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# ASGARD

## Advanced Fuels for Gen IV Reactors: Reprocessing and Dissolution


Contract Number: 295825

### DELIVERABLE D 1.3.2 COMMUNICATION ACTION PLAN – UPDATE 2015

#### EVALION

Author(s): P. Koran, M. Stilijanova, J.Heller, P.Scully

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WP Leader	DM Leader	Coordinator
<b>P.Scully</b>	<b>T. Retegan</b>	<b>Ch. Ekberg</b>
		

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Dissemination level			
PU	Public	<b>X</b>	
RE	Restricted for specific group		
CO	Confidential (only for ASGARD partners)		

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1.3	04/04/13	Koran	publications added
1.4	17/02/14	Koran, Retegan, Heller, Scully	2014 Annual update
1.5	10/03/15	Stilijanova, Koran, Heller, Scully	2015 Annual update

## Relevant domain(s) and workpackage(s)

Tick **ALL** ☐ or select in the following table:

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Coordinator:	Christian Ekberg
EC Officer:	Michel Hugon, Roger Garbil
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Coordinator contact:	+46-31-7722801, <a href="mailto:che@chalmers.se">che@chalmers.se</a>
Administrative contact:	+420 245 008 599, <a href="mailto:asgard.admin@evalion.cz">asgard.admin@evalion.cz</a>
Online contacts:	<a href="http://www.asgardproject.eu">www.asgardproject.eu</a> <a href="mailto:info@asgardproject.eu">info@asgardproject.eu</a>
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# EXECUTIVE SUMMARY

The Communication Action Plan represents a more detailed description of activities and tasks briefly described in the DoW in frame of **WP1.3 – Dissemination, exploitation and networking**. This document identifies and organizes the activities to be performed and dissemination channels to be used in order to promote ASGARD project aims and targets, and to disseminate the project outcomes worldwide. The Communication Plan introduces strategy for identification of the target groups and key stakeholders of the project, definition of the communication channels, description of the dissemination materials to be developed and details of the targeted events and conferences of the project. The visual identification lists all graphical elements of the project, such as the project logo and other tools to be used within the project promotion.

The Communication Action Plan is to be considered a “living” document – it will be regularly updated according to project progress and actual needs and opportunities to make the project more visible.

# 1 INTRODUCTION

The aim of the dissemination work package (WP1.3 Dissemination, exploitation and networking) is to disseminate ASGARD's goals, progress and results to interested and potentially interested parties at national and international levels. This work package will enable presentation of the project outcomes for further exploitation and examine their possible applications. It will also create links with other European or international projects in order to assure cross-fertilization within the research community.

Work package 1.3 covers the full duration of the project; four partners are directly involved in the organization and realization of various types of promotional activities while the others will support them and contribute to dissemination of project objectives and results mainly through their participation on various scientific events and networking.

The below table shows the allocation of PMs by Beneficiary:

<b>Partner</b>	<b>PMs</b>	<b>Role in WP1.3</b>
CHALMERS	3	Representation of the consortium,
NNL	6,3	WP leader, overall planning and coordination of the project promotion, identification of target groups' representatives, End-user database
CTU	2	Networking
EVALION	2	Administrating webpage, elaboration of dissemination materials, support in IPR issues, updating Communication Plan

## 2 OBJECTIVES, TASKS AND EXPECTED RESULTS

### 2.1. OBJECTIVES

The main objective of WP1.3 is to guarantee dissemination of knowledge achieved by the project and its results into the defined target groups, represented mainly by the nuclear community. Reaching this objective requires identification, approaching and management of key target groups represented mainly by nuclear industries, key research organizations and the nuclear technical community as a whole. Dissemination of the project results also includes production and publishing of promotional materials for different target groups. Networking with related projects, initiatives and platforms will be given special attention in order to maximize the impact of the project and to utilize potential synergies.

### 2.2 WP ACTIVITIES

The work to be carried out within WP1.3 has been divided into 4 tasks covering all areas related to project dissemination, exploitation of results and networking. Their definitions are summarized below.

#### **Task 1.3.1: End users management (partners: NNL, CHALMERS, EVALION)**

Main target institutions will be identified in the beginning of the project. **End Users Database (D1.3.1) will be established by NNL and managed** throughout the project. ASGARD will use the stakeholder database to monitor the level of engagement with target groups and record feedback. **The database will be available to project partners in the restricted area of ASGARD website.** NNL will be responsible for the task. EVALION will keep the End Users Database updated throughout the project duration and assure distribution of project results to interested parties.

Duration: M3-M48

#### **Task 1.3.2: Dissemination and external communication (partners: NNL, EVALION)**

A number of ways can be used to achieve good communication, such as: information on project webpage and other reachable webpages and portals, brochures and leaflets, press releases, TV and radio broadcasting, scientific papers, presentations, posters, personal communication, educational materials resulting from other WPs, project logo and ASGARD corporate identity.

