



ISO/TC 307

Blockchain and distributed ledger technologies

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Secretariat: SA (Australia)

ISO TC 307 Consolidated CM and WG reports June 2020

Document type: Other meeting document

Date of document: 2020-05-28

Expected action: INFO

Background: Please find enclosed the Committee Manager's report, as well as reports from WGs 1, 2 and 5 and JWG 4.

Committee URL: <https://isotc.iso.org/ecom/livelihood/open/tc307>



ISO TC 307

Blockchain and distributed ledger technologies

N0418: ISO/TC 307 Committee Manager Report June 2020

Chairperson	Craig Dunn
Committee Manager	Emily Dawson (SA)

Membership of TC 307	
Participating Countries – 44 (1 new)	Observing Countries – 13
Australia (SA)	Argentina (IRAM)
Austria (ASI)	Belarus (BELST)
Belgium (NBN)	Colombia (ICONTEC)
Brazil (ABNT)	Estonia (EVS)
Cambodia (ISC)	Hong Kong (ITCHKSAR)
Canada (SCC)	Indonesia (BSN)
China (SAC)	Iran, Islamic Republic of (ISIRI)
Croatia (HZN)	Kenya (KEBS)
Cyprus (CYS)	Morocco (IMANOR)
Czech Republic (UNMZ)	Philippines (BPS)
Denmark (DS)	Romania (ASRO)
Finland (SFS)	Slovakia (SOSMT)
France (AFNOR)	Uruguay (UNIT)
Germany (DIN)	
Hungary (MSZT)	
India (BIS)	
Ireland (NSAI)	
Israel (SII)	
Italy (UNI)	
Jamaica (BSJ)	
Japan (JISC)	
Kazakhstan (KAZMEMST)	
Korea, Republic of (KATS)	
Luxembourg (ILNAS)	
Malaysia (DSM)	
Malta (MCCAA)	
Mexico (DGN)	
Netherlands (NEN)	
New Zealand (NZSO)	
Nigeria (SON)	
Norway (SN)	
Poland (PKN)	
Portugal (IPQ)	
Russian Federation (GOST R)	
Singapore (SPRING SG)	
South Africa (SABS)	
Spain (UNE)	
Sweden (SIS)	
Switzerland (SNV)	
Thailand (TISI)	
Ukraine (DSTU)	
United Arab Emirates (ESMA)	
United Kingdom (BSI)	
United States (ANSI)	

New members

Upgraded members



ISO TC 307

Blockchain and distributed ledger technologies

Liaison Committees to ISO/TC 307	
ISO/IEC JTC 1	Information technology
ISO/IEC JTC 1/SC 7	Software and systems engineering
ISO/IEC JTC 1/SC 17	Cards and security devices for personal identification
ISO/IEC JTC 1/SC 27	IT Security techniques
ISO/IEC JTC 1/SC 31	Automatic identification and data capture techniques
ISO/IEC JTC 1/SC 32	Data management and interchange
ISO/IEC JTC 1/SC 36	Information technology for learning, education and training
ISO/IEC JTC 1/SC 37	Biometrics
ISO/IEC JTC 1/SC 38	Cloud Computing and Distributed Platforms
ISO/IEC JTC 1/SC 40	IT Service Management and IT Governance
ISO/IEC JTC 1/SC 41	Internet of Things and related technologies
ISO/IEC JTC 1/SC 42	Artificial intelligence
ISO/PC 308	Chain of custody - General terminology and models
ISO/TC 20	Aircraft and space vehicles
ISO/TC 46/SC 11	Archives/records management
ISO/TC 68	Financial services
ISO/TC 68/SC 2	Financial Services, security
ISO/TC 154	Processes, data elements and documents in commerce, industry and administration
ISO/TC 184/SC 4	Industrial data
ISO/TC 211	Geographic information/Geomatics
ISO/TC 215	Health informatics
ISO/TC 262	Risk management
ISO/TC 292	Security and resilience
ISO/TC 309	Governance of organizations
ISO/TC 322	Sustainable finance
ISO/TC 323	Circular economy
ISO/TC 324	Sharing economy

Liaison Committees from ISO/TC 307		
ISO/IEC JTC 1	Information technology	Laura Lindsay
ISO/IEC JTC 1/SC 7	Software and systems engineering	Padma Ramesh
ISO/IEC JTC 1/SC 17	Cards and security devices for personal identification	Pietro Marchionni
ISO/IEC JTC 1/SC 27	IT Security techniques	Shinichiro Matsuo Pietu Pohjalainen
ISO/IEC JTC 1/SC 29	Coding of audio, picture, multimedia and hypermedia information	Touradj Ebrahimi
ISO/IEC JTC 1/SC 31	Automatic identification and data capture techniques	Sylvain Cariou
ISO/IEC JTC 1/SC 32	Data management and interchange	Willem van 't Einde Diana Tuezova
ISO/IEC JTC 1/SC 37	Biometrics	Arunpirasath Nadarasa
ISO/IEC JTC 1/SC 38	Cloud Computing and Distributed Platforms	Brian Shepherd Toshihiro Suzuki
ISO/IEC JTC 1/SC 40	IT Service Management and IT Governance	Peter Sze
ISO/IEC JTC 1/SC 41	Internet of Things and related technologies	Mike Edwards Vadim Tsypyshev
ISO/IEC JTC 1/SC 42	Artificial intelligence	Janna Lingenfelder
ISO/PC 308	Chain of custody	Nick Addison
ISO/TC 46	Information and documentation	Victoria Lemieux
ISO/TC 46/SC 11	Archives/records management	Victoria Lemieux
ISO/TC 68	Financial services	Mark Ebeling Jan Noppen Caroline Thomas



