# Draft Project plan for the CEN Workshop on “Best practices for accurate position of visible and invisible traces in digital replicas of crime scenes for investigation and training purposes”

**Requests to participate in the Workshop and/or comments on the project plan are to be submitted by 2024-03-10 to yusuf.yilmaz@din.de**

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, 2024-02-08 (Version 1)**

**Contents**

**Summary**

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

The objective of forensic methods is to obtain results with a measurement quality relevant (e.g., consistent, reliable and accurate) for the criminal justice system. This means that during the introduction or implementation of new forensic methods/technologies a specific step must be taken to prove in an objective way that the method is suitable for its intended use.

Emerging methods and technologies facilitate the assessment of crime scene traces, requiring only pertinent samples to be sent to off-site laboratories for confirmation, easing the burden of casework and thereby reducing the magnitude of backlogged evidence. Rapid screening of physical and chemical traces and evidences at the crime scene also has the capability to rapidly determine whether a criminal investigation is needed and provide law enforcement personnel with necessary information in a timely manner, which in many cases is crucial. Moreover, the first hours after a crime are crucial for the investigations to obtain relevant facts and data thus, rapid and on-site forensic investigations are extremely relevant to greatly increase the speed and efficacy of the acquisition of information relevant for the criminal justice system.

In crime scene investigations, all relevant observations need an exact location, because it is essential to support the investigation to perform analysis of spatial distribution (e.g., Blood Pattern Analysis (BPA)), reconstruct a sequence of events and make hypotheses about the occurred events, and ultimately to draw conclusions.
Passive documentation of the crime scene, such as photographs, is insufficient when crime scene investigations (CSIs) aim at detecting and using physical traces that are invisible to the naked eye and can't be captured by a picture (in the order of micrograms and below), to obtain information on the source and the events that produced them.

For a more complete documentation of a crime scene, which covers visible and invisible traces and evidence, an active documentation is required to report the exact spatial location of all relevant information[1]. For cases containing photographically invisible traces and evidence, there is the need to introduce new methods for documenting a crime scene and to show where they were found, using a combination of modern technologies.
Nowadays, several contactless sensors are available for on-field forensic analysis of different classes of chemical and biological substances[2,3,4] including invisible stains (e.g., bodily fluids) and traces (e.g., explosives).

For instance, near-infrared hyperspectral imaging (NIR-HSI) has demonstrated its potential to make visible stains of semen, vaginal fluid, and urine on fabrics, which lays the basis to face the challenging visualization and discrimination of semen within bodily fluids mixtures. HSI offers significant potential for the detection, visualization, identification and age estimation of forensic traces. The rapid, non-destructive and non-contact features of HSI mark its suitability as an analytical tool for forensic science. Infrared and Raman spectroscopy are two of the most widely studied techniques, among various standoff sensing methods, that could be used to detect explosives based on the interaction of electromagnetic radiation with target materials located at a certain distance, producing frequency-dependent variations in signal radiation that can be measured with a detector[5,6,7,8,9].

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1 https://doi.org/10.1016/j.jofri.2017.03.002

2 https://doi.org/10.1016/j.aca.2018.06.014

3 http://dx.doi.org/10.1016/j.trac.2014.08.011

4 http://dx.doi.org/10.1016/j.forsciint.2012.09.012

5 Gaft M, Nagli L. UV gated Raman spectroscopy for standoff detection of explosives. Optical Materials. 2008;30:1739–1746

6 https://doi.org/10.1016/j.trac.2017.12.014

7 https://doi.org/10.3390/s16010008

8 Henric Östmark, Markus Nordberg, and Torgny E. Carlsson, "Stand-off detection of explosives particles by multispectral imaging Raman spectroscopy," Appl. Opt. 50, 5592-5599 (2011)

9 Christopher Carson, John Macarthur, Matthew Warden, David Stothard, Lorenz Butschek, Stefan Hugger, Jan-Philip Jarvis, Marko Haertelt, Ralf Ostendorf, Andre Merten, Markus Schwarzenberg, Jan Grahmann, and Marcin Ratajczyk "Towards a compact, portable, handheld device for contactless real-time standoff detection of hazardous substances", Proc. SPIE 10624, Infrared Technology and Applications XLIV, 106240F (29 May 2018); https://doi.org/10.1117/12.2305711

