

**Question(s):** 

Source:

INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2017-2020

19/13

Geneva, 2 November 2018

**TD** Rapporteurs

Title:Meeting Report of Q19/13 (Geneva, 22 October – 2 November 2018)Purpose:AdminContact:-Contact:Emil Kowalczyk<br/>Orange Polska S.A.DalaTel: +48 502 397 809<br/>E-mail: Emil.Kowalczyk@orange.com

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Keywords:	Report, Q19/13
Abstract:	This is report of Q.19/13 (Geneva, 22 October – 2 November, 2018).

# **1** Opening of the meeting

Rapporteur of Question 19/13, Mr Emil Kowalczyk (Orange Polska) welcomed participants and provided agenda for meeting. The agenda were accepted and approved by Delegates.

# 2 Previous meeting

The report from the previous Q19/13 meeting hold at Geneva, 16 - 27 July 2018 as <u>TD269-WP2</u> was recalled. The report of Question 19/13 interim e-meeting at Geneva, 5 - 7 September 2018 as <u>TD302-WP2</u> was presented and accepted by Question without modification.

#### **3** Goals of this meeting

The Rapporteur indicated goals of this meeting as follows:

- Progress on-going work items as follows:
  - draft Rec. "Cloud Computing Overview of Inter-Cloud Trust Management" <u>for</u> <u>Consent process</u>
  - draft Rec. "Cloud computing functional requirements of inter-cloud data management"<u>for Consent process</u>
  - Corrigendum 1 of ITU-T Y.3514 "Cloud computing Trusted inter-cloud computing framework and requirements" <u>for Consent process</u>

#### - 2 -SG13-TD318/WP2

- o draft Rec. "Big data Overview and requirements for data preservation"
- o draft Rec. "Metadata framework for cloud service lifecycle management"
- o draft Rec. "Cloud computing maturity requirements and framework"
- draft Rec. "Cloud Computing End-to-end fault and performance management framework of inter-cloud virtual network services"
- draft Rec. "Cloud computing Requirements for cloud service development and operation management"
- Discuss new work items introduced by contributions
- Review the Q19/13 Roadmap and Q19/13 Living Lists
- Participate in joint sessions with other Questions as needed

## 4 Approval of the agenda

The agenda (posted as  $\underline{TD-009}$ ) was presented and approved by the meeting.

#### 5 Discussion of input documents (including liaisons)

# 5.1 Y.CCICDM-Req

#### Base document: [ TD 300-WP2/13 ]

Number	Title	Source	Questions
[ <u>C–128]</u>	Proposal for improvement of draft Y.CCICDM-Req Accepted with modifications.	China Unicom	Q19/13

#### 5.2 Y.BDDP-reqts

#### Base document: : [ TD 262-WP2/13 ]

Number	Title	Source	Questions
[ <u>C-048]</u>	Proposed modifications for clause 7 and Appendix I of Y.BDDP-reqts Accepted with modifications.	DaTang Telecommunication Technology & Industry Holding Co. Ltd (China)	Q19/13
[ <u>C-047]</u>	Proposed modifications for clause 6 of Y.BDDP-reqts Accepted.	DaTang Telecommunication Technology & Industry Holding Co. Ltd (China)	Q19/13
<u>[C-046]</u>	Proposed modifications for clause 3 of Y.BDDP-reqts Accepted.	DaTang Telecommunication Technology & Industry Holding Co. Ltd (China)	Q19/13

## 5.3 Y.CCICTM

Base document: [ TD 301-WP2/13 ]

Number	Title	Source	Questions
<u>[C-049]</u>	Proposal for additions and modifications in Y.CCICTM. Accepted with modifications.	DaTang Telecommunication Technology & Industry Holding Co. Ltd (China)	Q19/13

### 5.4 Y. cslm-metadata

Base document: [ TD 263-WP2/13 ]

None.

