



HORIZON 2020  
RESEARCH INFRASTRUCTURES

H2020-INFRAIA-2014-2015

INFRAIA-1-2014-2015 INTEGRATING AND OPENING EXISTING NATIONAL AND REGIONAL RESEARCH  
INFRASTRUCTURES OF EUROPEAN INTEREST



ENSAR2  
EUROPEAN NUCLEAR SCIENCE AND APPLICATION RESEARCH 2

*GRANT AGREEMENT NUMBER: 654002*

DELIVERABLE D1.1 - DISSEMINATION

Version: 2.0  
Author: Ketel TURZÓ  
Date: 10/01/2017

*PROJECT AND DELIVERABLE INFORMATION SHEET*

ENSAR2 Project Ref. N <sup>o</sup>	654002
Project Title	European Nuclear Science and Application Research 2
Project Web Site	<a href="http://www.ensarfp7.eu/">http://www.ensarfp7.eu/</a>
Deliverable ID	D1.1
Deliverable Nature	Report
Deliverable Level*	PU
Contractual Date of Delivery	February 28, 2017
Actual Date of Delivery	
EC Project Officer	Mina KOLEVA

\* The dissemination levels are indicated as follows: PU – Public, PP – Restricted to other participants (including the Commission Services), RE – Restricted to a group specified by the consortium (including the Commission Services). CO – Confidential, only for members of the consortium (including the Commission Services).

*DOCUMENT CONTROL SHEET*

Document	Title: Dissemination	
	ID: D1.1	
	Version: 2.0	
	Available at: <a href="http://www.ensarfp7.eu/">http://www.ensarfp7.eu/</a>	
	Software Tool: Microsoft Office Word 2007	
	File: ENSAR2_D1.1_v1	
Authorship	Written by:	Ketel TURZÓ, GANIL
	Contributors:	
	Reviewed by:	M.N. Harakeh & M. Lewitowicz, GANIL
	Approved by:	

*DOCUMENT STATUS SHEET*

Version	Date	Status	Comments
0.0	20/12/2016	For internal review	M.N. Harakeh & M. Lewitowicz
1.0	10/01/2017	For internal review	M.N. Harakeh & M. Lewitowicz
2.0	12/01/2017	Submitted on EC Participant Portal	M. Koleva
		Final version	

**Document Keywords**

Keywords	ENSAR2, Dissemination, Communication, Scientists, Society
----------	---

**Disclaimer**

This deliverable has been prepared by Work Package 1 (FISCO2 - Financial and Scientific Organisation 2) of the Project in accordance with the Consortium Agreement and the Grant Agreement n°654002. It solely reflects the opinion of the parties to such agreements on a collective basis in the context of the Project and to the extent foreseen in such agreements.

**Copyright notices**

© 2016 ENSAR2 Consortium Partners. All rights reserved. This document is a project document of the ENSAR2 project. All contents are reserved by default and may not be disclosed to third parties without the written consent of the ENSAR2 partners, except as mandated by the European Commission contract 654002 for reviewing and dissemination purposes.

All trademarks and other rights on third party products mentioned in this document are acknowledged as own by the respective holders.

*TABLE OF CONTENTS*

List of acronyms and abbreviations.....	4
Executive Summary .....	5
Introduction.....	5
Section 1 – Dissemination of scientific results .....	5
Section 2 - Communication measures for promoting the project and its findings .....	6
Conclusion .....	7

*LIST OF ACRONYMS AND ABBREVIATIONS*

GANIL	Grand Accélérateur National d'Ions Lourds, France
FISCO2	FInancial and SCientific Organisation 2
MIDAS	MInimisation of Destructive plASma processes in ECRIS
NuPIA	Nuclear Physics InnovAtion
NUSPIN	NUclear SPectroscopy INstrumentation
NuSPRASEN	Nuclear Structure Physics, Reactions, Astrophysics and Superheavy Elements Network
PSeGe	R&D on Position-Sensitive Germanium detectors for nuclear structure and applications
SATNuRSE	Simulations and Analysis Tools for Nuclear Reactions and Structure in Europe
EURISOL	EUROpean ISOL facility
NA	Networking Activity
JRA	Joint Research Activity

