JTC1-SC41/433/RM

**Administrative Circular**

**2024-06-14**

**JOINT TECHNICAL COMMITTEE 1: Information technology**

**ISO/IEC JTC 1/SC 41: INTERNET OF THINGS AND DIGITAL TWIN**

# Plenary meeting resolutions for the 15th JTC1/SC41 plenary meeting to be held in Helsinki, Finland from 2024-05-27 to 2024-05-31

# ISO/IEC JTC 1/SC 41 N2688

**ISO/IEC JTC 1/SC 41**
**Internet of Things and Digital Twin**
**Secretariat: KATS (Korea, Republic of)**

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**SC 41 N2688**

# PLENARY MEETING RESOLUTIONS
## ISO/IEC JTC 1/SC 41 Internet of Things and Digital Twin
2024-05-27 to 31, Helsinki, Finland

NOTE: *ALL RESOLUTIONS HAVE BEEN ADOPTED UNANIMOUSLY UNLESS OTHERWISE NOTED.*

**Contents**

**ORGANIZATION**

**Modification of title and task of JWG 17 with IEC/TC 65**

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| 498. | JTC 1/SC 41 decides to change the title and task of its JWG 17 with IEC/TC 65 as follows:<br><br>**<Current title>**<br>System interface between industrial facilities and the smart grid<br><br>**<Current task>**<br>This work will identify, profile and extend where needed, the standards needed to allow industrial facilities, and the industrial automation systems within such industrial facilities, to communicate with the smart grid for the purpose of planning, negotiating, and managing the flow of electrical power and related information between them.<br><br>**<Proposed new title>**<br>Industrial IoT Systems<br><br>**<Proposed new task>**<br>Standardization for operational technologies (OT) in the context of Industrial IoT Systems. |

**Appointment of JWG 17 Co-Convenor**

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| 499. | JTC 1/SC 41 appoint Pengchao Chen (CN) as the co-Convenor of JWG 17 from SC 41 side. |

**Creation of a new JWG with IEC/TC 124, IEC SyC AAL and IEC/ISO JSyC BDC**

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| 500. | JTC 1/SC 41 recognize that its project ISO/IEC 30197 (*IoT for Stress Management, Good health & Well-being*) is multidisciplinary in nature, which implies the need for expertise that is found in many IEC and ISO TCs, including IEC/TC 124. Consequently, a 'systems approach' is required.<br><br>JTC 1/SC 41 thus decides to create the following JWG with, ideally, ISO/TC 124, IEC SyC AAL and IEC/ISO SyC BDC.<br><br>**<Title>**<br>Embodied IoT Systems<br><br>**<Task>** |

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| | Standardization for embodied IoT Systems. Embodied IoT Systems are based on the embodied computing paradigm, also known as body-centered computing. This is 'a paradigm on the merging of information technology and an organism'. This includes wearable, implantable and ingestible devices as well as bionics. Ref: https://www.iec.ch/basecamp/bio-digital-convergence-standardization-opportunities<br><br>This JWG will be managed by JTC 1/SC 41.<br><br>JTC 1/SC 41 appoints Jitender Kumar (IN) as the co-Convenor from SC 41 side.<br><br>If and when this JWG is approved by either IEC/TC 124, IEC SyC AAL or IEC/ISO SyC BDC, JTC 1/SC 41 decides to create the JWG and transfer the project ISO/IEC 30197 to this JWG. Additional parties will be added to the JWG afterward.<br><br>NOTE – ISO/IEC 30197 (*Internet of Things (IoT) - IoT for stress management, good health and well-being*) is currently at WD stage. |

**Reappointment of JWG 24 Convenor**

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| 501. | Since JTC 1/SC 41 received one nomination (Shen Guo, CN) for Call for JWG 24 Convenor, JTC 1/SC 41 reappoints Shen Guo (CN) as the Convenor of the JWG 24 from SC 41 side.<br><br>NOTE – Currently there is no Convenor for JWG 24 from IEC/TC 57 side. |