Three-dimensional crime scene reconstruction has received attention as an alternative or complementary tool to photographic documentation for the documentation and analysis of a crime scene after an event. Among the different equipment available for 3D crime scene reconstruction, some of the most widely used are conventional RGB cameras, such as DSLRs, laser scanners, and mobile phones. These techniques enable a complete 3D registration of a crime scene and the objects contained in it, often without the need to alter any spatial positions or physical properties. The adoption of new technologies for 3D modelling by Law Enforcement Agency (LEAs) can improve efficiency and effectiveness in the investigations and the criminal justice system[10,11].

Moreover, many studies show practical use of Virtual Reality (VR) as a tool in forensics, supporting crime investigations and training. The identified potential applications of VR technology in the field of crime scene investigation include, among others, data analysis, hypothesis evaluation, training, and courtroom uses. The 3D documentation and computer-generated animations in VR are recognized as ideal media to accurately visualize crime or accident scenes, to help understand the situation and retain complex spatial information.

Best practices and guidelines are not available for an accurate and correct automated/semi-automated 3D positioning of scanning sensor (e.g. IR, Raman) measurements in the virtual 3D model and recreated in VR.
This proposal is based on the work performed in the RISEN project with the aim of supporting crime scene investigations through the acquisition of an interactive 3D model of a crime scene, which also displays the results of trace analysis obtained by various on-site contactless sensors, bringing together the best practices of creating such a data collection (a digital replica of the crime scene also including analytical information acquired from the crime scene) making use of all available sensor technology, taking steps forward such SOPs.

**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 "**Best practices for accurate position of visible and invisible traces/evidence in digital replicas of crime scenes for investigation and training purposes**" due to the following reasons:

- To bring together forensic experts and academia from different nations to collaborate on strategies to provide a baseline framework for representative positioning of traces in the crime scene for accurate visualization.
- Share experiences and requirements related to trace positioning.
- Collect and assess technical solutions (and their accuracy) for trace management.
- Prioritize needs related to trace positioning.
- Define positioning accuracy requirements for different types of traces.

Define visualization accuracy requirements for different types of traces and crime scenes.

**What is explicitly not part of the CWA(s)?**
The planned Workshop is applicable to/is intended to be used by crime scene investigators, forensics analytics and experts in digitalised crime scene documentation.
The planned Workshop does not apply to/is not intended to be used by professionals not trained in forensics investigation and documentation.

## 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**.

[10] https://doi.org/10.3390/forensicsci1020008

[11] https://doi.org/10.3390/forensicsci1020008

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 2024-03-14.

## 2 Workshop proposers and Workshop participants

### 2.1 Workshop proposers

| Person or organisation | Short description and interest in the subject |
|---|---|
| Dr Roberto Chirico<br>Organization: ENEA, Diagnostic and Metrology Laboratory ENEA C.R. Frascati<br>Email: roberto.chirico@enea.it<br>Phone: +39 0694005662<br>Web page: https://www.enea.it/en | Senior scientist at Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), chemist (2005, University of Rome "La Sapienza" - Italy) with a PhD in Environmental Sciences (2010, ETH Zürich - Switzerland). Coordinator of the RISEN Project (H2020, G.A. No. 883116). Scientific responsible for the Big City Trials project in the frame of the special NATO program STANDEX. Member of the "Detection of explosives and weapon threats in secure locations (DEWSL)" thematic group project for the European Reference Network for Critical Infrastructure Protection (ERNCIP). Member of the NATO SET-237 task group on "Printed standards of explosives for optical measurements". Scientific responsible for ENEA for the projects ENTRAP (H2020) and EXERTER (H2020) |
| Johannes Peltola<br>Organization: VTT<br>Kaitoväylä 1<br>Email: johannes.peltola@vtt.fi<br>Phone: +358 40 7694056<br>Webpage: www.vtt.fi | Johannes Peltola, Principal Scientist in VTT, has received his MSc in electrical engineering from the University of Oulu in 1998. His career at VTT started in 1995. His research topics include machine learning and signal processing algorithms in application for security, industrial AI and Mixed Reality. He has participated in a leading role to several international EU, EUREKA/ITEA, NATO framework projects, including 10 EU commission funded projects, 8 EUREKA framework projects and numerous national research and commercial projects. In RISEN Project (H2020, G.A. No. 883116) he is leading the work package for sensor development, 3D reconstruction and positioning the traces in the crime scene. He has expertise on leading research teams for more than 10 years and have extensive project management skills. He has over 40 publications in which 10+ are published in international journals or in book chapters |

