Proposals for a CEN-CENELEC-ETSI Coordination Group on Smart Manufacturing (SMa-CG): Draft Terms of Reference

Introduction

Digitising European Industry is one of key challenges of the European economy. The manufacturing sector in the European Union accounts for 2 million enterprises, 33 million jobs and 60% of productivity growth. We stand on the brink of a new industrial revolution, driven by new-generation information technologies such as the Internet of Things (IoT), cloud computing, big data and data analytics, robotics and 3D printing as it is outlined in the Terms of Reference of the MSP/DEI WG on Standardisation in Support of Digitising European Industry.

Standardization – by which is meant voluntary usage of technical specifications developed by consensus - is considered the most important key element to successfully support this development by allowing for coherent solutions across the different players taking part in differentiated digital manufacturing value chains.

To respond to this task and to avoid a proliferation of working groups with overlapping mandates, a Joint MSP/DEI Working Group (MSP/DEI WG) has been set up. MSP/DEI WG recommends in its report to establish a platform for the synchronisation of the various standardisation activities.

To support an overall and full coordination of the European Standardization activities, it is important to establish well-defined structures at the level of CEN, CENELEC and ETSI. The approach of a CEN-CENELEC-ETSI Coordination Group is well established and can be used for the specific needs of Smart Manufacturing.

I. ~~1~~ Title

CEN-CENELEC-ETSI Coordination Group on Smart Manufacturing (SMa-CG)

II. ~~2~~ Status

The SMa-CG is a joint Group of CEN, CENELEC and ETSI. ~~It shall report to the CEN and CENELEC Technical Boards (BTs) as well as the ETSI Board.~~

III. ~~3~~ Scope

The SMa-CG shall advise on ongoing European activities relating to smart manufacturing standardization, and on how they are being addressed in CEN, CENELEC and ETSI but also to synchronise on a position of CEN, CENELEC and ETSI towards third parties concerning standardization in the field of smart manufacturing.

The group shall:

- advise the CEN/CENELEC BTs and ETSI Board on the standardisation needs regarding smart manufacturing and initiate appropriate actions,
- advise the CEN/CENELEC BTs and ETSI Board on political issues concerning smart manufacturing,
- coordinate the various standardisation activities among CEN, CENELEC and ETSI taking into account the MSP/DEI WGs activities,
- advise CEN/CENELEC BTs and ETSI Board on ways and means to improve the visibility and recognition of CEN, CENELEC and ETSI activities in Smart Manufacturing domain,.

With respect to international standardisation activities on smart manufacturing, the Group shall monitor the progress of the relevant standardisation activities in ISO and IEC, and ensure coordination between European activities and those at the international level

With respect to links with related activities in Europe, the Group should establish information exchange with relevant initiatives and interested fora and consortia

The Group shall not develop standardization deliverables itself, but may produce information material intended for the public domain after approval by the CEN/CENELEC/BTs and ETSI Board.

IV. Setting-up – Lifetime

The SMa-CG is established for an initial period of three years. During that period the SMa-CG will circulate progress reports once a year. Prolongation after the initial period may be decided by the CEN/CENELEC BTs and ETSI Board.

The SMa-CG was set-up by the CEN and CENELEC Technical Boards on 2019-05-28 and by the ETSI Board on 2019-06-12/14.

V. Chairmanship & Secretariat

Chair: Dr Jens Gayko. Appointed by the ETSI Board on 2019-09-XX and by the CEN and CENELEC Technical Boards on 2019-10-09 for a renewable period of 3 years Secretariat: DIN – Contact: Ms Anna Petschulies

VI. Membership

The SMa-CG is comprised of Members and Observers.