**(Re-)appointment of Project Editors**

502. JTC 1/SC 41 (re-)appoints the following Project Editors for the projects as indicated below until the next plenary meeting of SC 41, subject to NB endorsement. By endorsing the editors, the NBs certify that the nominated expert has the time and resource to carry out their duties and attend meetings where their project is discussed. SC 41 reminds the editors that their principal mandate is to ensure transparency and consensus in the projects' development.

| WG | Project Number | Stage | Main Editor | Co-Editors |
|---|---|---|---|---|
| PT | ISO/IEC TR 30194 | DTR | Antonio Kung (FR) | Kate Grant (GB), Laurent Guise (FR) Pedro Malo (PT) |
| 3 | ISO/IEC 30141 ED2 | FDIS | Torbjörn Lahrin (SE) | Wei Wei (DE) |

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|---|---|---|---|---|---|---|
| | | 3 | [AWI] PWI TR JTC1-SC41-XX<br>Internet of Things (IoT) – Reference architecture guidance | WD-TR | Eric Simmon (US) | |
| | | 3 | ISO/IEC 30141 ED3 | WD | Torbjörn Lahrin (SE) | Anand Kumar (IN)<br>Wei Wei (DE) |
| | | 4 | ISO/IEC 30178 | CD | Jesper Rönnholm (SE) | Asbjorn Hovsto (NO) |
| | | 4 | ISO/IEC 30181 | FDIS | Young Gab Kim (KR) | Rainer Schrundner (DE) |
| | | 4 | ISO/IEC 21823-5 | WD | Antonio Kung (FR) | Jukka Alve (FI)<br>Karim Tobich (GB)<br>Jaeho Lee (KR)<br>Raul Garcia Castro (ES)<br>Jan deMeer (DE) |
| | | 4 | ISO/IEC 30198 | WD | Jin Wang (CN) | V Karthika (IN)<br>Kim Yan (AU)<br>Min Wei (CN) |
| | | 5 | ISO/IEC 30180 | CDV | Yong-Woon Kim (KR) | |
| | | 5 | ISO/IEC 30184 | FDIS | Jinoo Joung (KR) | |
| | | 5 | ISO/IEC TR 30189-1 | DTR | Seok-Joo Koh (KR) | Asbjorn Hovsto (NO) |
| | | 5 | ISO/IEC 30187 | CD | Chi Zhang (CN) | Jan deMeer (DE)<br>Kim Yan (AU) |
| | | 5 | ISO/IEC TR 30195 | CD-TR | Wuxi Bi (CN) | |
| | | 5 | ISO/IEC TR 30196 | CD-TR | Kai Chen (CN) | |
| | | 5 | [AWI] PWI TR JTC1-SC41-18<br>Internet of Things (IoT) – Guidance on IoT application to home healthcare | WD-TR | Kiwon Lee (KR) | |
| | | 6 | ISO/IEC 30186 | CDV | Sangkeun Yoo (KR) | Kim Yan (AU)<br>Lin Hu (CN)<br>Joern Ploennigs (IE) |
| | | 6 | ISO/IEC 30188 | WD | Shiqi Jia (CN) | Antonio Kung (FR)<br>Detlef Tenhagen (DE)<br>Liyue Yan (CN) |
| | | 6 | (AWI] PWI TR JTC1-SC41-XX<br>Fidelity metric of digital twin system | WD-TR | Soonhung Han (KR) | |
| | | 7 | ISO/IEC 30177 | CDV | N. Mohan Krishna Varma (IN) | Pramod Maurya (IN)<br>Hak Lim Ko (KR)<br>Howard Choe (US)<br>Ivor Nissen (DE)<br>Delphin Raj (IN) |
| | | 7 | ISO/IEC 63573-1 | WD | Eun Tae Won (KR) | Sarang Dhongdi (IN) |

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| JWG 32 | (AWI) PWI TR JTC1-SC41-12 Internet of Things (IoT) – Environmental and ecological effects, risks, and considerations of underwater acoustic signalling | WD-TR | Timothy Schoechle (US) | Patrick Miller (GB)<br>Kathy Matara (US) |
| 5 | ISO/IEC 30197 | WD | Ajit Shenvi (IN) | Priyanshu Sharma (IN) |

