

MoU/MG "ISO-IEC-ITU-UNECE Memorandum of Understanding on e-Business Management Group"

Secretariat: ISO

Secretary: Euchner Martin Mr



Draft meeting minutes 43rd meeting of IEC-ISO-ITU-UNECE Memorandum of Understanding on e-Business Management Group (MoU/MG), (1-2 December 2021), corrected

Document type	Related content	Document date	Expected action
Meeting / Minutes	Meeting: VIRTUAL 1 Dec 2021	2022-03-04	INFO

**Replaces:** N 907 Draft Meeting Minutes 43rd MEETING OF THE IEC-ISO-ITU-UNECE MOU ON E-BUSINESS MANAGEMENT GROUP (MoU/MG), (1-2 December 2021)

## Description

Please note that a small error was identified in 5.4.4, which has been corrected.

MoU/MG/N907 Status: Draft Date: 24 02 2022

Source: MoU/MG Secretary

## **Draft Meeting Minutes**

## 43<sup>rd</sup> MEETING OF THE IEC-ISO-ITU-UNECE MOU ON E-BUSINESS MANAGEMENT GROUP (M<sub>0</sub>U/MG)

## **Executive summary**

The  $43^{rd}$  meeting of the MoU/MG was a virtual meeting held  $1^{st}$  to  $2^{nd}$  December 2021. The meeting was kindly hosted by ITU. UNECE chaired the meeting. ISO fulfilled the secretariat role.

Reports from organizations were circulated in advance allowing for information exchange and identification of coordination points. Some reports were received/made during the meeting.

#### **Attendance:**

32 participants online from:

IEC participants = 1

ISO participants = 9

ISO/IEC JTC 1 participants = 3

ITU participants = 2

UNECE participants = 13

Partner organizations = CEN (1), OAGi (1) and OASIS (2)

Apologies received (2): ISO/TC 323, IEC/TC 3.

## **Reports and presentations**

The following reports were made available on **ISO Documents** prior to the meeting:

- IEC/TC 3
- ISO/IEC JTC 1/SC 32
- ISO/TC 8, ISO/TC 46, ISO/TC 184/SC 4, ISO/TC 211, ISO/TC 154, ISO/TC 321, ISO/TC 323
- ITU-T
- UN/CEFACT ITP-PDA, UN/CEFACT M+T PDA, UN/CEFACT T+L, UN/CEFACT SCMP, UN/CEFACT F+P, UN/CEFACT A+A, UN/CEFACT eData Management, UN/CEFACT AGRI, UN/CEFACT T+T, UN/CEFACT CBM
- OAGi

The following reports were received during the meeting and are available on the same page:

- ISO/TC 37, ISO/TC 68, ISO/TC 215
- ISO/IEC JTC 1/SC 42
- CEN eBusiness Coordination Group
- OASIS

## Minutes of the meeting

#### 1. Introduction

The 43<sup>rd</sup> MoU/MG meeting took place on 1<sup>st</sup> and 2<sup>nd</sup> December 2021 and was held as a virtual meeting. This meeting was kindly hosted by ITU.

## 2. Opening of the meeting

Following the decision to have an annual rotating leadership of this group between the four signatories, Ms Maria Ceccarelli (UNECE) replaced Mr Martin Euchner (ITU) as MoU/MG Chair and Ms Laura Mathew (ISO) replaced Mr Stephen Dutnall (IEC) as secretary. Their mandates will run until the 44<sup>th</sup> MoU/MG meeting.

The Chair opened the meeting on 1<sup>st</sup> December 2021 at 10:00 CET. The meeting was attended by 32 participants remotely. The list of participants is available in Annex A.

Meeting documents identified as their "Nxxx" number, are available on the ISO webpage at: <a href="https://sd.iso.org/documents/ui/#!/browse/iso-adhoc/mou-mg">https://sd.iso.org/documents/ui/#!/browse/iso-adhoc/mou-mg</a>

## 3. Agenda

The draft meeting agenda was available as document <u>N889</u>. The agenda was adopted without amendments.

## 4. Approval of the minutes of the previous meeting

The minutes of the 42<sup>nd</sup> MoU/MG on e-Business (9<sup>th</sup> to 10<sup>th</sup> December 2020) were available as document N861. The minutes were adopted without amendments.

Martin Euchner explained that, due to time constraints at the  $42^{nd}$  plenary, the four signatories met during Q1 and Q2 2021 to agree on the outstanding agenda items. The list of standing resolutions and actions was reviewed and the ones that were out of date were cancelled. The results are shown in N862, which supplements the minutes in N861.

## 5. Updates from organizations

Organizations were invited to provide a brief and concise update of news and issues related to the scope of the MoU/MG since the last meeting. The main focus of these updates is to identify coordination issues.

## 5.1 UNECE reports

#### 5.1.1 UN/CEFACT International Trade Procedures Programme Development Area

<u>MoU/MG N865</u> was presented by Birgit Viohl, ITP domain coordinator. Recent achievements included three new recommendations:

- Recommendation 47, Pandemic crisis trade-related response;
- Recommendation 44, Cross-border facilitation measures for disaster relief;
- Recommendation 38, Trade information portals.

Upcoming activities include:

- White paper on private sector involvement in trade facilitation bodies;
- Single Window Assessment Methodology;
- Enhancing the repository of Single Window case studies accompanying Recommendation 33 and the repository of single submission portals accompanying Recommendation 37;
- Revision of Recommendation 2, semantic information and codes in international trade data exchange of what are ontologies, codes and libraries;

• Future topics in relation to Single Window, such as risk management, cyber security and machine learning.

Output: The report of the UN/CEFACT International Trade Procedures PDA was noted.

## 5.1.2 UN/CEFACT Methodology and Technology Programme Development Area

MoU/MG N871 was presented by Ian Watt, UN/CEFACT Vice Chair.

The report highlights the various work of the M+T PDA. A recent achievement was the publication of UN/EDIFACT Directories 21B.

Current and upcoming activities include:

- RDM2API:
- API Town Plan;
- Application programming interface technical specification.

Mr Watt highlighted semantic harmonization, stating that the UN/CEFACT M+T PDA are happy to assist IEC/TC 57 on development of the Core Component needs (R16/09).

Following a short discussion on the API town plan, it was clarified that it is essentially a governance model to ensure the avoidance of duplication and concentration on harmonization.

Output: The report of the UN/CEFACT Methodology and Technology PDA was noted.

## 5.1.3 UN/CEFACT Transport and Logistics Domain

<u>MoU/MG N867</u> was presented by Ian Watt, UN/CEFACT Vice Chair. The report highlights the various work of the T+ L Domain. A recent achievement was the recommendation on ship agent and ship broker minimum standards.

