EINFRA-12-2017

Topic's content support document

Disclaimer:

This supporting document draws on different documents relevant for the content of EINFRA-12-2017 proposals. It has been prepared with great care as aide memoire to help evaluators bear in mind the various elements to be included in the proposals, as described in the Work Programme 2016-17 (WP) and Specific Proposal Template (ST). It also aims at helping evaluators substantiate their assessment. When it comes to filling in the evaluation forms, only the three official evaluation criteria (Excellence, Impact and Implementation) and their explanatory sub-criteria should, however, be replied to.

Please note that this document has no additional legal value. For legal purposes, reference should always be made to the official H2020 documentation listed below.

We encourage evaluators to bring this summary along to the consensus meeting as supporting material.

References:

WP   Research Infrastructures Work Programme 2016-17
http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-infrastructures_en.pdf

GA   General Annexes to the WP
http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-ga_en.pdf

DMP Data Management Guidelines
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

OA   Open Access Guide
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf

ST   Specific proposal template for EINFRA-12-2017 – *This form is accessible to grant applicants only. Therefore, the points below which refer to the ST only are relevant just for the applicants and not for the evaluators.*

Topic	**EINFRA-12-2017** **Data and Distributed Computing e-infrastructures for Open Science**
Subtopic:	(a) Secure and agile data and distributed computing e-infrastructures
Type of Action:	RIA

Points related to the EXCELLENCE criterion

	Item	Checklist	Source
EXCELLENCE	1.	The objectives of the project have been clearly described and are pertinent.	GA, page 30
	2.	The objectives described are measurable, realistic and achievable within the duration of the project.	ST, page 2
	3.	The overall concept is sound and the proposed methodology credible.	GA, page 30
	4.	The objectives of the project are consistent with the expected exploitation and impact of the project.	ST, page 2
	5.	The proposal indicates clearly to which topic in the work programme relates, and explains how it addresses the specific challenge and scope of that topic, as set out in the work programme. (The proposal is **in/out** of scope).	WP, page 35-36
	6.	*The proposal addresses the integration of computing, software and storage resources exposing them through a dynamic registry and catalogue of services supporting European research and education communities in their tasks related with data and computing intensive science. This integration should be done by means of open and flexible architectures and include institutional, regional, national and European capabilities, packaging them in the optics of end-user needs*	
	7.	*The proposal addresses seamless operation of highly scalable and agile data and computing platforms and services dedicated to analytics including hardware and software components, database, compilers, analytics software, supported to easy user entry points for the community of users*	
	8.	*The proposal reliably addresses the aspects of privacy, cybersecurity and information assurance supporting multiple compartments with private, public or industrial corpus of data, protected from unauthorized access by secure interfaces*	
	9.	*The proposal addresses adoption of standards-based common interfaces, open source components enabling access and processing of underlying data collected/stored in different platforms and formats. Empowering users to customise application and services tailoring them to specific requirements, which will differ across disciplines, applications etc*	

EXCELLENCE	10.	*The proposal foresee the consortium will work closely with user communities (from different disciplines) to foster the use of digital infrastructures, promote the values of open science and support their data management plans. Engage and train users (researchers, educators and students) to contribute to the dynamic registry and catalogue of services improving quality of data, software and computing infrastructure that become available for re-use*	
	11.	*The proposal fosters interoperability of pan-European thematic/community-driven e-infrastructures providing cost-effective and interoperable solutions for data management. The data and computing e-infrastructure should be able to interoperate with resources based on different technologies which are operated/owned by public and or private organisations*	
	12.	*The proposal supports the preservation and curation of data and associated software so that the reproducibility and accuracy of the data can be verified*	
	13.	*The proposal enables seamless transition and e-infrastructure upgrades, exploiting economies of scale and promoting interoperability with similar infrastructures across and beyond Europe and operate user-friendly and comprehensive repositories of software components for research and education*	
	14.	The proposal describes any national or international research and innovation activities which will be linked with the project, especially where the outputs from these will feed into the project.	ST, page 2
	15.	The proposal has considered existing operational services to the greatest extent possible.	WP, page 74
	16.	Service orientation. The project will contribute to the production of a high quality catalogue of services describing the services that they will provide during the lifetime of the project or that they intend to develop during the project.	WP, page 30
	17.	The proposal plans for active participation in international fora and community-led consensus building initiatives to promote data and computing infrastructure interoperability such as the Research Data Alliance.	WP, page 30
	18.	The proposal shows that the Service Activities (Trans-national and/or Virtual Access Activities) will offer access to state-of-the-art infrastructures and high quality services, and will enable users to conduct excellent research as demonstrated, inter-alia, by both the quality of the associated catalogue of services and the baseline and expected future measurements of related KPIs.	WP, page 45
	19.	The proposal describes how the services developed will be made discoverable on-line, searchable in a catalogue of services or digital registry.	WP, page 74-75
	20.	The proposal demonstrates that the concerned platforms and services are based on systems and technologies that have reached at least TRL 8 before the start of the project.	WP, pages 31, 45, 76
	21.	The proposal describes adequately, in terms of Networking Activities (NA) & Service Activities (SA), the activities it intends to carry out; furthermore the focus of the project is on these activities.	WP, page 75
	22.	The activities described in each category (NA, SA & JRA) fit with the definitions provided in the Work Programme (e.g. compliance with TRL guidelines; involvement of SME's...).	WP, page 75-76