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**(Re-)appointment of Editors for PWI**

503. JTC 1/SC 41 (re-)appoints the following editors for PWIs.

| WG | Project Number | Stage | Main Editor | Co-Editors |
|---|---|---|---|---|
| 3 | PWI JTC1-SC41-XX IoT, edge and cloud continuum | PWI | Antonio Kung (FR) | Lara Lopez (AIOTI) |
| 5 | PWI-TR JTC1-SC41-10 Internet of Things (IoT) – IoT-based management of tangible cultural heritage assets – Part 2: Use cases | PWI-TR | Seok-Joo Koh (KR) | Asbjorn Hovsto (NO) |
| 5 | PWI JTC1-SC41-XX Internet of Things (IoT) – General requirements of information publishing system based on IoT | PWI | Tao Xia (CN) | Zhigang Zhang (CN) |
| 5 | PWI JTC1-SC41-XX Internet of Things (IoT) – IoT systems using wireless power technology. | PWI | Xin Fang (CN) | Kim Yan (AU) |
| 6 | PWI JTC1-SC41-19 Digital Twin- Guidelines for digital entity modeling | PWI | Liyue yan (CN) | Kim Yan (AU) |
| 6 | PWI JTC1-SC41-16 Digital Twin – Extraction and transactions of data components | PWI | Jieshan Li (CN) | Antonio Kung (FR)<br>Kim Yan (AU) |
| 6 | PWI JTC1-SC41-17 Guidance on the integration of IoT and digital twins in data spaces | PWI | Antonio Kung (FR) | Sha Wei (CN)<br>Jieshan Li (CN)<br>Jan de Meer (DE) |

**Liaison Officers**

504. JTC 1/SC 41 reaffirms the importance of liaisons with the following committees, to be established, confirmed, or disbanded as listed in SC 41N2689.

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| | The JTC 1/SC 41 Committee Manager shall send a letter to the Committee Managers of the aforementioned committees to officially communicate this resolution with those liaisons listed in SC 41N2689.<br><br>The JTC 1/SC 41 Committee Manager is also instructed to issue a call for liaison officers from JTC 1/SC 41 to the entities listed in SC 41N2689 for which liaison officers are not assigned. |

**WORK PROGRAM**

**Work Items**

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| 505. | **<ISO/IEC 30178>**<br>**Internet of Things (IoT) - Data format, value and coding**<br><br>Based on consensus in WG 4, JTC 1/SC 41 decides to circulate the revised text of CD 30178 for the 3rd CD consultation (8-week period).<br>JTC 1/SC41 instructs the Project Editor to submit the final agreed disposition of comments on CD2 and the 3rd CD text to its Committee Manager by 2024-06-30. | WG 4 |
| 506. | **<ISO/IEC 30181>**<br>**Internet of Things (IoT) - Functional architecture for resource identifier interoperability**<br><br>Based on consensus in WG 4, JTC 1/SC 41 decides to circulate the revised text of CDV 30181 for FDIS ballot.<br>JTC 1/SC 41 instructs the Project Editor to submit the final agreed disposition of comments on CDV and the FDIS text to its Committee Manager by 2024-06-30. | WG 4 |
| 507. | **<ISO/IEC 30180>**<br>**Internet of Things (IoT) - Functional requirements to determine the status of self-quarantine through Internet of Things data interfaces**<br><br>Based on consensus in WG 5, JTC 1/SC 41 decides to circulate the revised text of CDV 30180 (SC41N2592) for 2nd CDV ballot. | WG 5 |

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| 508. | **<ISO/IEC 30186>**<br>**Digital twin – Maturity model and guidance for a maturity assessment**<br><br>Based on consensus in WG 6, JTC 1/SC 41 decides to circulate the revised text of CD 30186 for CDV ballot.<br>JTC 1/SC 41 instructs the Project Editor to submit the final agreed disposition of comments on CD and the CDV text to its Committee Manager by 2024-06-30. | WG 6 |