ISO TC 307

Blockchain and distributed ledger technologies

ISO/TC 68/SC 2	Financial Services, security	Diana Tuezova
ISO/TC 154	Processes, data elements and documents in commerce, industry and administration	Diana Tuezova
ISO/TC 211	Geographic information/Geomatics	Diana Tuezova
ISO/TC 215	Health informatics	Ingrid Barth
ISO/TC 262	Risk management	Jose Antonio Costa
ISO/TC 292	Security and resilience	Nick Addison
ISO/TC 295	Audit data services	Eric Cohen
ISO/TC 309	Governance of organizations	Orville Johnson Ad Kroft Diana Tuezova
ISO/TC 322	Sustainable finance	Eric Cohen Caroline Thomas
ISO/TC 323	Circular economy	Caroline Thomas

Organizations in liaison (Category A)	
EC - European Commission	European Commission
EEA Inc.	Enterprise Ethereum Alliance Inc.
FIG	International Federation of Surveyors
GS1	GS1
IEEE	Institute of Electrical and Electronics Engineers, Inc
INATBA	International Association for Trusted Blockchain Applications
ITU	International Telecommunication Union Note: the liaison representatives <i>from</i> TC 307 to ITU are David Manset and Mark Staples
OECD	Organisation for Economic Co-operation and Development, OECD
SBS - Small Business Standards	Small Business Standards
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UNECE	United Nations Economic Commission for Europe

Work Programme						
Current Projects						
Reference	Document title	WG	Project leader	Stage	Limit date	Timeframe
ISO/WD TS 23258	Taxonomy and Ontology	WG 1	Wonsuk Lee (wonsuk.lee@etri.re.kr)	20.20	2022-01-30	SDT 48
ISO/CD 23257	Reference architecture	WG 1	Kyeong Hee Oh (khoh@tcaservices.kr)	30.60	2021-01-30	SDT 48
ISO/FDIS 22739	Terminology	WG 1	Victoria Lemieux (vlemieux@mail.ubc.ca)	50.20	2020-08-28	SDT 36
ISO/CD TR 23576	Security management of digital asset custodians	WG 2	Shin'ichiro Matsuo (matsuo@mac.com)	30.60	2021-06-07	SDT 36
ISO/DTR 23245	Security risks, threats and vulnerabilities	JWG 4	Shinichiro Matsuo (matsuo@mac.com)	30.60	2020-11-21	SDT 36
ISO/AWI TS 23259	Legally binding smart contracts	WG 3	Philippa Ryan (Philippa.Ryan@uts.edu.au)	20.00	2022-02-23	SDT 48
ISO/WD TS 23635	Guidelines for governance	WG 5	Roman Beck (romb@itu.dk)	20.00	2022-10-05	SDT 48
ISO/CD TR 3242	Use cases	WG 6	Caroline Thomas (carolinet2020@gmail.com)	30.00	TBC	TBC
ISO/PWI TR 23249	Blockchain and distributed ledger technologies – Overview of existing DLT systems for identity management	JWG 4	TBC	00.00	TBC	SDT 24

Current Projects (administered by another committee)						
Reference	Document title	WG	Project leader	Stage	Limit date	Timeframe
ISO/NP TR 24332	Application of blockchain technology to records management — Issues and considerations	TC 46/ SC 11/ JWG 1	Sungjae Kim (kimsj@dca.or.kr) Geoff Goodell (g.goodell@ucl.ac.uk)	20.00	TBC	SDT 24

Publications			
Designation	Document title	WG	Systematic/recommended review date
ISO/TR 23455:2019	Overview of and interactions between smart contracts in blockchain and distributed ledger technology systems	WG 3	2022-09-30
ISO/TR 23244:2020	Privacy and personally identifiable information protection considerations	JWG 4	2023-05-30

Out of Session Resolutions

The following resolutions have been approved out of session since meeting 05 via CIB:

Resolution #	Detail
2020/111	TC 307 decides to form a liaison with GS1.
2020/112	TC 307 approves the reappointment of Craig Dunn as Chair for a second 3-year term, concluding 31 December 2022 (see N592).
2020/113	<p>TC 307 nominates the following member(s) as liaison representatives to ISO/IEC JTC 1/SC 17:</p> <ul style="list-style-type: none"> • Amanda Suo (Spain) • Anthony Nadalin (USA) <p>TC 307 nominates the following member as liaison representative to ISO/IEC JTC 1/SC 37:</p> <ul style="list-style-type: none"> • Amanda Suo (Spain) <p>TC 307 nominates the following member(s) as liaison representatives to ISO/PC 308:</p> <ul style="list-style-type: none"> • Miguel Garcia-Menendez (Spain) • Ignacio Alamillo (Spain) • David Arroyo (Spain) • Cristiano Petroni (Brazil) <p>TC 307 nominates the following member(s) as liaison representatives to ISO/TC 154:</p> <ul style="list-style-type: none"> • Miguel Garcia-Menendez (Spain) • Ignacio Alamillo (Spain) <p>TC 307 nominates the following member(s) as liaison representatives to ISO/TC 292:</p> <ul style="list-style-type: none"> • Miguel Garcia-Menendez (Spain) • Ignacio Alamillo (Spain) • David Arroyo (Spain) • Amanda Suo (Spain) • Eduardo Mugnai (Brazil) <p>See N605.</p>
2020/114	TC 307 nominates Amanda Suo (Spain) as liaison representative to ISO/IEC JTC 1/SC 27 (see N606).
2020/115	TC 307 approves the publication of ISO/CD TR 23245.2 contingent on the resolution of all comments received.

