.msec-5			
[25]	France Telecom	Proposed changes to the text of Q.6 "Security aspects of ubiquitous telecommunication services"			
[21]	Canada	Comments on draft new Recommendation ITU-T X.1191 (X.iptvsec-1 - Functional requirements and architecture for IPTV security aspects) (COM 17-R 44)			
[20]	ETRI	Proposal for the first draft text of X.msec-5 : Security aspects of mobile			

Document Number	Source	Title	
(Rev.1)		multi-homed communications	
[18]	ETRI	Suggestion of adding new subsection items and modifications to existing subsections for the section 7 "interoperable SCP framework" appeared on the draft text of X.iptvsec-5	
[17]	ETRI	Scenarios of SCP-B or SCP-IX deployed in IPTV Terminal Device	

#### **Plenary-related Contributions (4)** 3.4

The following four plenary-related contributions are identified for discussion.

Document Number	Source	Title				
[73]	Verisign	Proposal for global real-time trusted standards and administration query capabilities				
[36]	France	Changes on the proposed new structure for SG17				
[30]	Germany	Assignment of default approval procedures to Question of SG17				
[1]	WTSA-08	WTSA-08 Questions assigned to SG17 for the study period 2009-2012				

3.5 Plenary-related Temporary Documents (55)					
Document Number Source		Title			
[ 197-PLEN]	Chairman SG 17	Draft agenda, closing plenary			
[187-PLEN]	Vice-Chairman SG 17	ITU Workshop on "New challenges for Telecommunication Security Standardizations", 9 (Afternoon) to 10 February 2009, Geneva - Final Report			
[147-PLEN]	TSB	Using TIES email serveur from another email account			
[ 142-PLEN]	ITU-T SG 16	LS - Request for multimedia contact person			
[140-PLEN]	Chairman SG 17	Handling of input documents addressed to All/17			
[111-PLEN]	Chairman SG 17	Open SG 17 management team meeting			
[110-PLEN]	Chairman SG 17	Approval track for SG 17 Recommendations			
[107-PLEN]	TSB	List of participants			
[ 105-PLEN]	ITU-T SG16	Reply LS to Q6/17 on USN security standardization activities			
[100-PLEN]	TSB	Implementation of WTSA-08 Resolution 76: instructions to the ITU-T Study Groups			
[95-PLEN]	TSB	WTSA-08 Resolutions for consideration by Study Group 17			
[94-PLEN]	ITU-T Security project leader (2005- 2008)	Guide to maintaining and updating the Security Standards Roadmap			
[93-PLEN]	Chairman SG 17	Organization of ITU-T Z-series Recommendations			
[73-PLEN]	Chairman SG 17	Organization of ITU-T X-series Recommendations			
[70-PLEN]	TSB	Additional SG 17 responsibilities and assignment for coordination, projects and external relationship			

Document Number	Source	Title	
[ 62-PLEN]	ITU-T SG13	LS - Information about newly approved ITU-T Recommendation Y.1901 (ex - Y.iptv-req)	
[ 61-PLEN]	ITU-T SG13	LS to IPTV related Study Groups on NGN capability set 2	
[60-PLEN]	ITU-T SG13	LS - Single contact points for NGN-related works in each Study Group	
[59-PLEN]	ITU-T SG13	LS - Establishment of Focus Group on Future Networks (FG-FN)	
[58-PLEN]	ITU-T SG13	LS - Ad-Hoc groups to meet requirements of Resolutions 2 and 56 WTSA-08	
[ 49-PLEN]	TSB	Reply results to TSB Circular 241	
[ 48-PLEN]	SG 17 Management Team	Proposed candidates for Study Group 17 leadership positions	
[ 43-PLEN] Q6/17	ISO/IEC JTC 1/SC 27	LS on Privacy framework (27N7234, 27N7239)	
[ 42-PLEN] Q6/17	JCA-NID	LS - Information on NID terms and definitions	
[ 39-PLEN] Q6/17	Convener of JCA- NID	LS - Coordination of USN Terms and Definitions	
[ 38-PLEN]	Convenor of JCA- AHF	Liaison on Accessibility and Resolution 70 (WTSA-08) "Telecommunication/information and communication technology accessibility for persons with disabilities"	
[ 37-PLEN]	TSB	Report on CAP Implementers Workshop (Geneva, 9-10 December 2008)	
[ 35-PLEN]	TSB	Draft study for TAS on financial aspects of network security: malware and spam	
[ 34-PLEN] Q6/17	Convener of JCA- NID	LS - Information on revised ToR of JCA-NID	
[ 33-PLEN]	ETSI TC GRID	LS - Grid Stakeholders	
[ 31-PLEN] Q6/17	Rapporteur former Q.9/17	Proposed check lists applicable to existing or new draft Recommendation(s) in the area of IPTV security	
[ 30-PLEN] Q6/17	Editors Rec. X.iptvsec-4	Draft Recommendation X.iptvsec-4, Algorithm selection scheme for SCP descrambling (IPTV-GSI event, Geneva, 24-28 November 2008)	
[ 29-PLEN] Q6/17	Editors Rec. X.iptvsec-5	Draft Recommendation X.iptvsec-5, SCP interoperability scheme (IPTV-GSI event, Geneva, 24-28 November 2008)	
[ 28-PLEN] Q6/17	Editor/Contributors Rec. X.iptvsec-3	Draft Recommendation X.iptvsec-3, Key management framework for secure IPTV services (IPTV-GSI event, Geneva, 24-28 November 2008)	
[ 27-PLEN] Q6/17	Rapporteur former Q.9/17	Q.6/17 meeting report (IPTV-GSI event, Geneva, 24 - 28 November 2008)	
[ 26-PLEN]	ITU-T SG 15	LS - New versions of the Access Network Transport (ANT) Standardization Plan and Work Plan	
[25-PLEN] Q6/17	ITU-T SG 15	LS – Draft Recommendation G.hntreq	
[ 23-PLEN]	Chairman FG ICT&CC	LS - Questionnaire from ITU-T Focus Group on ICT and Climate Change	
[ 22-PLEN] Q6/17	ITU-T SG 13	LS - Review of SG 17 draft Recommendation X.usnsec-1	
[ 20-PLEN] Q6/17	ISO/IEC JTC 1/SC 6	LS to JTC 1/SC 27, JTC 1/SGSN and ITU-T SG17 for collaboration work on sensor networks security (6N13793)	

