

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: 654002
Proposal acronym: ENSAR2
Duration (months): 48
Proposal title: European Nuclear Science and Application Research 2
Activity: RANKING LIST

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	GRAND ACCELERATEUR NATIONAL D'IONS LOURDS	FR	2,031,125	20.31%	2,031,125	20.31%
2	ISTITUTO NAZIONALE DI FISICA NUCLEARE	IT	1,279,501	12.80%	1,279,501	12.80%
3	EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH	CH	1,012,999	10.13%	1,012,999	10.13%
4	JYVASKYLAN YLIOPISTO	FI	772,875	7.73%	772,875	7.73%
5	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR	1,041,375	10.41%	1,041,375	10.41%
6	GSI HELMHOLTZZENTRUM FUER SCHWERIONENFORSCHUNG Gmbh	DE	516,875	5.17%	516,875	5.17%
7	RIJKSUNIVERSITEIT GRONINGEN	NL	483,375	4.83%	483,375	4.83%
8	THE HENRYK NIEWODNICZANSKI INSTITUTE OF NUCLEAR PHYSICS, POLISH ACADEMY OF SCIENCES	PL	186,555	1.87%	186,555	1.87%
9	UNIwersytet Warszawski	PL	337,945	3.38%	337,945	3.38%
10	INSTITUTUL NATIONAL DE CERCETARE -DEZVOLTARE PENTRU FIZICA SI INGINERIE NUCLEARA "HORIA HULUBEI" (IFIN-HH)	RO	185,000	1.85%	185,000	1.85%
11	FONDAZIONE BRUNO KESSLER	IT	229,000	2.29%	229,000	2.29%
12	EBG (Entwicklungs- und Betriebsgesellschaft) MedAustron GmbH	AT	40,000	0.40%	40,000	0.40%
13	KATHOLIEKE UNIVERSITEIT LEUVEN	BE	96,125	0.96%	96,125	0.96%
14	UNIVERSITE LIBRE DE BRUXELLES	BE	125,000	1.25%	125,000	1.25%
15	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	FR	248,000	2.48%	248,000	2.48%
16	Groupement d'interet Public ARRONAX	FR	62,500	0.62%	62,500	0.62%
17	JUSTUS-LIEBIG-UNIVERSITAET GIESSEN	DE	150,000	1.50%	150,000	1.50%
18	JOHANNES GUTENBERG UNIVERSITAET MAINZ	DE	74,375	0.74%	74,375	0.74%
19	LMU	DE	53,000	0.53%	53,000	0.53%
20	UNIVERSITAET ZU KOELN	DE	102,500	1.03%	102,500	1.03%
21	NATIONAL CENTER FOR SCIENTIFIC RESEARCH "DEMOKRITOS"	EL	60,000	0.60%	60,000	0.60%
22	UNIVERSITA DEGLI STUDI DI MILANO	IT	97,500	0.98%	97,500	0.98%
23	FUNDACAO DA FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA	PT	38,000	0.38%	38,000	0.38%
24	CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT	ES	50,000	0.50%	50,000	0.50%
25	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES	259,625	2.60%	259,625	2.60%
26	UNIVERSIDADE DE SANTIAGO DE COMPOSTELA	ES	105,500	1.06%	105,500	1.06%
27	Universidad de Sevilla	ES	165,000	1.65%	165,000	1.65%
28	THE UNIVERSITY OF LIVERPOOL	UK	91,250	0.91%	91,250	0.91%
29	UNIVERSITY OF YORK	UK	57,500	0.58%	57,500	0.58%
30	Magyar Tudományos Akademia Atommagkutató Intézete	HU	47,500	0.48%	47,500	0.48%
Total:			10,000,000		10,000,000	

Abstract:

ENSAR2 is the integrating activity for European nuclear scientists who are performing research in three of the major subfields defined by NuPECC: Nuclear Structure and Dynamics, Nuclear Astrophysics and Nuclear Physics Tools and Applications. It proposes an optimised ensemble of Networking (NAs), Joint Research (JRAs) and Transnational Access Activities (TAs), which will ensure qualitative and quantitative improvement of the access provided by the current ten infrastructures, which are at the core of this proposal. The novel and innovative developments that will be achieved by the RTD activities will also assure state-of-the-art technology needed for the new large-scale projects. Our community of nuclear scientists profits from the diverse range of world-class research infrastructures all over Europe that can supply different ion beams and energies and, with ELI-NP, high-intensity gamma-ray beams up to 20 MeV. We have made great effort to make the most efficient use of these facilities by developing the most advanced and novel equipment needed to pursue their excellent scientific programmes and applying state-of-the-art developments to other fields and to benefit humanity (e.g. archaeology, medical imaging). Together with multidisciplinary and application-oriented research at the facilities, these activities ensure a high-level socio-economic impact. To enhance the access to these facilities, the community has defined a number of JRAs, using as main criterion scientific and technical promise. These activities deal with novel and innovative technologies to improve the operation of the facilities. The NAs of ENSAR2 have been set-up with specific actions to strengthen the communities' coherence around certain research topics and to ensure a broad dissemination of results and stimulate multidisciplinary, application-oriented research and

Evaluation Summary Report

Evaluation Result

Total score: 13.00 (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: **4.50** (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 objectives are very clearly identified, pertinent and very well elaborated in terms of priority and strategy. The proposal aims at providing access to nine of the complementary world-class European facilities performing research in Nuclear Physics and access to accelerators and detectors to study the interaction of particle beams (including radioactive beams) and photon beams with matter.

The involved large-scale facilities to be accessed as well as current needs in the targeted community are identified according to the findings of recent NuPECC and Nuclear Physics ERA-NET surveys. The concept is very sound. Trans-disciplinary contributions and considerations are clearly reflected in the activities and workplan.

The proposed approach comprises: access to existing large research infrastructures, access to new or upgraded infrastructures, research and development for the benefit of experimental studies, networking and dissemination actions and broadening of fundamental research towards innovations and applications.

The concept of integrating activities in nuclear science, while promoting and stimulating inter and multidisciplinary research and development and application oriented research is very sound and ambitious.

Networking activities are very well defined and their tasks, objectives and interaction with JRAs and TAs are well conceived, hence they will foster co-operation between the partners and provide access to infrastructures as well as contribute to qualitative and quantitative improvements of services provided by research infrastructures. Trans-national access activities are well addressed. The plan to develop a network of small-scale facilities improving the technical support to large-scale infrastructures providing transnational access offers added value to it. The JRAs contribute remarkably to the improvement of existing infrastructures in qualitative and quantitative terms: the workplan includes activities to improve performance and quality of the facilities, especially concerning beam variety, instrumentation and experimental programmes.

However, the strategic vision for the future (after the projects ends) is missing and thus substantially weakening the proposal.

Criterion 2 - Impact

Score: **4.50** (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 impact is high for the targeted nuclear physics community and to keep Europe in a leading and competitive role in nuclear physics applications. Such impact is also strengthened by the ties with international programmes and with industry. Support to unique facilities in Romania and in Poland will be offered for the first time. Specific activities are planned to foster liaison and shared knowledge with US and Japanese communities working in this thematic area. JRAs activities include plans to explore and promote exploitation of their outcomes in areas of wide societal interest such as homeland security, medical imaging or radiotherapy. The measures to disseminate project results are good: specific activities and partners are identified for the different dissemination channels. The proposal shows awareness of the need to manage IPRs. However, IPRs aspects are just mentioned in the proposal. The partners plan to implement a consortium agreement at the start of the project in order to settle IPR questions. The data management plan is defined but is not satisfactory in terms of wider access to data and engagement with e-Infrastructures. For example, access conditional on collaboration with the working group could negatively influence the impact.

Communication activities will be taken towards scientists (meetings, publications, trainings and schools) and toward general public (dedicated website, Wikipedia, public events).

Criterion 3 - Quality and efficiency of the implementation

Score: **4.00** (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 work plan is coherent and effective tasks and responsibilities are identified as well as inter-relations among internal networks and work-packages.

There is a very good matching of expertise and full complementarity of participants within the consortium.

The allocation of tasks and resources is appropriate. A special attention is put on one Networking Activity (NuPIA) which is to study the innovation potential of the consortium and to implement necessary measures between the partners and industry.

The management scheme is sound and is proven to be efficient in the past experiences of the consortium.

The cost share between the work packages appears appropriate.

Risk assessment has been performed with a long list of potential risks and clear ideas of mitigation measures.

However, the way that a possible manpower shortage at BNL is dealt with, i.e. by training a single employee could turn out to be insufficient. Similarly, the possible reduction of CNRS support mitigated by the identification of internal resources is risky.

Gender issues have not been addressed in sufficient detail.

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