The target groups will be continuously informed about the project, with key events opened up to invited speakers and attendees. Publication of the results from ASGARD will be encouraged from all participants and a number of papers will be produced. Annually revised Communication Action Plan (D1.3.2) will be used as basis for optimized and efficiently managed communication of the project. Annual Public Reports (D1.3.3) and (final) Executive Summary Reports delivered by DM2-DM4 will be used for communication purposes addressing broad public audience.

All partners will be involved in this task, with NNL taking the lead and EVALION supporting for creation of dissemination materials and administering the webpage.

Duration: M1-M48

### **Task 1.3.3 Networking (NNL, CHALMERS, CTU)**

This task will provide connections with other European networks and organizations (SNE-TP, ENEN, TSO, etc.) and relevant EU projects. The networking, especially with ENEN representatives will be ensured by already well established relations between ASGARD partners and ENEN. Additionally, strong links will be promoted from the very beginning with the present FP7 ACSEPT project. The networking will provide information exchange and timely feed-back on the impact of ASGARD results. Two International Workshops will be organized during the project, the first one two years into the project and the second one at the end of the project. Also presentations will be delivered or small workshops/sessions held at bigger international events and conferences in nuclear or energy field (such as e.g. FISA, GLOBAL, European Nuclear Conference, etc.).

Networking will be coordinated by NNL, CHALMERS and CTU. All partners are expected to contribute in this Task.

Duration: M1-M48

### **Task 1.3.4 Exploitation and Intellectual Property Management (CHALMERS, EVALION)**

An Exploitation Plan will be produced describing the key opportunities for implementation of the project outputs, within the EU and what the requirements will be to development any technology to the point of application. The plan will be based on around a Technology Roadmap format for each of the exploitation paths. Intellectual Property Management Strategy will be produced as a part of the Exploitation Plan. It will detail how each of the programme participants and partnering organizations will be able to extract value out of any IP generated in the project. CHALMERS will compile the final deliverable - D1.3.6. The Exploitation Plan based on all partners' inputs and requirements. EVALION will support CHALMERS in the area of IPR.

Duration: M13-M48



## 2.3 EXPECTED RESULTS – PROJECT WP3.1. DELIVERABLES

D1.3.1 Project Presentation (M3); responsible partner: CHALMERS

D1.3.2 Communication Action Plan (M6, M14, M26, M38), responsible partner: EVALION

D1.3.3 End Users Database (M9); responsible partner: NNL

D1.3.4 Annual Public Report (M16, M28, M40); responsible partner: EVALION/CHALMERS

D1.3.5 First International Workshop (M24); responsible partner: CTU

D1.3.6 Second International Workshop (M48); responsible partner: NNL

D1.3.7 Exploitation Plan including Technology Roadmap and IPR strategy (M48); responsible partner: CHALMERS

### 3 TARGET GROUPS / END USERS

Target group (or stakeholder) can be defined as any group or individual who can be affected by the project results and objectives or who can affect them. The project will aim at four levels of dissemination: awareness, understanding, action and participation. **Awareness** will mainly involve delivering the main message of the project in relation to its aim and objectives, while **Understanding** will require providing more detailed information on the project purposes, methods and deliverables. **Action** means that the project products will be delivered to the target group for further use. **Participation** means that some members of the target group will be directly involved in some of the project activities. Dissemination of information is also necessary towards stakeholders who will offer any kind of support within the project duration. The target groups and levels of promotion activities towards them have been identified and are presented in the table below.

Target Group	Awareness	Understanding	Action	Participation
Nuclear industries (involved in IUG, others)	X	X	X	X
Research organizations (SAC and others)	X	X	X	X
University teachers and students (Summer schools, courses, papers)	X	X		X
General Public (Webpage, promotion)	X			
EU legislative and research bodies (EU promotion and networking)	X	X		
Relevant projects (networking)	X	X	X	X
Other related industry (promotion, webpage)	X			
Media (interviews, press releases)	X			

### 3.1. END USER DATABASE

The end user database has a relatively simple form of Excel table (delivered by NNL). The typical member of the database will be a company or institution but individuals can be included as well in reasonable cases. Each member of the database will be identified by official name, the contact person and e-mail (obligatory). Other means of contact can be added if necessary. Each organization will typically be represented by 1 person, but in some cases more people representing 1 institution can be included. The database will be used for distribution of the information about project progress and its results.

Contact will be made with CINCH project, where a very good start of similar database has been established including for example universities teaching nuclear chemistry and European facilities in nuclear field.