### 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 |
|---|---|
| Roberto Chirico | AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA) |
| Andrea Chiuri | AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA) |
| Federico Angelini | AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA) |
| Panagiotis Kopitsis | HELLENIC POLICE (HP) |
| Johannes Peltola | VTT Technical Research Centre of Finland Ltd (VTT) |
| Catherine Palmér | POLISMYNDIGHETEN SWEDISH POLICE AUTHORITY (SPA) |
| Jimmy Berggren | POLISMYNDIGHETEN SWEDISH POLICE AUTHORITY (SPA) |
| Håkan Larsson | POLISMYNDIGHETEN SWEDISH POLICE AUTHORITY (SPA) |
| Ioannis Daniilids | The Center of Security Studies (KEMEA) |
| Giuliano Iacobellis | MINISTERO DELLA DIFESA (RaCIS) |
| Marco Manso | PARTICLE SUMMARY (PART) |
| Marko Härtelt | Fraunhofer Institute for Applied Solid State Physics (FhG-IAF) |
| René Lindner | German Institute for Standardisation (DIN) |
| Ulrike Schröder | German Institute for Standardisation (DIN) |
| Yusuf Yilmaz | German Institute for Standardisation (DIN) |

## 3 Workshop objectives and scope

### 3.1 Background

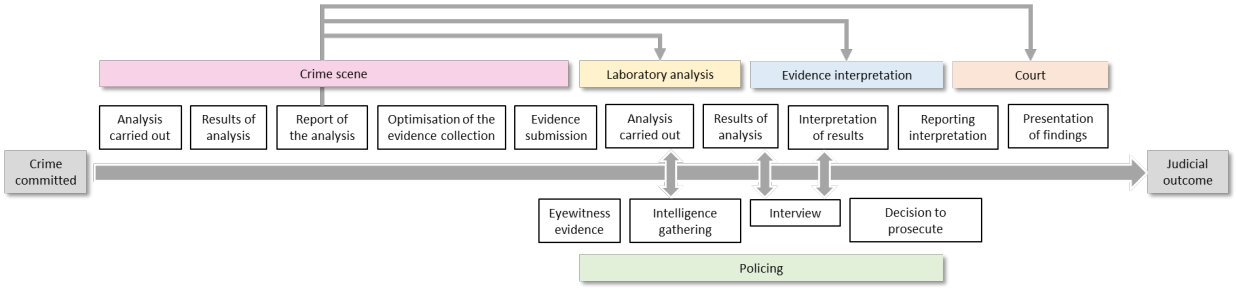
#### 3.1.1 Introduction to the RISEN project

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 rapid contactless sensors for the optimisation of trace analysis on site during crime scene investigations and subsequent visualisation of the results on reconstructed 3D model of the scene. Data are processed in near 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 visible and invisible traces and relative analytical results. The identified traces are digitally marked and inventoried and a digitalised chain of custody will be established. In parallel to the technical development, validation approaches have been developed and standardisation activities have been performed to guarantee the quality of the data acquired and the accuracy of their position on the crime scene by the instrument during field measurements.

### 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 Real-tIme on-site forenSic tracE qualificatioN (RISEN) project, an innovate concept in forensic investigations in the context of CSI of sites affected by a chemical, biological or explosives attack, has developed a set of network-enabled near real-time contactless sensors for handling traces on site and accurate 3D recreation mechanisms of the entire crime scene, providing an immersive environment for investigators to evaluate hypotheses and conduct highly detailed investigations, together with methods and SOPs for its validation.
Forensic science sits at the nexus of science, law, policy and investigation. It should be viewed as a process that encompasses the crime scene through to court.
Investigations comprise different stages. Several technologies are already available for use in the field and others are under development, which could be applied to on-site documentation and investigation, that extend to crime scene investigations how forensic evidence and human decision-making are integral at each stage of the investigations.




