EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

CONSENSUS EVALUATION REPORT

GENERAL OVERVIEW

Open Call Collection	*OC-2019-1*
Proposal Reference	*OC-2019-1-24170*
Proposal Title	*European Digital Objects network*
Proposal Acronym	*EUDOn*
Review Panel	*RP 2 - Information and Communications Technologies related sciences and applications, targeting to advance and empower the society of tomorrow*
Evaluation Status	*Final*

EVALUATION

SUMMARY TABLE

S&T EXCELLENCE			NETWORKING EXCELLENCE			IMPACT			IMPLEMENTATION	Marks
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
3	3	3	4	3	4	4	4	4	3	35

COMMENTS

S&T EXCELLENCE

Soundness of the Challenge

Q1 - Does the proposal demonstrate a comprehensive command of the state of the art in the field and present a relevant and timely challenge?	Mark
The proposal addresses this question in a good manner. Main strengths: The proposal sets out the state of the art in the field very well. FAIR principles and FAIR-Digital Objects are discussed along with other initiatives such as EOSC. There is a need at international and national level for more joined up thinking and technological innovation. There is a lack of a core concept for the ecosystem of data infrastructures. This is a relevant and timely challenge. Examples are provided. EUDOn proposal wants to pave the way towards a more efficient data intensive science, to a stable domain of FDOs for Open Science. It will work with a network of experts to address the roadblocks in applying the FDO concept. The proposal has some weaknesses and the following improvements are necessary: The challenges are lacking in detail and do not really provide tangible details to understand the challenge and how it translates to a COST Action.	3

Progress beyond the state-of-the-art

Q2 - Does the proposal describe an innovative approach to the challenge that advances the state of the art in the field?	Mark
The proposal addresses this question in a good manner. Main strengths: As stated in the proposal, the aim is not to invent or re-invent specifications but rather to embrace existing specifications (essentially the FAIR principle instantiated into FAIR-Digital Objects - FDO) and to use the power of a COST Network to foster concrete realizations around this starting point.The proposal promises "inclusion at an unprecedented level" to facilitate the extension of the FDO concept to foster data-driven research and data reuse.As such the proposal is consistent with the aims of COST to help building networks to strengthen initiatives and help their development. The proposal has some weaknesses and the following improvements are necessary: A number of initiative and standards are not pointed out in the proposal (e.g.: FAIR4Health) and so the proposal is lacking to show that the development of a DO network or DOI in a FAIR perspective needs to take into account specific application domain issues. It is not fully clear how the proposal will advance beyond the state of the art (i.e. going beyond the mere networking of current specialists).	3

Q3 - Are the objectives presented relevant to the challenge, clear and ambitious?	Mark
The proposal addresses this question in a good manner. Main strengths: The objectives presented are challenging and ambitious. There are four objectives in total. They are relevant and outline specific work connected to FDOs. Objectives 5,6,7 are related to capacity building. In particular Objective 7 is ambitious and very timely. The project tries to provide a set of solutions from an academic and industrial perspective to the DO issues and limitations in Europe particularly but also worldwide. The proposal has some weaknesses and the following improvements are necessary: The project is felt too coarse in its description. More focused objectives are required for this type of project to move forward and then broaden its perspective.Objective 1 is a SWOT/GAP analysis which shall be updated on a 6 monthly cycle. As the proposal states some of the network are already working on this at the moment. Therefore, this might not be a very ambitious objective if it is already established in existing work. Objective 2 is interesting and ambitious but difficult to see how it can be quantified and measured. "Charting the potential impact on research practices...." seems difficult. The same issue for Objective 3 and 4. Overall, the objectives appear on the one hand as ambitious objectives but there is a lack of real detail about how they would be implemented and if they are actually measurable and quantifiable.	3

NETWORKING EXCELLENCE

Added value of networking in S&T Excellence

Q4 - Does networking bring added value in tackling the challenge in relation to existing efforts at the European and/or international level?	Mark
The proposal addresses this question in a very good manner. Main strengths: The challenge addressed by the proposal is by nature (and presented as such) a networking challenge, assuming that current specifications are reliable, solid and mature enough. The challenge is therefore to unify and attract bodies around a common vision and implementation. This is precisely the point of this proposal. Networking will therefore bring added value.Directing the proposal to the COST Association, able to support network at a EU-wide (and wider) scale is fully relevant to the objectives of the proposal. The proposal would benefit from certain improvements:	4

A number of initiatives and standards at European level are not sufficiently pointed out in the proposal (e.g: FAIR4Health).	