**Transfer of ISO/IEC TR 30195 and ISO/IEC TR 30196**

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| 509. | JTC 1/SC 41 decides to transfer the following projects to JWG 17 with IEC/TC 65:<br><br>● ISO/IEC TR 30195 Internet of Things (IoT) - IoT Applications for Long-distance Oil and Gas Pipeline<br><br>● ISO/IEC TR 30196 Internet of Things (IoT) – IoT applications for natural gas distribution system |

**Modification of title of ISO/IEC 30181**

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| 510. | JTC 1/SC 41 decides to modify the title of ISO/IEC 30181 as follows:<br><br>**<Current Title>**<br>Internet of Things (IoT) - Functional architecture for resource **ID** interoperability<br><br>**<Proposed title>**<br>Internet of Things (IoT) - Functional architecture for resource **identifier** interoperability<br><br>**<Rationale of modification>**<br>An editorial modification of the title was made for clarification. | WG 4 |

**Modification of title of ISO/IEC 30187**

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| 511. | JTC 1/SC 41 decides to modify the title of ISO/IEC 30187 as follows:<br><br>**<Current Title>**<br>Internet of Things (IoT) - Evaluation **indicator** for IoT systems<br><br>**<Proposed title>**<br>Internet of Things (IoT) - Evaluation **indicators** for IoT systems<br><br>**<Rationale of modification>**<br>For consistency of the title and the scope of the project, an editorial modification of the title was made. | WG 5 |

**Progress of PWI JTC1-SC41-16 Digital Twin – Extraction and transactions of data components**

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| 512. | Noting the WG 6 consensus on PWI JTC1-SC41-16 (WG6N254), JTC 1/SC 41 instructs its Committee Manager to launch the NP ballot on PWI JTC1-SC41-16, once having received the NP form and the initial WD.<br><br>WG 6 should seek cooperation prior to NP submission and invite them to participate in the development of this NP.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) JTC 1/SC 32 and JTC 1/SC 38 | WG 6 |

**Progress of PWI JTC1-SC41-17 Guidance on the integration of IoT and digital twins in data spaces**

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| 513. | Noting the WG 6 consensus on PWI JTC1-SC41-17 (WG6N257), JTC 1/SC 41 instructs its Committee Manager to launch the NP ballot on PWI JTC1-SC41-17, once having received the NP form and the initial WD.<br><br>WG 6 should seek cooperation prior to NP submission and invite them to participate in the development of this NP.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) JTC 1/SC 32 and JTC 1/SC 38 | WG 6 |

**New Work Items**

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| 514. | JTC 1/SC 41 appreciates the proposal for a New Work Item on **Internet of Things (IoT) - IoT applications using context aware collaboration services** (SC41N2610).<br><br>JTC1/SC 41 requests, as noted in Resolution 45, an NP form and an initial draft to be socialized with WG 5, and with appropriate ISO, IEC committees and other SDOs. WG 5 should seek cooperation prior to NP submission and invite them to participate in the development of this NP.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) JTC 1/WG 11, IEC/SyC AAL, IEC/SyC SM. | Korea |

**Initiation of TR on Digital Twin – Fidelity metric of digital twin system**

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| 515. | Based on discussion result of WG 6 meeting on (AWI) PWI TR JTC1-SC41-11 (Digital Twin - Correspondence measurement of digital twins) in Helsinki, JTC 1/SC 41 decides to initiate a project for Technical Report<br><br>**Title:**<br>Digital Twin - Fidelity metric of digital twin system<br><br>**Scope:**<br>This document provides:<br>- Purpose of fidelity metric of digital twin system;<br>- Review of related international standards and others;<br>- Outline of the elements of fidelity metric; and<br>- Use cases of fidelity metric.<br><br>JTC 1/SC 41 assigns this project to WG 6 and appoints Soonhung Han (KR) as Project Editor.<br><br>JTC 1/SC 41 requests WG 6 to seek cooperation and invite them to participate in the development of this TR.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) IEC/TC 65, IEC/TC 65/WG 24, ISO/TC 184, ISO/TC 184/SC 4. SC31, SC 32, SC 38<br><br>NOTE 1 – As the IEC IT system currently cannot reflect the progress of a TR project until it is submitted as a CD-TR document, the IEC website will show that this project is still at the PWI stage even though it is an Approved Work Item.<br><br>NOTE 2 – (AWI) PWI TR JTC1-SC41-11 will be cancelled from the SC 41 Work Programme. | WG 6 |

