
**Proposal for a CEN Workshop
on “CBRNe SENSOR API -
Network Protocols, Data
Formats and Interfaces”**

1 Proposal Form for the Workshop proposer

Details of the Workshop proposer:

Name: Marco Manso
Organization: Particle Summary
Postal address: Rua da Venezuela N 29 14 E, Lisbon 1500 618, Portugal
Email: marco@particle-summary.pt
Phone: +351 96 468 64 98
Webpage: www.particle-summary.pt/wp/

Already known partners:

- AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA)
- MINISTERO DELLA DIFESA (RaCIS)
- KENTRO MELETON ASFALIAS (KEMEA)
- HELLENIC POLICE (HP)
- FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. (FHG)
- WOJSKOWA AKADEMIA TECHNICZNA IM.JAROSLAWA DABROWSKIEGO (WAT)
- UNIVERSITA' DEGLI STUDI DI BERGAMO (UniBg)
- UNIVERSIDAD DE ALCALA (UAH-IUICP)
- CONSORZIO CREO-CENTRO RICERCHE ELETTRICO OTTICHE (CREO)
- PARTICLE SUMMARY (PART)
- Teknologian tutkimuskeskus VTT Oy (VTT)
- FORSVARETS FORSKNINGINSTITUTT (FFI)
- Ministério da Justiça (PJ)
- VON HOERNER & SULGER GMBH (VHS)
- POLITIDIREKTORATET (NCIS)
- Netherlands Forensic Institute (NFI)
- POLISMYNDIGHETEN SWEDISH POLICE AUTHORITY (SPA)
- MASA TECH S.R.O. (MASA)
- VALSTS TIESU EKSPERTIZU BIROJS (SFSB)

Title of the proposed Workshop:

CBRNe Sensor Application Programming Interface (API) - Network Protocols, Data Formats and Interfaces

Background/Objectives:

The aim of the EU-funded RISEN project (<https://cordis.europa.eu/project/id/883116>) 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.

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.

Scope of the proposed Workshop (planned area of application):

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.

Are the following aspects potentially affected?

	YES	NO
Safety matters	<input type="checkbox"/> ¹	<input checked="" type="checkbox"/>
Management system aspects	<input type="checkbox"/> ²	<input checked="" type="checkbox"/>
Conformity assessment aspects	<input type="checkbox"/> ³	<input checked="" type="checkbox"/>
Security matters	<input type="checkbox"/> ⁴	<input checked="" type="checkbox"/>

As Safety and Security matters are only positively affected by the proposed CWA, we have not marked a YES.

RISEN can reduce exposure to potentially dangerous traces (and crime scenes) so is a positive outcome. This is a positive impact on safety.

Security would be also positive, due to less interaction with the scene, less potential cross-contamination etc.

Theme related standardization Technical Bodies, standards or regulations, if applicable:

- 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*
- EN ISO series 21043 *Forensic sciences*
- 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)*

Optional attachments:

CORDIS
<https://cordis.europa.eu/project/id/883116>

RISEN Website
<https://www.risen-h2020.eu/>

RISEN Flyer
<https://www.risen-h2020.eu/component/jdownloads/?task=download.send&id=1&catid=2&Itemid=101>

MANSO, Marco; Chirico, Roberto; Peltola, Johannes; Engström, Philip; Larsson, Håkan; Berggren, Jimmy. *The RISEN Project – A Novel Concept for Real-time on-site Forensic Trace Qualification*. International Command and

¹ For CEN: The CEN/CENELEC Workshop proposal shall be submitted to CEN/BT for decision. For CENELEC: Work on the proposed CEN/CENELEC Workshop shall not be initiated.

² The CEN/CENELEC Workshop proposal shall be submitted to the CEN/CENELEC BT(s) for decision.

³ CEN/CENELEC Internal Regulations - Part 3, 33 applies.

⁴ For projects dealing with security matters the security risk analysis provided below (item 3) shall be carried out.

It is envisaged to have the Kick-off of the CEN Workshop during the next RISEN project meeting on 11 October 2022.

2 Proposal Form for the Workshop secretariat

Choose organisation. Workshop on "CBRNe Sensor Application Programming Interface (API) - Network Protocols, Data Formats and Interfaces"

Details of the Workshop secretary:

Name: Yusuf Yilmaz
Organization: DIN
Postal address: Burggrafenstraße 6, 10787 Berlin
Email: yusuf.yilmaz@din.de
Phone: +49 30 26012438
Webpage: www.din.de/en/innovation-and-research

Finance:

Workshop financed by EU-funded RISEN project (EU H2020 project, GA Nr 883116)

Drafting and Dissemination:

Deliverables within the project:

- D 9.1 Standardization potential (2022-12-31)
- D XX Sensor APIs (Marco??)

Ongoing exchange with different standardization bodies:

- RISEN in Liaison with ISO/TC 272
- According information in NSBs

Dissemination of results via (future) RISEN dissemination

- Workshops, such as *1st RISEN Workshop on New trends in Crime Scene Investigations* (2021-10-08, [link](#))
- Workshop (September 2023)
- Workshop (September 2024)
- Newsletter
- RISEN website

Does the proposed CWA conflict with an EN or an HD?

	YES	NO
EN	<input type="checkbox"/> ⁵	<input checked="" type="checkbox"/>
HD (CENELEC)	<input type="checkbox"/> ⁵	<input checked="" type="checkbox"/>

Is the proposed CWA within the domain of an existing CEN and/or CENELEC Technical Body?

- No <CEN/CENELEC TC>

CEN/CENELEC Management Centre (to be completed by CCMC):

Name of the CCMC project manager:
Organization: CCMC
Postal address: Rue de la Science 23, 1040 Brussels
Email:
Phone: +32 2 550 xxxx
Webpage: <https://www.cencenelec.eu/aboutus/MgtCentre/Pages/default.aspx>

⁵ Work on the proposed CWA shall not be initiated.

Response of identified potentially affected CEN/CENELEC TCs

	YES	NO
Is there an active work item covering the scope of the planned CWA?	<input type="checkbox"/>	<input type="checkbox"/>
Are there arguments against the topic of the planned CWA?	<input type="checkbox"/>	<input type="checkbox"/>
<Add information/explanations to the points marked „yes“>		

3 Security risk analysis

3.1 General

Security risk analysis is a process of identifying and analysing the main negative factors that may affect a standardization project's objectives. The following is targeted at secretariats of CEN/CENELEC Workshop Agreements (CWA) dealing with security issues. Its purpose is to help them identify and mitigate the risks associated with their project. It is structured around two main security threats that can affect the success of the work: major diverging interests among stakeholders and sensitive information.

3.2 Risk analysis on major diverging interest among stakeholders

Diverging interests among stakeholders can impede the process in reaching agreement on the CWA and even lead to failure to deliver the planned CWA. In order to identify and possibly mitigate the risks, the following questions should be reviewed:

- Is the planned CWA expected to have a major impact on the security policy/strategy of the core stakeholders?
- Does the scope of the CWA cover products or services with a clear dual-use purpose (i.e. which can be used for military purposes)?

3.3 Risk analysis on sensitive information

- In light of the scope of the CWA, is it likely that it may deal with sensitive information? If so, what is the information sensitivity level?
- Is there a need for a (non-)disclosure agreement?
- Is there any conflict of interest for stakeholders involved in the CEN/CENELEC Workshop, regarding especially the use they may make of any information they receive during the development of the CWA?
- What steps should be taken to manage information dissemination and storage (e.g. memory stick, emailing, storage) during the development process of the CWA?

<Add statement here>