## 5.5 Y.CCM-reqts

Base document: [ TD 264-WP2/13 ]

Number	Title	Source	Questions
<u>[C–139]</u>	Draft Recommendation on "Cloud computing maturity requirements and framework" (Y.ccm-reqts) Accepted with modifications. Revised text accepted after TD-018.	China Mobile Communications Corporation	Q19/13
[ <u>C–138]</u>	Update draft Y.ccm.reqts of Definitions and Abbreviations Accepted with modifications.	China Mobile Communications Corporation	Q19/13

# 5.6 Y.cccsdaom-reqts [ TD 267-WP2/13 ]

Number	Title	Source	Questions
<u>[C–140]</u>	Proposed a new use case for a closed loop system in telecom cloud integration Accepted with modifications.	China Mobile Communications Corporation	Q19/13
<u>[C–119]</u>	Y.cccsdaom-reqts - Proposal for addition of use case in Appendix-I Not discussed due to lack of Authors or Representatives to present this material in time of RGM SG13 in November 2018. It was agreed to provide material of this Contribution to living list of Q19/13 for future consideration.	TEC DOT	Q19/13
<u>[C–091]</u>	Proposal for several terms definitions in Y.cccsdaom-req Accepted with modifications.	China Unicom; China Academy of Information and communication Technology	Q19/13

#### - 4 -SG13-TD318/WP2

[ <u>C-005]</u>	Proposal for add requirement and use cases in Y.cccsdaom-req	China Academy of Information and	Q19/13	
	Accepted with modifications.	communication Technology		

# 5.7 Y.e2efpm [ TD 265-WP2/13 ]

Number	Title	Source	Questions
[C-130]	Clarifications on change management in clause 8.3 (Y.e2efapm)	Orange Polska S.A	Q19/13
[ <u>C–129]</u>	Accepted with modifications.Clarifications on performance management in clause 8.4 (Y.e2efapm)Accepted. General comments are addressed for whole draft Rec.	Orange Polska S.A	Q19/13
<u>[C–118]</u>	<ul> <li>Y.e2efapm-reqts - Proposal for addition of functional requirements related to end-to-end fault and performance management of virtual network services under the clause 8</li> <li>Not discussed due to lack of Authors or Representatives to present this material in time of RGM SG13 in November 2018. It was agreed to provide material of this Contribution to living list of Q19/13 for future consideration.</li> </ul>	TEC DOT	Q19/13
<u>[C–117]</u>	<ul> <li>Y.e2efapm-reqts - Proposal for addition of functional requirements related to end-to-end fault and performance management of virtual network services under the clause 7</li> <li>Not discussed due to lack of Authors or Representatives to present this material in time of RGM SG13 in November 2018. It was agreed to provide material of this Contribution to living list of Q19/13 for future consideration.</li> </ul>	TEC DOT; Datang Software Technologies CO.,LTD. CHINA	Q19/13

# 5.8 New Work Item Proposals

None.

# 5.9 Other contributions related to cloud computing and big data

None.

# 5.10 Incoming liaisons, others for Cloud/Big data for Q19/13

The following documents were reviewed and noted.

Document	Subject	Source	Questions	Preliminary decision
[ 273-GEN ]	LS/i/r on Telecommunication Management and OAM Project Plan	SG5	Q23/13, Q22/13, Q2/13,	Noted. SG5 and SG2 collaboration.