Contact Details

Name	Role	Contact Details
Emily Dawson (Australia)	TC 307 Committee Manager	emily.dawson@standards.org.au +61 2 9237 6136 Level 9, 20 Bridge Street Sydney Australia NSW 2000
Craig Dunn	TC 307 Chairperson	craigdunn31@gmail.com



ISO TC 307

Blockchain and distributed ledger technologies

Geoffrey Goodell (UK)	WG 1 Convenor (Foundations) Co-Convenor, ISO/TC 46/SC 11/JWG 1 (Joint ISO/TC 46/SC 11 - ISO/TC 307 WG: Blockchain)	g.goodell@ucl.ac.uk
Julien Bringer (France)	WG 2 Convenor (Security, privacy and identity) JWG 4 Co-Convenor (Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG: Blockchain and distributed ledger technologies and IT Security techniques)	julien@kallistech.com
Sal Francomacaro (US)	JWG 4 Co-Convenor (Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG: Blockchain and distributed ledger technologies and IT Security techniques)	salvatore.francomacaro@nist.gov
Volker Swarek (Germany)	WG 3 Convenor (Smart contracts and their applications)	volker.skwarek@haw-hamburg.de
Roman Beck (Denmark)	WG 5 Convenor (Governance)	romb@itu.dk
Caroline Thomas (UK)	WG 6 Convenor (Use cases)	carolinet2020@gmail.com
Gilbert Verdian (UK)	SG 7 Convenor (Interoperability of blockchain and distributed ledger technology systems)	gilbert.verdian@quant.network

ISO/TC 307/WG 1 Foundations

Report to Committee Manager, 2020-05-15

Geoff Goodell (UK) Convenor, WG 1

Victoria Lemieux (CA) Project Leader, FDIS 22739 Terminology

Kyeong Hee Oh (KR) Project Leader, CD 23257 Reference architecture

Wonsuk Lee (KR) Project Leader, WD TS 23258 Taxonomy and Ontology

1 Introduction

ISO/TC 307/WG 1 is the working group tasked with producing recommendations related to the foundational elements of blockchain and distributed ledger technologies. The working group comprises four projects:

- FDIS 22739 Terminology
- CD 23257 Reference architecture
- WD TS 23258 Taxonomy and ontology

This report details the progress to date associated with the four projects. As of 2020-05-15, the WG 1 project groups have held 14 two-hour teleconferences since the Hyderabad plenary, in addition to a three-day onsite meeting in Vancouver to resolve comments on DIS 22739. The following table offers a summary of the number of past (between Hyderabad and now) and future (currently scheduled) meetings allocated or partially allocated to each of the four projects:

Project	Onsite	Virtual	
		Past	Future
FDIS 22739	3	0	0
CD 23257	0	10	5
WD TS 23258	0	7	5

The teleconferences were held on Tuesdays, with times rotating among the three standard ISO time slots (05:00, 13:00, 21:00 UTC), with eight weeks missing, including the week immediately after the Hyderabad plenary as well as the week of the DIS 22739 comment resolution onsite meeting in Vancouver. Meetings were coordinated to avoid conflicts with WG 6. Meetings were allocated to topics with the following prioritised objectives:

- advancing DIS 22739 to publication ahead of its deadline in August 2020;
- advancing CD 23257 to the Enquiry stage (DIS) in time to arrange to receive DIS ballot results suitable for CRM during the Singapore plenary in November 2020;
- advancing WD TS 23258 to the Committee stage (CD) in summer 2020.

The teleconferences were carried out via conference calls conducted using the ISO Zoom meeting platform and via the online forum linked from the TC 307/WG 1 committee home page.

2 Progress

In summary, all four of our WG 1 activities have advanced according to our plan since the Dublin plenary. Currently, FDIS 22739 Terminology is under FDIS ballot that is scheduled to close on 2020-06-08, we are currently conducting comment resolution for CD 23257.3 Reference Architecture, and WD TS 23258 is progressing toward a final working draft.

The detailed project updates are as follows:

1. **DIS 22739 Terminology.** We are pleased with the outcome of comment resolution of DIS 22739, which we held during our onsite meeting in Vancouver, under the leadership of Victoria Lemieux. We were fortunate to hold this meeting back-to-back with our inaugural meeting of TC 46/SC 11/JWG 1. The outcome of comment resolution is summarised below:

Disposition of Comments	ISO/TC 307/WG 1/N 656
Consensus Report	ISO/TC 307/WG 1/N 669
Submitted Draft of DIS 22739 (PDF)	ISO/TC 307/WG 1/N 667
Submitted Draft of DIS 22739 (MS Word)	ISO/TC 307/WG 1/N 675
Changes Since Previous Version	ISO/TC 307/WG 1/N 665
Exceptional Changes Report	ISO/TC 307/WG 1/N 661

We anticipate at most one additional teleconference, perhaps on 2020-06-22 or the following week, to review and finalise the editorial comments following the FDIS ballot results. This teleconference might not be necessary. We plan to finalise FDIS 22739 for publication as soon as possible to satisfy the August 2020 deadline. We anticipate that publication will take place before the end of September 2020.

