Draft Project plan for the CEN Workshop on "CBRNe SENSOR API - Network Protocols, Data Formats and Interfaces"

Requests to participate in the Workshop and/or comments on the project plan are to be submitted by 2022-09-30 to yusuf.yilmaz@din.de[1]

Recipients of this project plan are kindly requested to name all patent rights known to them to be relevant to the Workshop and to make available all supporting documents.

Berlin, 2022-08-30 (Version 1)

[1] Applications for participating in the Workshop and comments on the project plan that are not received by the deadline do not need to be taken into consideration. Once constituted, the Workshop will decide whether or not to consider the comments received in good time.

Contents

Summary

Why is this Workshop initiated? / What is the need for this Workshop?

The RISEN project is developing a generic SENSOR API that will be used by different RISEN sensors manufactured by different organisations. In this regard, the existing SENSOR API can be further generalised and used as a basis for a future standard, allowing any CBRNe SENSOR to connect and exchange information, in a network-enabled environment, with remote services in a uniform way.

The planned Workshop defines/establishes/specifies CBRNe-related sensor data formats and protocols to support forensics investigations

Which issue(s) should be solved by the Workshop? / What is the future benefit of the CWA(s)?

It is proposed to develop a CWA on CBRNe SENSOR API - Network Protocols, Data Formats and Interfaces due to the following reasons:

- Facilitate analyst data interpretation by using familiar, well defined and consistent sensor data formats

- Enable evidence management information systems to receive data from compliant CBRNe sensors without requiring custom developments

- Include 3D-spatial support in sensor data, enabling 3D data location.

- Improve operational autonomy and efficiency with digitalisation of traces and evidences.

- Enable forensics data sharing between practitioners.

What is explicitly not part of the CWA(s)?

The planned Workshop is applicable to/is intended to be used by forensics analytics and crime scene investigators The planned Workshop does not apply to/is not intended to be used by professionals not trained in forensics investigation.

1 Status of the project plan

Draft project plan for public commenting (Version 1.0)

This draft project plan is intended to inform the public of a new Workshop. Any interested party can take part in this Workshop and/or comment on this draft project plan. Please send any requests to participate or comments by e-mail to yusuf.yilmaz@din.de.

All those who have applied for participation or have commented on the project plan by the deadline will be invited to the kick-off meeting of the Workshop on 2022-10-10.

2 Workshop proposer and Workshop participants

2.1 Workshop proposer

Person or organisation	Short description and interest in the subject
Name: Dr. Marco Manso	Founder and Director of PARTICLE Summary. More than 20 years of experience working in the Security&Defence private market, more than 15 years

Organization: PARTICLE Summary Email: marco@particle-summary.pt Phone: +351 96 468 64 98 Webpage: https://particle-summary.pt	in Executive and R&D Positions. Coordination experience of European and national R&D projects. PhD (Seismology / High density sensor networks) from the University of Évora; MSc. in Information Warfare/Competitive Intelligence from Military Academy; Engineering degree from the Technical University of Lisbon.

2.2 Other potential participants

This CWA will be developed in a Workshop (temporary body) that is open to any interested party. The participation of other experts would be helpful and is desired. It is recommended that: (e. g. Research Institutes for…, Industry and commerce, academic and research, Standards developers and applicants…)

- RTD (Research and Technical Development)
- LEA (Law Enforcement Agencies)
- UNI (Universities)
- SME (Small and Medium sized enterprises)

will take part in the development of this CWA.

2.3 Participants at the kick-off meeting

The following persons or organisations already signed up to the kick-off meeting prior to the publication of the draft project plan.

Person	Organisation
Marco Manso	PARTICLE SUMMARY (PART)
Roberto Chirico	AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA)
Andrea Rossi	MINISTERO DELLA DIFESA (RaCIS)
Ioannis Daniilidis	KENTRO MELETON ASFALEIAS (KEMEA)
Georgios Karadimas	HELLENIC POLICE (HP)
Frank Schnürer	FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. (FHG)
Jaroslaw Mlynczak	WOJSKOWA AKADEMIA TECHNICZNA IM.JAROSLAWA DABROWSKIEGO (WAT)
Francesco Saverio	UNIVERSITA' DEGLI STUDI DI BERGAMO (UniBg)
Gemma Montalvo	UNIVERSIDAD DE ALCALA (UAH-IUICP)