Document Number	Source	Title			
[ 18-PLEN]	TSB	Call for papers – Second ITU-T Kaleidoscope "Innovations for Digital Inclusion"			
[ 16-PLEN]	ITU-T SG 16	LS - Progress achieved in the ad hoc Group on Vehicle Gateway Platform (VGP)			
[ 14-PLEN] Q6/17	ITU-T SG 11	LS - Collaboration proposal for development of NID/USN test specifications			
[ 12-PLEN]	TSB	Draft summaries for Recommendations under development or revision			
[ 11-PLEN]	TSB	Planned actions to be taken on Recommendations to the February 200 SG17 meeting			
[ 10-PLEN]	TSB	Summary results of actions taken at and sice the 15-19 September 2008 SG17 meeting			
[ 9-PLEN ]	TSB	Mapping between ISO/IEC Standards and ITU-T Recommendations			
[ 8-PLEN ]	TSB	Listing of common and technically aligned Recommendations - International Standards (including technical reports and international standardized profiles)			
[ 7-PLEN ]	TSB	Status of E- and F-series Recommendations under the responsibility of SG17			
[ 6-PLEN ]	TSB	Status of Z-series Recommendations and Z-series Implementers' Guides			
[ 5-PLEN ]	TSB	Status of X-series Recommendations and X-series Implementers' Guides			
[ 4-PLEN ]	TSB	Initial allocation of documents			
[ 3-PLEN ]	TSB	List of Contributions and Reports			
[ 2-PLEN ]	TSB	Draft work programme for Working Parties and Questions			
[ 1-PLEN ]	TSB	Agenda, meeting schedule and room allocation			

#### 4 Meeting results

The Q.6/17 Rapporteur, Jong-Hyun Baek and Associate Rapporteur, Yutaka Miyake chaired the meeting. 80 documents were addressed at the meeting. The documents can be classified into the following areas: Multicast & Group security, mobile security, IPTV security, NID/USN security, plenary-related contributions and temporary documents including Q.6/17 specific temporary documents.

#### 4.1 Agreements reached

### 4.1.1 General

The Q.6/17 meeting agenda was confirmed as in TD0072 Rev.2. Meeting report of Q.9/17 (Geneva, 15-19 September 2008, TD4152 Rev.2) and Meeting report of Q.9/17 at IPTV-GSI event (Geneva, 24-28 November 2008, TD0027) were reviewed. The action plan of Q.6/17 was updated as in TD0181 Rev.2, reflecting current status of Q.6/17 activities. The summaries for recommendations under development were updated as in TD0180 Rev.2.

As a highlight, the meeting agreed to propose WP2 /17 to approve the two draft Recommendations (i.e., X.1171, X.1191) which were determined at last Geneva September 2008 SG17 meeting. Also the meeting agreed to meet during 24-26 June 2009 IPTV-GSI meeting, as well as 29 June - 1 July 2009 for Q.6 and Q.7 Rapporteur meeting to address all issues for Q.6/17 and Q.7/17.

There were 17 participants for Q.6/17 meeting given in <Annex I>.

### 4.1.2 Joint Meeting with ISO/IEC JTC 1/SC 6/WG 7 on USN and Multicast security

#### TD0020/C52/TD0022, X.usnsec-1: Security framework for USN

For the joint work on USN security between ITU-T Q.6/17 and ISO/IEC JTC 1/SC 6/WG 7, TD0020 was discussed. After long discussion, the meeting reached agreements as follows;

- Develop common text for X.usnsec-1 based on the format of ITU-T Rec. A.23.
- Initiating CD ballot with common text for X.usnsec-1 at ISO/IEC JTC1/SC6.
- Assign Prof. Youm as a liaison officer of ISO/IEC JTC1/SC6 for collaboration.
- Participate SC6/WG7 meeting for collaboration between Q.6/17 and SC6/WG7 on USN security.