#### - 5 -SG13-TD318/WP2

[ 308-WP2 ]	LS/i/r on New ITU-T SG13 terms and definitions (reply to SCV - LS 16 -E) [from ITU-T SG5]	ITU-T SG5	Q19/13	computing. Noted. Related to definitions developed under ITU-T Y.3514. Q19/13 is provided LS/o/r.
[ 307-WP2 ]	LS/i/r on SG17 updates to the cloud computing standards roadmap (reply to SG13-LS71) [from ITU-T SG17]	ITU-T SG17	Q19/13, Q18/13, Q17/13	Noted. Important update for Q19/13 in aspect of security in cloud
[ 306-GEN ]	LS/i on SG17 work item X.sgcc: Security guidelines for container in cloud computing environment [from ITU-T SG17]	SG17	<b>Q19/13,</b> Q18/13, Q17/13	As titled.
[ 280-GEN ]	LS/i on Emerging technologies, including cloud computing: m-services, and OTTs: Challenges and opportunities, economic and policy impact for developing countries [from ITU-D SG1]	ITU-D SG1	Q5/13, <b>Q19/13</b> , Q18/13, Q17/13, Q16/13, Q1/13	Noted.
[ 275-GEN ]	LS/i/r on invitation to review Big data Standardization Roadmap and provide missing or update information (reply to SG13-LS72) [from W3C]	W3C	Q7/13, Q19/13, Q18/13, Q17/13, Q16/13	Noted. W3C is focused on "data activity".
	(reply to SG2 LS73-E and SG2 LS47-E) [from ITU-T SG5]		<b>Q19/13,</b> Q18/13, Q17/13	

# 5.11 Incoming liaisons, others for all Questions

The following documents were reviewed and noted.

Document	Subject	Source	Questions	Preliminary decision
[ 287-GEN ]	Technical tutorial on Decentralized Internet Infrastructure (DII)	TSB	QALL/13	Noted. Inspired for Q19/13 in term of trusted infrastructure supported by blockchains technologies.
[ 286-GEN ]	Technical tutorial on quantum key distribution.	TSB	QALL/13	Noted.

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[ 285-GEN ]	LS/i on the new version of the Home Network Transport (HNT) Standards Overview and Work Plan [from ITU-T SG15]	ITU-T SG15	QALL/13	Noted.	
[ 284-GEN ]	LS/i on the new version of the Access Network Transport (ANT) Standards Overview and Work Plan [from ITU-T SG15]	ITU-T SG15	QALL/13	Noted.	
[ 283-GEN ]	LS/i/r on Establishment of new Focus Group on Network Technologies for 2030 and beyond (FG NET-2030) (reply to SG13-LS66) [from ITU-R WP 5D]	ITU-R WP 5D	QALL/13	Noted.	
[ 282-GEN ]	Report of the eighth meeting of the SG13 ad hoc group on "Guidelines for development of technical Recommendations", Tuesday 25 September 2018, 9:00-10:30 AM Geneva time (electronic meeting)	Co- convenor of the SG13 ad hoc group	QALL/13	Noted.	
[ 281-GEN ]	Output draft of the 25th September 2018 e-meeting of the ad-hoc group on Guidelines and methodologies for developing technical Recommendations	Co-editors	QALL/13	Noted.	
[ 278-GEN ]	LS/r on hot topics (reply to TSAG - LS10-E) [from ITU-T SG5]	ITU-T SG5	QALL/13	Noted.	
[ 277-GEN ]	LS/r on ITU inter-Sector coordination: ITU-R Working Parties 5A, 5B, and 5C versus ITU-T Questions (reply to ITU-R SG5 - Document 5C/TEMP/146 (Rev.1)) [from ITU-SG5]	ITU-T SG5	QALL/13	Noted.	
[ 272-GEN ]	LS/i/r on Definition of broadband access (reply to SCV - LS 15 -E) [from ITU-T SG5]	ITU-T SG5	QALL/13	Noted.	
[ 270-GEN ]	LS/i/r on invitation to review Big data Standardization Roadmap and provide missing or update information (reply to SG13-LS72) [from FG-DPM]	FG DPM	QALL/13	Noted.	
[ 268-GEN ]	LS/i on Establishment of new ITU-T Focus Group on vehicular multimedia (FG-VM) and its first meeting [from ITU-T SG16]	ITU-T SG16	QALL/13	Noted.	
[ 267-GEN ]	LS/i on Establishment of new ITU-T Focus Group on artificial intelligence for health (FG AI4H) [from ITU-T SG16]	ITU-T SG16	QALL/13	Noted.	
[ 266-GEN ]	LS/i on creation of new Questions 5/16 (Artificial intelligence-enabled multimedia applications) and 22/16 (Distributed ledger technologies and e- services) [from ITU-T SG16]	ITU-T SG16	QALL/13	Noted.	