Nicola Liberatore	CONSORZIO CREO-CENTRO RICERCHE ELETTRO OTTICHE (CREO)
Johannes Peltola	Teknologian tutkimuskeskus VTT Oy (VTT)
Rune Lausund	FORSVARETS FORSKNINGINSTITUTT (FFI)
Maria Saltao	Ministério da Justiça (PJ)
Alexander Scheuring	VON HOERNER & SULGER GMBH (VHS)
Viet Hung Nguyen	POLITIDIREKTORATET (NCIS)
Gino Groeneveld	Netherlands Forensic Institute (NFI)
Philip Engstrom	POLISMYNDIGHETEN SWEDISH POLICE AUTHORITY (SPA)
Martin Sabo	MASA TECH S.R.O. (MASA)
Raimonds Apinis	VALSTS TIESU EKSPERTIZU BIROJS (SFSB)
Yusuf Yilmaz	DIN German Institute for Standardisation (DIN)
Ulrike Schröder	DIN German Institute for Standardisation (DIN)

3 Workshop objectives and scope

3.1 Background

3.1.1 Introduction to the RISEN project

The aim of the EU-funded RISEN project (https://cordis.europa.eu/project/id/883116) (https://www.risen-h2020.eu/) is the development of a set of real-time contactless sensors for the optimisation of trace detection, visualisation, identification and interpretation on site during crime scene investigations. Data will be processed in real time and sent to a 3D augmented crime scene investigation system to produce an interactive 3D model of the scene with position and labelling of traces and relative analytical results. The identified traces will be digitally marked and inventoried and a digitalised chain of custody will be established.

3.1.2 Motivation for the creation of this Workshop (Why is this Workshop initiated? What is the need for this Workshop? Which issue(s) should be solved by the Workshop? What is the future benefit of the CWA(s)? What is explicitly not part of the CWA(s)?

The RISEN project is developing a generic SENSOR API that will be used by different RISEN sensors manufactured by different organisations. In this regard, the existing SENSOR API can be further generalised and used as a basis for a future standard, allowing any CBRNe SENSOR to connect and exchange information, in a network-enabled environment, with remote services in a uniform way.

It is proposed to develop a CWA on CBRNe SENSOR API - Network Protocols, Data Formats and Interfaces due to the following reasons:

- Facilitate analyst data interpretation by using familiar, well defined and consistent sensor data formats

- Enable evidence management information systems to receive data from compliant CBRNe sensors without requiring custom developments

- Include 3D-spatial support in sensor data, enabling 3D data location.

- Improve operational autonomy and efficiency with digitalisation of traces and evidences.

- Enable forensics data sharing between practitioners.

3.1.3 Market environment (What is already on the market and how does the envisaged CWA(s) differ from it?)

The CBRNe sensor market addresses civil security and defence. These are niche markets where a small number of manufacturers achieve a large market share. As such, there has been little incentive towards harmonizing and standardizing CBRNe sensors digital interfaces capable to operate with manufacturer-agnostic IT systems, resulting in vendor-lock systems.

The proposed CWA aims at defining an API for CBRNe sensors, enabling specialised IT system manufacturers to provide innovative solutions (beyond sensor scope) on top of well-known interfaces and datamodels. At the same time, CBRNe sensor manufacturers can focus on sensor development work, benefitting from well-defined interfaces and datamodels to follow. Finally, end-users can better understand and analyse (well defined) sensors outputs, thus improving their work efficiency and technology acceptance.

3.1.4 Legal environment (Directives and relevant European legislation)

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3.2 Scope

The planned Workshop defines/establishes/specifies CBRNe-related sensor data formats and protocols to support forensics investigations. The planned Workshop is applicable to/is intended to be used by forensics analytics and crime scene investigators. The planned Workshop does not apply to/is not intended to be used by professionals not trained in forensics investigation.