C52 provides the new draft text of X.usnsec-1: Security framework for ubiquitous sensor network. After some discussion, the meeting agreed to make suggestions as follows;

• Change WSN term to SN term in whole text to avoid terms confusion.

TD0022 provides comments on draft X.usnsec-1 from Q.16/13. After reviewed the document, the meeting agreed to reflect some comments (i.e., comment 1, 2, 3, part of 5) to X.usnsec-1 and to send a LS to Q.16/13 on USN issues with TD0163 Rev.3.

The TD0162 was published as a baseline document of X.usnsec-1 with common text format for further discussion.

#### C64, X.603.1|ISO/IEC 16512-2 draft Amd.1: Relayed multicast protocol (RMCP-2)

C64 proposes a revision of RMCP-2 security extensions for relayed multicast protocol. After some discussion, the meeting agreed to make suggestion as follow;

- Add "ISO/IEC 9798-2" to reference section
- Change a table numbers for aligned with X.603.1|16512-2.
- Correct typo errors and English grammars.
- Produce a LS to Q.15/11 and SC6 on multicast security (RMCP-2). (TD0201 Rev.3)

The TD0143 was published as a baseline document of X.603.1|ISO/IEC 16512-2 draft Amd.1 for further discussion.

#### C62/C63, X.mcsec-1: Security requirements and framework for multicast communication

C62 proposes modifications to clause 7 to 9 for X.mcsec-1. After some discussion, the meeting agreed to make suggestions as follows;

- Change a reference section with new reference notation.
- Including X.603 Recommendation to reference section.
- Correct typo errors in Section 8.2 and 9.1.2

C63 proposes new clauses 10 and 11 for X.mcsec-1. After some discussion, the meeting agreed to make suggestions as follows;

- Specify the detailed function for each entity in Section 10.
- Add use cases in compliance with security framework and technologies in this document.
- · Correct typo errors and English grammars

The TD0164 was published as a baseline document of X.mcsec-1 for further discussion.

# TD0105, Reply LS to Q.6/17 on USN security standardization activities

TD0105 provides ToR of Q.25/16 and Draft ITU-T Rec. F.usn-mw for collaboration with Q.6/17 on USN security. After review the document, the meeting agreed to make suggestion as follows;

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Produce a LS to Q.25/16 with TD0202 Rev.2 for keeping collaboration with Q.25/16 on USN middleware security.

#### 4.1.3 Mobile security

#### C20 Rev.1, X.msec-5: Security aspects of mobile multi-homed communications

C20 Rev.1 proposes the models and security threats for the mobile multi-homed environment. It is decided that this Recommendation will be reviewed in detail when the document reached to the more mature status.

#### C 26, comments related to draft Rec. X.msec-5

C26 proposes comments related to draft Recommendation ITU-T X.msec-5. After reviewed the document, the meeting agreed to reflect comments in X.msec-5 document and the TD0194 was published as a baseline document of X.msec-5 for further discussion.

#### 4.1.4 NID/USN security

# C34, X.1171 (X.nidsec-1): Threats and requirements for protection of personally identifiable information in applications using tag-based identification

C34 gathers the comments from France for Rec. ITU-T X.1171 as contained in COM 17-R43. There are six comments in this contribution. After some discussion, the meeting agreed to make suggestions as follows;

- For comment 1, the editor accepts it and copies the definition of PII from ITU-T X.1250.
- For comment 2 and 3, it is agreed to reflect relevant parts of OECD privacy guideline [b-OECD] to section 10 of ITU-T X.1171. This part will be checked by French delegates after the consolidated document will be prepared.
- For comment 4 and 5, it is accepted to reflect these comments to ITU-T X.1171.
- For comment 6, the editor explains why the requirements in Table 1 are not reflect the OECD privacy guideline in detail at consolidated document. The document will be checked by French delegates.
- The editor is asked to publish the consolidated document and final draft Recommendation ITU-T X.1171 as TD0186 Rev.2 and TD0269 Rev.1 respectively.
- Q.6/17 will ask WP2/17 to approve ITU-T X.1171.

#### C60/C65, X.usnsec-2: USN middleware security guidelines

C60 and C65 propose draft text for X.usnsec-2. After some discussion, the meeting agreed to make suggestions as follows;

- Delete "Cookie reply" and "Manufacturing for query and cookie" in section 6.1, because USN middleware does not have Web service functions.
- Assign Ms. Mi Joo Kim as co-editor for X.usnsec-2.
- Publish temporary document as first draft text for X.usnsec-2 by merging two contributions.

TD0184 was published as a revised draft Recommendation X.usnsec-2.

#### C69, X.usnsec-3: Secure routing mechanisms for wireless sensor network

C69 proposes a scope and skeleton for X.usnsec-3, secure routing mechanisms for Wireless Sensor Network. After some discussion, the meeting agreed to make suggestions as follows;

- Avoid using two different terminologies; USN and WSN if those terminologies have same meanings.
- Avoid overlaps or duplications between X.usnsec-1 and this document.