The database has been established and is stored on Ping Pong in “DM1/WP1.3/End Users Database” folder. It will be populated by consortium members. The table will be administered by AMO (new entries will be sent to the AMO for update).

Population of the database has been slow to date with approximately 10 individuals being identified. During the Cluj meeting in January 2015 the Project Coordination Committee agreed that there should be one more effort made to populate the database. NNL agreed to contact each of the Work package leaders to secure names.

## 4 COOPERATION WITH OTHER PROJECTS, NETWORKING

To achieve the highest potential impact and discover multilateral synergies, ASGARD has been cooperating with other initiatives on national, European and international scale. Some of the initiatives identified are the following:

- FAIRFUELS – Fabrication, Irradiation and Reprocessing of Fuels and Targets for Transmutation – FAIRFUELS is looking to develop, fabricate and test innovative nuclear fuels containing Minor Actinides ([www.fp7-fairfuels.eu](http://www.fp7-fairfuels.eu)). Joint Winter school with FAIRFUELS was organized in January 2013.
- ACSEPT – Actinide Recycling by Separation and Transmutation – The ACSEPT project objective is to develop chemical separation processes compatible with fuel fabrication techniques ([www.acsept.org](http://www.acsept.org)). Finished in 2012.
- ACTINET – Integrated Infrastructure Initiative for Actinide Science – The objective of this project is to reinforce the networking of existing European infrastructures in actinide sciences, and to facilitate their efficient use by the European scientific community ([www.actinet-i3.eu](http://www.actinet-i3.eu)). Finished in 2012.
- CINCH – Cooperation in Education in Nuclear Chemistry is focused on cooperation in education of the nuclear chemistry in EU in cooperation with Russia ([www.cinch-project.eu](http://www.cinch-project.eu)). Joint Winter school organized in January 2013, the project is now finished.
- SNETP – Sustainable Nuclear Energy – Technological Platform – promotes research, development and demonstration of the nuclear fission technologies ([www.snetp.eu](http://www.snetp.eu)).
- Euratom – The European Atomic Energy Community - helps to pool knowledge, infrastructure, and funding of nuclear energy. It ensures the security of atomic energy supply within the framework of a centralized monitoring system ([www.ec.europa.eu](http://www.ec.europa.eu)).
- SACSESS - Safety of Actinide Separation processes. FP7 EURATOM SACSESS project will provide a structured framework to enhance the fuel cycle safety associated to P&T. In addition, safety studies will be performed for each selected process to identify weak points to be studied further. These data will be integrated to optimise flowsheets and process operation conditions. Follow-up of ACSEPT project.
- TALISMAN - Transnational Access to Large Infrastructure for a Safe Management of Actinide. FP7 EURATOM project will foster the networking between existing

European infrastructures in actinide sciences open them widely to any European scientists by offering and supporting transnational access to unique facilities. To meet its objectives, TALISMAN will animate and organize a network of actinide facilities across the EU that will increase our knowledge for a safer management of actinides fostering training and education. Follow-up of ACTINET.

- CINCH-II – Cooperation in Education and Training in Nuclear Chemistry. FP7 EURATOM CINCH-II project aims at mobilization of the identified existing fragmented capabilities to form the critical mass required to implement the courses and meet the nuclear chemistry postgraduate education and training needs of the European Union. [www.cinch-project.eu](http://www.cinch-project.eu)
- PELGRIMM - PELGRIMM is a 4 year project, addressing Minor-Actinide (MA) bearing fuel developments for Generation IV Fast Reactor Systems to support the Strategic Research Agenda (SRA) of the European Sustainable Nuclear Energy – Technology Platform (SNE-TP). [www.pelgrimm.eu](http://www.pelgrimm.eu)

#### 4.1 METHOD OF COOPERATION

Some of the ASGARD partners are also involved in the ACSEPT, CINCH, CINCH-II, SACSESS, TALISMAN, FAIRFUELS and PELGRIMM projects. Thus the information flow between these projects and ASGARD is ensured. The other organizations involved in the mentioned projects will be informed about ASGARD via delivering of promotional materials, personal discussions and invitations to the events organized in frame of ASGARD project and vice versa.

Common meetings and courses will be negotiated where possible and appropriate. The first joined event of the ASGARD project was the first ASGARD summer school organized together with FAIRFUELS and CINCH in Netherlands in January 2013.

DM1 Leader (Teodora Retegan) is a member of the mirror group for "SET Plan Energy Education and Training Initiative" since March 2012.

In 2014, ASGARD will continue collaboration with SACSESS project (launched in March 2013) and with CINCH-II project (started in June 2013). The collaboration will be aimed mainly at joint schools and seminars during winter 2013-2014. Joint meetings and related training events have been organized with CINCH-II (ASGARD internal school – Reprocessing Course in June 2013 in Warsaw, Fuel Characterization and Isotope Separation courses in January 2014 in Stockholm). CINCH-II and ASGARD project meetings have been organized jointly in order to enable exchange of knowledge and optimize travel costs.