Upcoming activities include:

- Mapping of the IMO eFAL data requirements, in partnership with the IMO;
- Dangerous goods eBusiness standard.

Mr Watt again highlighted semantic harmonization, making reference to R07/06, A17/06 and R19/03.

Any group that wishes to submit data requirements to UN/CEFACT for harmonization should send an email to the <u>secretariat</u>, where the team supporting library maintenance will take it up.

Output: The report of the UN/CEFACT Transport and Logistics Domain was noted.

## 5.1.4 UN/CEFACT Supply Chain Management and Procurement Domain

<u>MoU/MG N866</u> was presented by Edmund Gray, SCMP Domain Coordinator. The report highlights the various work of the SCMP Domain. Recent achievements were:

- Buy ship pay reference data model (approved and delivered in 2020);
- Export packing list.

Current activities include:

- Supply chain track and trace;
- Standard on transferable records;
- eNegotiation;
- Automotive project.

Mr Gray highlighted semantic harmonization and made reference to R07/06 and R16/06.

Jake Knoppers informed the group that ISO/IEC JTC 1/SC 32 has developed ISO/IEC 15944-9 on Business transaction traceability framework for commitment exchange. This freely available standard gives traceability requirements of commitments made, for instance who is responsible and who makes a commitment.

Output: The report of the UN/CEFACT Supply Chain Management and Procurement Domain was noted.

## 5.1.5 UN/CEFACT Finance and Payment Domain

<u>MoU/MG N868</u> was presented by Fabio Sorrentino, F+P Domain Coordinator. The report highlights the various work of the F+P Domain. Current activities of this domain include the open finance white paper.

Upcoming activities include use of new technologies in relation to finance and payment.

Mr Sorrentino highlighted semantic harmonization and made reference to R07/06.

Mr Sorrentino and Patrice Hertzog confirmed that UNECE and ISO/TC 68 are in liaison through Liliana Fratini Passi, who participates in TC 68/TAG 1, Fintech Technical Advisory Group.

Output: The report of the UN/CEFACT Finance and Payment Domain was noted.

## 5.1.6 UN/CEFACT Accounting and Audit Domain

MoU/MG N872 was presented by Anita Patel, A+A Domain Coordinator. The report highlights the various work of the A+A Domain. Recent activities include the accounting and audit reference data model.

Ms Patel highlighted semantic harmonization and made reference to R07/06 and R16/04, the latter being pertinent to concerns of potential overlap with ISO/TC 295.

Output: The report of the UN/CEFACT Accounting and Audit Domain was noted.

## 5.1.7 UN/CEFACT eData Management Domain

MoU/MG N870 was presented by Kaushik Srinivasan, eData Domain Coordinator. The report highlights the various work of the eData Domain.

Current and upcoming activities of this domain include:

- UN CEFACT Chain project;
- Cross-border inter-ledger exchange for preferential certificates of origin;
- IoT for trade facilitation:
- AI for trade facilitation;
- Digital Identity for trade;
- Data retention and time stamping:
- Trusted third-party services and eNotarization.

Mr Srinivasan highlighted semantic harmonization and made reference to R07/06, R19/02 and A20/02. He confirmed that ongoing work in ISO/IEC JTC 1 in relation to IoT and AI has been taken into account, while Jake Knoppers agreed to share the report with JTC 1 for awareness regarding data retention and time stamping.

Wael William Diab noted the relation to AI use cases, which is under the responsibility of ISO/IEC JTC 1/SC 42 (see N893).

Output: The report of the UN/CEFACT eData Management Domain was noted.

#### 5.1.8 UN/CEFACT Agriculture, Fisheries and Agri-food Domain

MoU/MG N869 was presented by Ian Watt, UN/CEFACT Vice Chair. The report highlights the various work of the AGRI Domain. Recent achievements include:

- Sustainable textile and leather traceability and transparency;
- eCert Guide.

Upcoming activities include:

- Certificates;
- Halal e-certificate;

Sustainable development and circular economy reference data model.

Mr Watt highlighted semantic harmonization and made reference to R07/06 and A20/01.

Output: The report of the UN/CEFACT Agriculture, Fisheries and Agri-Food Domain was noted.

#### 5.1.9 UN/CEFACT Travel and Tourism Domain

MoU/MG N873 was presented by Akio Suzuki, T+T Domain Expert. The report highlights the various work of the T+T Domain. Current and upcoming activities of this domain include:

- Business standards for sustainable tourism;
- Experience programs technical artefacts.

Mr Suzuki highlighted semantic harmonization and made reference to R07/06.

Output: The report of the UN/CEFACT Travel and Tourism Domain was noted.

## 5.1.10 UN/CEFACT Cross Border Management Domain

MoU/MG N874 was presented by Ananth Rathakrishnan, CBM Domain Coordinator. The report highlights the various work of the CBM Domain.

Current and upcoming activities include:

- Cross Border Management Reference Data Model (CBM RDM);
- Cross-border multimodal digital corridors for regulatory related movement of consignment data and consignment status information for trade facilitation.

Future proposed work items include best practices in facilitation of movement of goods at land borders/land locked countries/land authorities.

Jake Knoppers informed the group that ISO/IEC JTC 1/SC 32/WG1 on e-business has a project on open-edi jurisdictional domains and cross border data flows, with rules pertaining to services among jurisdictional domains (i.e. any legal border impacting movement of goods and services).

Output: The report of the UN/CEFACT Cross Border Management Domain was noted.

## 5.2 ITU-T report

MoU/MG N875 was presented by Olivier Dubuisson, ITU-T representative to the MoU/MG on ebusiness.

The report highlights the Joint Coordination Activity on Digital Covid 19 Certificates (JCA-DCC). A JCA does not develop standards but coordinates activities within ITU-T and takes account of work going on elsewhere. If there are groups that have related work, the JCA-DCC would invite liaison statements.

The World Telecommunication Standardization Assembly will take place in March 2022, setting the scene for the next study period.

Recent achievements include standards on:

- Machine learning and artificial intelligence;
- Machine learning for quantum key distribution networks;
- IT systems and smart cities:
- Distributed ledger technologies;
- Connected health and e-health, which may be interesting to ISO/TC 215.

Mr Dubuisson spoke about focus groups, which are pre-standardization groups open to non-ITU participants. Particular attention was drawn to a focus group on AI and IoT for digital agriculture, in which the FAO is involved.

The report also shows a list of collaboration initiatives under point 4.

No MoU MG resolutions were specifically referenced.