## *EXECUTIVE SUMMARY*

It is of high importance for research institutions as ENSAR2 beneficiaries to optimise the dissemination and communication actions towards scientists and society. Beyond creating scientific knowledge, it is essential to ensure its diffusion for further scientific developments and collective benefit of economy and society. Towards this aim, a specific plan is presented with first actions performed in 2016. This plan displays the various aspects that are/will be developed during the ENSAR2 project concerning:

- dissemination of scientific results as publications, workshops, conferences, hands-on trainings, actions towards industry, specific web sites, and
- communication to the layman as creation of specific web sites or contribution to general web sites, public events (science festivals, lectures, etc.)

## *INTRODUCTION*

A crucial part of scientific work is dissemination and communication of results, towards scientists and towards society. The aim is to maximise the benefit generated by research work in the short and long terms. This specific activity can take multiple shapes, from a presentation in a conference to participation in a Science picnic. This diversity is necessary in order to reach a maximum of persons who could be interested for professional or personal reasons.

Within the framework of the ENSAR2 project, we propose here a Dissemination and Communication plan. This plan is presented with its status twelve months after the start of ENSAR2. It will evolve until the end of the project.

## *SECTION 1 – DISSEMINATION OF SCIENTIFIC RESULTS*

Institutions participating in ENSAR2 have as their ultimate objective publication of their scientific results in renowned international journals, and, where applicable, dissemination of these results to other scientific communities and the public as well. For each NA or JRA work package, its Steering Committee (SC) will discuss the scientific results and the best possible way of publishing them with consensus among the participants in that activity. The reports of the activities that will be produced for the EC will be placed on the website of ENSAR2. In case of results of possible exploitation by the industry, the matter will be discussed in the Steering Committee. In addition to management of the complex consortium, the NA FISCO2 will be responsible for the dissemination of knowledge and outreach activities to society in general. The NA NuPIA will help with the outreach activities to disseminate ENSAR2 innovation actions to industry. FISCO2 will act in this respect for all participants in this Integrated Activity. Education and training of young nuclear physicists is foreseen in several JRAs and NAs. Hands-on training organised in MIDAS NA in 2016 with ENSAR2 support:

- MIVOC method and/or highly charged plasma diagnostics (JYFL, Finland): First training 5-7/12/2016 and second 7-9/12/2016
- Iron beam production with ECR4 ion source using oven technique (GANIL, France): First training – 15-17/11/2016

The participants in ENSAR2 deem the publication of results of importance not only for the scientific community, but also for reaching out to society and industry. This is clearly a main objective of ENSAR2. The multidisciplinary applications and some of the work packages have direct benefit to society. In case of major discoveries of importance for the wide scientific community and the public, press releases will be issued to ensure a strong and

appropriate impact. The coordinator and management of ENSAR2 will actively encourage and monitor the broad implementation of the techniques developed by the participants in the various activities. The ENSAR2 website (<http://www.ensarfp7.eu/>) was set up to record and disseminate the technical advances.

The dissemination of knowledge within the community will take place also via specific workshops and collaboration meetings organised by several JRAs and NAs.