2. **CD 23257 Reference architecture.** Under the leadership of Kyeong Hee Oh, CD 23257 has progressed according to our plan in Hyderabad, and we are currently resolving comments on the third CD draft, CD 23257.3. As of 2020-05-15, there are only ten comments remaining. We intend to finish comment resolution by the end of May. To prepare for the possibility that we fall short of that goal, we have arranged some extra teleconferences during the week of 2020-06-01. The limit date for reaching the Enquiry stage is 2021-01-29. The latest versions of the documents, reflecting our progress as of 2020-05-15, are as follows:

Draft Disposition of Comments (MS Excel)	ISO/TC 307/WG 1/N 723
Draft of CD 23257.3 (MS Word)	ISO/TC 307/WG 1/N 722

3. **WD TS 23258 Taxonomy and ontology.** Under the leadership of Wonsuk Lee, this project has made steady progress. We especially want to thank Jérôme Pons (France), who has been particularly instrumental to helping us develop the document, as well as Fiona Delaney (Ireland), who has been instrumental in coordinating our work with the work of WG 6 Use Cases. The target date for CD registration is 2020-06-29. We might satisfy the target, but this is uncertain. Progress has been delayed in part due to our need to focus on CD 23257.3 comment resolution as a result of not having the option to conduct comment resolution in Cyprus. The latest version of WD TS 23258 can be found in ISO/TC 307/WG 1/N 708.

3 Issues

The following two issues have emerged that might require attention from TC 307 leadership:

1. ***Loss of the Cyprus plenary.*** We interpret the loss of the Cyprus plenary due to SARS-CoV-2 to mean that we need TC 307 to explicitly approve the advancement of CD 23257.3 to the Enquiry stage (DIS). ***We specifically request this approval, with the view to eliminate the risk that CD 23257.3 might be held back.*** We also intend to file a Consensus Report as we have done on two occasions for FDIS 22739. The loss of the Cyprus plenary has also delayed the progress of WD TS 23258. This does not seem to be a critical issue for WD TS 23258, but we are likely to miss the target date for CD registration.
2. ***Continued problems with the Zoom teleconferencing platform.*** Some of our experts have expressed regret that they are unable to join our WG 1 meetings because the Zoom platform has been inaccessible or unusable for them for security reasons. We appreciate that it is possible to join ISO Zoom teleconferences by phone, although this is not the most effective way to collaborate and not always an option for our experts, especially those whose workplaces disallow mobile phones or certain calls via fixed phones. We also appreciate that it is possible to join ISO Zoom meetings via a web browser, although we note that Zoom actively discourages the use of web browsers to access its platform and instead encourages users to install special software.¹ Furthermore, the Zoom platform specifically disallows audio for common browsers such as Firefox.² Our experience suggests that ISO might consider instead hosting its own teleconferencing system, perhaps using open-source tools such as Jitsi.³

4 Next Steps

We encourage TC 307 experts to take the following actions:

1. Encourage your national standards organisations to approve FDIS 22739 and also contribute useful editorial comments.
2. Participate in the remaining CD 23257.3 comment resolution meetings.
3. Once the CD 23257.3 comments have been fully resolved, review the resulting document and the disposition of comments carefully, submit comments to improve the document further, and encourage your national standards organisations to submit your comments.
4. Review the latest draft of WD TS 23258. Then, submit your comments to Wonsuk Lee or post your comments to the WG 1 Forum.
5. Join ISO/TC 46/SC 11/JWG 1, which still needs more participation from TC 307 experts!

We look forward to working with you remotely in the coming months. Please do not hesitate to reach out to me <g.goodell@ucl.ac.uk> with any comments, questions, or concerns.

¹This is a 'dark pattern' to encourage data extraction; see <https://web.archive.org/web/20200511130824/https://techcrunch.com/2020/03/20/psa-yes-you-can-join-a-zoom-meeting-in-the-browser/>

²Zoom encourages people to use Google Chrome, which is riddled with privacy-related bugs; for example, see <https://trac.torproject.org/projects/tor/wiki/doc/ImportantGoogleChromeBugs>

³Jitsi, <https://jitsi.org/>



Security, privacy and identity

ISO/TC 307/WG 02

Date: 2020-05-18

Doc. Number: N0119

Assistant: Antoine AUROUSSEAU

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Convenor: Julien BRINGER

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WG2 update report for TC 307 – May 2020

FOLLOW
UP

For Information

COMMENTARIES /

DECISIONS

Report of activities from November 2019 to May 2020

SOURCE

WG 2 Secretariat

Report from WG 2 - Security, privacy and identity

This document contains the activities report of WG 2, from Hyderabad's plenary (November 2019) to early May 2020, as an input to TC 307, ahead of Nicosia virtual WG 2 meetings (June 2020).