3.3 Related activities

The subject of the planned CWA is not at present the subject of a standard. However, there are committees, standards and/or other technical specifications that deal with related subjects and thus need to be taken into account - and involved, where necessary - during this Workshop:

- CEN/TC 391 Societal and Citizen Security
- CEN/TC 419 Forensic science processes
- ISO/TC 272 Forensic sciences
- ISO/IEC JTC 1/SC 32 Data management and interchange
- ISO 18385:2016, Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes — Requirements
- ISO 21043-1:2018, *Forensic Sciences - Part 1: Terms and definitions*
- ISO 21043-2:2018, *Forensic Sciences - Part 2: Recognition, recording, collecting, transport and storage of items*
- ISO/NP 21043-3, *Forensic Sciences - Part 3: Analysis*
- ISO/NP 21043-4, *Forensic Sciences - Part 4: Interpretation*
- ISO/NP 21043-5, *Forensic Sciences - Part 5: Reporting*
- ISO/IEC 30128, *Information technology — Sensor networks — Generic Sensor Network Application Interface*
- ISO/IEC series 29182, *Information technology — Sensor networks: Sensor Network Reference Architecture (SNRA)*

4 Workshop programme

4.1 General

The kick-off meeting is planned to take place on 2022-10-10 in Riga, Latvia. A draft for public commenting will be published for 30 days.

A total of 5 Workshop meetings (kick-off meeting and Workshop meetings) and web conferences will be held, during which the content of the CWA(s) will be presented, discussed and approved.

The CWA will be drawn up in English (language of meetings, minutes, etc.). The CWA will be written in English

4.2 Workshop schedule

Table 1: Workshop schedule (preliminary)

CEN/CENELEC Workshop	July 22	Aug 22	Sept 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	June 23	…
Initiation													
1. Proposal form submission and TC response													
2. Project plan development													
3. Open commenting period on draft project plan (mandatory)													
Operation													
4. Kick-off meeting													
5. CWA(s) development													
6. Open commenting period on draft CWA(s) (optional)													
7. CWA(s) finalised and approved by Workshop participants													
Publication													
8. CWA(s) publication													
Dissemination (see 7)													
Milestones			K	V	V	M	V				M/ A	P D	

K Kick-off
V Virtual Workshop meeting
P Publication of CWA
D Online distribution of CWA
M Workshop meeting
A Adoption of CWA

5 Resource planning

The CEN Workshop is financed by the European research project RISEN (Real-tIme on-site forenSic tracE qualificatioN). This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 883116.

All costs related to the participation of interested parties in the Workshop's activities have to be borne by themselves. The copyright of the final CEN Workshop Agreement will be at CEN. The final document will include the following paragraph: "Results incorporated in this CEN Workshop Agreement received funding from the European Union's HORIZON 2020 research and innovation programme under grant agreement number 883116 (RISEN)".

6 Workshop structure and rules of cooperation

6.1 Participation in the Workshop

The Workshop will be constituted during the course of the kick-off meeting. By approving this project plan, the interested parties declare their willingness to participate in the Workshop and will be formally named as Workshop participants, with the associated rights and duties. Participants at the kick-off meeting who do not approve the project plan are not given the status of a Workshop participant and are thus excluded from further decisions made during the kick-off meeting and from any other decisions regarding the Workshop.

As a rule, the request to participate in the Workshop is closed once it is constituted. The current Workshop participants shall decide whether any additional members will be accepted or not.

Any new participant in the Workshop at a later date is decided on by the participants making up the Workshop at that time. It is particularly important to consider these aspects:

a. expansion would be conducive to shortening the duration of the Workshop or to avoiding or averting an impending delay in the planned duration of the Workshop;
b. the expansion would not result in the Workshop taking longer to complete;
c. the new Workshop participant would not address any new or complementary issues beyond the scope defined and approved in the project plan;
d. the new Workshop participant would bring complementary expertise into the Workshop in order to incorporate the latest scientific findings and state-of-the-art knowledge;
e. the new Workshop participant would actively participate in the drafting of the manuscript by submitting concrete, not abstract, proposals and contributions;
f. the new Workshop participant would ensure wider application of the CWA.

All Workshop participants who voted for the publication of the CWA or its draft will be named as authors in the European Foreword, including the organisations which they represent. All Workshop participants who voted against the publication of the CWA, or who have abstained, will not be named in the European Foreword.