Before a crime scene professional can have any digital replica of a crime scene admitted for a court case, the professional must ensure the quality and reliability of the methods, tools, programs, and techniques used to obtain that evidence. An important aspect to be taken in consideration is the accuracy of the digital replica used to visualise a crime scene, as it must be sufficiently representative in order to be valid in court. In order to ensure such accuracy, the visualisation methods used must already be validated for their representativeness to the actual physical dimensions and trace positioning in a crime scene.

Guidelines are needed to obtain digital replicas with a quality relevant (e.g., consistent, reliable and accurate) for the criminal justice system and the guidelines should serve as common basis to perform forensic field analysis/digitalised documentation and to guarantee the quality of the measurements on the field, also for cases containing photographically invisible traces/evidence.
The guidelines should facilitate the development of good practice methods and processes for on-site documentation and analysis with contactless tools, to generate a 3D model that allows for the visualisation of visible and invisible traces and evidence, which is essential to understand where they are found and better support the investigations.

The guidelines shall provide the scientific and forensic community with instructions on how to produce standards that do not currently exist, and that are necessary for methodological development, testing, validation, and performance evaluation of forensic methods to provide reproducible and accurate results. Homemade SRM should be firstly prepared in ideal settings for the development of the methods and testing of the sensors, and then in more complex, representative (settings to be included in the “simulated scenes”. Moreover, the guidelines should identify the procedures to define the setting to be used in simulated scenarios. The common guideline together with the realization of samples will also cover their positioning in relation to the type of simulated crime scenarios.

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

ISO 21043-2:2018 should be updated taking in consideration the evolving digitalisation of the investigations and documentation and the partial transfer of the laboratories to the field. The ongoing technology development suggests that part of the analysis that at the moment are mostly performed in laboratory, in the near future will be directly performed rapidly on the field with scanning contactless sensors. 3D reconstruction of crime scenes with TLS and photogrammetry have been demonstrated to be highly valuable tools for creating a comprehensive 3D documentation of a scene and any relevant evidence such as large or small objects, streets, buildings or victims. These 3D technologies offer high levels of accuracy and enable the creation of a permanent record of crime scenes also including information on the positioning of traces.

The development of autonomous and semi-autonomous moving vehicles and robotics drive the development of different positioning solutions based on visual odometry and RF technologies. These solutions such as lidar based localization, UWB, RTK or GPS can be taken into use for the development of new positioning procedures for facilitating the documentation of different traces in the crime scene.

### 3.1.4 Legal environment (Directives and relevant European legislation)

EU Member States hold primary competence for internal security and civil protection, which inherently includes the prevention, detection, and response to CBRN threats. However, it has been increasingly recognised that security matters require the involvement of many actors, as the (in)security of one country has effects on others. In recognition of this, the Lisbon Treaty provided legal grounds for the EU to engage in the framework of 'shared internal competences (Article 4 TFEU) regarding the area of freedom, security and justice, common safety concerns, and transport; civil protection measures (Article 196 TFEU); as well as external actions of the Union (Articles 21 and 22 TEU). Furthermore, in the event of (cross-border) incidents of high magnitude, EU Member States may choose to employ EU (cooperation) instruments in their response. As such, the EU supports EU Member States through the means available within its mandate, such as (judicial) coordination activities, cooperation efforts with actors outside the EU, or through the monitoring of incidents (e.g., through various Europol reports).

One of RISEN's main objectives is to focus on the identification of the designed and deployed technologies as well as the procedures engaged in the course of the project and their compliance to the European legal framework. The developed and emerging tools assisting the near-future capability of forensic investigations will be evaluated and thoroughly assessed to ensure public acceptance and ethical consideration, throughout the whole project time.