Overall summary

Main work items:

- the following Technical Report project, already started before Hyderabad,
 - o ISO/DTR 23576 "Security Management of Digital Asset Custodians" – Project Leader Shin'ichiro Matsuo (JP), with Aldo Lo Castro (GB)
- And the following studies, extended for six months at Hyderabad WG 2 plenary with revised ToRs
 - o Security Evaluation of Consensus Models (SECM) started in May 2018, with ToR in WG 2 N013, led by Patrick Curry (GB), Siddharth Durbha (IN) and Stéphane Caporali (FR);
 - o WG 2 and WG3 Study on Security Issues on Smart Contracts, as per ToR in WG 2 N047, started in November 2018, and led by Stephen Holmes (GB).

Projects status

As of May 2020, the status of the WG2 projects is as follows:

DTR 23576

- DTR ballot result is positive, as acceptance criteria have been reached.
- The DTR ballot result and numerous comments being available only lately during Hyderabad meeting, three CRM slots have been organized in January and February 2020 via virtual e-meeting (WG2 5th meeting).
- At the end of the slots, the DoC was completed, in particular resolving the issues related to the presence of normative requirements in the text and many other technical comments. Some of the general and technical comments could however not be implemented as there were no concrete proposed change. The DoC has been circulated afterward and no further comments were received.
- Given the significant editing workload, the editors are planning to circulate the revised version in May to be able to finalize the text during upcoming June e-meeting.
- It was indeed agreed to handle an internal quality assessment review after implementation of the DoC.
- The next tentative step is moving to publication after June e-meeting.

Study SECM

- The new call for contributions did not enable to collect many new inputs, so the most active experts continued to discuss on the basis of Hyderabad outcome to prepare a revised report.
- The study on SECM has been a long journey and the content of the report will certainly be useful for several TC307 works, but it remains difficult to identify specific new projects to be launched right after the study (although some preliminary ideas were identified before Hyderabad). Security of consensus mechanisms has potentially an impact everywhere, but it is a complicated topic to cover by itself. This may also depend on the active participation of experts and willingness to help leading this effort.
- The conclusion of the study and how to leverage the report will be discussed in upcoming June e-meeting.

WG 2 and WG3 Study on Security Issues on Smart Contracts

- The study on security issues on Smart Contracts has received a few additional comments through the latest call for contributions.
- The study leader continued to organize regular teleconference meetings, with several active experts. Additionally, some informal communication happened with WG3 TS team to ensure the report is better aligned with WG3 needs.
- The report will be discussed during upcoming June e-meeting, together with the tentative plan to convert it into a TR (as already identified as a possible option in the updated ToR).

Other activities

From late 2019 to March 2020, the convenor worked together with JWG 4 co-convenors to prepare a joint workshop with ITU-T SG17 (<https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20200316/Pages/default.aspx>). Due to the COVID-19 situation, the workshop was postponed until further notice to ensure that it will be a forum for active discussion and networking between TC307 WG 2 (and JWG 4) and SG 17 experts.

WG 2 Reference Documents

Main documents related to WG 2 activities and the different projects

Access to WG 2 N-docs

<https://ecom.afnor.org/livelihood-fr/livelihood.exe?func=ll&objid=34033077&objaction=ndoclist>

General

2018-04-06	TC307 Plenary_May_2018-WG2-SG3-SG4 report	N8	Information
2018-05-25	Recommendations to ISO/TC 307 and WG 02 decisions - London - May 2018	N16	information Listed actions for project leaders
2018-09-07	Report from WG2 - Security, privacy and identity for TC307 2018 October plenary	N29	Information
2018-11-07	Final agenda of Moscow WG2 meetings	N39	Information
2018-11-09	Recommendations to ISO/TC 307 and WG 02 decisions - Moscow - October 2018	N43	Information Listed actions for project leaders and experts
2019-05-27	Agenda of Dublin WG2 meetings	N59	Information
2019-06-15	Recommendations to ISO/TC 307 and WG 02 decisions - Dublin - May 2019	N67	Information Listed actions for project leaders and experts
2019-10-31	Agenda of Hyderabad WG 2 meetings	N79	Information
2019-12-24	Recommendations to ISO/TC 307 and WG 2 decisions - Hyderabad - November 2019	N100	Information Listed actions for project leaders and experts
2019-12-08	Agenda of virtual January-February WG 2 meeting for DTR 23576 CRM	N99	Information and for experts registration
2020-05-13	Agenda of virtual Nicosia WG 2 meeting	N116	Information and for experts registration

TR 23576 Blockchain and distributed ledger technologies — Security Management of Digital Asset Custodians

2018-05-22	TR proposal	N15	
2018-08-01	WD1	N25	For comments (deadline 2018-09-21)
2018-10-15	Result of voting and collated comments on WD1	N34	Inputs for DoC
2018-12-03	final Disposition of Comments on WD1	N44	Information
2019-01-24	WD2	N45	For comments (deadline 2019-03-15)
2019-03-21	Result of voting and collated comments on WD2	N51	Inputs for DoC
2019-06-05	Scope change	N65	Information
2019-08-05	Final Disposition of Comments on WD2	N70	Information
2019-09-11	DTR	N69	For TC307 DTR ballot
2019-11-29	DTR ballot result and collated comments	N98	Inputs for DoC during 5 th WG2 meeting
2020-05-06	Final Disposition of Comments on DTR	N115	Information