#### - 7 -SG13-TD318/WP2

[ 265-GEN ]	LS/i on reference table to be used for Conformance and Interoperability testing [from ITU-T SG11]	ITU-T SG11	QALL/13	Noted.	
[ 264-GEN ]	LS/r on appointment of ITU technical experts (reply to SG2 - LS36) [from ITU- T SG11]	ITU-T SG11	QALL/13	Noted.	
[ 263-GEN ]	LS/i on LwM2M v1.1 Release Approval [from OMA]	OMA	QALL/13	Noted.	
[ 262-GEN ]	LS/i on Ethernet Bandwidth Assessment [from IEEE 802.3 Working Group1]	IEEE 802.3 Working Group1	QALL/13	Noted.	
[ 258-GEN ]	LS/i/r on Establishment of new Focus Group on Network Technologies for 2030 and beyond (FG NET-2030) (reply to SG13-LS67) [from N5A]	N5A	ALL/13	Noted.	
[ 257-GEN ]	LS/i/r on SG17 support to FG NET-2030 (reply to SG13-LS66) [from ITU-T SG17]	ITU-T Study Group 17	ALL/13	Noted.	

## 6 Review the Work Program

The work program of Q19/13 was reviewed and updated. In particular, targets for Consent for all ongoing draft Recs were widely discussed and modified based on current state of these documents. The current work program for Q19/13 can be found in Annex A.

#### 7 Review Roadmap for Q19/13

The roadmap of Q19/13 was updated according to Consent process applied to **ITU-T Y.3517** "Cloud computing - Overview of inter-cloud trust management", **ITU-T Y.3518** "Cloud computing - Functional requirements of inter-cloud data management" and **Corrigendum 1 of ITU-T Y.3514** "Cloud computing - Trusted inter-cloud computing framework and requirements". The current roadmap for Q19/13 can be found in [SG13-TD316/WP2].

#### 8 Review Living Lists

The Living list for Q19/13 were reviewed without any modification. The current Living List for Q19/13 can be found in [SG13-TD317/WP2].

#### 9 Contributions for other Questions

None identified.

#### **10 Drafting**

#### 10.1 Draft Rec. Y.CCICDM-req

The draft Rec. was updated by replacing inter-cloud data annotation, processing and usage with intercloud data policy for the whole draft. The linkages for all the use cases in Appendix I and requirements in Clause 7-9 were verified and fixed. Section of references, abbreviations, and conventions in Clause 2, 4, and 5 was updated as well. As former interim Q19/13 e-meeting hold 5-7 September 2018, was dedicated to improve text of this draft Rec., the overall editorial modifications and format adjusting for the whole draft was applied to prepare this draft Rec. for Consent process. Question 19/13 agreed to provide this draft Rec. to Consent process under Recommendation number ITU-T Y.3518.

#### 10.2 Draft Rec. Y.CCICTM

This draft Rec. was updated by modification the content of sections related to terms and to abbreviations. As former interim Q19/13 e-meeting hold 5-7 September 2018, was dedicated to improve text of this draft Rec., the overall editorial modifications and format adjusting for the whole draft was applied to prepare this draft Rec. for Consent process. Question 19/13 agreed to provide this draft Rec. to Consent process under Recommendation number ITU-T Y.3517.

#### **10.3 Draft Rec. Y.BDDP-reqts**

This draft Rec. was updated by providing new term for "big data preservation" in clause 3.2. The reorganisation clause 6 into three sub clauses occurred. The medication of use case I.4 "Data preservation policy management" to including some specific scenarios was applied. Based on this, the some specific requirements derived from the modified use case I.4. was proposed into body text. Several pending issue addressed by Editor's note was solved. The text of this draft Rec. was harmonized with terminology and methodology related to big data and developed under Question 17/13.