Ms Ceccarelli noted the interest from UN/CEFACT regarding the work on AI and that it may be a good example to add to the white paper.

Output: The report of the ITU-T was noted.

#### 5.3 IEC reports

# 5.3.1 IEC/TC 3 "Documentation, graphical symbols and representations of technical information" and SC 3D

MoU/MG N888 was presented by Stephen Dutnall on behalf the IEC/TC 3 Chair.

The report highlights the scope of the work of IEC/TC 3 and its subcommittees, notably:

- Machine sensible representation of information;
- Human sensible representation of information;
- General and safety-related marking, identification and arrangement of information in electrical installations, equipment and man-machine interfaces.

IEC/TC 3 is in the process of being identified as a horizontal technical committee (it already develops horizontal publications).

Mr Dutnall highlighted the IEC 81346 series, which is aimed at the power industry and has now been taken up in other industries, e.g. shipbuilding, offshore windmills, which demonstrates the impact of IEC/TC 3 in multiple domains.

The report also outlines the activities of subcommittee SC 3D, which is responsible for how content is introduced and managed in the Common Data Dictionary (CDD), and the interactions with other committees to populate the CDD.

Output: The report from the IEC/TC 3 was noted.

## 5.3.2 IEC/TC 57 "Power systems management and associated information exchange"

No report was received.

The signatories will review committees' participation during a follow-up meeting in 2022 Q1.

#### 5.4 ISO reports

## 5.4.1 ISO/TC 8 "Ships and marine technology"

<u>MoU/MG N883</u> was presented by Ørnulf Jan Rødseth, outlining the recent cooperation between ISO/TC 8, UNECE and IMO on a data model for interoperability of ship and shore communication (EDIFACT is used a lot in the container trade, while other ships use other types of standards).

The group was informed of the ongoing revision to update ISO 28005 on API and message structures for electronic port clearance.

## 5.4.2 ISO/TC 37 "Language and terminology", e-Accessibility

MoU/MG N894 was presented by Christian Galinski, who spoke about the issue of interoperability of structured content and the importance of accessibility and e-accessibility, as well as the many facets of ontologies. ISO/TC 37/SC 3 started a project to make different ontologies interoperable, and experts from that group should be invited to any future webinar on semantic interoperability.

Mr Galinski outlined the work of the five subcommittees in ISO/TC 37:

- SC 1, Principles and methods most relevant to the MoU is WG 3, whose standard ISO 704 is cited in the ISO/IEC Directives and is used by all standardization bodies.
- SC 2, Terminology workflow and language coding some of these standards are important in the ICT field, e.g. language codes, considering the importance of identification in all kinds of semantic interoperability. The revision of ISO 639 is ongoing and will be available on the ISO Online Browsing Platform.

- SC 3, Management of terminology resources WG 1 is working on data categories and WG 3 on data interchange, including some collaboration with OASIS.
- SC 4, Language resource management covering not only terminology, but all kinds of elements that are found in language, to the microcontent level.
- SC 5 Translation, interpreting and related technology addressing the accessibility aspect, e.g. interpreting booths that are accessible (Mr Galinski noted that the issue of accessibility is addressed by all the WGs).

Output: The report from ISO TC 37 was noted.

## 5.4.3 ISO/TC 46 "Information and documentation"

MoU/MG N876 was submitted, however a representative was not available to present the report.

Jake Knoppers informed the meeting that he would follow up on items in the report relevant to records management. He also kindly offered to write future reports from his own committee that specifically refer to the MoU/MG actions and resolutions that are relevant to its work, suggesting that this could be used as a template for other committees to do the same.

## 5.4.4 ISO/TC 68 "Financial services"

MoU/MG N891 was presented by Patrice Hertzog, Chair of ISO/TC 68/SC 9.

After highlighting the many advisory groups within ISO/TC 68 and also its liaisons (other ISO committees, as well as external organizations), Mr Hertzog mentioned some areas of key focus:

- Semantic representation for ISO 20022;
- ISO 17442, *Legal Entity Identifier* (LEI), for identifying who is issuing securities and offering financial services;
- ISO 24165, *Digital Token Identifier*, which is applicable to non-FIAT digital currencies;
- ISO 24366, *Identification of natural persons*, developed as a complement to the LEI as natural persons being able to issue securities, closely linked to ISO/IEC JTC 1/SC 17;
- Security, e.g. encryption, firewalls, consumer devices;
- Reference data scope, e.g. identifiers specific to the financial industry such as LEI, IBAN, BIC:
- Information exchange, e.g. modelling, financial messaging, APIs.

Jake Knoppers pointed out that identification of natural persons is partly addressed in ISO/IEC 15944-1. That standard allows any natural person to have multiple personas, identifiers and signatures, which are validated in the context and purpose for which the same is provided. It was agreed that the registration process is very important as well as the standard itself, and Mr Hertzog confirmed that there is a liaison with ISO/IEC JTC 1 already in place.

# 5.4.5 ISO/TC 154 "Processes, data elements and documents in commerce, industry and administration"

MoU/MG N877 was presented by Ms Laura Mathew on behalf of the ISO/TC 154 leadership. Highlights in the report included:

- Several projects at preliminary stage (i.e. not yet started), which may be of interest to other groups;
- New project on data interchange processes using blockchain technology attention is drawn to A20/02.

Jim Wilson, convenor of ISO/TC 154/WG 7, highlighted the growing body of work in the area of blockchain and the difficulties in avoiding duplication of effort and overlaps. It is hoped that the MoU/MG could facilitate in this regard.

Jake Knoppers highlighted the potential usefulness of ISO/IEC 15944, application of open-edi business transaction ontology.

Output: The report from ISO TC 154 was noted.

## 5.4.6 ISO/TC 171 "Document management applications"

No report was received.

#### 5.4.7 ISO/TC 184/SC 4 "Industrial data"

MoU/MG N885 was presented by Kenneth Swope, Chair of ISO/TC 184/SC 4.

As this was the first time ISO/TC 184/SC 4 has attended the MoU MG in some years, Mr Swope introduced the committee and its website. He emphasized that their focus is on data and how it flows from one domain to another. Recent topics like digital twin have brought focus to the value of this information, and how it helps efficiency and quality.

Highlights from the work programme include:

- ISO 10303, the standard for data exchange and product data, and ISO 15926, which is a derivative for the oil and gas industry;
- ISO 8000, a horizontal standard for data quality;
- 17 projects completed in the last 12 months, including ISO 23247, digital twin framework for manufacturing;
- 30 projects under development, including updates of parts of ISO 10303;
- JWG 24 (with IEC SC 3D) has created the procedure for including ISO content in the CDD, which will be used by SC 4 and other ISO committees for managing standards as a database.