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- Avoid using different definitions with other document in section 3.
- Publish temporary document as first draft text for X.usnsec-3.

TD0182 was published as first draft text for X.usnsec-3.

#### 4.1.5 IPTV security

# C21/C32/C39, X.1191 (X.iptvsec-1): Functional requirements and architecture for IPTV security aspects

C21/C32/C39 provides comments on draft new Recommendation ITU-T X.1191 (COM 17-R 44). After some discussion, the meeting agreed to make suggestions as follows;

- Editors of X.1191 produce the consolidated text as TD0179 Rev.1 and final draft Recommendation ITU-T X.1191 as TD0228 Rev.1.
- Q.6/17 will ask WP2/17 to approve the final draft Recommendation ITU-T X.1191.

# C31/C48/C49/C50/TD0031, X.iptvsec-2: Functional Requirements and mechanisms for Secure Transcodable Scheme of IPTV

C31 proposes scope, requirements and business background for effective standardization of X.iptvsec-2 (TD4189). After some discussion, the meeting agreed to make suggestions as follows;

- The editor is asked to provide detail explanation text especially for figure 4 in C31.
- Consider how to apply FEC (Forward Error Correction) to the proposed architecture from the view point of security.
- Check the status of IPR issues related to this draft Recommendation.

C48 clarifies the difference, and identified the relation between X.iptvsec-2 and X.iptvsec-5. The meeting agreed to consider these issues during the development of the two Recommendations, and TD0170 was published to inform this document.

C49 proposes to add the appendix "Appendix I: Reference points for secure transcoding in IPTV" to X.iptvsec-2. Q.6/17 agreed to include the proposed text to X.iptvsec-2. TD0171 was published as a revised baseline document for X.iptvsec-2.

TD0031 provides a check list for developing Recommendations related to IPTV security, and propose to make and maintain this check list for each Recommendation during development. Q.6/17 agreed to use this check list.

C50 proposes a check list for X.iptvsec-2, and Q.6/17 agreed to use this document as the check list for X.iptvsec-2, and TD0167 was published as the check list of X.iptvsec-2.

#### TD0029/C17/C18, X.iptvsec-5: SCP interoperability scheme

TD0029 is a baseline document for X.iptvsec-5.

C17 proposes the scenarios of SCP-B or SCP-IX deployed in IPTV TD in the appendix II Interoperability of SCP in ITU-T Recommendation X.1191 (X.iptvsec-1) as an annex of X.iptvsec-5: SCP interoperability scheme. Q.6/17 agreed to include the proposed text to Annex I of X.iptvsec-5.

C18 proposes new subsection items for the section 7 of the draft text on "X.iptvsec-5: SCP interoperability scheme" and some modifications for existing subsections. Q.6/17 agreed to include the proposed text to section 7 of X.iptvsec-5, and TD0245 was published as a revised baseline document for X.iptvsec-5.

In addition, the meeting reached the following consensuses after the discussion.

• The scope of this document will be modified according to the relationship between the proposed SCP interoperability scheme and a legacy approach of the SCP interoperability scheme.

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• Gap analysis between recommendation subject/purpose, requirements and real market/business/existing system will be prepared in the appendix of this Recommendation.

#### TD0028/C54, X.iptvsec-3: Key management framework for secure IPTV services

TD0028 is a baseline document for X.iptvsec-3.

C54 proposes the second draft text on X.iptvsec-3. This contribution updates section 8.1, section 8.2 and several references. The meeting agreed to use this document as new draft text and to continue this work. TD0193 was published as the revised draft text of X.iptvsec-3. It is raised that we need to discuss the issues on considering existing key management schemes and new key management schemes when we develop this Recommendation.

#### TD0030, X.iptvsec-4: Algorithm selection scheme for SCP descrambling

TD0030 is a baseline document for X.iptvsec-4. The meeting agreed not to discuss this document in this meeting due to the absence of editors.

#### 4.1.6 Plenary-related Contributions

- C1 on Questions assigned to SG17 for the study period 2009-2012; The meeting agreed to take no action
- C25 on proposed changes to the text of Q.6 "Security aspects of ubiquitous telecommunication services"; The meeting agreed to reflect the comments from France Telecom to the Action Plan for Q.6/17 i.e., privacy issues, wireless PHY/MAC layers security, lightweight security technologies using ECC algorithm, and not to change the original Q.6 Question Text. Annotated text included in the contribution is attached as Appendix A in this report.
- **C30** on Assignment of default approval procedures to Question of SG17; The meeting agreed default approval procedure as AAP.
- C36 on Changes on the proposed new structure for SG17; The meeting agreed to no changes on new structure for SG17. Especially, Q.9 should keep stay in WP2 because the question's work items and scopes are more closed to WP2 than WP3.
- C73 on Proposal for global real-time trusted standards and administration query capabilities; The
  meeting agreed to take no action.

