Proposal Evaluation Form

EUROPEAN COMMISSION

Horizon 2020 - Research and Innovation Framework Programme

Evaluation Summary Report - Research and innovation actions/Innovation actions

Call: H2020-INFRAIA-2014-2015
Funding scheme: Research and Innovation action
Proposal number: 654168
Proposal acronym: AIDA-2020
Duration (months): 48
Proposal title: Advanced European Infrastructures for Detectors at Accelerators
Activity: RANKING LIST

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH	CH	2,591,854	18.72%	2,356,231	23.56%
2	OESTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN	AT	132,000	0.95%	120,000	1.20%
3	UNIVERSITE CATHOLIQUE DE LOUVAIN	BE	86,493	0.62%	78,629	0.79%
4	INRNE	BG	49,500	0.36%	45,000	0.45%
5	RUDER BOSKOVIC INSTITUTE	HR	95,084	0.69%	86,440	0.86%
6	FYZIKALNI USTAV AV CR V.V.I	CZ	71,500	0.52%	65,000	0.65%
7	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	FR	177,100	1.28%	161,000	1.61%
8	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR	3,447,498	24.90%	1,258,300	12.58%
9	STIFTUNG DEUTSCHES ELEKTRONEN-SYNCHROTRON DESY	DE	1,194,490	8.63%	1,085,900	10.86%
10	JOHANNES GUTENBERG UNIVERSITAET MAINZ	DE	49,500	0.36%	45,000	0.45%
11	Karlsruher Institut fuer Technologie	DE	252,936	1.83%	229,943	2.30%
12	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE	157,300	1.14%	143,000	1.43%
13	RHEINISCHE FRIEDRICH-WILHELMS-UNIVERSITAT BONN	DE	213,400	1.54%	194,000	1.94%
14	MAGYAR TUDOMANYOS AKADEMIA WIGNER FIZIKAI KUTATOKOZPONT	HU	49,500	0.36%	45,000	0.45%
15	TEL AVIV UNIVERSITY	IL	60,500	0.44%	55,000	0.55%
16	FONDAZIONE BRUNO KESSLER	IT	137,500	0.99%	125,000	1.25%
17	ISTITUTO NAZIONALE DI FISICA NUCLEARE	IT	1,343,100	9.70%	1,221,000	12.21%
18	VILNIAUS UNIVERSITETAS	LT	88,000	0.64%	80,000	0.80%
19	UNIVERSITETET I BERGEN	NO	49,500	0.36%	45,000	0.45%
20	AKADEMIA GORNICZO-HUTNICZA IM. STANISLAWA STASZICA W KRAKOWIE	PL	263,750	1.90%	120,000	1.20%
21	LABORATORIO DE INSTRUMENTACAO E FISICA EXPERIMENTAL DE PARTICULAS	PT	49,500	0.36%	45,000	0.45%
22	INSTITUT JOZEF STEFAN	SI	243,729	1.76%	221,571	2.22%
23	CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT	ES	200,200	1.45%	182,000	1.82%
24	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES	302,500	2.18%	275,000	2.75%
25	INSTITUTO DE FISICA DE ALTAS ENERGIAS	ES	60,500	0.44%	55,000	0.55%
26	INSTITUTO TECNOLOGICO DE ARAGON	ES	124,520	0.90%	113,200	1.13%
27	LUNDS UNIVERSITET	SE	49,500	0.36%	45,000	0.45%
28	SCIENCE AND TECHNOLOGY FACILITIES COUNCIL	UK	112,200	0.81%	102,000	1.02%
29	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	UK	189,970	1.37%	172,700	1.73%
30	University College London	UK	385,000	2.78%	350,000	3.50%
31	UNIVERSITY OF BRISTOL	UK	165,000	1.19%	150,000	1.50%
32	UNIVERSITY OF GLASGOW	UK	178,200	1.29%	162,000	1.62%
33	THE UNIVERSITY OF LIVERPOOL	UK	123,200	0.89%	112,000	1.12%
34	The University of Manchester	UK	174,680	1.26%	158,800	1.59%
35	THE UNIVERSITY OF BIRMINGHAM	UK	108,115	0.78%	98,286	0.98%
36	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	UK	217,800	1.57%	198,000	1.98%
37	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZURICH	CH	492,500	3.56%	0	0.00%
38	UNIVERSITE DE GENEVE	CH	159,750	1.15%	0	0.00%
	Total:		13,847,369		10,000,000	

Abstract:
Particle physics is at the forefront of the ERA, attracting a global community of more than 10,000 scientists. With the upgrade of the LHC and the preparation of new experiments, the community will have to overcome unprecedented challenges in order to answer fundamental questions concerning the Higgs boson, neutrinos, and physics beyond the Standard Model. Major developments in detector technology are required to ensure the success of these endeavours. The AIDA-2020 project brings together the leading European infrastructures in detector development and a number of academic institutes, thus assembling the necessary expertise for the ambitious programme of work. In total, 19 countries and