In this context , European Union recently adopted the e-evidence package, consisted of two new EU instruments; the Regulation on European Production Orders and European Preservation Orders for electronic evidence in criminal proceedings and for the execution of custodial sentences following criminal proceedings [Regulation (EU) 2023/1543] and the Directive laying down harmonised rules on the designation of designated establishments and the appointment of legal representatives for the purpose of gathering electronic evidence in criminal proceedings [Directive (EU) 2023/1544] with the aim to make it easier and faster for law enforcement and judicial authorities to obtain the electronic evidence they need to investigate and eventually prosecute criminals by ensuring at the same time full compliance with fundamental rights and principles recognised in Article 6 of the Treaty on European Union (TEU) and the Charter of Fundamental Rights of the European Union (the 'Charter'), in particular the principles of necessity and proportionality, due process, protection of privacy and personal data and confidentiality of communications.

## 3.2 Scope

The scope of this CEN Workshop is to bring together forensic experts and academia from different nations to collaborate on strategies to develop guidelines for the 3D documentation including 3D-spatial support in sensor data, enabling 3D data location, and visualising spatial information in VR and 2D displays.

*The planned CEN Workshop Agreement establishes guidelines and methods for accurate automated/semi-automated positioning of scanning sensor (e.g., IR, Raman) measurements in the virtual 3D model.*

*The planned CWA is intended to be used by LEAs' personnel with expertise in crime scene investigation and documentation, tool developers from academia and private sectors for crime scene documentation.*
*The planned CWA is not intended to be used by professionals not trained in forensics investigation and documentation.*

### 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 2024-03-14 in Athens, Greece.
A total of eight Workshop meetings (kick-off meeting and Workshop meetings) and web conferences will be held, during which the content of the CWA 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 Workshop | Jan 24 | Feb 24 | Mar 24 | Apr 24 | May 24 | Jun 24 | Jul 24 | Aug 24 | Sep 24 | Oct 24 | Nov 24 | Dec 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Initiation** | | | | | | | | | | | | |
| 1. Proposal form submission and TC | | | | | | | | | | | | |
| 2. Project plan development | | | | | | | | | | | | |
| 3. Open commenting period on draft project | | | | | | | | | | | | |
| **Operation** | | | | | | | | | | | | |
| 4. Kick-off meeting | | | K | | | | | | | | | |
| 5. CWA development | | | | | | | | | | | | |
| 6. CWA finalised and approved by Workshop | | | | | | | | | | | | |
| **Publication** | | | | | | | | | | | | |
| 7. CWA publication | | | | | | | | | | | | |
| **Dissemination (see 7)** | | | | | | | | | | | | |
| **Milestones** | | | K | V | V | V | V | V | M | M | V A | P D |

**B** CEN BT meeting deciding on establishment of a CEN Workshop
**K** Kick-off
**M** Workshop meeting
**V** Virtual Workshop meeting
**A** Adoption of CWA
**P** Publication of CWA
**D** Online distribution 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 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 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.