**Progress of TR on Digital Twin – Fidelity metric of digital twin system**

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| 516. | Based on consensus in WG 6 (WG6N248), JTC 1/SC 41 decides to circulate the revised text for CD consultation (8-week period), once having received the CD text. | WG 6 |

**Initiation of TR on Internet of Things (IoT) – Reference architecture guidance**

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| 517. | Based on the discussion result of WG 3 meeting in Helsinki, JTC 1/SC 41 decides to initiate a project for Technical Report on the initial WD-TR (SC41N2687).<br><br>**Title:**<br>Internet of Things (IoT) – Reference architecture guidance<br><br>**Scope:**<br>This document provides:<br>- Guidance on using the ISO/IEC 30141 - IoT Reference Architecture Edition 2;<br>- Background on the changing context IoT systems are being developed in, an overview of the different sections of the IoT Reference Architecture;<br>- Some rationales on why to use the IoT Reference Architecture and information about how to use it to architect an IoT system; and<br>- An explanation of construction patterns.<br><br>JTC 1/SC 41 assigns this project to WG 3 and appoints Eric Simmon (US) as Project Editor.<br><br>**Rationale:**<br>The ISO/IEC 30141 is a complex standard. To make it easier for users to understand WHY to use 30141 and HOW to use it. A supporting TR describing these matters is needed and will be important and beneficial.<br><br>NOTE – As the IEC IT system currently cannot reflect the progress of a TR project until it is submitted as a CD-TR document, the IEC website will show that this project is still at the PWI stage even though it is an Approved Work Item. | WG 3 |

**PWI for TR on Architecture considerations for IoT, edge and cloud**

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| 518. | Based on the AIOTI contribution (SC41N2657), JTC 1/SC 41 decides to register the following PWI for a TR:<br><br>**Title:**<br>Internet of Things (IoT) – Architecture considerations for IoT, edge and cloud<br><br>**Scope:**<br>Provide a technical report on the architecture in the IoT, edge and cloud with the goal to contribute to the reference architecture in the form of construction patterns.<br><br>JTC 1/SC 41 assigns this PWI to WG 3 and appoints Antonio Kung (FR) as a PWI Editor and Lara Lopez (AIOTI) as a PWI Co-Editor.<br><br>JTC 1/SC 41 requests WG 3 to seek cooperation and invite them to participate in the development of this PWI.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) JTC 1/SC 38 | WG 3 |

**PWI on Internet of Things (IoT) – General requirements of information publishing system based on IoT**

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| 519. | Based on the CNB contribution (SC41N2611), JTC 1/SC 41 decides to register the following PWI for an IS:<br><br>**Title:**<br>Internet of Things (IoT) – General requirements of information publishing system based on IoT<br><br>**Scope:**<br>This document provides the business process of information publishing system based on IoT and specifies the functional requirements, performance requirements and security requirements for the system.<br><br>JTC 1/SC 41 assigns this PWI to WG 5 and appoints Tao Xia (CN) as a PWI Editor.<br><br>JTC 1/SC 41 requests WG 5 to seek cooperation and invite them to participate in the development of this PWI.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) JTC 1/SC 32 and ITU-T SG16 | WG 5 |

**PWI on Internet of Things (IoT) — IoT systems using wireless power technology**

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| 520. | Based on the CNB contribution (SC41N2612), JTC 1/SC 41 decides to register the following PWI for an IS:<br><br>**Title:**<br>Internet of Things (IoT) — IoT systems using wireless power technology<br><br>**Scope:**<br>This document specifies general requirements of IoT systems using wireless power technology, including functional requirements for energy management of IoT gateway and interface between IoT gateway and wireless power system.<br><br>JTC 1/SC 41 assigns this PWI to WG 5 and appoints Xin Fang (CN) as a PWI Editor.<br><br>JTC 1/SC 41 requests WG 5 to seek cooperation and invite them to participate in the development of this PWI.<br><br>● Appropriate ISO, IEC TCs/SCs and other SDOs: (including, but not limited to) JTC 1/SC 6, JTC 1/SC 31, IEC/TC 47, IEC/TC 69, IEC/TC 100, IEC/TC 106, IEC/CISPR and ITU-R | WG 5 |