## 10.4 Draft Rec. Y.cslm-metadata

This draft Rec. was no evoked by contributions. The Rapporteur pointed out this situation as first time. According to Question 19/13 internal rules, the draft Recs, which is not evoked during 3 following meeting, will be plan to cancel.

## 10.5 Draft Rec. Y.CCM-req

This draft Rec. was updated by adding use case of resource service cost utilization improvement. According to the discussion of C-139, the new TD-018 was produced to provide modification of use case description and derive the requirements. The clause 3 of definitions and clause 4 of abbreviations ware updated accordingly. Finally, the clause 7.1 of body text as well as Appendix I, were updated by derived requirements and use case description, accordingly.

## 10.6 Draft Rec. Y.e2efapm

This draft Rec. was updated by clarifications on change management in clause 8.3 and clarifications on performance management in clause 8.4. General remarks related to harmonization with cloud computing methodology and clarification of roles and sub-roles were proposed. Meeting indicated lack of stack (in form of figure with description) and hierarchical terminology used in this draft Recs. The full stack of service seems to be referenced for this draft Rec.

## 10.7 Draft Rec. Y.cccsdaom

This draft Rec. was updated by adding new definitions of "continuous integration", "continuous delivery" and "automated testing". The description of user case "I.3 Development plan" was updated with requirements derivation to clause 7. Additionally, the use case "I.4. NFV Development/Integration/Verification closed loop system was accepted. The general editorial changes were proposed for whole draft document.

# 10.8 Corrigendum 1 of ITU-T Y.3514 "Cloud computing - Trusted inter-cloud computing framework and requirements

The text of Corrigendum 1 of ITU-T Y.3514 was evoked from former meeting after [296-WP2]. There was no comments either updates on this text, therefore, the Question 19/13 agreed to provide this Corrigendum 1 of ITU-T Y.3514 to Consent process under AAP procedure following the path for the original Recommendation ITU-T Y.3514.

#### 11 IPR statement

No IPR statement was received during the meeting.

# 12 Approval of Outgoing Liaisons, if any

The Question 19/13 meeting approved the following Liaisons outgoing documents (LS/o):

<u>SG13-TD320-WP2</u> LS/o/r on terms and definitions harmonization – dependability [to SCV]

## 13 Review and approval of meeting outputs

The Q19/13 meeting approved the following output documents (TDs):

<u>SG13-TD310-WP2</u>	Output draft Rec. "Cloud computing - functional requirements of inter- cloud data management" - for Consent (Y.3518)
<u>SG13-TD311-WP2</u>	Output draft Rec. "Cloud computing - Overview of inter-cloud trust management" – for Consent (Y.3517)
<u>SG13-TD319-WP2</u>	Corrigendum 1 of ITU-T Y.3514 "Cloud computing - Trusted inter-cloud computing framework and requirements" – for Consent
<u>SG13-TD312-WP2</u>	Output draft Rec. "Big data – Overview and requirements for data preservation " (Y.BDDP-reqts)
<u>SG13-TD313-WP2</u>	Output draft Rec. "Cloud Computing - End-to-end fault and performance management framework of inter-cloud virtual network services" (Y.e2efapm)
<u>SG13-TD314-WP2</u>	Output draft Rec. "Cloud computing – Requirements for cloud service development and operation management" (Y.cccsdaom-reqts)
<u>SG13-TD315-WP2</u>	Output draft Rec. "Cloud computing maturity requirements and framework (Y.ccm-reqts)"
<u>SG13-TD316-WP2</u>	Roadmap of Q19/13, 22 October – 2 November 2018, Geneve
<u>SG13-TD317-WP2</u>	Living list of Q19/13, 22 October – 2 November 2018, Geneve
<u>SG13-TD318-WP2</u>	Report of Q19/13, 22 October – 2 November 2018, Geneve