Networking with the USA partners will be intensified. Established contacts are as follows:

- INL (Idaho National Laboratory) – Dr. Terry Todd
- Washington State University – Prof. Ken Nash
- University of California, Irvine – Prof. Mikael Nilsson
- University of California, Berkeley – Prof. Heino Nitsche

In the year 2015 cooperation with CINCH-II project will continue for example - “Working with Plutonium” training will take place in Chalmers University, Sweden in May.

## 5 DISSEMINATION CHANNELS

In order to effectively reach the targets for dissemination and to maximize the visibility of the project, the partners will use a broad spectrum of dissemination channels. The project (public) website will play an important role in the project dissemination strategy. The website will be complemented by Press Releases, leaflets, posters, scientific articles as well as presentations at various events that bring together the key industry players. On the other hand, only publishable information can be used for wide promotion, which in case of ASGARD limits the number of relevant releases.

### 5.1 EXISTING LOCAL CHANNELS

Each ASGARD partner will use its existing dissemination channels. As minimum requirement each partner will:

- **Include a link from project partner website** to <http://www.asgardproject.eu>

Update: by February 2015, 7 partners’ webpages contain information about the project.

	info about ASGARD	link to ASGARD webpage
CHALMERS	YES	NO
JÜLICH	NO	NO
ICHTJ	YES	NO
NNL	NO	NO
PSI	NO	NO
NRG	NO	NO
KIT	NO	NO
CEA	NO	NO
CTU	YES	NO
KTH	YES	NO
EVALION	YES	YES
WESTINGHOUSE	NO	NO

INCDTIM	YES	YES
UNIVLEEDS	YES	NO
UMAN	NO	NO
UCAM	NO	NO

- **Assure the distribution of the project press releases and other promotional materials on the local/national level** through existing mailing lists, university online conferences etc.
- **Include at least one article in an organization-related publication** (website, newsletter or other) over the course of the project

## 5.2 ASGARD WEBSITE

CHALMERS and EVALION have been developing a website available at [www.asgardproject.eu](http://www.asgardproject.eu). Website statistics will follow the patterns of use, number of visitors, most accessed directories and top visited pages. In 2014, the webpage was redesigned by EVALION. Content was completely transferred.