The SMa-CG can only be successful if all relevant stakeholders are present, either directly in the SMa-CG or through cooperation, e.g. in the Networking Platform. The relevant stakeholders can be grouped as follows:

- representatives of interested Technical Bodies in CEN, CENELEC and ETSI;
- members of CEN, CENELEC and ETSI;
- SDOs, consortia and alliances (of industrial partners);
- European associations representing interested stakeholders;
- National initiatives;
- major European research projects, large scale pilots, test beds;
- Open source communities;
- Industry, including SME;
- National initiatives, including relevant National Research & Innovation Centres;
- Societal stakeholders.

Participation in the SMa-CG shall focus on the first two groups. Selected representatives of other groups might be invited as appropriate.

Observers may include:

- European Commission DGs and the EFTA Secretariat;
- IEC, ISO;
-
- international initiatives, where seen as appropriate.

Kommentar [FJ1]: To add "representatives of CEN-CENELEC Management Centre (CCMC) and ETSI Secretariat" to the list of organisations participating in the group as foreseen in the Internal Regulations, Part 2, Annex G

Kommentar [PA2]: AFNOR

Kommentar [PA3]: AFNOR: Members include representatives from body or organisation falling in the following categories : ~~The relevant stakeholders can be grouped as follows:~~
• representatives of interested Technical Bodies in CEN, CENELEC and ETSI;
• national members of CEN, CENELEC and ETSI;
~~• SDOs, consortia and alliances (of industrial partners);~~
~~• European associations representing interested stakeholders ;~~
~~• National initiatives;~~
~~• major European research projects, large scale pilots, test beds;~~
~~• Open source communities;~~
~~• Industry, including SME;~~
~~• National initiatives, including relevant National Research & Innovation Centres;~~
~~• Societal stakeholders.~~

Kommentar [PA4]: ETSI doesn't have the concept of "national" members:

Kommentar [PA5]: CCMC: add "Representatives of other relevant ESO coordination groups" as the third bullet point

Kommentar [PA6]: AFNOR add:
• relevant European associations having an official partnership with CEN and/or CENELEC, by virtue of the CEN-CENELEC Guide 25!

Additional participants may participate in meetings and be included in electronic discussions where agreed by the Chairman and the Secretariat.

Participants are expected to represent the interest of an organization or association rather than a private company's interest. Participation shall be on a voluntary basis.

Kommentar [PA7]: ETSI doesn't use the representation concept as in CEN/CENELEC: ~~Participants are expected to represent the interest of an organization or association rather than a private company's interest.~~
or:
Participants are expected to represent the interest of an organization, ~~or~~ association or standardization group rather than a private company's interest"
(Just to explain the term standardization group, we cannot say committee as this has a specific limiting meaning in ETSI as explained above.)

VII. Reporting line & timeline

It will shall report to the CEN and CENELEC Technical Boards (BTs) as well as to the ETSI Board. The SMa-CG reports at least once a year by correspondence or when a decision is expected from the CEN-CENELEC Technical Boards and from the ETSI Board at the meeting.

VIII. ~~4~~ Tasks

The SMa-CG's tasks can be grouped into strategic, political and technical aspects.

~~4.1~~ Strategic and political coordination

- Analyse the report of MSP/DEI Joint WG on Standardisation in Support of Digitising European Industry as well as the EU Rolling Plan for ICT Standardisation to make recommendations and/or propose actions
- Exchange information with related fora and consortia and relevant initiatives on Smart Manufacturing, as appropriate
- Provide a suitable platform for overall discussion of smart manufacturing standardization-related issues with stakeholders, including the European Commission
- Give recommendations to the CEN/CENELEC BTs and ETSI Board concerning European requirements, and to whom they should be addressed
- Exchange information with similar international, global and other regional standardization activities, and aim for a coordinated and collaborative approach concerning smart manufacturing standards issues
- Establish a coordinated approach in Europe to enhance the visibility of CEN, CENELEC, ETSI, ISO and IEC activities in the smart manufacturing domain,
- Clarify non-technical questions to avoid unnecessary discussions in technical groups.

