# Draft Project plan for the CEN-CENELEC Workshop on “Open protocol for CRBN sensor connectivity”

**Requests to participate in the Workshop and/or comments on the project plan are to be submitted by**
**2023-05-03 to amariblanca@une.org**[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.

[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.

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# 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 amariblanca@une.org,

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 **2023-05-10.**

# 2 Workshop proposer and Workshop participants

## 2.1 Workshop proposer

| Person or organisation | Short description and interest in the subject |
|---|---|
| WoePal GmbH | WoePal GmbH provides expertise ranging from in-situ gas sensing systems, remote sensing and network technologies to data analytics, assessments and presentation of results. For special applications in the field of gas sensor technology, there are often no or only insufficient commercially available sensor solutions. This is where WoePal GmbH comes in and develops spectroscopic methods for the analysis of solids, liquids and gases as well as microsystems combined with optical technologies, as a cost-effective solution for the selective and sensitive detection of chemical compounds, air pollutants and greenhouse gases. However, the focus is not only on the development of the sensors, but also on their integration into already existing IoT networks via various wireless communication options (BluetoothLE, ZigBee, LoRa & LoRaWAN). In addition, the data obtained in this way can be visualised with the help of a monitoring and analysis framework. |

## 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:

- manufacturers
- designers
- integrators
- service providers

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 |
|---|---|

| | |
|---|---|
| Workshop Chair<br>Natalie SCHÜTZ | Workshop Chair<br>WoePal GmbH |
| Workshop Vice-Chair | Workshop Vice-Chair |
| Moritz ZIMMER | WoePal m |
| Stefan PALZER | WoePal GmbH |
| Alberto FERNÁNDEZ | Amper S&C IoT SL |
| Narcís AVELLANA | Amper S&C IoT SL |
| Adrian CAÑADAS | Amper S&C IoT SL |
| Manuel LOZANO | Consejo Superior de Investigaciones Científicas, CSIC |
| Celeste FLETA | Consejo Superior de Investigaciones Científicas, CSIC |
| Javier BRAVO | Consejo Superior de Investigaciones Científicas, CSIC |
| Esteve AMAT | Consejo Superior de Investigaciones Científicas, CSIC |
| Workshop secretariat<br>Ana MARIBLANCA SÁNCHEZ | Workshop secretariat<br>Spanish Association for Standardization, UNE |

## 2.4 Registered Workshop participants

The following persons or organisations have registered as Workshop participants at the kick-off meeting and will actively participate in the development of the CWA.

| **Person** | **Organisation** |
|---|---|
| Workshop Chair<br>Natalie SCHÜTZ | Workshop Chair<br>WoePal GmbH |
| Workshop Vice-Chair | Workshop Vice-Chair |
| Moritz ZIMMER | WoePal GmbH |
| Stefan PALZER | WoePal GmbH |
| Alberto FERNÁNDEZ | Amper S&C IoT SL |
| Narcís AVELLANA | Amper S&C IoT SL |

| | |
|---|---|
| Adrian CAÑADAS | Amper S&C IoT SL |
| Manuel LOZANO | Consejo Superior de Investigaciones Científicas, CSIC |
| Celeste FLETA | Consejo Superior de Investigaciones Científicas, CSIC |
| Javier BRAVO | Consejo Superior de Investigaciones Científicas, CSIC |
| Esteve AMAT | Consejo Superior de Investigaciones Científicas, CSIC |
| Workshop secretariat<br><br>Ana MARIBLANCA SÁNCHEZ | Workshop secretariat<br><br>Spanish Association for Standardization, UNE |

# 3 Workshop objectives and scope

NEST, an iNteropErable multidomain CBRN SysTem, is a research project founded by Research Executive Agency of the European Commission under Grant Agreement number 101018596.

NEST will design and implement a novel and unique standoff system with the capability to detect multiple threats amongst which are CBRN threats or pandemic viruses. As the day-to-day protection of commercial and transport facilities is the responsibility of the owners and operators, in close cooperation with local law enforcement, NEST will support owners, operators, and security staff by providing (i) threat indications and warnings, and (ii) guidance for facility security by developing appropriate information-sharing and analysis mechanisms.