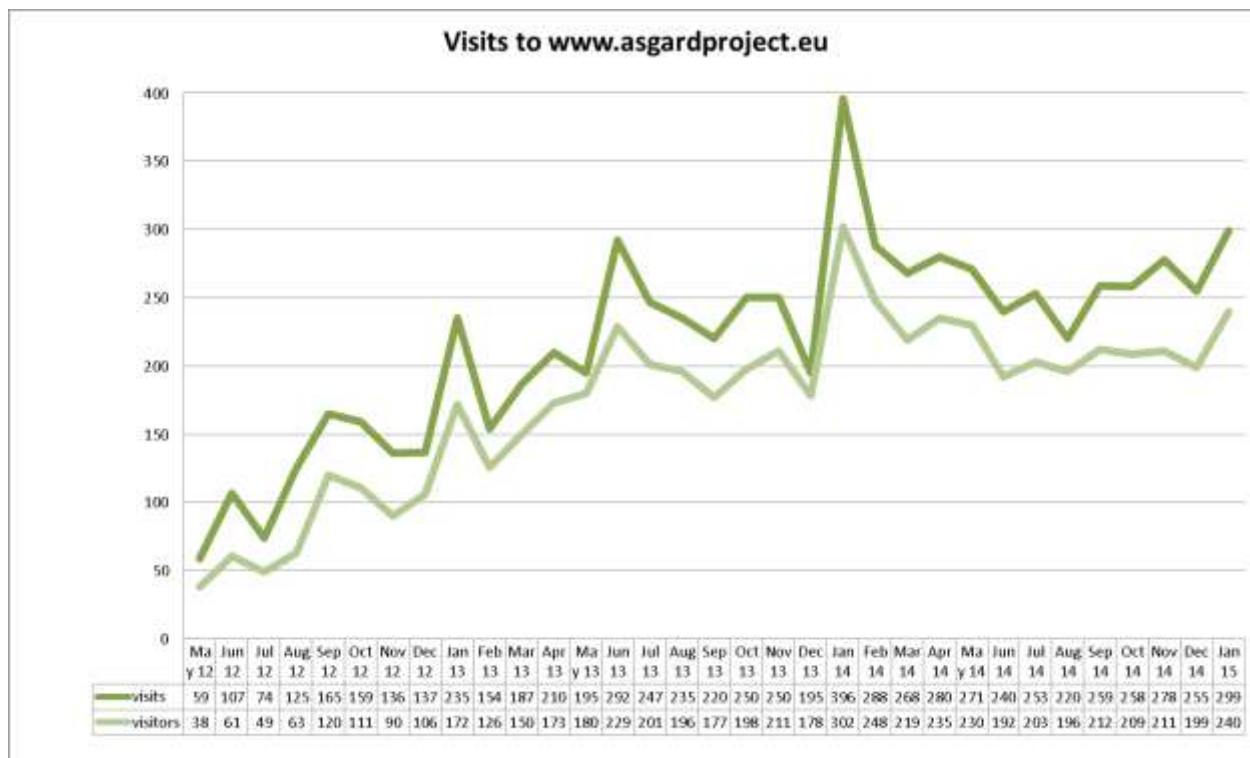


Sections and overall design of the website is described in D1.1.2 Quality Plan - Project Handbook. For dissemination and communication purposes, the following functions and pages within the website are mainly used:

- Calendar of ASgard events at <http://asgardproject.eu/events>
- Short news at <http://asgardproject.eu/news>
- Contact Form at <http://asgardproject.eu/contact>.

As of February 2015, the ASgard webpage statistics are as follows:





### 5.3 DISSEMINATION MATERIALS

Dissemination materials consist of:

- **Project of logo** and visual identity of the project elaborated by CHALMERS
- **ASGARD standard presentation** (PPT)
- **Project leaflet**
- Production of **posters** (one general poster was already elaborated by CHALMERS and EVALION with contribution of other partners; if needed, other posters may be created for special occasions)
- The Annual Public Report will be produced by EVALION and will be available on the website for download.

### 5.4 MEDIA CHANNELS

**Press campaign and publication of scientific articles and press releases** form an important part in the dissemination strategy. On-line and off-line magazines, scientific newspapers and blogs will be the main media channels. Mass media channels such as TV, radio will be targeted only in special occasions, probably in the final stage of the project. Within the period, total of 32 dissemination actions were performed. It includes 9 papers, 11 poster presentations and 12 oral presentations. Number of papers will significantly increase once the papers submitted to RadChem 2014 conference (took place in May 2014) are published. At least two other papers (UNIVLEEDS) are near to submission. References to the dissemination actions are given below.

As the project enters its final delivery phase, publication activity is expected to increase which will be made available through the website.

Consideration is being given to exploring alternative dissemination channels such as social media.

#### Papers

1. *S. Bourg (CEA), S. Delpech (CNRS), C. Ekberg (Chalmers) - FISA 2013 Conference - From Fuel to Fuel: Dissolution, Partitioning and Fuel Manufacturing, (Conference proceedings).*
2. *M. Pukari and M. Takano, Sintering and Characterization of ZrN and (Dy,Zr)N as Surrogate Materials for Fast Reactor Nitride Fuel, Nucl. Mater. 444 (2014) 7.*
3. *M. Pukari, M. Takano and T. Nishi, Sintering and Characterization of (Pu,Zr)N, J. Nucl. Mater. 444 (2014) 421.*
4. *T. Pavelková, V. Čuba, F. Šebesta: Photo-induced low temperature synthesis of nanocrystalline UO<sub>2</sub>, ThO<sub>2</sub> and mixed UO<sub>2</sub>-ThO<sub>2</sub> oxides, J. Nucl. Mater. 442, 2013, 29-32.*
5. *Christian Ekberg, Eva deVisser-Tynova, Teodora Retegan, Mark Sarsfield and Janne Wallenius, ASGARD, proceedings of Sustainable Nuclear Energy Conference SNEC, 9-11<sup>th</sup> of April 2014, Manchester, UK.*

6. *Christian Ekberg, Stephane Bourg, Eva deVisser-Tynova, Andreas Geist, Teodora Retegan, Mark Sarsfield and Janne Wallenius, ASGARD, proceedings of the 17th Radiochemical Conference RADCHEM, 11th-16th of May, 2014, Mariánské Lázně, Czech Republic.*
7. *James Shepherd, Michael Fairweather, Peter Heggs, Bruce Hanson: Modelling the Oxidation of Spent Uranium Carbide Fuel, Proceedings of the 24th European Symposium on Computer Aided Process Engineering – ESCAPE 24 June 15-18, 2014, Budapest, Hungary. © 2014 Elsevier B.V.*
8. *Deptuła, M. Brykale, M. Rogowski, T. Smolinski, T. Olczak, W. Łada, D. Wawszczak, A.G. Chmielewski, K.C. Goretti: Fabrication of Uranium Dioxide Microspheres by Classic and Novel Sol-Gel Processes. 2014 MRS Spring Meeting & Exhibit, April 21-25, 2014, San Francisco, California.*
9. *Ancuța Balla, Damian Axente, Cristina Marcu: Determination of the activation parameters for the catalytic reduction of the sulfuric acid to sulfur dioxide”, INCDTIM, submitted for publication.*

## 5.5 EVENTS

One of the main dissemination channels to be used is participation on events and organising ASGARD project own workshops.