#### 4.1.7 Actions on incoming liaison statements and plenary-related TDs

- TD0001 on Agenda, meeting schedule and room allocation; The meeting agreed to take no action.
- **TD0002** on Draft work programme for Working Parties and Questions; The meeting agreed to take no action.
- TD0003 on List of Contributions and Reports; The meeting agreed to take no action.
- TD0004 on Initial allocation of documents; The meeting agreed to take no action.
- **TD0005** on Status of X-series Recommendations and X-series Implementers' Guides; The meeting agreed to take no action.
- TD0006 on Status of Z-series Recommendations and Z-series Implementers' Guides; The
  meeting agreed to take no action.
- **TD0007** on Status of E- and F- series Recommendations under the responsibility of SG17; The meeting agreed to take no action.
- **TD0008** on Draft work programme for Working Parties and Questions; The meeting agreed to take no action.
- TD0009 on Mapping between ISO/IEC Standards and ITU-T Recommendations; The meeting agreed to take no action.

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- **TD0010** on Summary results of actions taken at and since the 15-19 September 2008 SG17 meeting; The meeting agreed to take no action.
- **TD0011** on Planned actions to be taken on Recommendations to the February 2009 SG17 meeting; The meeting agreed to take no action.
- TD0012 on Draft summaries for Recommendations under development or revision; The meeting agreed to take no action.
- TD0014 Rev.1 on LS Collaboration proposal for development of NID/USN test specifications; The meeting agreed to make reply LS (TD0203 Rev.2) to inform the situation and future plan of revised developing Recommendations.
- **TD0016** on LS Progress achieved in the ad hoc Group on Vehicle Gateway Platform (VGP); The meeting agreed to take no action.
- **TD0018** on Call for papers "Second ITU-T Kaleidoscope, Innovations for Digital Inclusion"; The meeting agreed to take no action.
- TD0023 on LS Questionnaire from ITU-T Focus Group on ICT and Climate Change; The meeting agreed to make a answer of questionnaire and send a answer sheet to Q.1/17 Rapporteur.
- TD0025 on LS Draft recommendation G.hntreq; The meeting agreed to no comments for this document. However, developed reply LS on G.hntreq (TD0200 Rev.2) for future collaboration with SG15.
- **TD0026** on LS New version of the Access Network Transport (ANT) Standardization Plan and Work Plan; The meeting agreed to take no action.
- **TD0027** on Q.6/17 meeting report (IPTV-GSI event, Geneva, 24 -28 November 2008); The meeting agreed to take no action.
- TD0033 on LS Grid Stakeholders; The meeting agreed to take no action.
- TD0034 on LS Information on revised ToR of JCA-NID; The meeting agreed to take no action
- **TD0035** on Draft study for TAS on financial aspects of network security: malware and spam; The meeting agreed to take no action.
- **TD0037** on Report on CAP Implementers Workshop (Geneva, 9-10 December 2008); The meeting agreed to take no action.
- TD0038 on LS Accessibility and Resolution 70 (WTSA-08) "Telecommunication/information and communication technology accessibility for persons with disabilities"; The meeting agreed to take no action.
- TD0039 on LS –Coordination of USN Terms and Definitions; The meeting agreed to take no action. The editors are encouraged to use terminologies in this document and join mailing list for this issue. The meeting agreed to take no action in this meeting.
- TD0042 on LS Information on NID terms and Definitions; The meeting agreed to take no action. The editors are encouraged to use terminologies in this document and join mailing list for this issue. The meeting agreed to take no action in this meeting.
- TD0043 on LS on Privacy framework (27N7234, 27N7239); The meeting agreed to take no action.
- **TD0048** on Proposed candidates for Study Group 17 leadership positions; The meeting agreed to take no action.
- TD0049 on Reply results to TSB Circular 241; The meeting agreed to take no action.
- **TD0058** on LS Ad-Hoc groups to meet requirements of Resolutions 2 and 56 WTSA; The meeting agreed to take no action.

- TD0059 on LS Establishment of Focus Group on Future Networks (FG-FN); The meeting agreed to take no action.
- **TD0060** on LS Single contact points for NGN-related works in each Study-Gourp; The meeting agreed to take no action.
- TD0061 on LS to IPTV related Study Groups on NGN capability set 2; The meeting agreed to take no action.
- **TD0062** on LS Information about newly approved ITU-T Recommendation Y.1901 (ex Y.iptv-req); The meeting agreed to take no action.
- **TD0070** on Additional SG 17 responsibilities and assignment for coordination, projects and external relationship; The meeting agreed to nominate the candidates as follows.

Position	Name (study period 2005-2008)	Name (study period 2009-2012)
Joint Coordination Activity on Home Network (JCA-HN) - Representative	Heung Youl Youm (Korea)	Q.6/17 Rapporteur (Jong Hyun Baek, Korea), if there is no volunteer.
Joint Coordination Activity on IPTV (JCA-IPTV) - Representative	Heung Youl Youm (Korea)	Jaehoon Nah (Korea), if there is no volunteer.
Joint Coordination Activity on Network Aspects of Identification Systems (including RFID) (JCA-NID) - Representatives	Olivier Dubuisson (France Telecom, France)	Dooho Choi (Korea), if there is no volunteer.
Correspondence group on RFID - Contact person	Byung-Ho Chung (ETRI, Korea)	This activity was terminated.
ISO/IEC JTC1/SCs 25 (Interconnection of information technology equipment) and 27 (IT Security techniques) - SG 17 Representative for Home network	Geon-Woo Kim (ETRI, Korea)	(SC25 for Home Network) Q.6/17 Rapporteur (Jong Hyun Baek, Korea), if there is no volunteer.
		(SC27 for Home Network) Heung Youl Youm (Korea)
IETF - Contact person for Multicast	Shin-Gak Kang (ETRI, Korea)	Because this issue was move to ITU-T SG 11, we do not need to assign this position.

