

Preparation of Horizon 2020
**“European Nuclear Science and
Applications Research” (ENSAR) 2
proposal**

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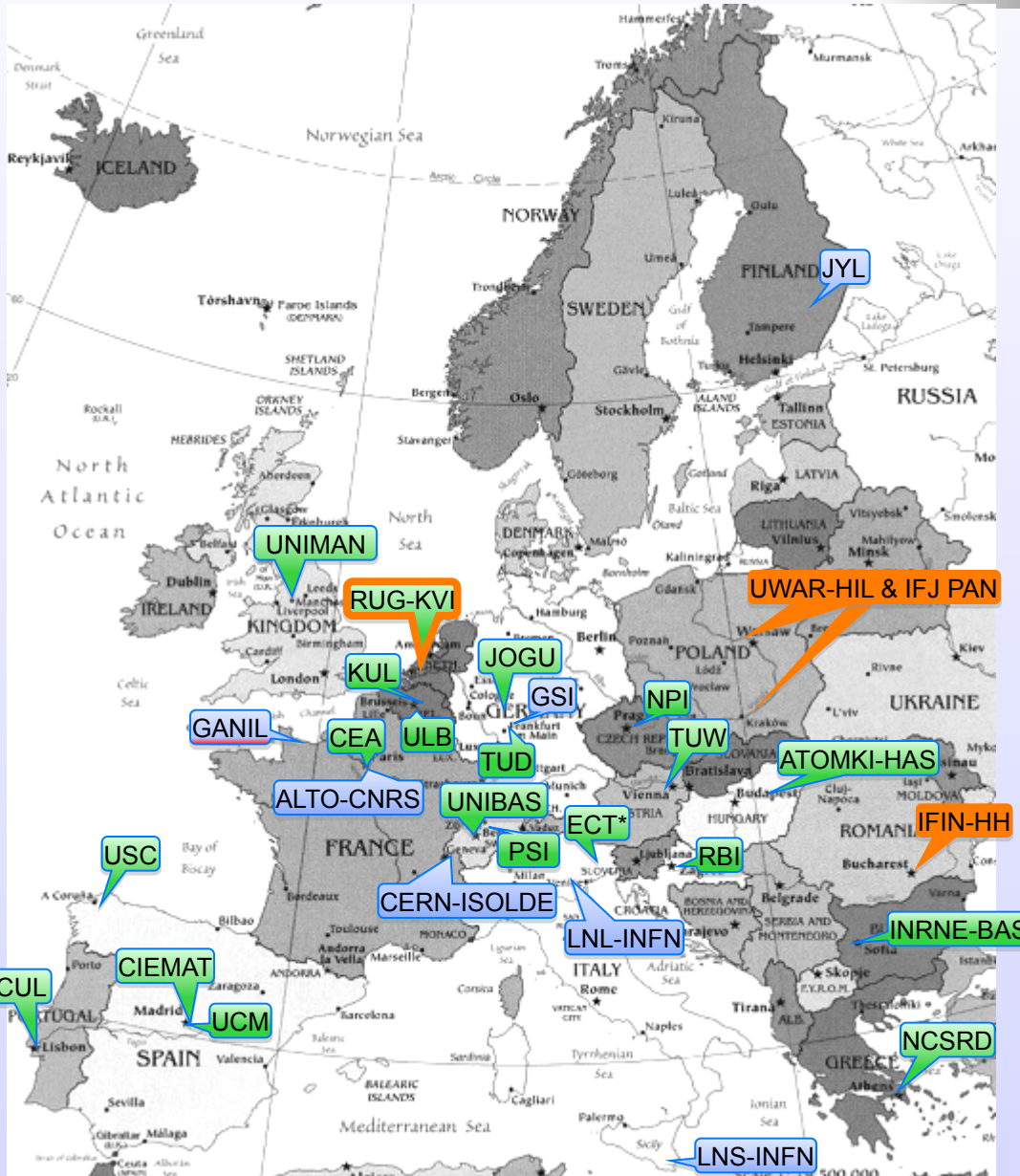
on behalf of Muhsin Harakeh (ENSAR Coordinator)

and

the ENSAR management group (FISCO)