### 5.5.1 DISSEMINATION ACTIONS AND PUBLICATIONS SO FAR (FEBRUARY 2015):

Partner(s)	Name of event or media	Date and location	Activity:	Type of audience
Chalmers	Interview in Bohsbladet	12. 01. 2012, Sweden	Gen. Proj. presentation	General Public
Chalmers	Press release	31. 01. 2012, Sweden	Gen. Proj. presentation	General Public
Chalmers	Article at klimatsmart.se	31. 01. 2012, Sweden	Gen. Proj. presentation	General Public
Chalmers	Interview-Swedish radio	8. 02. 2012, Sweden	Gen. Proj. presentation	General Public
Chalmers	Article in Today's Energy Solutions	8. 02. 2012, Sweden	Gen. Project presentation	General Public
Chalmers	Article in Ny Teknik	9. 02. 2012, Sweden	Gen. Project Presentation	General Public
Chalmers	Article in energyheter.se	9. 02. 2012, Sweden	Gen. Project Presentation	General Public
Chalmers	1 <sup>st</sup> Electra workshop	6.-7.03. 2012, Sweden	Concepts of Fuel and production	Scientific Community

			recycling	
<b>LEEDS</b>	22 <sup>nd</sup> European Symposium on Computer Aided Process Engineering	17.-20.06. 2012, United Kingdom	The ASGARD poster presented at the event	Scientific Community
<b>INCDTIM</b>	The XXXII Romanian Chemistry Conference	3.-5. 10. 2012, Romania	Presentation	Scientific Community
<b>INCDTIM</b>	The 18 <sup>th</sup> National Conference with internat. participation – “Progress in Cryogenics and Isotope Separation”	October 2012, Romania	Presentation	Scientific Community
<b>Chalmers</b>	Chalmers internal news	17. 10. 2011	Gen. Project Presentation	General Public
<b>Chalmers</b>	Kemivarlden Biotech	27.10.2012	Article – gen. project presentation	General Public
<b>NRG</b>	Nordic Nuclear Materials Forum for Gen IV Reactors	January 2012	General project presentation	NOMAGE4 project seminar participants
<b>Chalmers</b>	3 <sup>rd</sup> General Assembly of SNETP	Nov 29-30, 2012 Warsaw, Poland	Poster presentation	Open to public and external stakeholders
<b>Chalmers</b>	SNETP newsletter No.10	July 2012	Project profile	Scientific community
<b>KTH, Chalmers</b>	ATALANTE 2012 conference	September 2012, Montpellier, France	Presentation of work performed by KTH and Chalmers	Scientific community
<b>ICHTJ, JÜLICH</b>	ChemSession’12 – 9 <sup>th</sup> Warsaw’s Seminar of PhD students,	Warsaw, Poland, May 10th, 2012,	Poster: Synthesis of Kernels of Uranium Dioxide by Internal Geletion	Polish scientific community
<b>ICHTJ,</b>	NuMat 2012: Nuclear	Osaka, October	Poster: Synthesis of Uranium Dioxide	Scientific

<b>JÜLICH,</b>	Materials Conference	22-25, 2012	Microspheres doped by surrogates of MA by Complex Sol-Gel Process (CSGP)	community
<b>INCDTIM</b>	Central European Journal of Chemistry	10(6) 2012	Paper: "Catalytic reduction of sulfuric acid to sulfur dioxide", authors: Ancuța Balla, Cristina Marcu, Damian Axente, Gheorghe Borodi, Diana Lazăr	Scientific community
<b>INCDTIM</b>	The XXXIIth National Conference of Chemistry	Oct 3-5, 2012 Romania	"Determination of the activation energy for different catalysts in the sulfuric acid reduction to sulfur dioxide", authors: Ancuța Balla, Damian Axente, Cristina Marcu	Scientific community
<b>INCDTIM</b>	The XVIIIth ICIT Conference, Progress in cryogenics and isotopes separation	Oct 25-26, 2012, Călimănești-Căciulata Romania	Paper: "Nitride Nuclear Fuels", author D. Axente	Scientific community
<b>INCDTIM</b>	Central European Journal of Chemistry	Submitted for publication	"Determination of the Arrhenius parameters for different catalysts in the sulfuric acid reduction to sulfur dioxide", authors: Ancuța Balla, Cristina Marcu, Damian Axente	Scientific community
<b>JÜLICH, CEA</b>	ATALANTE 2012 - Nuclear Chemistry for Sustainable Fuel Cycles	Sep 2-7, 2012 Montpellier	Oral presentation: The co-conversion of minor actinides in uranium based fuel by internal Gelation. Paper by S. Neumeier, H. Daniels, C. Schreinemachers,	Scientific community