- TD0073 on Organization of ITU-T X-series Recommendations; The meeting agreed to take no action.
- TD0093 on Organization of ITU-T Z-series Recommendations; The meeting agreed to take no action.
- TD0094 on Guide to maintaining and updating the Security Standards Roadmap; The meeting agreed to take no action.
- **TD0095** on WTSA-08 Resolutions for consideration by Study Group 17; The meeting agreed to take no action.

- **TD0100** on Implementation of WTSA-08 Resolution 76: instructions to the ITU-T Study Groups; The meeting agreed to take no action.
- TD0107 on List of participants; The meeting agreed to take no action.
- TD0110 on Approval track for SG 17 Recommendations; The meeting agreed to take no action.
- TD0111 on Open SG 17 management team meeting; The meeting agreed to take no action.
- TD0140 on Handling of input documents addressed to All/17; The meeting agreed to take no action.
- **TD0142** on LS Request for multimedia contact person; The meeting agreed to nominate no one from Q.6/17. The meeting also agreed to recommend the Q.6/17 Rapporteur (Jong Hyun Baek, Korea) tentatively if the SG 17 asks Q.6/17 to nominate a person to this position.
- TD0147 on Using TIES email serveur from another email account; The meeting agreed to take no action.
- **TD0187** on ITU Workshop on "New challenges for Telecommunication Security Standardizations", 9 (Afternoon) to 10 February 2009, Geneva Final Report; The meeting agreed to take no action.
- TD0197 on Draft agenda, closing plenary; The meeting agreed to take no action.

# 4.1.8 Outgoing liaison statements

- TD0163 Rev.3: Reply to Liaison to SG 13 on X.usnsec-1: Security framework for ubiquitous sensor network
- TD0200 Rev.2: Reply LS to SG 15 on G.hntreq
- TD0201 Rev.3: LS on Multicast security
- TD0202 Rev.2: Reply LS to SG 16 on collaboration for USN Security
- TD0203 Rev.2: Reply LS to ITU-T SG 11 on Collaboration for development of NID/USN test specifications

4.2 Recommendations proposed for approval at this SG 17 meeting

Recommendation		 	ı _		Location	Equivalent
No.	Title	WP	Q.	Editor	of text	e.g., ISO/IEC
X.1171 (X.nidsec- 1)	Threats and requirements for protection of personally identifiable information in applications using tag-based identification	2	6	D. Choi	TD0269 Rev.1 TD0186 Rev.2	
X.1191 (X.iptvsec-1)	Functional requirements and architecture for IPTV security aspects	2	6	S. Ishii, N. Nguyen, X. Wei, H.Y. Youm	TD0228 Rev.1 TD0179 Rev.1	

# 4.3 Candidate Recommendations planned for consent or determination at the September 2009 SG 17 meeting

None.

4.4 Candidate Recommendations planned for consent or determination in this study

peri		I					
	Recommendation	WP Q.		Editor	Location of text	Equivalent	
No.	Title				or text	e.g., ISO/IEC	
X.mcsec-1	Security Requirement and Framework for Multicast communication	2	6	M.Y. Yoon, H.Y. Youm	TD0164		
X.usnsec-1	Security framework for ubiquitous sensor network	2	6	H.Y. Youm, E.Y. Choi	TD0162		
X.usnsec-2	USN middleware security guidelines	2	6	M.Y. Yoon, N.J. Park, M.J. Kim	TD0184		
X.usnsec-3	Secure routing mechanisms for wireless sensor network	2	6	E.Y. Choi	TD0182		
X.iptvsec-2	Functional requirements and mechanisms for secure transcodable scheme of IPTV	2	6	J.H.Nah	TD0171		
X.iptvsec-3	Key management framework for secure IPTV communications	2	6	H.Y. Youm	TD0193		
X.iptvsec-4	Algorithm selection scheme for SCP descrambling	2	6	J.Y. Park, N. Nguyen	TD0030		
X.iptvsec-5	SCP interoperability scheme	2	6	K.S.Yoon, D.Wang	TD0245		
X.msec-5	Security aspects of Mobile Multi- homed Communications	2	6	G.T. Bae, G.I. Ahn	TD0194		

# 4.5 Liaison statements

The table below summarizes the liaison activities of Q.6/17.