6.2 Workshop responsibilities

The Workshop Chair is responsible for content management and any decision-making and voting procedures. The Workshop Chair is supported by the Workshop Vice-Chair and the responsible Workshop secretariat, whereby the Workshop secretariat will always remain neutral regarding the content of the CWA(s). Furthermore, the Workshop secretariat shall ensure that CEN-CENELEC's rules of procedure, rules of presentation, and the principles governing the publication of CWA(s) have been observed. Should a Workshop Chair no longer be able to carry out her/his duties, the Workshop secretariat shall initiate the election of a new Workshop Chair. The list below covers the main tasks of the Workshop Chair. It is not intended to be exhaustive.

- Content related contact point for the Workshop
- Presides at Workshop meetings
- Ensures that the development of the CWA respects the principles and content of the adopted project plan
- Manages the consensus building process, decides when the Workshop participants have reached agreement on the final CWA, on the basis of the comments received
- Ensures due information exchange with the Workshop secretariat
- Represents the Workshop and its results to exterior

The Workshop secretariat, provided by a CEN/CENELEC national member, is responsible for organising and leading the kick-off meeting, in consultation with the Workshop proposer. Further Workshop meetings and/or web

conferences shall be organised by the Workshop secretariat in consultation with the Workshop Chair. The list below covers the main tasks of the Workshop secretariat. It is not intended to be exhaustive.

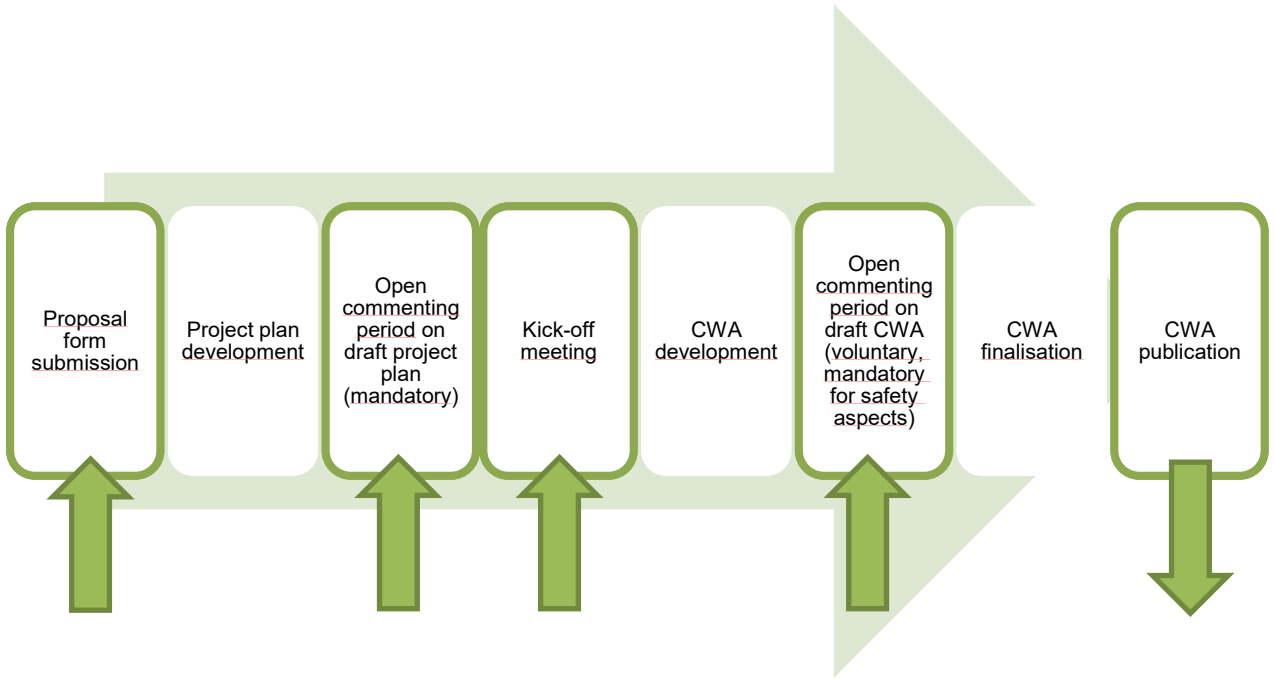
- Administrative and organisational contact point for the Workshop
- Ensures that the development of the CWA respects the principles and content of the adopted project plan and of the requirements of the CEN-CENELEC Guide 29
- Formally registers Workshop participants and maintains record of participating organisations and individuals
- Offers infrastructure and manage documents and their distribution through an electronic platform
- Prepares agenda and distribute information on meetings and meeting minutes as well as follow-up actions of the Workshop
- Initiates and manage CWA approval process upon decision by the Workshop Chair
- Interface with CEN-CENELEC Management Centre (CCMC) and Workshop Chair regarding strategic directions, problems arising, and external relationships
- Advises on CEN-CENELEC rules and bring any major problems encountered (if any) in the development of the CWA to the attention of CEN-CENELEC Management Centre (CCMC)
- Administrates the connection with relevant CEN or CENELEC/TCs