Mr Swope outlined the toolchain that is used within SC 4 and how this contributes to SMART standards activity, as well as drawing attention to their work around vocabularies and ontologies.

Laura Mathew introduced the ISO Smart Manufacturing Coordinating Committee (SMCC), in which TC 184/SC 4 actively participates (see A18/02). Martin Euchner will nominate a representative from the ITU to follow this activity.

Mr Swope added that JWG 21 between ISO/TC 184 and IEC/TC 65 is working on a smart manufacturing reference architecture to build a reference model for smart manufacturing.

## 5.4.8 ISO/TC 211 "Geographic information/Geomatics"

MoU/MG 878 was submitted, however a representative was not available to present the report.

Jake Knoppers noted the standard on temporal referencing, which may be relevant to date and time referencing in ISO/TC 154.

Martin Euchner noted that ISO/TC 211 is working on geospatial standards with OGC, who have also previously worked with ITU-T SG11. Therefore, the groups in ITU-T and ISO should coordinate to ensure work on the geospatial domain is not conflicting.

## 5.4.9 ISO/TC 215 "Health informatics"

MoU/MG N890 was submitted, however a representative was not available to present the report.

Jake Knoppers mentioned standards in ISO/TC 215 on anonymization and pseudonymization that are used in the e-business standards in JTC 1/SC 36.

Mr Euchner highlighted the security aspects that may be of interest to ITU-T SGs, and could be related to the JCA-DCC mentioned in the ITU-T report (N875).

Output: The report from ISO TC 215 was noted.

## 5.4.10 ISO/TC 307 "Blockchain and electronic distributed ledger technologies"

No report was received.

Laura Mathew recalled the very comprehensive report given by Craig Dunn, Chair of ISO/TC 307 (see N898) during the MoU MG webinar on blockchain in October.

This relates to R16/08 and resolution R16/16.

#### 5.4.11 ISO/TC 295 "Audit data services"

No report was received.

The work is linked to MoU/MG resolution R16/14.

## 5.4.12 ISO/IEC JTC 1 "Information technology"

No report was received.

Jake Knoppers committed to send a recommendation to the Chair of ISO/IEC JTC 1 to decide whether there should be overall JTC 1 input.

Martin Euchner recognized the e-business standards of ISO/IEC JTC 1/SC 32 and the importance of Dr Knoppers having attended this meeting.

## 5.4.12.1 ISO/IEC JTC 1/SC 32 "Data management and interchange"

MoU/MG N881 was presented by Jake Knoppers, who began by mentioning that ISO 14662 was fundamental to the establishment of the MoU/MG and is still a stabilized, horizontal standard.

The main area of focus for ISO/IEC JTC 1/SC 32 at present is ISO/IEC 15944, *Business operational view*, which is horizontal and application independent. Notable parts include:

- Part 7, e-business vocabulary, which is a consolidated control vocabulary of all terms and definitions provided in English, French, Russian and Chinese, and a human interface equivalent dealing with human accessibility issues;
- Part 17, on privacy by design, which was mentioned in EU data protection requirements;
- Part 14, on mapping between open-edi and cloud computing concepts;
- Part 20, which provides mapping between UN/CEFACT work and e-business work;
- Part 21, which links state machines to application of blockchain;
- Part 16, rules and guidelines to connect the business operational view and the algorithms that connect them;
- Part 19, which addresses aspects of cross-border data flow issues in the context of international business transactions.

## 5.4.12.2 ISO/IEC JTC 1/SC 35 "User interfaces"

No report was received.

## 5.4.12.3 ISO/IEC JTC 1/SC 40 "IT service management and IT governance"

No report was received.

## 5.4.12.4 ISO/IEC JTC 1/SC 42 "Artificial Intelligence"

MoU/MG N893 was presented by Wael William Diab, Chair of ISO/IEC JTC 1/SC 42.

The report gives an overview of the work going on in ISO/IEC JTC 1/SC 42, notably horizontal standards in AI and data science.

The case for standardization in AI is well established, and now ISO/IEC JTC 1/SC 42 is working on addressing emerging requirements from the application domain and societal requirements, regulatory policy and KPIs. The committee expects application standards and open-source projects to make use of the horizontal standards and extend them as necessary.

The main highlights from the report were:

• Foundational standards – AI stakeholders are different in terms of geography as well as background, so there is a standard on concepts and terminology, a framework for AI systems using machine learning (ML) and also a management system standard (MSS);

- Foundational work on big data process management framework for big data and analytics, data lifecycle;
- Trustworthiness security, privacy, trustworthiness of AI, risk management framework (there is also joint work with IEC/TC 65 on functional safety in AI systems);
- Transparency, taxonomy, treatment of unwanted bias, and how it can be treated through AI;
- Ethics and societal concerns, focusing on the context of the use of the technology;
- Use cases and applications ISO/IEC 24030 with over 130 use cases has been published, and SC 42 is happy to look at any use cases that might be presented by members of the MoU/MG;
- Computational methods at the heart of AI systems;
- Governance implications of AI, from the point of view of organizations and decision makers (joint effort with ISO/IEC JTC 1/SC 40);
- ISO/IEC 42001, AI Management System Standard acknowledging that AI technologies may bring specific concerns compared with traditional systems, this project opens the door to conformity assessment and auditability and can be extended to other application domains.

Maria Ceccarelli encouraged groups to create liaisons on use cases to avoid overlap.

Martin Euchner informed the meeting that work on AI is ongoing in various ITU-T Study Groups and highlighted the importance of ensuring coordination on AI and ML activities across our stakeholders.

Mr Diab mentioned existing liaisons with ITU, including with the focus group on healthcare, and reiterated his willingness to support areas of application and to welcome dialogue with any committees who are interested in providing use cases. He clarified that when a liaison is identified and joint work is undertaken, usually the lead is taken by the committee whose sector is the application, while SC 42 would normally take the lead when the subject is more horizontal.

#### 5.4.13 TC 321 Transaction assurance in e-commerce

MoU/MG N879 was presented by Mr Shanfeng Dong.

As it was the first time that ISO/TC 321 has attended the MoU/MG, Mr Dong gave some general information about the committee and its liaisons. No standards have been published yet, although some are under development.

The relevance to the UN/CEFACT AGRI domain and the close liaison relationship with ISO/TC 154 were noted.

ISO/TC 321 were encouraged to maintain awareness of the foundational standards ISO/IEC 15944 and ISO 8000.

## 5.4.14 TC 323 Circular economy

MoU/MG N880 was submitted, however a representative was not available to present the report.