# 14 Future Plan/Meetings

- The Q19/13 will meet during the next SG13 Plenary meeting, 4 15 March 2019 in Victoria Falls, Zimbabwe. Main objectives for this meeting include:
  - Progress on Q19/13 work items:
    - o draft Rec. "Big data Overview and requirements for data preservation"
    - o draft Rec. "Metadata framework for cloud service lifecycle management"
    - o draft Rec. "Cloud computing maturity requirements and framework"
    - draft Rec. "Cloud Computing End-to-end fault and performance management framework of inter-cloud virtual network services"
    - draft Rec. "Cloud computing Requirements for cloud service development and operation management"
  - Discuss any new work items proposals
- 2) The follows Question 19/13 meeting is planned in time of co-located rapporteur group meetings, **17 28 June 2019**.
- 3) The next follows Question 19/13 meeting is planned during the SG13 Plenary meeting, 14
   25 October 2019.

#### - 11 -SG13-TD318/WP2

#### 15 Other Business/Miscellaneous

# 15.1 Joint session of Questions 17/13, Question 18/13 and Question 19/13 on term of reference for new study period

In time of this RGM SG13, the Question 17/13, Question 18/13 and Question 19/13 begin common discussion on future direction and term of references for these Questions in next study period. Based on several comments collected during discussion, the Contributions addressed to given Question, are invited to specify future scope of work, technologies proposed for consideration as well as modification ToR of particular Question. Joint session was placed on 30<sup>th</sup> October 2018, S1.

Question 19/13 would like to kindly appreciate Question 17/13 and Question 18/13 for their effort and fruitful discussion during this session. For more details on this session refer to Report of Question 17/13.

#### 16 Review and approval of the meeting report

The Q19/13 reviewed and approved this meeting report.

#### **17** Closing of the meeting

Rapporteur Q19/13, Dr. Emil Kowalczyk showed his thanks and appreciations for all the participants who had devoted so much on the work of Q19/13 and expressed his wishes to meet again during SG13 Plenary Meeting, 4 - 15 March 2019 in Victoria Falls, Zimbabwe.

# Annex A – Q19/13 Work Program

Rec.	Q	Short Title	Status	Approval process	Priority	Target for Consent / Determinat ion / Approval	Revised / New Text Location	Editors	Liaisons
Y.3517 (Y.ccictm)	19/13	Cloud Computing - Overview of Inter-Cloud Trust Management	N	AAP	Н	Q4 2018		Yan Lei Datang Software	
Y.3518 (Y.ccicdm-req)	19/13	Cloud computing – functional requirements of inter-cloud data management	N	AAP	Н	Q4 2018		<b>Ying Cheng,</b> China Unicom	
Y.BDDP-reqts	19/13	Big data – Overview and requirements for data preservation	N	AAP	Н	Q4 2019		Yan Lei Datang Software, Ying Cheng, China Unicom	
Y.cslm- metadata	19/13	Metadata framework for cloud service lifecycle management	N	AAP	М	Q2 2019		Ying Cheng, China Unicom, Yan Lei Datang Software	
Y.ccm-reqts	19/13	Cloud computing maturity requirements and framework	N	AAP	М	Q4 2019		Tingting Zhang, China Mobile, Zhiqiang Hou, China Mobile, Ying Cheng, China Unicom,	
Y.cccsdaom-req	19/13	Cloud computing – Requirements for cloud service development and operation management	N	AAP	М	Q3 2020		XiaoLing Niu, MIIT Ying Cheng, China Unicom Tingting Zhang, China Mobile,	

- 13 -SG13-TD249/WP2

Rec.	Q	Short Title	Status	Approval process	Priority	Target for Consent / Determinat ion / Approval	Revised / New Text Location	Editors	Liaisons
Y.e2efapm	19/13	Cloud Computing - End-to-end fault and performance management framework of inter- cloud virtual network services	N	AAP	М	Q3 2020		Sridhar Sapparapu, TEC DOT Yan Lei, Datang Software	

Legend: H – high; M – medium; L – low; N - new; R - revised, D – deleted