		Points related to the IMPACT criterion	
	Item	**Checklist**	**Source**
IMPACT	23.	The proposal describes the extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the Work programme under the relevant topic:	WP, page 37
	24.	*The proposal demonstrates it will contribute to the operation of a federated European data and distributed computing infrastructure for research and education communities which will optimise the access to IT equipment and services and will put all European researchers and educators in equal footing to access essential resources to express their talent and creativity.*	
	25.	*The proposal foresee the e-infrastructure will establish partnerships with industrial and private partners and will train people in research and academic organisations preventing lack of skilled and specialised infrastructure operators.*	
	26.	*The proposal will avoid the locking-in to particular hardware or software platforms that would jeopardise the long-term planning for capacity upgrades. With such an operational infrastructure more scientific communities will use storage and computing infrastructures with state-of-the-art services for their research and education activities. The open nature of the infrastructure will allow scientists, educators and students to improve the service quality by interacting with data, software and computing resources.*	
	27.	*The proposal will increase the incentives for scientific discovery and collaboration across disciplinary and geographical boundaries, putting Europe in the driving seat at global level.*	
	28.	*The proposal demonstrates it will further develop the European economic innovation capacity and provide stability to the e-infrastructure*	
	29.	The proposal demonstrates it has the potential to enhance capacity for innovation and production of new knowledge.	WP, page 45
	30.	The proposal defines Key Performance Indicators (KPI) with which to measure the impact of the action. The proposal describes the collection and how it will make KPIs available in support of operational, technical and socio-economic impact assessment.	WP, pages 30, 45, 75
	31.	Software development within the project is Open Source with appropriate licenses. Any deviation is properly justified.	WP, page 75
	32.	The proposal includes a dissemination plan with quality measures to exploit and disseminate the project results (including management of IPR), and to manage research data where relevant.	GA, page 31
	33.	The proposal includes quality measures to communicate the project activities to different target audiences.	GA, page 31
	34.	The proposal includes a section on research data management. *Note: This is mandatory for all RIA actions. This should not be mixed up with the Data Management Plan (DMP) required by the Open Research Data pilot.*	ST, page 4 DM, page 3

		Points related to the QUALITY & EFFICIENCY OF THE IMPLEMENTATION criterion	
QUALITY & EFFICIENCY OF THE IMPLEMENTATION	**Item**	**Checklist**	**Source**
	35.	The proposal includes a high quality and effective work plan.	GA, page 30
	36.	Resources assigned to work packages are in line with their objectives and deliverables.	
	37.	The work plan provides an appropriate allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role.	GA, page 31
	38.	The proposal describes appropriately the management structures and procedures.	GA, pages 30-31
	39.	The proposal describes appropriately the risk management approach.	
	40.	The proposal describes appropriately the innovation management approach.	
	41.	The proposal describes the organisational structure and decision-making mechanisms and explains why they are appropriate to the complexity and scale of the project.	ST, page 6
	42.	The proposal addresses the complementarity of the participants and the extent to which the consortium as whole brings together the necessary expertise.	GA, page 31
	43.	The proposal opts out of the Pilot Action on Open Research Data **(Y/N)** If **NO**, the proposal must include a 'data management plan' (DMP) as a distinct deliverable within the first 6 months of the project. *Note: a) Participation in the Open Research Data pilot is voluntary. You, as an evaluator, will not consider positively or negatively the participation or not in the pilot, neither the reasons that justify that choice. b) In this RIA action, all proposals participate by default in the Open Research Data pilot. Proposals opting out must explicitly indicate this choice.*	ST, page 4 DM, pages 3-4

Topic	**EINFRA-12-2017** **Data and Distributed Computing e-infrastructures for Open Science**
Subtopic:	(b) Access and preservation platforms for scientific information
Type of Action:	RIA