Jake Knoppers mentioned the concept of "green edi" and the need to consider the disposal of goods after they have been consumed and then become a liability.

Various other activities on circular economy were mentioned, including:

- UN/CEFACT work on creating a new data model on circular economy and creating a team of specialists working on sustainable supply chain, circular economy and traceability;
- ITU-T SG 5 activity and liaison with ISO/TC 323;
- Other work in Europe on digital pathways and digital green passports.

## 5.5 Participating international user groups and interested parties

#### **5.5.1 OASIS**

MoU/MG N892 was presented by Mr James Clark, OASIS General Counsel. The report highlighted the work being done in liaison with the MoU signatory organizations:

#### ISO:

- ebXML with TC 154 and UNECE ISO 15000-1 for messaging and ISO 15000-2, the AS4 profile for messaging, were submitted to ISO/TC 154 and adopted in 2021. They are used in European and global projects;
- ISO 15000-3, update of the registry standard, has been submitted to ISO/TC 154 for adoption;
- ISO 15000-5 has been designated as a horizontal standard, indicating broader applicability;
- OASIS has longstanding PAS status (organizations that are approved to submit documents for fast-track adoption as ISO/IEC standards) with ISO/IEC JTC 1;
- Despite the added requirement to comply with ISO formatting requirements for subsequent editions of adopted standards, revisions of MQTT and UBL standards are being adopted.

## ITU-T:

• OASIS works with SG 17, particularly in security and the Common Alerting Protocol.

#### **UN/CEFACT:**

• As OASIS uses core components methodology in UBL, there is a lot of similarity in methodologies and naming and design rules. Consequently, there is some communication with UN/CEFACT in that area.

## Further points of note:

- OASIS projects are all searchable on the website (see links in the report);
- All work is conducted in public, which helps to get public input;
- OASIS standards programmes are subject to open-source licencing rules;
- Harm Jan van Burg will take over as senior European representative for international standards.

Output: The report from OASIS was noted.

#### 5.5.2 **OAGi**

<u>MoU/MG N884</u> was presented by Mr Jim Wilson, President and CEO of OAGi. The report gives an overview of OAGi activities, and highlights key terms, e.g.:

- IOF Industrial Ontologies Foundry;
- Score Open-source tool used in OAGi to manage core component libraries and to profile messages. Score supports ISO 15000-5 Core Component Specification and is jointly developed with NIST and OAGi.

## News highlights:

- Updates to Score new release this year with improvements:
- IOF formed as an organizational unit under OAGi;
- Working group activities, notably on mapping related to interoperability projects, which OAGi members are keen to address, and ontologies.

Jake Knoppers offered to look into the relevance of ongoing work on ontologies and metadata in ISO/IEC JTC 1/SC 32/WG2 to OAGi work. This ties in with considerations for agricultural metadata, currently being addressed by the ISO Strategic Advisory Group on Smart Farming (SAG SF).

It was agreed that an objective for ontology work is to improve semantic interoperability within enterprises and across enterprises and this is now becoming a hot topic. This resurgence of ontology is due to machine learning, AI and the ability to create smart products, smart cities, etc. When there is a need to have semantic representation of data, the ontology becomes the solution to how to relate these data across domains.

Output: The report from OAGi was noted.

#### 5.5.3 GS1

No report was received.

#### **5.5.4 SWIFT**

No report was received.

#### 5.5.5 CEN eBCG

MoU/MG N895 was presented by Ignacio Boixo, Chair of CEN eBCG.

The three main areas of activity in the eBCG were described: electronic invoicing in Europe, electronic procurement and financial reporting.

In particular, a CEN Workshop Agreement has become an International Standard through ISO/TC 68 (ISO 5116, *Improving transparency in financial and business reporting*).

Jamie Clark mentioned R16/06, which refers to the work that ISO/TC 68, OASIS and UN/CEFACT are doing to harmonize with the e-invoice related work done by some CEN groups and questioned whether eBCG should be added to that list. Mr Boixo agreed that his colleagues are working on electronic invoicing and are happy to collaborate.

#### 5.5.7 UPU

[Note that to avoid confusion, the order in the minutes reflects the numbering of the agenda, which erroneously omitted 5.5.6.]

No report was received.

#### 5.5.8 WCO

No report was received.

## **5.6 Dormant Organization List Candidates**

## 5.6.1 IMO

No report was received.

## 6. New coordination items with respect to e-business

The items listed below correspond to coordination items which do not have MoU/MG resolutions/actions – they should receive a resolution/action through requests in reports under item 5 or during the plenary meeting, in order to be moved to existing actions and be retained under item 7 on this agenda. If they do not, they shall be candidates for closure. At each plenary meeting the outstanding proposed coordination items are reviewed, those covered elsewhere or not relevant for e-business are groomed out. The template for justifying the continuation of a topic is:

- Rationale for e-business.
- Justification not to remove.
- Action/output.

## 6.1 Archiving for legal purposes

- Rationale for e-business: ISO/TC 46 previously reported on this topic as it was found to be relevant. It was agreed that they should report to the MoU/MG on the progress they have made in that field, considering that many standards these days are not only in PDF format and that legal considerations must be made for a more diverse body of output.
- Justification not to remove: None. It was agreed that this pertains to legal issues more than archiving, for instance, problems of copyright and data privacy in structured content.
- Action/output: A21/02 inviting ISO/TC 46 to provide best practices on archiving. This topic will be removed from point 6.

## **6.2** Fraud countermeasures

- Rationale for e-business: Work is ongoing in UN/CEFACT (included in traceability and certificate of origin), ITU-T SG11 (e.g. counterfeiting of mobile devices) and in ISO/TC 68 (e.g. identification of parties, Know Your Customer). Maria Ceccarelli noted that this is also an activity in the WCO, although they have not reported on it.
- Laura Mathew added that ISO/TC 292 and ISO/IEC JTC 1/SC 27 both work in this area.
- Justification not to remove: None this has become an existing coordination item.
- Action/output: Fraud countermeasures was proposed to be moved to item 7. It was intended to create a resolution, but this was not done during the meeting. To be followed up at the meeting in December 2022.

## 6.3 Internet-of-Things

- Rationale for e-business: IoT appears to be linked to e-business and the MoU/MG may be able to coordinate.
- Justification not to remove: The relation between IoT and e-business is not well enough understood and needs to be further investigated.
- Action/output: A21/01 requesting that groups working with IoT address its relationship to ebusiness. Based on the response, it may be appropriate to consider a future webinar on e.g. IoT consequences to trade and commerce.