Added value of networking in Impact

Q5 - Does the proposed network contain, or present a credible plan for securing, the critical mass and expertise for achieving the objectives and thus addressing the challenge?	**Mark**
The proposal addresses this question in a good manner. Main strengths: In itself the proposal describes expertise and covers the domain of the related challenge (encouraging the development of FDOs) in a relevant manner. It is explicitly suggested that the initial members have already strong connections with relevant initiatives. It is not obvious from the proposal that the challenge is guaranteed to be resolved but both the presentation and the risk analysis show that the proposers are aware of the difficulty of the challenge and have done their best to use COST tools to make steps towards the solution. In particular the use of STSMs is proposed as a way to exchange practices in a operational way. The proposal has some weaknesses and the following improvements are necessary: The proposal outlines the work of RDA and GOFAIR. It promises to fertilize the work already done by initiatives such as RDA, CODATA, GOFAIR, C2CAMP. It is not really clear how the critical mass and expertise for achieving the objectives and thus addressing the challenge will be created. The proposal mentions "we will apply inward oriented methods such as blogs and wikis for members enabling communication.....". This is not clear. It appears much of the work will back up on that which is already done by the other initiatives.When it comes to harmonizing practices as this is the case in the proposal, it is hard to predict the adoption of the proposed technology as it necessarily have a (immediately measurable) cost of transition, which should be balanced by a (less immediate and potential) benefit.	3

Q6 - Does the proposal identify the most relevant stakeholders and present a clear plan to involve them as Action's participants?	**Mark**
The proposal addresses this question in a very good manner. Main strengths: All the relevant stakeholder are categorised and listed in a relevant and rather exhaustive manner. Pointing out the interactions between the stakeholders is a good way to show why each one must be involved in the CA. The proposal would benefit from certain improvements: There is no real clear plan on how they will be involved (in particular for stakeholders such as citizens).	4

IMPACT

Impact to science, society and competitiveness, and potential for innovation/break-throughs

Q7 - Does the proposal clearly identify relevant and realistic impacts for science, society and/or competitiveness (including potential innovations and/or breakthroughs)?	Mark
The proposal addresses this question in a very good manner. Main strengths: The proposal indicates that it will not be involved in development and testing work, but it has the capacity to accelerate the process by forming a European and global hub for FDO activities. It will also facilitate an intensification of the dialogue between the relevant stakeholders at various levels about the data aspects as currently needed in Europe. The impacts of resolving the addressed challenge are quite clear as the proposal locates itself in the realm of OpenScience. OpenScience is accepted to be the door for large impact in Data Science via the organisation of coherent and collaborative data sources, to Society by making accessible and securing large body of knowledge. The proposal would benefit from certain improvements: From section 3.1.1 it is hard to see the relevant impacts for science, society and/or competitiveness. "Discussions may enhance worldwide impact" is one such impact. There are some impacts listed in section 1.2.2 - bringing Europe into a leading position in defining the future characteristics of an FDO data landscape and the establishment of a European focus point in a global effort towards massive investment in FDO based data management.	4

Measures to maximise impact

Q8 - Does the proposed networking clearly contribute to knowledge creation, transfer of knowledge and career development?	Mark
The proposal addresses this question in a very good manner. Main strengths: By using STSMs and the involvement (and mobility) of early researchers the proposal will impact the development of careers focused towards sub-branches of the global OpenScience challenge. EUDOn will organize a series of workshops which will facilitate knowledge and experience exchange and interaction of key stakeholders. The proposal would benefit from certain improvements: The proposal could have discussed more precisely the generation of novel challenges out of which early researchers could build research careers.	4

Q9 - Is the plan for dissemination and/or exploitation of results clear and attainable and does it contribute to the dialogue between science and the general public or policy?	Mark
The proposal addresses this question in a very good manner. Main strengths: The proposal is inherently directed towards make science open to society and public. In following the OpenScience philosophy the proposal directly answers the question. Many interesting and valid options are specified: Training courses, webinars. Hackathons, web-based competitions. Policy briefs, executive summaries. Annual events. These activities are certainly clear and potential attainable. The proposal would benefit from certain improvements: However, there is little mention of the general public. There are some connections to policy, but mostly via standard outputs such as policy briefs.	4

IMPLEMENTATION

Coherence and effectiveness of the work plan

Q10 - Is the work plan (WGs, tasks, activities, timeframe, deliverables and risk analysis) appropriate to ensure the achievement of the objectives?	Mark
The proposal addresses this question in a good manner. Main strengths: The inherent risk is analysed in the proposal in a credible way though risk analysis could be strengthened. All the proposal is built around the goal of creating a focal point for the FDO universe and actions are deliverables are consistent with this objective. The proposal has some weaknesses and the following improvements are necessary: Hackathons and other events are not mentioned in the deliverables, or WG5 dissemination. The timetable proposes only 3 steering group meetings. There is no clear details for how many WG meetings there will be. The work plan lacks specificity on describing its actions towards networking. It is not clear how the networking will happen and the instruments used for that are scarcely described, e.g. Workshops, conferences, schools etc.	3