**Request for NP form – All TCs identified**

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| 521. | JTC 1/SC 41 requests all NP proposers to fill in the relevant fields of the IEC NP form, to ensure that all identified TCs/SCs and other SDOs having a potential interest in the SC 41 resolutions:<br><br>● "Need for IEC coordination"<br>● "Need for ISO coordination" and/or,<br>● "Liaison with international bodies" |

**Invitation of NBs' and liaison for a contribution to produce a report on conformity assessment on IoT and digital twin**

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| 522. | JTC 1/SC 41 has acknowledged a standardization interest in conformity assessment (including devices/platforms/systems/products certification, Management System Standards, etc.) when utilizing IoT and digital twin standards and technologies considering resources and complexity. JTC 1/SC 41 decides to circulate a call for contributions to SC 41 NBs and liaisons as below:<br><br>● Reference document: SC41N2609<br>● Due date: 2024-09-30<br>● Subject: Related market needs, standardization issues, and a next step to proceed for conformity assessment on IoT and digital twins.<br><br>The NB of Korea will collate the contributions and report to SC 41 at its next plenary |

Abstention: Ireland

**JTC 1/SC 41 MANAGEMENT**

**SC 41 Webinar on Digital Twin**

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| 523. | JTC 1/SC 41 JTC 1/SC 41 agrees to re-schedule a 2-day Webinar on Digital Twin in cooperation with the IEC Academy on 2024-06-19 and 2024-06-25 UTC 13h00 – 15h30.<br><br>The Webinar will be under the responsibility of the SC 41/WG 6 Convener.<br><br>The dates were confirmed by the IEC Academy. |

**Next interim AG 6 meeting**

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| 524. | JTC 1/SC 41 agrees the following schedule for the next interim AG 6 meeting:<br><br>● Wednesday 2024-09-04 UTC 1300 to 1500 (Virtual) |

**Deadlines for the 2024 November SC 41 Plenary and AG Meeting**

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| 525. | JTC 1/SC 41 requests its NBs to submit contributions to its Committee Manager for the upcoming SC 41 Plenary and AG meetings by 2024-09-13 and reminds National Bodies of the timelines described in JTC 1 SD 19. |

**Next Plenary Meetings**

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| 526. | The following schedule of future JTC 1/SC 41 Plenary meeting weeks is agreed:<br><br>2024 (11 to 15 November): Wuxi, China (Confirmed)<br>2025 (May): Montréal, Canada (To be confirmed)<br>2025 (November): Berlin, Germany (To be confirmed)<br>2026 (May): France (To be confirmed)<br>2026 (November): TBD<br><br>The 2024 November plenary meeting in China will be in the hybrid mode and preceded by virtual preparatory WG meetings in the preceding weeks.<br><br>NOTE - It would be much appreciated if plenary meeting hosts endeavour to provide meeting information as early as possible to ensure timely request of Visa entry. |

## ACTION ITEM

1. After each plenary, JTC 1/SC 41 Committee Manager will send the SC 41 Committee Manager's report and the Resolutions to all SC 41 liaisons as a liaison report, and ask them in return to notify SC 41 if there is anything of interest that SC 41 should be aware of in its work.
2. JTC 1/SC 41 Committee Manager reminds the liaison representatives to provide the written report for every SC 41 Plenary meeting.
3. JTC 1/SC 41 Committee Manager will communicate with the IEC Secretariat for improvement of the IEC Meeting Registration System to optimize registration of WGs meetings.
4. JTC 1/SC 41 Committee Manager will request the IEC Secretariat to reserve the project numbers as shown below:
    - PWI JTC1-SC41-16 Digital Twin – Extraction and transactions of data components: ISO/IEC 30151
    - PWI JTC1-SC41-17 Guidance on the integration of IoT and digital twins in data spaces: ISO/IEC 30152

- PWI JTC1-SC41-19 Digital Twin- Guidelines for digital entity modeling: ISO/IEC 30153

**APPRECIATION**

JTC 1/SC 41 expresses its appreciation to the Finnish National Body for hosting the 15th SC 41 Plenary in Helsinki.