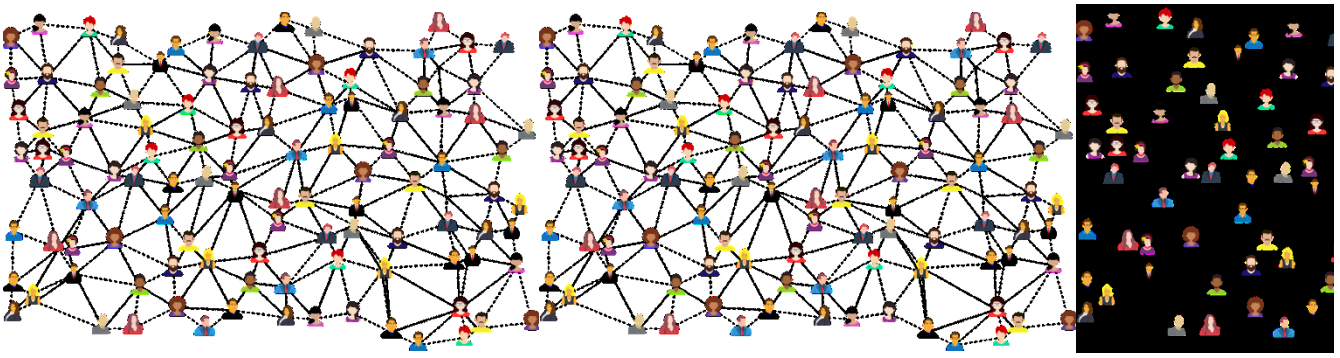
6.3 Decision making process

Each Workshop participant is entitled to vote and has one vote. If an organisation sends several experts to the Workshop, that organisation has only one vote, regardless of how many Workshop participants it sends. Transferring voting rights to other Workshop participants is not permitted. During voting procedures, decisions are passed by simple majority; abstentions do not count.

If Workshop participants cannot be present in the meetings when the CWA or its draft is adopted, an alternative means of including them in the voting procedure shall be used.

7 Dissemination and participation strategy





Proposal form submission

The Workshop proposal will be disseminated to the following relevant stakeholders and bodies for consultation:

- standards committee, working group etc.
- publisher of technical rules
- sector forum
- focus group
- coordination group
- others

Open commenting period on draft project plan

The project plan will be disseminated to the following relevant stakeholders and bodies for commenting:

- standards committee, working group etc.
- publisher of technical rules
- sector forum
- focus group
- coordination group
- others

In addition to the CCMC website, the project plan and the date of the kick-off meeting will be advertised on <XYZ> to raise awareness. Interested parties are requested to contribute either through commenting of the project plan (short term) or through Workshop participation (long term).

Open commenting period on draft CWA

The draft CWA will be disseminated to the following relevant stakeholders and bodies for commenting:

- standards committee, working group etc.
- publisher of technical rules
- sector forum
- focus group
- coordination group
- others

In addition to the CCMC website, the draft CWA will be advertised on <XYZ> to raise awareness. Interested parties are requested to contribute through commenting of the draft CWA (short term).

CWA publication

The final CWA will be disseminated to the following relevant stakeholders and bodies:

- standards committee, working group etc.
- publisher of technical rules
- sector forum
- focus group
- coordination group
- others

In addition to the CCMC website, the final CWA will be advertised on:

- sector specific newsletter

- social media, such as
  - Facebook
  - Instagram
  - LinkedIn
  - Twitter
- Research Gate
- EC Newsroom
- others

8 Contacts

- Workshop Secretariat:

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- Workshop proposer

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