

Draft Project plan for the CEN Workshop on " Methodology for the construction of omicsrelated graphs from animal, vegetal and environmental omic data-GLOMICAVE "

Requests to participate in the Workshop and/or comments on the project plan are to be submitted by 2023-11-23 to chernan@une.org1

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.

Madrid, October 3 (Version 1)

<sup>&</sup>lt;sup>1</sup> 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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# Foreword (TO BE DELETED BEFORE THE PUBLICATION OF THE DRAFT PROJECT PLAN)

The content of the project plan is structured into chapters. These chapters represent the Workshop project plan's minimum content, as well as optional but recommended text modules. There is no restriction on the addition of further chapters if this is deemed useful.

Colour code:

- Black font: Fixed text modules. Please do not change.
- Green font: Optional but recommended text modules. Please adjust according to your needs.
- <Red font>: Placeholder. Please fill in.
- Blue font: Explanation. Please delete in the final version.

# <u>Summary</u>

This workshop is motivated by the currently ongoing Horizon 2020 GLOMICAVE project (Global Omic Data Integration on Animal, Vegetal and Environment Sectors).

GLOMICAVE project addresses the need for building systems that allow scaling analytical processes of primary data and supporting downstream large-scale omics experiments, by maximizing the utility of pre-existing massive omics datasets to increase the understanding of biological systems, going beyond current existing data- driven tools in the biomedical sector.

The main objective of GLOMICAVE is to develop a cloud-based genotype to phenotype platform – relying on Big Data Analytics (BDA) and Artificial Intelligence (AI) techniques – and using large-scale publicly available and experimental omics datasets, enhanced with an automatic processing of scientific literature.

GLOMICAVE integrative approach will be validated in 3 different industrial sectors (livestock, agro- biotechnology and environment)

To achieve GLOMICAVE approach several objectives have been set, being one of these the integration multiomics datasets in a harmonized and normalized manner.

The objective of this Workshop is the development of a CEN Workshop Agreement will provide a methodology for the construction of graphs on topics related to non-human omics data, specifically in the domain of semantics for animals, plants, and the environment. This methodology will provide guidance for the representation and analysis of omics data in these domains, to facilitate the understanding and discovery of relevant relationships and patterns.

# 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 **chernan@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 **2023-11-23**.

#### 2 Workshop proposer and Workshop participants

#### 2.1 Workshop proposer

Person or organisation	Short description and interest in the subject
Organisation: EURECAT Name: Eloy HERNÁNDEZ BUSTO	Technology Centre of Catalonia, EURECAT Eurecat is the result of the merging process of the main Catalan Technology Centres, a process which started in 2015 and still ongoing which counts already with the sum of capacities of seven originals Centres and beyond. Eurecat has participated in more than 150 funded collaborative projects, mainly in the Horizon 2020 Programme and Horizon Europe. Eurecat R&D, innovation and training activities span from Industrial Technologies (metallic, plastic and composite materials, manufacturing processes, autonomous and professional robotics, functional printing and fabrics, simulations and sustainability) to Digital Technologies (Digital Humanities, Big Data Analytics, IT Security and Smart Management Systems, e-health, data mining and multimedia technologies) and Biotech (Omic science and Nutrition & health). Additionally, EURECAT has been accepted by the European_Commission as a KETs (Key Enabling Technologies) Technology Centre in order to collaborate with SMEs on close-to-market research and innovation activities.

## 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:

- Academic and research, experts on omics data
- Industry and commerce, experts on omics data of the livestock, agro-biotechnology or environment sectors

take part in the development of this CWA.

#### 2.3 Participants at the kick-off meeting

The list of participants is not yet fully finalized. It will be available after the kick off meeting a high participation is expected from GLOMICAVE partners and the experts coming from different funded European projects (e.g. Horizon2020).