~~4.2~~ Technical coordination

- Coordinate standardisation activities of CEN, CENELEC and ETSI related to Smart Manufacturing and synchronise with other parties, as appropriate
- Make proposals to the CEN/CENELEC BTs and ETSI for the allocation of work to specific technical groups, and for the coordination of overlapping issues on European level
- Establish a link between standardization in the CEN, CENELEC and ETSI domain on the one hand and groups doing piloting and testing on the other. There is potential for mutual benefits and substantial synergies. There are first examples to realize these synergies but currently there is no systematic approach to connect standardization on piloting/testing on a European level.
- Monitor the follow up of proposed European Standards and other consensus based deliverables to be developed for smart manufacturing based on the overview provided in the report of MSP/DEI Joint WG on Standardisation in Support of Digitising European Industry.

- Will exchange information with ISO and IEC in order to increase coherence and avoid duplication at the European level,

- Identify use cases and relevant materials to promote standards in area of Smart Manufacturing

~~4.3~~ Perspectives and development

- Establish links with innovation and European R&D in the fields covered by smart manufacturing, in cooperation with other platforms and projects such as CEN-CLC/BTWG STAIR, BRIDGIT, etc.

- Liaise with European policy makers with a view to investigate potential standardisation needs in support of EU policies in areas related to smart manufacturing

Contribute to the process of establishing the Networking Platform described in the MSP/DEI WG's recommendations (Networking Platform), be ready to contribute to the Networking Platform.~~Should there be agreement with other parties such as the European Commission, the SMa-CG's scope may be extended, upon decision by the CEN/CENELEC BTs and ETSI Board, to fully implement the Networking Platform described in the MSP/DEI WG's recommendations (Networking Platform).~~

Kommentar [PA8]: ETSI: Rephrase in order to better align with the MSP/DEI work:

~~5 Timescale~~

~~The SMa-CG is established for an initial period of three years. During that period the SMa-CG will circulate progress reports once a year. Prolongation after the initial period may be decided by the CEN/CENELEC BTs and ETSI Board.~~

~~6 Participation~~

~~The SMa-CG can only be successful if all relevant stakeholders are present, either directly in the SMa-CG or through cooperation, e.g. in the Networking Platform. The relevant stakeholders can be grouped as follows:~~

- ~~representatives of interested Technical Bodies in CEN, CENELEC and ETSI;~~
- ~~national members of CEN, CENELEC and ETSI;~~
- ~~SDOs, consortia and alliances (of industrial partners);~~
- ~~European associations representing interested stakeholders;~~
- ~~National initiatives;~~
- ~~major European research projects, large scale pilots, test beds;~~
- ~~Open source communities;~~
- ~~Industry, including SME;~~
- ~~National initiatives, including relevant National Research & Innovation Centres;~~
- ~~Societal stakeholders.~~

~~Participation in the SMa-CG shall focus on the first two groups. Selected representatives of other groups might be invited as appropriate.~~

~~Observers may include:~~

- ~~European Commission DGs and the EFTA Secretariat;~~
- ~~IEC, ISO;~~
- ~~international initiatives, where seen as appropriate.~~

Kommentar [PA9]: AFNOR: Members include representatives from body or organisation falling in the following categories : ~~The relevant stakeholders can be grouped as follows:~~
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• national members of CEN, CENELEC and ETSI;
• ~~SDOs, consortia and alliances (of industrial partners);~~
• ~~European associations representing interested stakeholders ;~~
• ~~National initiatives;~~
• ~~major European research projects, large scale pilots, test beds;~~
• ~~Open source communities;~~
• ~~Industry, including SME;~~
• ~~National initiatives, including relevant National Research & Innovation Centres;~~
• ~~Societal stakeholders.~~

Kommentar [PA10]: ETSI doesn't have the concept of "national" members:

Kommentar [PA11]: CCMC: add "Representatives of other relevant ESO coordination groups" as the third bullet point

~~Additional guests may participate in meetings and be included in electronic discussions where agreed by the Chair and the Secretariat.~~

~~Participants are expected to represent the interest of an organization or association rather than a private company's interest. Participation shall be on a voluntary basis.~~

Kommentar [PA12]: ETSI doesn't use the representation concept as in CEN/CENELEC: ~~Participants are expected to represent the interest of an organization or association rather than a private company's interest.~~
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IX. ~~7~~ Working methods

The SMa-CG is led by a Chair. The Chair is appointed by the CEN/CENELEC BTs and ETSI Board.