		Points related to the EXCELLENCE criterion	
	Item	Checklist	Source
EXCELLENCE	1.	The objectives of the project have been clearly described and are pertinent.	GA, page 30
	2.	The objectives described are measurable, realistic and achievable within the duration of the project and the proposed methodology.	ST, page 2
	3.	The overall concept is sound and the proposed methodology credible.	GA, page 30
	4.	The objectives of the project are consistent with the expected exploitation and impact of the project.	ST, page 2
	5.	The proposal indicates clearly to which topic in the work programme relates, and explains how it addresses the specific challenge and scope of that topic, as set out in the work programme. (The proposal is **in/out** of scope).	WP, page 36
	6.	*The proposal addresses deployment and maintenance of service-driven knowledge e-infrastructure responding to general and specific requirements of researchers and research organisations for open access to research digital objects, their registration and preservation.*	
	7.	*This e-infrastructure will further develop the research capacity through a coordinated and participatory architecture linking institutional and thematic repositories across Europe.*	
	8.	*It will support publishing platforms by providing essential services for scientific information that can be used by humans and machines. Such target platforms can be generic, specific for a research field or specialised on quality assurance, discoverability, archiving etc. Essential functions of this service-driven approach will include helpdesks, training and guidance to support producers and users of scientific information, community building to support research data sharing and management, as well as implementation of Open Access policies in Europe.*	
	9.	*Relevant indicators on the take-up of open access in Europe including publications and data should be elaborated and reported regularly.*	
	10.	*The project will promote a limited set of biblio- and webometrics that reflect open access policies. It will collect bibliometric data on publications, citations, data citations, etc. on all Horizon 2020 scientific output (including on the Open Research Data Pilot) and produce both standard and on-demand statistics.*	
	11.	*The project supports global interoperability of open access data e-infrastructures and linking with similar initiatives across the globe to complement the physical access to research facilities with data access and to ensure that Europe plays a leading role in international collaborations.*	

EXCELLENCE	12.	The proposal describes any national or international research and innovation activities which will be linked with the project, especially where the outputs from these will feed into the project.	ST, page 2
	13.	The proposal has considered existing operational services to the greatest extent possible.	WP, page 74
	14.	Service orientation. The project will contribute to the production of a high quality catalogue of services describing the services that they will provide during the lifetime of the project or that they intend to develop during the project.	WP, page 30
	15.	The proposal plans for active participation in international fora and community-led consensus building initiatives to promote data and computing infrastructure interoperability such as the Research Data Alliance.	WP, page 30
	16.	The proposal shows that the Service Activities (Trans-national and/or Virtual Access Activities) will offer access to state-of-the-art infrastructures and high quality services, and will enable users to conduct excellent research as demonstrated, inter-alia, by both the quality of the associated catalogue of services and the baseline and expected future measurements of related KPIs.	WP, page 45
	17.	The proposal describes how the services developed will be made discoverable on-line, searchable in a catalogue of services or digital registry.	WP, page 74-75
	18.	The proposal demonstrates that the concerned platforms and services are based on systems and technologies that have reached at least TRL 8 before the start of the project.	WP, pages 31, 45, 76
	19.	The proposal describes adequately, in terms of Networking Activities (NA) & Service Activities (SA), the activities it intends to carry out; furthermore the focus of the project is on these activities.	WP, page 75
	20.	The activities described in each category (NA, SA & JRA) fit with the definitions provided in the Work Programme (e.g. compliance with TRL guidelines; involvement of SME's...).	

	Item	Checklist	Source
		Points related to the IMPACT criterion	
IMPACT	21.	The proposal describes the extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the Work programme under the relevant topic:	WP, page 37
	22.	*The proposal demonstrates a reliable operation of e-infrastructure services for access and preservation of scientific information which will make the intellectual capital of Europe available to researchers, business and citizens at large.*	
	23.	*The proposal demonstrates that it will generate economic and scientific advances now and in the future as that capital is safely preserved for further exploitation by future generations.*	
	24.	*The proposal demonstrates that Open Access publications resulting from Horizon 2020 funded research will be made available and easily findable online.*	
	25.	*The proposal demonstrates that data needed to validate published results is linked to the publications and publicly shared whenever possible.*	
	26.	*The proposal demonstrates that accurate science metrics for Horizon 2020 can be produced with almost no effort.*	
	27.	*The proposal demonstrates that most of the European institutional repositories (at least 95%) as well as the principal thematic repositories will be part of the same interoperable repository network.*	
	28.	The proposal demonstrates it has the potential to enhance capacity for innovation and production of new knowledge.	WP, page 45
	29.	The proposal defines Key Performance Indicators (KPI) with which to measure the impact of the action. The proposal describes the collection and how it will make KPIs available in support of operational, technical and socio-economic impact assessment.	WP, pages 30, 45, 75
	30.	Software development within the project is Open Source with appropriate licenses. Any deviation is properly justified.	WP, page 75
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