Maria Ceccarelli's proposal to add API and circular economy to item 6 was accepted. Resolutions were passed to ask groups to report on their work on APIs (R21/01) and circular economy (R21/02).

## 7. Coordination of existing actions

The Chair addressed each coordination item (agenda points 7.1 to 7.14) and the associated resolutions and actions to confirm their continued relevance. The ones that were found to be completed or no longer relevant were deleted from the list. Some resolutions were modified.

It was decided that 7.4, ISO 15000 development, should not be a coordination item by itself. It was removed and Resolution R14/01 moved to item 7.1, semantic harmonization.

The updated lists of resolutions and actions can be found in Annexes B and C, respectively.

## 9. Secretariat

[Note that to avoid confusion, the order in the minutes reflects the numbering of the agenda, which erroneously omitted 8.]

## 9.1 Upcoming MoU/MG meetings

The next plenary meeting will be on 1<sup>st</sup> and 2<sup>nd</sup> December 2022. UNECE will host a hybrid meeting, online and at the Palais des Nations (depending on restrictions at that time).

## 9.2 Reminder for resolutions and action items

Groups are reminded that reports should be sent at least one week prior to the meeting and to refer directly to relevant resolutions and action items in those reports.

## 9.3 MoU/MG webinars

#### 9.3.1 Webinar on blockchain

Laura Mathew gave a brief oral report on the webinar on blockchain. Attendees to that event were able to gain useful insights and exchange views on ongoing activities in each of the MoU/MG signatory organizations.

The event <u>web page</u> shows the running order of the webinar. The materials are available on <u>ISO</u> <u>Documents</u> (N896 to N906).

Martin Euchner, as outgoing MoU/MG Chair, expressed his thanks to Laura Mathew for organizing the webinar, and to Lance Thompson and Stephen Dutnall for their preparation.

## 9.3.2 Future proposed webinars

Discussion is ongoing on the organization of a future webinar on semantic interoperability.

## 10. Any other business

Jamie Clark expressed thanks for the secretariat cleaning up the list of resolutions and action items.

## 11. Resolutions and actions closed at the meeting

The Chair reminded the meeting that two new Resolutions were passed, asking for information to be shared with the MoU/MG on:

- API (Resolution R21/01)
- Circular economy (Resolution R21/02).

Two new action items were passed, asking for best practices on:

- Archiving (Action A21/01)
- Internet of Things (Action A21/02).

Coordination items 6.1 and 6.3 will be removed.

## 12. Closing of the meeting

The following information is provided to help gauge the time needed if a virtual meeting is repeated.

- Day 1, the timing of the meeting was 10.00 to 14.30 CET
- Day 2, the timing of the meeting was 13.00 to 16.00 CET.

The meeting closed on the second day, 2<sup>nd</sup> December 2021 at 15.30 CET.

Annex A – List of participants,  $1^{st}$  and  $2^{nd}$  December 2021, MoU/MG on e-Business meeting

Title	Surname	First Name	Entity	Group
Mr	Bishop	Kevin	UNECE	Secretariat
Mr	Boixo	Ignacio	CEN	eBCG
Ms	Ceccarelli	Maria	UNECE	UN/CEFACT Secretary
Mr	Clark	Jamie	OASIS	
Mr	Diab	Wael William	ISO/IEC	JTC 1/SC 42
Mr	Dong	Shanfeng	ISO	TC 321
Mr	Dubuisson	Olivier	ITU-T	ITU-T representative in MoU/MG
Mr	Dutnall	Stephen	IEC	IEC Secretariat
Mr	Euchner	Martin	ITU-T	ITU-T Secretariat
Mr	Galinski	Christian	ISO	TC 37
Ms	Giraldo	Blanca Stella	ISO	TC 37
Mr	Gray	Edmund	UNECE	UN/CEFACT SCMP
Mr	Hertzog	Patrice	ISO	TC 68/SC 9
Dr	Knoppers	Jake	ISO/IEC	JTC 1/SC 32
Mr	Laughlan	Colin	ISO/IEC	JTC 1/SC 32
Ms	Mathew	Laura	ISO	ISO Central Secretariat
Mr	Mehta	Sachin	UNECE	UN/CEFACT T+T
Mr	Northey	James	ISO	TC 68
Ms	Patel	Anita	UNECE	UN/CEFACT A+A
Mr	Rathakrishnan	Ananth	UNECE	UN/CEFACT CBM
Mr	Rødseth	Ørnulf Jan	ISO	TC 8
Mr	Swope	Kenneth	ISO	TC 184/SC 4
Ms	Shlykova	Alla	UNECE	Secretariat
Mr	Sorrentino	Fabio	UNECE	UN/CEFACT F+P
Mr	Srinivasan	Kaushik	UNECE	UN/CEFACT eData
Mr	Suzuki	Akio	UNECE	UN/CEFACT T+T
Mr	Van Burg	Harm Jan	OASIS	
Ms	Viohl	Birgit	UNECE	UN/CEFACT ITP PDA
Mr	Watt	lan	UNECE	UN/CEFACT T+L
Mr	Wilson	Jim	OAGi	
Mr	Zhang	Jianfang	ISO	TC 154
Ms	Zhang	Yan	UNECE	Secretariat

IEC participants = 1

ISO participants = 9

ISO/IEC JTC 1 participants = 3

ITU participants = 2

UNECE participants = 13

Partner organizations = CEN (1), OAGi (1) and OASIS (2)

Total = 32 participants

 $Annex \ B-List \ of \ standing \ MoU/MG \ Resolutions$ 

Resolution	Area	Resolution text	Status
R07/06	Semantic harmonization	MoU/MG encourages member SDOs to submit their core components to the UN/CEFACT library maintenance point of contact, and participate in relevant UN/CEFACT activities.	In force
R07/23	Healthcare Informatics	MoU/MG welcomes the coordinated approach on healthcare being taken by ISO/TC 215, CEN TC 251, GS1, HL7, IHTSDO, IHE, and DICOM and OASIS, and encourages continued collaboration.	In force, modified.
<del>R08/04</del>	Healthcare Informatics	The MoU/MG recognises the potential synergy on eHealth between ITU-T SG 17, IEC/TC 25, ISO/TC 12, UN/CEFACT and the existing ISO/TC 215 standards, and encourages active liaison between the groups to make maximum use of existing standards.	In force Deleted
R09/06	Healthcare Informatics	The MoU/MG invites ITU-T SG 16 to coordinate its work on eHealth with ISO/TC 215 and its related groups (in progress).	In force
R10/11	eCatalogues; product data, classification and terminology	MoU/MG recommends that standards groups developing code lists should consider provision within the standards to prevent reuse of codes, in order to avoid invalidating earlier usages.	More information needed from a broad range of groups.
R11/07	Identification	The MoU/MG welcomes the contact between ISO/TC 37 for language codes, the ISO/TC 46 Maintenance Agency for country codes and the ISO/TC 68 Maintenance Agency for currency codes in order to maintain consistency.	In force
<del>R11/21</del>	<del>IMO</del>	MoU/MG extends an invitation to the International Maritime Organization (IMO) to become a Participating International User Group under the terms of the Memorandum of Understanding on e-Business.	In force Completed – IMO is invited
R12/03	Identification	MoU/MG recognizes that no single identification scheme for digital objects and other items will satisfy all business requirements, and therefore invites bodies responsible for identification schemes to ensure that their schemes and registration arrangements will accommodate interoperation with other schemes.	In force Inputs to be invited at next meeting