Major scientific events held in 2016 with ENSAR2 support:

- 13<sup>th</sup> Russbach School on Nuclear Astrophysics - March 6-12, 2016 - Russbach, Austria
- International Workshop on "In-Vivo Dosimetry" - May 19-20, 2016 - LMU Munich, Germany
- Carpathian Summer School of Physics 2016 - June 26 – July 9, 2016, Sinaia, Romania
- NUSPIN Workshop 2016 – June 27 – July 1, 2016 – San Servolo, Italy
- ENSAF workshop on Accelerator operation and Management – October 19-21, 2016 – CNA Sevilla, Spain
- IV International GEANT4 School - October 23-28, 2016 – Belgrade, Serbia
- NuSPRASEN workshop – December 6<sup>th</sup>, 2016 – CERN, Switzerland

Two town meetings will be organised by FISCO2 for the whole community, the first time thirty months after the start of ENSAR2 and a second time at its end. In these meetings, the achievements and highlights of each work package will be presented and discussed. These workshops and meetings will be very useful for the community members, in particular the large number of PhD students and young researchers, who benefit from access to ENSAR2 Research Infrastructures and use of their facilities not only informing them on achieved results but also about the impact on improvement of access to Research Infrastructures.

## *SECTION 2 - COMMUNICATION MEASURES FOR PROMOTING THE PROJECT AND ITS FINDINGS*

### **Communication towards scientists**

As presented above, the internal communication will be ensured by workshops, collaboration meetings, town meetings and scientific publications in all JRAs and NAs and those resulting from TNA to ENSAR2 RIs. ENSAR2 scientists will be strongly encouraged to present their results in international conferences. For a broader impact, the ENSAR2 web site will communicate about all scientific events and publications.

Several work packages of ENSAR2 will organise trainings and schools, as NAs MIDAS, NUSPIN, and NuPIA and JRAs PSeGe, and SATNuRSE.

In EURISOL JRA, a chart of intensities of available radioactive ion beams at ENSAR2 research infrastructures will be created to improve the distribution of information to users.

In addition, the NuPIA NA will organise specific communication actions for innovation, creating a communication kit to present ENSAR2 innovation activities in specific booths during international conferences.

### **Communication towards the layman**

Information on and promotion of Science towards the public are necessary to transmit the passion for Science and explain the importance of Research. There is a great public interest in new information about the structure of matter and how it has been generated. However, the layman has often a negative view of Nuclear Physics due to nuclear weapons and to problems with nuclear waste connected with nuclear energy. To counter that, the European excellent nuclear science and its positive application aspects should be emphasised, especially applications dedicated to health, and innovations resulting from research.

In order to promote and communicate about the project, many activities are planned during ENSAR2 reaching a wide public of students and laymen in European countries.

## Actions:

- Website for layman:  
<http://nupex.eu/>: this website developed by NuPECC (the Nuclear Physics European Collaboration Committee) in English promotes Nuclear Structure, Nuclear Astrophysics and Applications of Nuclear Science for the layman. ENSAR and ENSAR2 accepted the task to translate the website into other European languages. NUPEX website exists currently in Spanish, and Romanian versions, and partly in French, Italian and Polish versions. The translation of the website into different European languages will be pursued and expanded.
- Wikipedia, Scholarpedia:  
Update of the information about Nuclear Structure, Nuclear Astrophysics and Applications of Nuclear Science.
- Public events - participation in public events celebrating Science such as the following examples:
  - Science festivals: <http://www.ganil-spiral2.eu/leganil/actualites/le-ganil-participera-a-12019edition-normande-la-fete-de-la-science-2016-du-8-au-16-octobre>
  - Science picnic in Poland: <http://www.pikniknaukowy.pl/AboutPicnic>
  - Series of lectures:  
[https://www.gsi.de/presse/veranstaltungen/wissenschaft\\_fuer\\_alle.htm?no\\_cache=1](https://www.gsi.de/presse/veranstaltungen/wissenschaft_fuer_alle.htm?no_cache=1)
  - Researchers' Night: <http://www.venetonight.it/>
  - 'Open house' days...

*CONCLUSION*

As presented here, the ENSAR2 Collaboration has a Dissemination and Communication plan that includes a large variety of actions towards scientists and society. In such way, it will guarantee an efficient knowledge transfer. This plan will be regularly updated along ENSAR2 duration. The corresponding actions will be recorded through the continuous reporting: deliverables and milestones, publications, and dissemination actions.