The ENSAR 2 proposal aims at:

- Supporting the access costs to the research infrastructures at the highest possible level and \gg than few % of real operational cost today
- Supporting the scientists, especially the young researchers, participating in experiments at these infrastructures
- Supporting the novel instrumentation and theory developments leading to strong improvements of the research infrastructures through Joint Research Activities
- Supporting the synergy of the community and promoting and facilitating the use of the research infrastructures through Networking Activities



7 ⇒ 8 TNA Facilities

29 ⇒ 40 beneficiaries
≥ 18 countries

Community: 2700-3000 scientists and highly qualified engineers

Close collaboration with infrastructures outside Europe:

- Japan: RIKEN & RCNP
- China: IMP Lanzhou
- United States: NSCL & ANL
- Canada: TRIUMF
- South Africa: iThemba

Preparation of Horizon 2020 ENSAR 2 proposal

- ✓ **Creation of the Scientific Steering Committee with representatives of ENSAR2 TNA facilities and experts of their scientific fields: beginning of March 2013**

	<i>representative</i>	<i>e-mail</i>	<i>expert</i>	<i>e-mail</i>
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ENSAR & ENSAR 2

- *ENSAR started on Sept. 1, 2010*
- *End of the ENSAR project August 31, 2014*
- **Pre-proposal for ENSAR 2 as response to the EC consultation sent in October 2012**
- **Call for new ideas: deadline on [April 15, 2013](#)**
 ↗ about 10 new ideas (JRA, NA) received so far

ENSAR 2 New Ideas (preliminary)

Networks:

- **A network on small-scale accelerator facilities**
- **A network on nuclear medicine**
- **A network on fundamental interactions**
- **A network on clustering phenomena in nuclei**
- **A network FAIR-Net on nuclear structure activities related to FAIR**
- **A special emphasis is foreseen in the large networking done by theory and their computer facilities**

ENSAR 2 New Ideas (preliminary)

Joint Research Activities (1/2):

- **JRA on nuclear astrophysics**
- **Networking and Joint Research activities connected to current projects selected by the ERANET-NuPNET: GANAS, NEDENSAA and FATIMA (R&D on detectors), EMILIE (EURISOL technologies) and SARFEN (nuclear theory)**
- **JRA on development of actinide targets for ISOL facilities**

ENSAR 2 New Ideas (preliminary)

Joint Research Activities (2/2):

- **EURISOL JRA with proposed tasks on:**
 - ↗ **High vapour flow ion-source and target material development**
 - ↗ **Development of low beta SC-cavities**
 - ↗ **Chart and calculations of RIB intensities for EU facilities**
 - ↗ **Development of EBIS ion sources**
 - ↗ **Development of magnetic shields for SC - RF cavity**
 - ↗ **Development of Arc-ECRIS ion-source for RIB**

**Preparation of this JRA is coordinated by
EURISOL Project Office**

ENSAR 2 EC Request

- **EC financial contribution request: ≥ 15 M€**
 - ↗ Transnational Access Activities: ~50%**
 - ↗ Networking Activities: ~15%**
 - ↗ Joint Research Activities: ~35%**

Preparation of Horizon 2020 ENSAR 2 proposal Next steps

- **Call for new ideas: deadline on [April 15, 2013](#)**
↗ about 10 new ideas (JRA, NA) received so far
- **Presentation of new ideas during the ENSAR Town Meeting, Warsaw, Poland – [June 17 to 21, 2013](#)**
- **ENSAR 2 proposal to be prepared (end of 2013/ beginning of 2014) and submitted as soon as EU Horizon 2020 call appears**

Thank you for your attention