

## **Additional Call Requirements**

### **ECSEL Call 2020-4, CSA Digital Excellence support action**

The specific conditions (scope and objectives) for the CSA Digital Excellence support action are described in “Annex 8: Call 2020-4, CSA Digital Excellence support action” of the ECSEL Work Plan 2020.

The CSA for Digital Excellence aims for simplification of industrial, public and academic collaboration in different industrial domains. Especially the complex Semiconductor Industry is intended to enable a collaboration of industrial as well as academic stakeholders. This mainly requires a stable generic Industrial Reference platform, which is aimed to evolve as an open standard and as a base for a commercial B2B platform. It connects the domains and enables synchronous production coordination projects. The different industrial domains itself contribute to the reference model with a detailed generic description of the industrial structure and behavior. Industrial data samples enable external partners to experience the industrial domain and provide domain specific inputs. The reference model therefor has to be open and evolving.

In that respect and in order to achieve the expected results with this support action, following additional call requirements apply to this call (Call 2020-4, CSA Digital Excellence support action):

**A. Identify suitable infrastructure and hosting mechanisms for those results, that can assure accessibility in an open yet suitably controlled and secure manner – typically a URI**

In addition to the requirements described in point A of the “Annex 8: Call 2020-4, CSA Digital Excellence support action” of the ECSEL Work Plan 2020, an availability of the service with > 99% availability, a MTTR (Mean Time to Repair of < 5h) and a MTBF (Mean Time between failure) of one week are expected for the public exploitation platform. Furthermore, proposals should ensure that the response for normal queries time in the public exploitation platform is no longer than two times a Wikipedia homepage response time.

**B. Establish regular meetings of stakeholders with a view to management and keeping up to date of the results**

In addition to the requirements described in point B of the “Annex 8: Call 2020-4, CSA Digital Excellence support action” of the ECSEL Work Plan 2020, proposals should present a concrete plan on how the proposed exploitation framework will provide technical support (for instance with the approval of change requests, etc...) to the stakeholders in

general and in particular to the required review boards, beyond the lifetime of the related projects.

Last sentence of B paragraph, "Some others especially in the scattered supply chain will need a Distributed Ledger approach" should be disregarded (misplaced text - clerical error).

**C. Establish a mechanism whereby other relevant EU-funded projects can access and make use of these results and contribute to their further enhancement**

In addition to the requirements described in point C of the "Annex 8: Call 2020-4, CSA Digital Excellence support action" of the ECSEL Work Plan 2020, proposals should establish a mechanism that, by making use of the five kinds of users groups described in this chapter, ensure the appropriate management and enhancement of the public exploitation framework. A possible mechanism could be as follows:

- Project specific user concepts allow the project members to get the tailored input for their project (Project User)
- To create a project user group the projects have to apply for the specific project view at one of the Admin Users.
- The project user is terminated according to the project duration.
- After the project user is accepted the members can use (download and read not write) the provided partition of the data for their project without specific tracking of actions
- If project users have results or feedback this is asked to be provided latest at the project end. It will consequently be checked for integration.

Ultimately, proposals should ensure that the publicly accessible platform serves as a starting point for both a technical innovation platform for projects in the industrial domains and a commercial B2B platform.

**D. Study the extensibility of the results into further use-cases or application domains, developing support for those as part of their operation**

In addition to the requirements described in point D of the "Annex 8: Call 2020-4, CSA Digital Excellence support action" of the ECSEL Work Plan 2020, proposals should make sure that the reference platform contains at least the semiconductor domain as a core industrial domain. Moreover, in order to cover the entire supply chain containing semiconductors, proposals should present a plan to extend the concept to connected industrial domains like control unit manufacturers and OEMs.

**E. Through communication campaigns, including presentations at public events coordinated through, for example, funding bodies or Lighthouse Initiatives, assure widespread knowledge of the existence of these results and how they may be accessed**

In addition to the requirements described in point E of the "Annex 8: Call 2020-4, CSA Digital Excellence support action" of the ECSEL Work Plan 2020, proposals should present a comprehensive communication and dissemination plan to ensure that results are widely spread to all relevant communities. In particular, forums like EF ECS and the ECSEL JU Symposium shall be targeted.

Proposals submitted to this call should provide support to the relevant ECSEL Lighthouse Initiatives and make sure that the lighthouse projects can benefit from their support.

**F. Study and report on additional mechanisms or business models which can lead to the support of the results becoming self-sustaining**

In addition to the requirements described in point F of the “Annex 8: Call 2020-4, CSA Digital Excellence support action” of the ECSEL Work Plan 2020, proposals should present a realistic plan for making the platform self-sustaining after the finalization of the CSA. An example could be the following three phases scenario:

- Phase I: to communicate the digital reference and the Entity Relationship Model (ERM), to give secure access to those needing access, to receive proposals for updating the digital reference and the ERM and to improve the visualization to enable more tailored views of the ontology via WebVowl
- Phase II: to make the updating a standard process guaranteeing high quality and a fast update. A blended peer/Distributed ledger process might be the right technology here. The number of accessed data should significantly increase.
- Phase III: to move towards a sustainable platform, which generates to a large extent its own income to ensure that the platform stays alive after the CSA ends.

**G. Support the standardization initiatives**

In addition to the requirements described in point G of the “Annex 8: Call 2020-4, CSA Digital Excellence support action” of the ECSEL Work Plan 2020, proposals should, on one hand, present a plan aiming at making the industrial reference platform a de-facto standard (frequently used). On the other hand, the plan should include concrete actions to liaise with/contribute to the relevant standards groups in the field making sure that the digital reference and the ERM is presented to the members of the relevant standardization committees.

**H. Research and propose a concrete implementation plan for what must follow, to assure maximum benefit is taken from the results, in specific and in general use-cases.**

In addition to the requirements described in point H of the “Annex 8: Call 2020-4, CSA Digital Excellence support action” of the ECSEL Work Plan 2020, proposals should present an implementation plan for the industrial generic data models being accepted by the major industrial companies, especially the semiconductor data model by the major semiconductor manufacturers. This would ensure the development of the digital reference platform as an open self-evolving decentral organized standard.

Proposals submitted to this call should seek for interaction/cooperation and possible synergies with projects resulting from similar calls like for example calls DT-NMBP-39-2020 (CSA) and DT-NMBP-40-2020 (RIA).