The secretariat is allocated by the CEN/CENELEC BTs and ETSI Board to a CEN/CENELEC national member.

For particular topics the SMa-CG may agree to set up WGs to consider and report back.

The group may organise open stakeholder consultative meetings where required.

The number of face to face meetings should be reduced to a necessary minimum, online meetings should be preferred for interim consultations.

The ~~g~~Group shall provide regular progress reports to the CEN/CENELEC BTs and ETSI Board.

The Group is expected to exchange information with CEN-CENELEC BT WG 6 'ICT Standardization Policy' in view of fuelling the consistency of the overall strategic framework.

Produced information material intended for the public domain shall be approved by the CEN/CENELEC BTs and ETSI Board prior to publication.

Recommendations to the CEN/CENELEC BTs and ETSI Board should generally be adopted by consensus, meaning absence of sustained objection. The recommendations will be non-binding on participants' organizations.

[the electronic tools of the ESOs shall be used]

X. Revision of Terms of Reference

The Terms of Reference and any update needs the approval by the CEN and CENELEC Technical Boards and by the ETSI Board.

Annex

List of TCs and relevant groups – list to be completed by SMa-CG

CLC/TC 65X	Industrial-process measurement, control and automation
CEN/CLC/JTC 8	Privacy management in products and services
CEN/CLC/JTC 13	Cybersecurity and Data Protection
CEN-CLC BTWG 6	
CEN/TC 310	Advanced automation technologies and their applications
CEN/TC 114	Safety of machinery
CEN/TC 122	Ergonomics
CEN/TC 143	Machine tools – Safety
CEN/TC 225	AIDC technologies
CEN/TC 290	Dimensional and geometrical product

	specification and verification
CEN/TC 319	Maintenance
CEN/TC 368	Product Identification
CEN/TC 438	Additive Manufacturing
ETSI TC CYBER	
IEC/SyC SM	System Committee Smart Manufacturing
ISO SMCC	Smart Manufacturing Coordinating Committee
5G ACIA	5G Alliance for Connected Industries and Automation
AIOTI	Alliance for Internet of Things Innovation
IEC/ISO JWG21	Smart Manufacturing Reference Model(s)
3GPP (3rd Generation Partnership Project)	
ATTM (Access, Terminals, Transmission and Multiplexing)	
ATTM SDMC (Sustainable Digital Multiservice Cities)	
CYBER (CyberSecurity)	
DECT & ULE (Digital Enhanced Cordless Telecommunications)	
eHealth	
EE (Environmental Engineering)	
EMTEL (Emergency Communications)	
ERM (EMC and Radio Spectrum Matters)	
ESI (Electronic Signature)	
Human Factors	
ISG ARF (Augmented Reality Framework)	
ISG SAI (Securing AI)	
ISG CIM (Context Information Management)	
ISG OEU (Operational Energy Efficiency for Users)	
ISG MEC (Multi-access Edge Computing)	
ISG PDL (Permissioned Distributed Ledger)	

Kommentar [PA13]: Additional feedback from SIS (2019-05-10)

Kommentar [PA14]: ETSI technical groups with some relations to IoT…see below

ISG ZSM (Zero-touch Service Management)	
ITS (Intelligent Transport Systems)	
oneM2M SmartBAN (Smart Body-Area Networks)	
SmartM2M & SAREF (*) (Smart App REFerence Ontology)	
USER	