CERN are involved in this programme, which follows closely the priorities of the European Strategy for Particle Physics. AIDA-2020 aims to advance detector technologies beyond current limits by offering well-equipped test beam and irradiation facilities for testing detector systems under its Transnational Access programme. Common software tools, micro-electronics and data acquisition systems are also provided. This shared high-quality infrastructure will ensure optimal use and coherent development, thus increasing knowledge exchange between European groups and maximising scientific progress. The project also exploits the innovation potential of detector research by engaging with European industry for large-scale production of detector systems and by developing applications outside of particle physics, e.g. for medical imaging. AIDA-2020 will lead to enhanced coordination within the European detector community, leveraging EU and national resources. The project will explore novel detector technologies and will provide the ERA with world-class infrastructure for detector development, benefiting thousands of researchers participating in future particle physics projects, and contributing to maintaining Europe's leadership of the field.

Evaluation Summary Report

Evaluation Result

Total score: 14.50 (Threshold: 10.00)

Form information

SCORING

Scores must be in the range 0-5.

Interpretation of the score:

0– *The* ***proposal fails to address the criterion*** *or cannot be assessed due to missing or incomplete information.*

1– Poor. *The criterion is inadequately addressed, or there are serious inherent weaknesses.*

2– Fair. *The proposal broadly addresses the criterion, but there are significant weaknesses.*

3– Good. *The proposal addresses the criterion well, but a number of shortcomings are present.*

4– Very good. *The proposal addresses the criterion very well, but a small number of shortcomings are present.*

5– Excellent. *The proposal successfully addresses all relevant aspects of the criterion.Any shortcomings are minor.*

Criterion 1 - Excellence

Score: **5.00** (Threshold: 3.00/5.00 , Weight: 100.00%)

Note: The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme: .
Clarity and pertinence of the objectives;
Credibility of the proposed approach;
Soundness of the concept, including trans-disciplinary considerations, where relevant;
Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground-breaking objectives, novel concepts and approaches).
The extent to which the Networking Activities will foster a culture of co-operation between the participants and other relevant stakeholders.
The extent to which the Access Activities (Trans-national Access and/or Virtual Access activities) will offer access to state-of-the-art infrastructures, high quality services, and will enable users to conduct excellent research.
The extent to which the Joint Research Activities will contribute to quantitative and qualitative improvements of the services provided by the infrastructures.

+ The project aims at detector technology beyond the current state-of-the-art and upgrade of test facilities for the LHC upgrades and also for the future accelerator projects, maintaining European leadership in particle physics. The project is perfectly in line with European Strategy for Particle Physics.

+ It is a very clear, pertinent, ambitious and timely project.

+ There are number of actions that will provide high quality services to conduct advanced research e.g., beam user support, software development, new HEP technologies, new detectors, detector collaboration with industry and technology transfer.

Criterion 2 - Impact

Score: **5.00** (Threshold: 3.00/5.00 , Weight: 100.00%)

Note: The following aspects will be taken into account, to the extent to which the outputs of the project should contribute at the European and/or International level:
The expected impacts listed in the work programme under the relevant topic;
Enhancing innovation capacity and integration of new knowledge;
Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets, and where relevant, by delivering such innovations to the markets *
Any other environmental and socially important impacts;
Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant.

+ The expected impact of the proposal is very high in many ways: strengthening the ERA, innovation capacity, impact on European industry and other fields are the most significant ones.

+ The project results have a socially important potential for exploitation outside high energy physics.

+ Transnational activities are significantly enhanced and provide simple, high quality and easy access to the RIs.

+ The inclusion of 60 PhD positions will very significantly contribute to the training of young researchers .

+ The proposal has very well described Networking Activities, Transnational Access and Joint Research Activities, with a good balance between the different activities.

+ Gender balance is adequately addressed.

Criterion 3 - Quality and efficiency of the implementation

Score: **4.50** (Threshold: 3.00/5.00 , Weight: 100.00%)

Note: The following aspects will be taken into account:
Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources;
Complementarity of the participants within the consortium (when relevant);
Appropriateness of the management structures and procedures, including risk and innovation management.

+ The project has a coherent work plan, with clear tasks towards specific objectives.

+ Man-power allocated to the tasks is appropriate.

+ The project presents very good geographic coverage, including 19 countries and 38 institutions across Europe.

+ Management and procedures are structured for smooth and efficient operation of the project.

+ There is a large amount of matching funds from participating institutes.

Minor shortcomings are:

- The consortium partners UCLouvain, UoB, ITAINNOVA, RBI and JSI participate only in the transnational access activities, but they are not part of any networking or joint research activity.

- The description of "novel magnetisation schemes" is vaguely presented.

- Networking workshops for new detector communities are mentioned but not included in the workplan as a task, deliverable or milestone.

Operational Capacity

Status: **Operational Capacity: Yes**

Not provided

Proposal content corresponds, wholly or in part, to the topic description against which it is submitted, in the relevant work programme part

Status: **Yes**

Not provided

Overall comments

Not provided