Resolution	Area	Resolution text	Status
R12/09	Name and address, Records management	MoU/MG encourages those members who have an interest in using language and script codes (ISO 639, ISO 15924) for e-business purposes to build a liaison with ISO/TC 37 and ISO/TC 46, to ensure that their requirements are addressed.	In force To be checked.
R14/01	Semantic harmonization	The MoU/MG noted the publication of ISO 15000-5, <i>Electronic Business Extensible Markup Language (ebXML)</i> ————————————————————————————————————	In force See 7 above
R14/04	UN/CEFACT	The MoU/MG invites UN/CEFACT to make its forthcoming Business Requirements Specification on conformance and compliance available to other members for comment, in order to foster compatible approaches across various standards.	<del>In force</del>
R14/09	Smart Grid	The MoU/MG recognises the broad scope of requirements identified by IEC/TC 57 for the Smart Grid, and draws attention to the existing available standards and user investments which can contribute to addressing those requirements.	In force
R15/02	Updates from organizations	All MoU/MG organizations are requested to distribute brief descriptions of all their relevant, proposed, preliminary and new work items via the MoU/MG mailing list.  MoU/MG recommends that all relevant approved new work items from the MoU/MG members shall be disseminated to the MoU/MG mailing list for information and possible action at the earliest stage.	In force
R16/03	Open Source	The MoU/MG members note the growth of opportunities to apply open-source techniques to the development, implementation and use of standards, and encourage sharing best practices and the potential approach to a consistent approach to on open source in the scope of e-business across the member organizations.	In force, modified

Resolution	Area	Resolution text	Status
R16/04	Healthcare Informatics	The MoU/MG notes the work of ISO/TC 292 Security and resilience, UNECE Working Party on regulatory cooperation and standardization policies (WP.6) and UNISDR on disaster risk reduction, ISO/TC 215 on Patient tracking, ITU-T SG17 on Security and OASIS EDXL Tracking of Emergency Patients, and invites these groups to explore collaboration on patient tracking and other areas of preparedness.	In force
<del>R16/06</del>	Trade- transactions	The MoU/MG notes the work of CEN/TC 434 Electronic invoicing and CEN/TC 440 Electronic Public Procurement and encourages the groups to take advantage of liaisons with ISO/TC 68, UN/CEFACT and OASIS (the source organizations for their messages and syntaxes).	Revised, In force Work has been done – closed
<del>R16/07</del>	Trade- transactions	The MoU/MG notes the work of CEN/TC 445-Digital information Interchange in the Insurance Industry and encourages the group to take-advantage of liaisons with ISO/TC 68, UN/CEFACT and OASIS (the source organizations for its messages and syntaxes).	In force Progress of CEN/TC 445 is unknown – closed
<del>R16/08</del>	New- coordination- item Blockchain and Distributed Ledger Technology	The MoU/MG notes that the proposed ISO newwork on blockchain technology is potentially applicable to multiple business areas that are already represented by standards groups in the MoU/MG and, in the event of the formation of a new group to undertake the work, invites that group to participate in the MoU/MG.	In force TC 307 is fully functional, so this is obsolete
R16/09	Smart Grid, Semantic harmonization	The MoU/MG invites IEC/TC 57 to look into inclusion of their relevant data requirements into the UN/CEFACT Core Component Library.	In force The work was done – closed
R16/13	Data governance	MoU/MG notes the work of ISO/IEC JTC 1/SC 40 relating to data governance, and requests a presentation on the scope of the work to a future meeting in order to understand its relationship to the existing activities of the MoU/MG participants.	In force
R16/14	Semantic harmonization	MoU/MG was made aware of concerns raised by UN/CEFACT regarding potential duplication and/or overlap of work with ISO/TC 295 on audit data, and recommends UN/CEFACT to submit their concerns in writing to the Committee Secretariat, in copy to the MoU/MG to allow tracking of progress.	In force

Resolution	Area	Resolution text	Status
R16/15	Collaboration and coordination	MoU/MG recognizes Recommendations ITU-T A.5 "Generic procedures for including references to documents of other organizations in ITU-T Recommendations", A.25 "Generic procedures for incorporating text between ITU-T and other organizations", and A-series Supplement 5 "Guidelines for collaboration and exchange of information with other organizations", and invites the participating members of the MoU/MG to utilize these documents in developing joint documents, and to provide feedback to ITU-T on their use.	In force
R16/16	Blockchain and Distributed Ledger Technology	MoU/MG notes the formation of ISO/TC 307 "Blockchain and electronic distributed ledger technologies" and invites MoU/MG members to liaise with this new group as it develops its work programme.	In force
R17/03	Secretariat issues	The MoU/MG recognizes the need to have timely reports from its participating organizations, available at least one week before the start of the meeting, and with a reminder sent out by the secretariat one month in advance.	In force
<del>R17/06</del>	New-coordination-item	The MoU/MG notes the formation of IEC/SEG 8 on Communication Technologies and Architectures of Electrotechnical Systems, and invites MoU/MG member organisations to interact directly with that group.	In force IEC SyC Communica tions Technologi es and architecture s has been established, therefore this resolution is obsolete.
<del>R17/07</del>	New- coordination- item	The MoU/MG notes the formation of IEC/SEG 9 on Smart Home/Office Building Systems, and invites MoU/MG member organisations to interact directly with that group.	In force SEG 9 was disbanded.