The system will rely on the simultaneous use of low-cost CBRN detectors embedded in one unique detection equipment, which can be located into different sites inside the building or carried by security staff. The use of low-cost sensors will enable to cover a wide space inside. NEST will help in the early detection of CBRN threats in real time, and also provide complementary information — such as location of threats, temperature, humidity, time, operators involved, etc. — useful for auditing or investigation purposes. These functionalities will be achieved by using an IoT platform capable of acquiring, processing and merging data from internal and third-party services. Artificial intelligence will be applied to support decision process for securing facilities and for generating automatic alerts.

Furthermore, augmented reality will be used to display threats and hazards in a manner that minimise distraction and cognitive failures. NEST will be validated in three different scenarios within the transport and commercial sectors. These scenarios include a diverse range of sites that draw large crowds of people. NEST will share information with the command centres of a stadium, a transport system, and a hotel to assess the risk situation. As a result of this action, owners, operators, and security staff will benefit from a universal system that will lay the foundations for creating a standardization framework.

## 3.1 Background

The existing and under-development standards that are relevant for the project were identified in the very early stages of the project to be considered during the project works. The relevant standardisation committees were addressed to inform their officers of NEST objectives and to evaluate and follow the best way to promote the transfer of the results of the project to future standards.

However, there was neither existing no project dealing with the requirements for an open global detection system. Then the motivation for the creation of this Workshop is to address this issue.

Designers, manufacturers, integrators and service providers will benefit of the future CWA, because it would enable the compatibility of any kind of sensors with the system, in terms of connection, data transmission, mapping, communication protocols, etc.

Today, there exists an extensive number of detection systems, developed all over the world. Each system can be specific for the detection of one or several agents and may be part of a larger system that integrates the information from all individual systems, processes the data and manages the visualization, notification and operation.
However, there are sometimes interoperability constraints, and some of the would-be technically optimal subsystems are incompatible with the overall system. This is a handicap both for the system designer, who cannot have the most efficient resources available, and for the manufacturers of sensors and detection systems, who cannot compete in certain projects because of these incompatibility issues. Therefore, the future CWA will solve these interoperability matters.

### 3.2 Scope

The planned Workshop defines requirements for an open global system, that accepts any kind of detection subsystems. It will include sensor connection, data transmission, data management and compatibility requirements.
The planned Workshop is intended to be used by designers, manufacturers, integrators and service providers from private and public companies.

### 3.3 Related activities

The subject of the planned CWA is not at present the subject of a standard. However, at the beginning of NEST some standardization technical bodies were identified, and they will be specifically notified in case they may want to get involved.

## 4 Workshop programme

### 4.1 General

The kick-off meeting is planned to take place on 10th May 2023 by Webconference.

The estimated number of web conferences to be held is 12 (monthly); during these meetings 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

The Workshop schedule will be modified in the kick-off meeting and adapted as long as the Workshop progresses.

**Table 1: Workshop schedule (preliminary)**

| CEN/CENELEC Workshop | Feb 2023 | March 2023 | April 2023 | May 2023 | Jun 2023- Dec 2023 | Jan 2024 | Feb 2024 | March 2024 | April 2024 | … |
|---|---|---|---|---|---|---|---|---|---|---|
| **Initiation** | | | | | | | | | | |
| 1. Proposal form submission and TC response | | | | | | | | | | |
| 2. Project plan development | | | | | | | | | | |
| 3. Open commenting period on draft project plan | | | | | | | | | | |
| **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 | |

**B** CEN/CENELEC BT meeting deciding on establishment of a CEN/CENELEC 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

All costs related to the participation of interested parties in the Workshop´s activities have to be borne by themselves. There is no fee for registration in the Workshop.

# 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

The Workshop proposal, the draft project plan, and the draft CWA will be disseminated to relevant stakeholders and bodies for consultation:

- Standardization committees related to the scope;
- Designers
- Manufacturers
- HW, FW and SW Integrators
- Service providers.

In addition to the CCMC website, the above mentioned documents will be advertised on the NEST website and in some NEST partners websites to raise awareness. Interested parties are requested to contribute either through commenting of the project plan or the draft CWA (short term) or through Workshop participation (long term).

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

- sector specific newsletter
- NEST website, and some NEST partners websites
- social media, such as
    - Facebook
    - Instagram
    - LinkedIn
    - Twitter

## 8 Contacts

- Workshop Chair:
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- Workshop Secretariat:

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