Study on Security Evaluation of Consensus Models

2018-05-18	ToR	N13	For contributions
2018-09-06	Study report	N27	For comments / discussions (please now contact rapporteurs and/or participate to Moscow presentation)
2018-10-19	Study report (updated)	N35	For comments / discussions (please contact rapporteurs and/or participate to Moscow presentation)
2018-11-07	Call for contributions	N41	For contributions (deadline 2019-01-31)
2019-02-08	Result of call for contributions	N50	Information. Inputs to study
2019-05-27	2 nd study report	N57	For comments / discussion in Dublin
2019-06-15	3 rd call for contributions	N68	For contributions (deadline 2019-08-30)
2019-09-03	Result call for contributions	N75	Information. Inputs to study
2019-11-18	Report study	N88	For discussion in Hyderabad
2019-11-22	Updated ToR	N97	Study extension and new call for contributions
2020-02-04	Result call for contributions	N106	Information. Inputs to study

WG 2 and WG3 Study on Security Issues on Smart Contracts

2018-11-07	ToR	N47	For information and contributions (deadline 2018-12-31)
2019-01-11	Result of call for contributions	N49	Information. Inputs to study
2019-06-04	Study presentation in Dublin	N62	Information / discussion in Dublin
2019-07-09	Result of 2 nd call for contributions	N73	Information. Inputs to study
2019-11-18	Report study	N87	For discussion in Hyderabad
2019-11-22	Updated ToR	N96	Study extension and new call for contributions
2020-02-04	Result call for contributions	N107	Information. Inputs to study



**Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG
Blockchain and distributed ledger
technologies and IT Security techniques**

ISO/TC 307/JWG 04

Date: 2020-05-18

Doc. Number: N0132

Assistant: Antoine AUROUSSEAU

antoine.aurousseau@afnor.org

Convenors:

Julien BRINGER – Salvatore FRANCOMACARO

JWG4 update report for TC 307 – May 2020

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For information

COMMENTARIES /

Report of activities from November 2019 to May 2020

DECISIONS

SOURCE

JWG 4 Secretariat

Report from JWG 4 - Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG: Blockchain and distributed ledger technologies and IT Security techniques

This document contains the activities report of JWG 4, from Hyderabad's plenary (November 2019) to early May 2020, as an input to TC 307, ahead of Nicosia virtual JWG 4 meetings (June 2020).

Overall Summary

- Main work items
 - Two Technical Report projects, already started before Hyderabad,
 - ISO/DTR 23244 “Privacy and personally identifiable information protection considerations” – Project Leader Stephen Holmes (GB)
 - ISO/DTR 23245 “Security risks, threats and vulnerabilities” – Project Leader Shin'ichiro Matsuo (JP)
 - The study
 - “Trust Anchors for Decentralised Identity Management” (TADIM), led by Ignacio Alamillo (ES) and Patrick Curry (GB), started in Dublin (May 2019) and extended for a period of 6 months after Hyderabad (November 2019)
 - And the newly started project
 - ISO/NP TR 23249 (originally numbered as 23247) “Blockchain and distributed ledger technologies – Overview of existing DLT systems for identity management” – Project Leader Paolo Campegiani (IT) and co-leader Ignacio Alamillo (ES)

- Meetings: JWG 4 Meeting on April 28 and 30, 2020 in conjunction with the SC 27 series of meetings

Projects status

As of May 2020, the status of the JWG 4 projects is as follows:

TR 23244

- After concluding DoC on DTR ballot in Hyderabad, the project leader did work with ISO CS to prepare the final version of the document.
- Submission for publication has been made in Dec. 2019, and after several iterations, have been accepted by ISO CS in March 2020.
- TR 23244 has been published on ISO website on May 7th - <https://www.iso.org/standard/75061.html?browse=tc>

DTR 23245

- After agreeing in Hyderabad on moving to publication based on the positive DTR ballot before Dublin (May 2019), and initiating in parallel a revision to cover many of the remaining comments and some criticisms received at the CIB consultation circulated in Oct./Nov. 2019, project leader worked on preparing the final text for submission to ISO CS.
- At the time of submission to ISO CS, ISO TPM requested to TC307 committee manager to create a 2nd DTR ballot, in view of the number of technical changes made since the 1st DTR ballot and the elapsed time (almost 1 year) since.
- Consequently, the 2nd DTR ballot has been created (in both TC307 and SC27 committees in parallel, with deadline to vote between early May and mid-May).
- Vote results, feedbacks received from NBs and any additional comment, will be reviewed at the upcoming June virtual meeting, to decide on next steps (e.g. revision of DTR toward a new draft, publication, and/or revision).

NP TR 23249

- After TC307 plenary in Hyderabad and SC27 approval received in January 2020, the project has officially started. This project was erroneously numbered ISO TR 23247 and eventually renamed by ISO cs with the current number.
- A call for contributions has been circulated in February and a first draft has been prepared based on the collected contributions in March-April.
- The first draft has been discussed during JWG4 meeting in April (virtual Saint Petersburg, right after SC27 WGs meetings week)
- A new call for contributions has been created late April for discussion during upcoming virtual meeting, on what to be modified and next steps.