			G. Modolo, D. Bosbach, G. Leturcq, S. Grandjean	
<b>KIT-INE</b>	ATAS workshop 2012	November 5th – 7th 2012, Helmholtz-Zentrum Dresden Rossendorf, Germany	Poster presentation: M. Cheng, M. Steppert, C. Walther, “MonOm species distributions in acidic solution measured by Electrospray Ionization Mass-Spectrometry”	Scientific community
<b>UMAN</b>	Nuclear FiRST Doctoral Training Centre Winter School	January 8-10, 2013 Buxton, UK	poster presentation: “Molten salt reprocessing of carbide fuels”	Scientific community
<b>KIT-INE</b>	2013 Spring Meeting of the German Physical Society	March 18-22, 2013, Hannover, Germany	Oral presentation: "Mo_nO_m species distributions in acidic solution measured by Electrospray Ionization Mass-Spectrometry" by M.Cheng	Scientific community
<b>JÜLICH</b>	E-MRS 2013 Spring Meeting	27.-29.05.2013, Strasbourg, Poster presentation	E. L. Ebert, A. Bukaemskiy, S. Neumeier, G. Modolo, D. Bosbach, Dissolution behavior of MgO and Mo based ADS inert matrix fuel	Scientific community
<b>JÜLICH</b>	Progress in Nuclear Energy	Accepted in May 2013	E. L. Ebert, A. Bukaemskiy, S. Neumeier, G. Modolo, D. Bosbach, Dissolution behavior of MgO and Mo based ADS inert matrix fuel	Scientific community

<b>ICHTJ</b>	6th All-Polish Conference on Radiochemistry and Nuclear Chemistry	April 21-24, 2013, Poland, Kraków-Przegorzały, oral presentation	M. Brykala et al. : Synthesis of uranium dioxide microspheres doped by neodymium oxide by Complex Sol- Gel Process (CSGP)	Scientific community
<b>NRG</b>	ACTINIDES 2013, Karlsruhe	accepted for oral presentations	G. Ménard, E. de Visser – Týnová: “Dissolution of innovative irradiated fuels: the case of HELIOS and CONFIRM”	Scientific community
<b>CTU</b>	28th Miller conference on radiation chemistry	Israel, 2013, p. 36	T. Pavelkova , V. C uba, F. S ebesta: Radiation-induced preparation of nuclear fuels, Book of Abstracts	Scientific community
<b>ICHTJ</b>	NuMat 2012: Nuclear Materials Conference	Poster	M. Brykala, A. Deptula, T. Olczak, G. Modolo, Ch. Schreinemachers; Synthesis of Uranium Dioxide Microspheres doped by surrogates of MA by Complex Sol-Gel Process (CSGP)	Scientific community
<b>KIT-INE</b>	DPG Frühjahrstagung 2013	Hannover, March 18th – 22nd, 2013	Meijie Cheng, Michael Steppert, Clemens Walther, “MonOm species distributions in acidic solution measured by Electrospray Ionization Mass-Spectrometry”	Scientific community
<b>CEA, CHALMERS</b>	Joint FISA and EURADWASTE 2013 conferences	14-17 October 2013 - Vilnius, Lithuania	S. Bourg (CEA), S. Delpech (CNRS), C. Ekberg (Chalmers) - FISA 2013 Conference - From Fuel to Fuel: Dissolution, Partitioning and Fuel	Scientific community