Resolution	Area	Resolution text	Status
R17/08	Traceability	The MoU/MG notes a number of initiatives on traceability in various industries such as aerospace, diamonds, agriculture, garments, medical products, and counterfeiting, and identifies traceability as a new coordination item for the forthcoming MoU/MG meetings, and invites MoU/MG members to provide more information on this topic of interest.	In force, modified. More groups working on traceability to be identified (including UN/CEFAC T AGRI domain, ITU-T SG 11, ISO/TC 184/SC 4, ISO/TC 321).
R17/11	WCO	MoU/MG encourages WCO to take advantage of its participation in the MoU/MG to seek inputs from existing e-commerce standards activities.	In force
R18/01	eAccessibility and eInclusion	The MoU/MG, recognizing the importance of accessibility and inclusion of persons with disabilities, resolves to take up eAccessibility and eInclusion as a theme of for continued coordination and endorses Recommendation 2016 (reference MoU/MG N812) on this topic.	In force, modified
R18/04	Semantic harmonization	MoU/MG encourages its members to reference in their standards the revised ISO 8601 series of standards on date and time.	In force
R19/01	Semantic harmonization	The MoU/MG encourages standards organizations to compare their notions of trust and trustworthiness with an aim to providing a consistent use of these terms.  Experts are encouraged to work together to understand the specific connotation of trust and trustworthiness in different domains.	In force
R19/02	Digital Identity	The MoU/MG welcomes the involvement of UN/CEFACT eGovernment Domain in ITU-T on Digital Identity Management in order to consider this work in their Digital Identity project.	In force

Resolution	Area	Resolution text	Status
R19/03	Artificial Intelligence	The MoU/MG welcomes the involvement of the ITU-T Study Group 16 in the work of the UNECE Transportation Division and the work of ISO-IEC JTC1 SC42 and the work of ISO TC204 on the topic of autonomous / assisted driving.	In force
R19/04	Artificial Intelligence	The MoU/MG encourages the member organizations to look into the potential of artificial intelligence and machine learning in the area of ebusiness and report in future MoU/MG meetings on this topic.	In force Groups are asked to submit use cases.
R20/01	Accessibility	The MoU/MG, conscious about web content accessibility increasingly becoming legally obligatory in many countries especially in the public domain, encourages members of the MoU/MG (in line with MoU/MG Resolution 18/01) to consider the aspect of web content accessibility complying with ISO/IEC 40500 in the development of structured data (such as codes, symbols, nomenclatures, classifications, etc.)	In force
R21/01	API	The MoU/MG recognizes the importance of the ongoing work on API and invites member organizations to report on their ongoing work in future MoU/MG meetings and encourages groups to create liaisons to maximize their efforts.	New
R21/02	Circular economy	The MoU/MG encourages member organizations to look into the potential of circular economy in the area of e-business and report in future MoU/MG meetings on this topic.	New

## Annex C – List of MoU/MG Actions

Action	Area	Action text	Status
A06/41	Secretariat issues	The MoU/MG secretariat to prepare a calendar of the main meetings of MoU/MG member organizations, to be posted on the MoU website. The MoU/MG members are therefore requested to send this information as early as possible to the MoU/MG secretariat.	Ongoing
A07/14	Secretariat issues	Member organizations were encouraged to update their lists of participants, link and contacts point under the MoU/MG site.	Ongoing
<del>A09/27</del>	Name and address	Members to contact ISO/TC 37 if they wish to participate on NP on appellation, where work has not yet started.	<del>Open</del>
A09/30	Secretariat	The MoU/MG Secretariats are requested to send to ITU-T Secretariat necessary updates needed on the website to ensure content is topical - needs new presentation, updated lists of participating organisations and individuals.	Ongoing
<del>A09/41</del>	<del>UPU</del>	MoU/MG members noted the planned growth areas for UPU, and UN/CEFACT, ITU-T, OASIS, OAGi and GS1-were invited to provide information on relevant standards relating to the use of Mobile Phones and RFID in Postal Union supply chain management.	<del>Open</del>
<del>A09/42</del>	ISO/IEC JTC 1	MoU/MG invites ISO/IEC JTC 1/SC 32 to develop an integrated picture of the relationship between the standards developed in WG 1 and WG 2.	<del>Open</del>
A11/18	Secretariat issues	Each individual organization's secretariat to send out reminders to their respective mailing list on action items.	Revised, on-going
A13/01 (ref. Resolutio n 12/08)	ISO/IEC JTC 1	The MoU/MG notes the request from ISO/IEC JTC-1/SC32/WG1 (see document JTC 1/SC32 N2278) for possible update to some Tables (especially Table 3) in the Introduction, as found in the 2010, 3 <sup>rd</sup> edition of the ISO/IEC 14662 "Information technology — Open-edi Reference Model" standard. MoU/MG member organizations are requested to contact the JTC-1/SC32/WG1 Convenor, Mr Wenfeng Sun (sunwf@cnis.gov.cn) directly with respect to any updates to these Tables.	<del>Open</del>
A15/01	Secretariat issues	The MoU/MG secretariat will make available a draft minutes from the meeting at latest two weeks after the meeting.	Open Part of normal process

Action	Area	Action text	Status
A16/05	New Coordination	The MoU/MG invites its member organizations to provide information on their activities in the context of Big Data for e-business.	Open Follow up request for further informatio n related to e- business (e.g. ITU and JTC1 SC42)
A17/06	WCO	MoU/MG invites WCO DMPT to review and consider the reuse of the UN/CEFACT eCMR (road consignment document) deliverable.	Open Request will be made for input to December 2022 meeting
A18/01	Quantum technologies	MoU/MG invites its members to provide inputs to the next MoU/MG meeting on the subject of quantum computing in the scope of electronic business.	Open
A18/02	Smart manufacturing	MoU/MG invites its members to provide inputs to the next MoU/MG meeting on the subject of smart manufacturing in the scope of electronic business.	Open
A19/01	Signed digital evidence	The MoU/MG invited organizations to provide inputs to the next MoU/MG meeting on the subject of <a href="interoperability of">interoperability of</a> signed digital evidence.	Open, modified
A19/02	Healthcare informatics	The MoU/MG invites ISO TC215 to report on the coordinated approach on healthcare and the current liaisons in place for this. (see R07/23 and R09/06).	Open
A20/02	Blockchain and distributed ledger technologies	The MoU/MG found considerable interest in the use of Blockchain and distributed ledger technologies (DLT) with an impact on electronic business, and invites its members to report to the MoU/MG their approaches and requirements on interoperability of DLT.	Open
A21/01	Internet of Things	Noting the limited understanding of how IoT relates to e- business, the MoU/MG invites groups that are working with IoT to report on this topic, with a view to considering a future webinar on IoT and e-business.	New
A21/02	Archiving	The MoU/MG invites ISO/TC 46 to report on their work on archiving (referring to the deprecated agenda item 6.1, Archiving for legal purposes).	New