Study on Trust Anchors for Decentralised Identity Management (TADIM)

- A call for contributions with deadline late January 2020 has been circulated.
- A few contributions have been received and the study leaders prepared an updated version of the report considering those contributions and discussions from Hyderabad.
- Additionally, potential next steps were discussed during JWG4 meeting in April (virtual Saint Petersburg, right after SC27 WGs meetings week), and after this meeting, the study leaders created a proposed text for starting a new TR based on the content of the study report.
- The study report and the proposal of a new TR will be discussed during upcoming June virtual meeting.

Collaboration with ISO/IEC JTC 1/SC 27

With the active support of the co-convenor Salvatore Francomacaro, JWG 4 actively interacted with SC27 to ensure a smooth circulation of documents and information. Specific items of coordination have been the organization of JWG4 virtual meeting in April 2020, the week after SC27 WGs meetings. It was planned to be held in Saint Petersburg the same week as the SC27 WGs meetings but due to the change of status to virtual due to Covid-19, it was preferred to organize the meeting the week after to avoid conflicting with the other SC 27 WGs meetings .

The April meeting was attended by more than 30 remote participants with the participation of some SC27 management officers ; main topics of discussion were TR 23249 and TADIM study.

Other activities

From late 2019 to March 2020, the co-convenors worked together to prepare a joint workshop with ITU-T SG17 (<https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20200316/Pages/default.aspx>). Due to the COVID-19 situation, the workshop was postponed until further notice to ensure that it will be a forum for active discussion and networking between TC307 JWG 4 (and WG 2) and SG 17 experts.

Reference documents

Main documents related to JWG 4 activities and the different projects

Access to JWG 4 N-docs

<https://ecom.afnor.org/livelink-fr/livelink.exe?func=ll&objid=35182162&objaction=ndocslst>

General

2018-11-07	Final agenda of Moscow JWG 4 meetings	N09	Information
2018-11-09	Recommendations to ISO/TC 307 and JWG 4 decisions - Moscow - October 2018	N12	Information Listed actions for project leaders and experts
2019-03-12	JWG4 Tel Aviv meeting announcement and agenda	N27	Information and for experts registration
2019-04-07	JWG4 Tel Aviv overview meeting – presentations	N33	Information
2019-05-27	Agenda of Dublin JWG 4 meetings	N55	Information
2019-06-20	Recommendations to ISO/TC 307 and JWG 4 decisions - Dublin - May 2019	N60	Information Listed actions for project leaders and experts
2019-09-20	Agenda of Paris JWG 4 meetings	N73	Information and for experts registration
2019-11-05	Agenda of Hyderabad JWG 4 meetings	N84	Information
2019-11-21	Recommendations to ISO/TC 307 and JWG 4 decisions - Hyderabad - November 2019	N109	Information Listed actions for project leaders and experts
2020-03-16	Agenda of virtual Saint Petersburg JWG 4 meetings	N115	Information and for experts registration
2020-05-13	Agenda of virtual Nicosia JWG 4 meetings	N131	Information and for experts registration

Study on Trust Anchors for Decentralised Identity Management (TADIM)

2019-06-07	Terms of reference study TADIM	N57	Information and call for contribution (deadline 2019-08-30)
2019-09-03	Results call for contributions	N72	Information
2019-11-14	Report study	N91	For discussion in Hyderabad
2020-02-04	Results call for contributions	N121	Information
2020-05-13	Report study + proposed TR	N129, N130	For discussion in virtual June meeting

TR 23244 Blockchain and distributed ledger technologies - Privacy and personally identifiable information protection considerations

2018-04-04	WD1	WG2 N6	
2018-06-15	Disposition of Comments	WG2 N20	Information
2018-08-03	WD2	WG2 N26	For comments (deadline 2018-09-21)
2018-10-17, 2018-10-21, 2018-10-26	Result of voting and collated comments on WD2	N1, N3, N6	Inputs for DoC
2018-12-03	final Disposition of Comments on WD2	N13	Information
2018-12-13	WD3	N14	For comments (deadline 2019-03-01)
2019-03-12	Result of voting and collated comments on WD3	N28	Inputs for DoC
2019-04-07	ISO-IECJTC1-SC27 N19177 Results deflt LB title change	N34	Information
2019-06-13	Final Disposition of Comments on WD3	N63	Information
2019-06-13	DTR	N66	For DTR ballots (SC27 and TC307)
2019-09-30	Result of ISO/IEC JTC 1/SC 27 voting and comments on document ISO/DTR 23244	N77	Inputs for DoC and publication decision
2019-09-30	Result of TC 307 voting and comments on document ISO/DTR 23244	N76	Inputs for DoC and publication decision
2020-01-22	Final Disposition of Comments on DTR	N110	Information
2020-01-22	Final text for publication	N111	For publication process

DTR 23245 Blockchain and distributed ledger technologies - Security risks, threats and vulnerabilities