Incoming Liaisons					Outgoing Liaisons			
TD Number	Source	For I/A	Title or Subject	Q.	То	For I/A	Title or subject	TD Number
TD0014 Rev.1	ITU-T SG 11	A	LS – Collaboration proposal for development of NID/USN test specifications	6, 14/17	ITU-T Q.12/11	Ι	Reply LS to ITU-T SG 11 on Collaboration for development of NID/USN test specifications	TD0203 Rev.2
TD0016	ITU-T SG 16	A	LS – Progress achieved in the ad hoc Group on Vehicle Gateway Platform(VGP)	All/1 7				

TD0020	ISO/IEC JTC1/SC 6	A	LS to JTC 1/SC 27, JTC 1/SGSN and ITU-T SG17 for collaboration work on sensor networks security (6N13793)	6/17				
TD0022	ITU-T SG 13	A	LS – Review of SG 17 draft Recommendation X.usnsec-1	6/17	ITU-T Q.16/13	I	Reply to Liaison to SG 13 on X.usnsec-1: Security framework for ubiquitous sensor network	TD0163 Rev.3
TD0023	Chairman FG ICT&CC	A	LS – Questionnaire from ITU-T Focus Group on ICT and Climate Change	All/1 7				
TD0025	ITU-T SG 15	A	LS – Draft recommendation G.hntreq	6/17	ITU-T Q.1/15	I	Reply LS to SG 15 on G.hntreq	TD0200 Rev.2
TD0026	ITU-T SG 15	A	LS – New version of the Access Network Transport (ANT) Standardization Plan and Work Plan	All/1 7				
TD0034	Convener of JCA- NID	I	LS – Information on revised ToR of JCA-NID	6, 10, 11, 12/17				
TD0038	Convener of JCA- AHF	A	LS – Accessibility and Resolution 70 (WTSA- 08)"Telecommuni cation/information and communication technology accessibility for persons with disabilities"	All/1 7				
TD0039	Convener of JCA- NID	A	LS –Coordination of USN Terms and Definitions	6/17				
TD0042	JCA-NID	I	LS – Information on NID terms and Definitions	6, 10, 11, 12/17				
TD0043	ISO/IEC JTC 1/SC 27	I	LS on Privacy framework(27N72 34, 27N7239)	4, 6, 9, 10, 11/17				

TD0058	ITU-T SG13	I	LS – Ad-Hoc groups to meet requirements of Resolutions 2 and 56 WTSA	All/1 7				
TD0059	ITU-T SG13	I	Establishment of Focus Group on Future Networks (FG-FN)	All/1 7				
TD0060	ITU-T SG 13	A	LS on single contact points for NGN-related works in each Study Group	All/1 7				
TD0061	ITU-T SG13	A	Liaison response on Q.6/17 work plan for trusted service provider identity (SPID) Recommendations	6/17				
TD0062	ITU-T SG 13	I	Information about newly approved ITU-T Recommendation Y.1901 (ex - Y.iptv-req)	6/17				
TD0105	ITU-T SG 16	A	Reply LS to Q6/17 on USN security standardization activities	6/17	ITU-T Q.25/16	I	Reply LS to SG 16 on collaboration for USN Security	TD0202 Rev.2
					ITU-T Q.15/11, ISO/IEC JTC1/SC6/ WG7	I	LS on Multicast security	TD0201 Rev.3

# 4.6 Action plan

The Action Plan produced based on the Question text of Q.6/17 authorized at WTSA-08, and was published as TD0181 Rev.2.

# 4.7 Summaries of Recommendations

Revised summaries of the Recommendations were given in TD0180 Rev.2.

# 4.8 Future meetings

Ongoing work will be progressed by correspondence and email discussion.

Q.6/17 will have a joint meeting with ISO/IEC JTC 1 SC6/WG7 on USN security during 1-5 June 2009 ISO/IEC JTC 1 SC6 meeting at Tokyo, Japan.

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Q.6/17 will hold a Rapportures group meeting collocated with IPTV-GSI event on 24-26 June 2009, as well as 29 June - 1 July 2009 to address all issues. All contributions related to this meeting will be handled in the Q.6/17 Rapporteur meeting, not IPTV-GSI event.

Q.6/17 will meet on 16-25 September 2009 during Geneva SG17 meeting.

# Appendix A

# Annotated text for Q.6/17

# Question 6/17

# Security aspects of ubiquitous telecommunication services

(Continuation of part of Q.9/17)

#### 1 Motivation

Recommendations X.1111, X.1112, X.1113 and X.1114 describe the security framework for home network including the device certificate profile, authentication mechanism, and authorization framework. Recommendations X.1121, X.1122, X.1123, X.1124, and X.1125 provide a comprehensive specification on security for mobile network. Draft Recommendations X.1171 and X.usnsec-1 specify the privacy framework for mobile NID services and the security framework for USN (ubiquitous sensor network), respectively. A continued effort to maintain and enhance these security Recommendations to satisfy the needs of emerging ubiquitous technologies and services is required.