JTC 1/SC 41 extends its appreciation to the Host for meeting rooms, wonderful facilities, delicious lunches, coffee, and wonderful weather.

- Host: SESKO
- Organizer
  - Anna Tanskanesn (Secretary of Finnish NC)
  - Jukka Alve
  - Ella Laurikainen
  - Anne Piirainen
  - Derek Roche
  - Pia Rouste
  - Henna Saarnikoski

JTC 1/SC 41 also expresses its special appreciation to Mr. Jukka Alve for his exceptional contribution. His unwavering support, from the preparation stage through to the conclusion of the meeting, was profoundly felt and greatly valued by all participants.

JTC 1/SC 41 extends its sincere appreciation to the host and sponsors of the Technical Workshop and Social Dinner. The workshop provided valuable insights into the current status of Finnish and European technologies in the IoT and Digital Twin related fields. And the Finnish-style Social Dinner fostered a more collaborative spirit among SC 41 members for the week.

- Host: SESKO
- Co-Organizer
  - AIOTI
  - OpenContinuum
- Sponsors
  - aerOS, AURORAL, Begonia, Eneshare, FLUIDOS, Int:net, INSTAR, Omega-X, and Spade

SC 41 also extends its appreciation to the distinguished speakers.

- Svet Mihaylov(EC), Lara Lopez(Eviden), Anastasios Zafeiropoulos(NTUA), Alejandro Fornés(UPV), Albert Seubers(Fluidos)
- Alberto Dognini(Fraunhofer FIT), Charukeshi Joglekar(Fraunhofer FIT), Bruno Traverson(EDF)
- Aris Tagarakis(CERTH), Asbjørn Hovstø(Hafenstrom), Jussi Numminen(Wirepas)
- Mika Karaila(Valmet)
- Damir Filipovic(AIOTI), Razgar Ebrahimy(DTU)
- Jarkko Pellikka(Nokia)

SC 41 expresses its special appreciation to Mr. Antonio KUNG for his exemplary organization of the workshop. Thanks to his diligent efforts, SC 41 was able to effectively exchange information with a variety of organizations despite the time constraints.

JTC 1/SC 41 extends its deep appreciation to Ms. Erin Bournival, the former Convenor of WG 3.

Ms. Bournival has been dedicated to the work on IoT Foundational Standards since the days of the former WG 10. Following the creation of SC 41, she has devotedly committed to SC 41 works as WG 3 Convenor and recently concluded her role following the Seoul Plenary.

It has been a sincere pleasure working with Ms. Bournival, and we highly value her commitment and contributions. SC 41 wishes her the best of success in both her professional and personal endeavors.

JTC 1/SC 41 extends its appreciation to Mr. Seung-ho Hong and Mr. Tomoyuki Ikeyama, the former Convenors of JWG 17 with IEC TC 65. Under their leadership, JWG 17 has facilitated successful efforts in developing system interfaces between industrial facilities and the smart grid.

SC 41 wishes them the best of success in their future professional endeavors.

JTC 1/SC 41 extends its appreciation to Dr. Gargi Keeni, the former SIF Facilitator and the longtime IN expert in SC 41 for her enthusiasm and friendship in SC41 standardization activities.

SC 41 wishes her the years ahead be filled with new endeavors and happy adventures.

JTC 1/SC 41 expresses its appreciation to the drafting committee:

- Mr. Asbjørn Hovstø (NO)
- Ms. Chi Zhang (CN)
- Mr. Christophe Mouton (FR)
- Mr. David Board (GB)
- Mr. Jinoo Joung (KR)
- Mr. Kenichi Ogawa (JP)
- Mr. Kim Yan (AU)
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# May 27th - 31st, 2024
# Dipoli, Helsinki, Finland (Incl. Virtual)

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