2018-04-04	WD1	WG2 N7	
2018-06-15	Disposition of Comments	WG2 N21	information
2018-08-01	WD2	WG2 N23	For comments (deadline 2018-09-21)
2018-10-21	Result of voting and collated comments on WD2	N4	Inputs for DoC
2018-12-07	Scope change	N10	Information
2018-12-06	final Disposition of Comments on WD2	N21	information
2019-01-24	DTR	N16	For DTR ballots (SC27 and TC307)
2019-04-07	ISO-IECJTC1-SC27 N19551 Results formal LB scopetitle change	N35	Information
2019-04-10	ISO/IEC JTC 1/SC 27 Result of voting on document SC 27 N19138 – Text for ISO/DTR 23245	N36	Inputs for DoC and publication decision
2019-04-10	Result of voting and collated comments on document ISO/DTR 23245 (ISO/TC 307 N407 and N408)	N37	Inputs for DoC and publication decision
2019-06-29	Disposition of comments from Dublin on DTR	N64	Information
2019-06-07	Call for editing team	N71	For experts, to support editor on implementation of DoC
2019-10-09	2 nd text of DTR	N68	For CIB ballots (SC27 and TC307)
2019-11-18	Results of SC27 & TC307 calls for comments & late ES comments	N95, N96, N100	Inputs for DoC and publication decision
2020-02-28	Final DoC on 2 nd text of DTR	N112	Information

(cancelled) TR 23246 Blockchain and distributed ledger technologies – Overview of identity management using blockchain and distributed ledger technologies

2018-04-06	WD1	WG2 N9	
2018-05-18	Scope change	WG2 N14	
2018-06-15	Disposition of Comments	WG2 N22	information
2018-08-01	WD2	WG2 N24	For comments (deadline 2018-09-21)
2018-09-06	Proposed revised WD2	WG2 N28	For comments (deadline 2018-09-21)
2018-10-17, 2018-10-21	Result of voting and collated comments on WD2	N2, N5	Inputs for DoC
2018-12-03	final Disposition of Comments on WD2	N17	information
2018-12-13	WD3	N18	For comments (deadline 2019-03-01)
2019-03-12	Result of voting and collated comments on WD3	N29	Inputs for DoC
2019-03-26	Collated intermediary contributions from experts	N31	(additional comments received during the teleconference) Information, discussion
2019-06-11	Scope change	N58	Information
2019-07-30	Final Disposition of Comments on WD3	N65	Information
2019-10-14	WD4	N67	For comments (deadline 2019-11-10)
2019-11-12	Result of voting and collated comments on WD4	N85, N86, N89	Inputs for DoC
2019-11-22	Final Disposition of Comments on WD4	N103	Information

NP TR 23249 Blockchain and distributed ledger technologies – Overview of existing DLT systems for identity management

2020-03-13	Results call for contribution	N123, N125	Information
2020-04-19	WD1	N114	For discussion
2020-05-01	Updated WD1	N127	For comments (deadline 2020-05-20)

ISO TC 207/WG 5 Governance: Progress report from Nov 2019 to May 2020

Date of document: May 15th, 2020

Convenor: Roman Beck

Secretary: Astrid Bækby Knudsen, Danish Standards

Support secretary: Ditte Klint Hede, Danish Standards

ISO TS 23635 Blockchain and distributed ledger technologies — Guidelines for governance

Based on the discussions in Hyderabad, a WD (ISO-TC307-WG5_N0059) was prepared and sent out for comments within WG 5 from mid-January to mid-March 2020. At the same time, the WD5 was put out for vote and commenting (CIB) on TC level to ensure that the draft content wise do not miss any topics relevant in some countries not necessarily present in the working group.

The aim was to seek confirmation that the document was on the right track prior to CD, to avoid the need to resolve significant amounts of comments at CD stage.

The following Member Bodies sent comments: Spain, Poland, Nigeria, The Netherlands, Malaysia, Luxemburg, Denmark, France, and Ireland. Experts from Russia and UK sent comments directly to the WG 5 secretariat. A total of 76 comments were received.

2-hour Zoom sessions were held on:

- April 22nd UTC 1300 – 29 experts attended
- April 29th UTC 0500 – 22 experts attended
- May 6th UTC 2100 – 28 experts attended
- May 13th UTC 1300 – 37 experts attended

And the following two is planned (also 2 hours)

- May 20th UTC 0500
- May 27th UTC 2100

The working procedure on how to categorize and handle the incoming comments was set out in the document ISO-TC307-WG5_N0060, distributed in the end of January.

Following the COVID-19 situation and the cancellation of the physical working group meetings in Nicosia, Cyprus, the plan was adjusted, allowing for all comments to be handled in zoom sessions under the following categorisation:

Category A: Comments of a pure editorial character. Has been incorporated into the new version of the draft via “track changes” so that all changes are visible.

Category B: Comments of a technical character, where just clarification was needed.

Category C: Comments of a more complex/controversial technical nature, were originally and ideally to be discussed F2F, they have now been handled in the Zoom sessions. The Category C comments were clustered into the following four topics: 1) Definitions, 2) Incentives and Incentive mechanisms, 3) Accountability, and 4) On-chain/off-chain. A task force has been created for each of them allowing for the experts to collaborate on suggesting new texts and update text in the clauses.

With the discussion and incorporation of the comments Roman Beck believes the overall quality of the draft has improved and will continue to do so following the last Zoom sessions late May and the first week of June.

We experience active participation and nice collaboration from the many dedicated experts that are attending our meetings faithfully each week. Especially the experts in the task forces deserves appreciation, and Roman Beck is really pleased that many experts are active in the discussions on a general level.

Each week, meeting agendas, minutes and updated versions of the draft and comment file have been distributed via Livelink.

The goal for WG 5 is to put the new version of the draft out for DTS ballot by the end of June. A ballot period of 12 weeks is suggested to take the summer holidays into consideration.