The ubiquitous telecommunication service refers to the service that allows anyone to access to any desired information in a user-friendly way, anytime and anywhere using any devices. The telecommunications industry has been experiencing an exponential growth in area of mobile technology based ubiquitous telecommunication services. Specifically, security of domain-specific ubiquitous telecommunications between heterogeneous devices using application-level technologies such as ubiquitous web for ubiquitous sensor network, home network, mobile network, multicast network, IPTV network, etc., is crucial for the further development of the industry, network operators and service providers. Standardization of the best comprehensive security solutions is vital for the network operators and service providers that operate in a multi-vendor international ubiquitous environment. Due to some specific characteristics of the mobile telecommunications (e.g., over the air transmission, limited computing power and memory size of the small mobile devices), providing security is an especially challenging task that deserves special attentions and study.

Recommendations under responsibility of this Question as of 1 December 2008: X.1111, X.1112, X.1113, X.1114, X.1121, X.1122, X.1123, X.1124 and X.1125.

#### 2 Question

Study items to be considered include, but are not limited to:

- a) How should security aspects of ubiquitous telecommunication services be identified and defined in mobile telecommunication?
- b) How should threats behind ubiquitous telecommunication services be identified and handled?
- c) What are the security technologies for supporting ubiquitous telecommunication services?
- d) How should secure interconnectivity between ubiquitous telecommunication services be kept and maintained?
- e) What security techniques, mechanisms and protocols are needed for emerging ubiquitous telecommunication services, especially for emerging digital content protection services?
- f) What secure application protocols should be applied for ubiquitous telecommunication services?

메모 [AK1]: Can "anyone" be a device? (e.g., in the context of USN the sensors have access to the monitored information; of course the privacy/security issues posed by the action of the sensors should be resolved at deployment time).

메모 [AK2]: How is "comprehensive" defined? And what is its scope? Does it mean end-to-end?

메모 [AK3]: In USNs the task is even more challenging.

메모 [AK4]: However it seems that EC cryptography methods help reduce the computational demands by enabling the reduction of cryptographic key lengths.

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- g) What are the global security solutions for ubiquitous telecommunication services and their applications?
- h) What are the best practices or guidelines for secure ubiquitous telecommunication services and their applications?
- i) What enhancements to existing Recommendations under review or new Recommendations under development should be adopted to reduce impact on climate changes (e.g., energy savings, reduction of green house gas emissions, implementation of monitoring systems, etc.) either directly or indirectly in telecommunication/ICT or in other industries?

#### 3 Tasks

Tasks include, but are not limited to:

- a) In collaboration with other ITU-T study groups and standards development organizations, especially with IETF, ISO/IEC JTC 1/SCs 6, 25, 27 and 31, produce a set of Recommendations for providing comprehensive security solutions for secure ubiquitous telecommunication services.
- b) Review existing Recommendations/Standards of ITU-T and ISO/IEC in the area of home network, mobile network, mobile NID service, and ubiquitous sensor network to identify secure ubiquitous telecommunication services.
- c) Study further to define security aspects of ubiquitous telecommunication services for a multi-vendor international ubiquitous environment, and for emerging new services.
- d) Study and develop security issues and threats in secure ubiquitous telecommunication services.
- e) Study and develop security mechanisms for secure ubiquitous telecommunication services.
- f) Study and develop interconnectivity mechanisms for secure ubiquitous telecommunication services in a single or multi-vendor ubiquitous environment.

#### 4 Relationships

#### **Recommendations:**

X.800-series and others related to security

#### **Questions:**

ITU-T Qs 1, 2, 3, 4, 5, 7, 9, 10/17, 16/13, 13/16 and 22/16

#### Study groups:

ITU-T SGs 9, 11, 13 and 16; JCA-NID, JCA-HN, JCA-IPTV; ITU-R

#### **Standardization bodies:**

ISO/IEC JTC 1/SCs 6, 25, 27 and 31; IETF; 3GPP; 3GPP2; OMA

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# <Annex I> Participants List

No	Name	Organization	e-mail
1	Dooho Choi	ETRI, Korea	dhchoi@etri.re.kr
2	Shin Gak Kang	ETRI, Korea	sgkang@etri.re.kr
3	Jae Seung Lee	ETRI, Korea	jasonlee@etri.re.kr
4	Jong Hyun Baek	KISA. Korea	jhbaek@kisa.or.kr
5	Mijoo Kim	KISA, Korea	Mijoo.kim@kisa.or.kr
6	Miyoun Yoon	KISA, Korea	myyoon@kisa.or.kr
7	Hyangjin Lee	KISA, Korea	jiinii@kisa.or.kr
8	Yong Nyo Shin	KISA, Korea	ynshin@kisa.or.kr
9	Wang Hao	CQUPT	Wanghaonet@163.com
10	Yutaka Miyake	KDDI, Japan	yu-miyake@kddi.com
11	Shinji Ishii	NTT, Japan	ishii.shinji@lab.ntt.co.jp
12	Jabeom Gu	ETRI	gjb@etri.re.kr
13	Heung Youl Youm	Soonchunhang University, Korea	hyyoum@sch.ac.kr
14	Hui Zhang	CESI	zhanghui@cesi.ac.cn
15	Heung-Ryong Oh	TTA, Korea	hroh@tta.or.kr
16	Guntae Bae	ETRI, Korea	gtbae@etri.re.kr
17	Jaehoon Nah	ETRI. Korea	jhnah@etri.re.kr

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