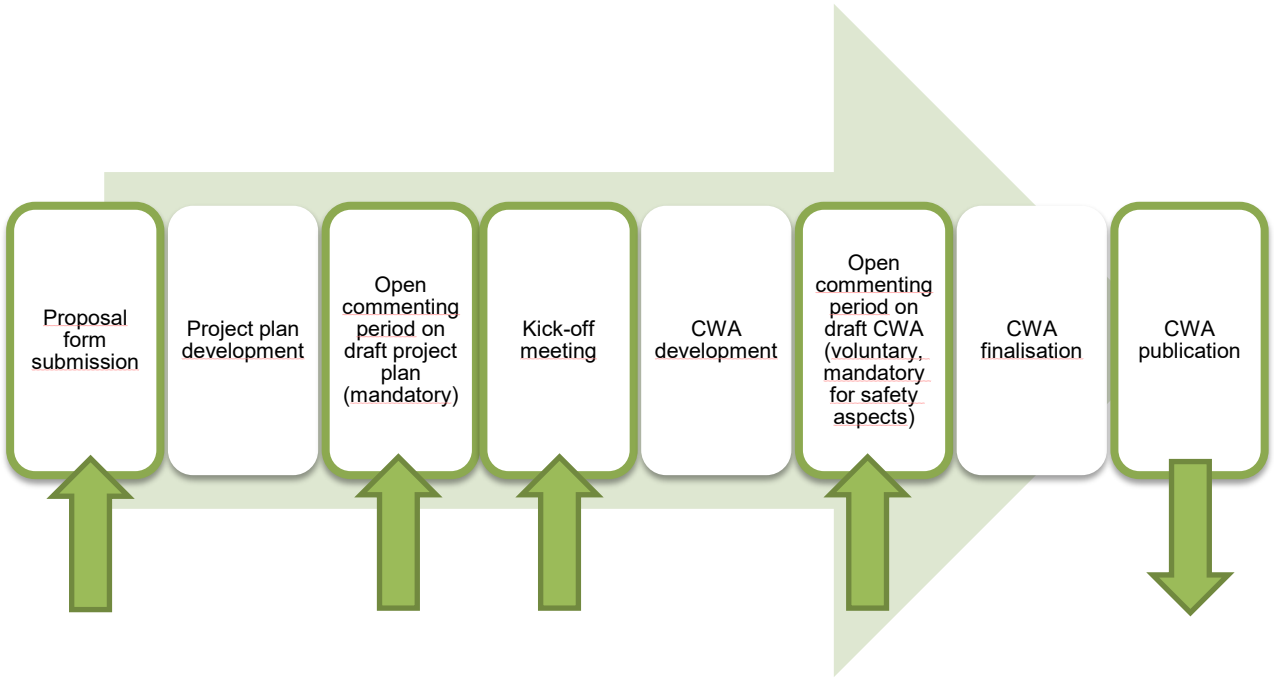
- Administrative and organisational contact point for the Workshop
- Ensures that the development of the CWA respects the principles and content of the adopted project plan and of the requirements of the CEN-CENELEC Guide 29
- Formally registers Workshop participants and maintains record of participating 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 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 TCs

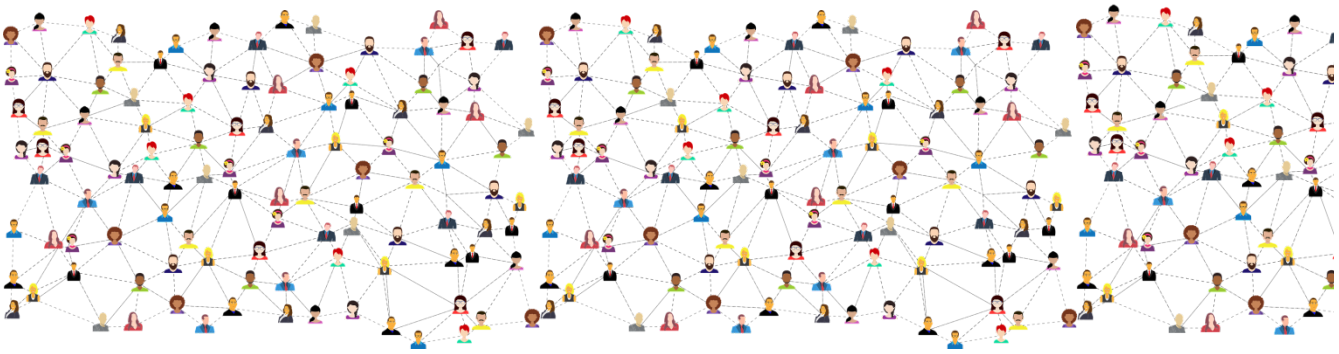
### 6.3 Decision making process

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[Error! Bookmark not defined.]
- focus group[Error! Bookmark not defined.]
- coordination group[Error! Bookmark not defined.]
- 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[Error! Bookmark not defined.]
- focus group[Error! Bookmark not defined.]
- coordination group[Error! Bookmark not defined.]
- 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[Error! Bookmark not defined.]
- focus group[Error! Bookmark not defined.]
- coordination group[Error! Bookmark not defined.]
- 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[Error! Bookmark not defined.]
- focus group[Error! Bookmark not defined.]
- coordination group[Error! Bookmark not defined.]
- 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 Chair:
  Roberto Chirico
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