#### 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.

<u>Person</u>	<u>Organisation</u>								
Workshop Chair	Workshop Chair								
Eloy Hernández	Technology Centre of Catalonia, EURECAT								
Workshop Vice-Chair	Workshop Vice-Chair								
Biotza Gutierrez	Technology Centre of Catalonia, EURECAT								
Workshop secretariat	Workshop secretariat								
UNE – Asociación Española de Normalización									
Cristina Hernán	UNE – Spanish Association for Standardization								

#### 3 Workshop objectives and scope

#### 3.1 Background

The GLOMICAVE project is developing a cloud-based genotype to phenotype platform – relying on Big Data Analytics (BDA) and Artificial Intelligence (AI) techniques – and using large-scale publicly available and experimental omics datasets, enhanced with an automatic processing of scientific literature.

The main outcome will be a multi-omics data analysis open platform consisting of multiple tools to assist experts and nonexperts in identifying and understanding new links between genotype and phenotype, which apply to different domains. The platform will tackle data integration, analysis, and exploitation, with special attention to data governance, security, management, and monitoring.

GLOMICAVE integrative approach will be validated in 3 different industrial sectors (livestock, agro-biotechnology and environment) addressing specific challenges in 6 business cases (animal reproductive technology, meat quality, fruit growth and quality, plant growth, phosphorus removal/recovery and bioenergy production in the urban water cycle), which will pave the way for further uptake in other business areas.

The objective of this Workshop is the development of one CEN Workshop Agreement on the methodology to follow for the construction of graphs on topics related to non-human omics data, specifically in the domain of semantics for animals, plant, and environment. This methodology provides guidance for the representation and analysis of omics data in these domains, to facilitate understanding and discovery of relevant relationships and patterns.

# 3.2 Scope

The planned Workshop specifies the method to follow for the construction of graphs on animal, plant and environment omics data, specifically in the domain of semantics for the representation and analysis of omics data to facilitate understanding and discovery of relevant relationships and patterns.

The planned Workshop does not apply to the domain of semantics for humans.

#### 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:

- ISO/IEC JTC1/SC32 Data management and interchange
- ISO/TC 207 Environmental management
- ISO/TC 34 Food products

#### 4 Workshop programme

#### 4.1 General

The kick-off meeting is planned to take place on 23<sup>rd</sup> of November in Tours, France. A draft for public commenting will be published for 30 days.

A total of 3 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

The preliminary Workshop schedule will be the following:

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

CEN/CENELEC Workshop		Oct 2022			Nov 2022				Dec 2022				Jan 2022				)23	Mar 2023			Apr 2023		
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 (including 30-days open consultation)																							
7. CWA(s) finalised and approved by Workshop participants																							
Publication																							
8. CWA(s) publication																							
Dissemination																							
Milestones					K			۷				۷				V				Α		Ρ	D

K Kick-off

NNick-oilMWorkshop meetingVVirtual Workshop meetingAAdoption of CWAPPublication of CWADOnline distribution of CWA

# 5 Resource planning

The administrative costs of the CEN Workshop will be financed by resources from the GLOMICAVE project. The final document will include the following paragraph: "Results incorporated in this CEN Workshop Agreement have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 952908".

Both registration and participation at the CEN Workshop described here are free of charge. The use of electronic meetings will be preferred. Nevertheless, in the case of physical meetings, they will be held in Europe and each participant has to bear his/her own costs for travel, accommodation, and subsistence.

# 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 integration 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

#### DRAFT CEN/CENELEC WS project plan (E)

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 their information:

- standards committee, working group etc.
- publisher of technical rules
- sector forum**Error! Bookmark not defined.**
- focus groupError! 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 forumError! Bookmark not defined.
- focus groupError! 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 the social networks and communication channels of GLOMICAVE project 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 forumError! Bookmark not defined.
- focus groupError! Bookmark not defined.
- coordination groupError! Bookmark not defined.
- others

In addition to the CCMC website, the draft CWA will be advertised on the social networks and communication channels of GLOMICAVE project 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 groupError! Bookmark not defined.
- coordination groupError! Bookmark not defined.
- others

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

- sector specific newsletter
- social media, such as
  - o Facebook
  - o Instagram
  - o LinkedIn
  - o **Twitter**
  - Research Gate
- EC Newsroom
- others

# 8 Contacts

- Workshop Chair:

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- Workshop Vice-Chair:

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- Workshop Secretariat:

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– Workshop proposer

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