			Manufacturing, (Conference proceedings)	
<b>KTH</b>	Nucl. Mater. 444 (2014) 7	Issues 1–3, January 2014, Pages 421-427	M. Pukari and M. Takano, Sintering and Characterization of ZrN and (Dy,Zr)N as Surrogate Materials for Fast Reactor Nitride Fuel	Scientific community
<b>CTU</b>	J. Nucl. Mater. 442, 2013, 29–32.	Issues 1–3, November 2013	T. Pavelková, V. Čuba, F. Šebesta: Photo-induced low temperature synthesis of nanocrystalline UO <sub>2</sub> , ThO <sub>2</sub> and mixed UO <sub>2</sub> –ThO <sub>2</sub> oxides	Scientific community
<b>ICHTJ, JÜLICH</b>	International European Nuclear Young Generation Forum	June 17-21, 2013, Sweden, Stockholm, presentation	Microsphere of Uranium Dioxide Obtained by Complex Sol-Gel Process (CSGP) as Potential Fuels for Transmutation of Minor Actinides – M.Brykała, A.Deptuła, M.Rogowski, G.Modolo	Scientific community
<b>ICHTJ, JÜLICH</b>	IAEA, Technical Meeting on Advanced Actinide Recycle Technologies	November 18- 20, 2013, Austria, Vienna, presentation	Complex Sol-Gel Process (CSGP) as a method to synthesis of mixed oxide fuels - M.Brykała, A.Deptuła, M.Rogowski, Ch.Schreinemachers , G.Modolo.	Scientific community
<b>KIT-INE</b>	GDCh-Tagung 2013	Darmstadt, September 1 <sup>st</sup> - 4 <sup>th</sup> 2013, Darmstadt, Germany, presentation	M. Cheng, M. Steppert, C. Walther, “On the dissolution behavior of new Mo fuel matrices for Generation IV Reactors”,	Scientific community
<b>JÜLICH, KIT- INE</b>	GDCh-Tagung 2013	Darmstadt, September 1 <sup>st</sup> - 4 <sup>th</sup> 2013, Darmstadt, Germany,	E. L. Ebert, E. Lichte, M. Cheng, M. Steppert, C. Walther, A. Bukaemskiy, F. Sadowski, G.	Scientific community



		presentation	Modolo, D. Bosbach, „Auflösungsverhalten von MgO- und Mo-basierten ADS Inertmatrixbrennstoffen“	
<b>CTU</b>	13. Mikulášské setkání ČNS	4. - 6.12.2013, Brno, Czech Republic, oral contribution	K.V. Mareš, J. John, F. Šebesta: Caesium separation from the solution issuing the reprocessing of CerMet fuels based on molybdenum (in Czech)	Scientific community
<b>PSI</b>	Proc.Int. Conf. Global-2013.	October 2013, Salt Lake City, USA. Conference contribution.	Shcherbina N., Kulik D., Kivel N., Potthast H., Günther-Leopold I. Partitioning of fission products from irradiated nitride fuel using inductive vaporization.	Scientific community
<b>CTU</b>	17th Radiochem. conference	May 11-16, 2014, Czech Republic, Mariánské Lázně Booklet of Abstracts, poster presentation	K.V.Mareš, J.John, F.Šebesta: Purification of isotopically enriched <sup>92</sup> Mo from reprocessing of CerMet Mo-based transmutation fuel	Scientific community
<b>JULICH</b>	First joint workshop on f-element chemistry	28-30 April, 2014, University of Manchester, UK Poster presentation	E.L.Ebert, A.Bukaemskiy, F.Sadowski, F.Brandt, M.Cheng, M.Steppert, C.Walther, G.Modolo, D.Bosbach: Dissolution behavior of MgO and Mo based Inert Matrix Fuel for the transmutation of plutonium and minor actinides	Scientific community
<b>JULICH</b>	17th Radiochemical conference	11-16 May 2014, Czech Republic, Mariánské Lázně	E.L.Ebert, A.Bukaemskiy, F.Sadowski, F.Brandt, G.Modolo, D.Bosbach: Dissolution studies	Scientific community

		Poster presentation	on molybdenum-based inert matrix fuel targets for the transmutation of minor actinides	
<b>JULICH</b>	17th Radiochemical conference	11-16 May 2014, Czech Republic, Mariánské Lázně Poster presentation	E.L.Ebert, A.Bukaemskiy, F.Sadowski, F.Brandt, G.Modolo, D.Bosbach: Dissolution behaviour of MgO based Inert Matrix Fuel for the transmutation of plutonium and minor actinides	Scientific community
<b>JULICH</b>	17th Radiochemical Conference	11-16 May 2014, Czech Republic, Mariánské Lázně Poster presentation	R.Middendorp, C.Schreinemachers, S.Neumeier, G.Modolo, D.Bosbach: Investigations of the uranyl and neodymium(III) adsorption behavior on ion Exchange resins for the weak-acid resin process	Scientific community
<b>UNIVLEEDS</b>	European Symposium on Computer Aided Process Engineering	15-18 June 2014, Hungary, Budapest Poster presentation	J.Shepherd, M.Fairweather, P.Heggs, B.Hanson: Modelling the Oxidation of Spent Uranium Carbide Fuel	Scientific community
<b>UNIVLEEDS</b>	Sustainable Nuclear Energy Conference	9-11 April 2014, UK, Manchester Poster presentation	J.Shepherd, M.Fairweather, P.Heggs, B.Hanson: Modelling the Oxidation of Spent Uranium Carbide Fuel	Scientific community
<b>UMAN</b>	17th Radiochemical Conference	11-16 May 2014, Czech Republic, Mariánské Lázně Poster presentation	Z.Bikbajeva, C.Sharrod: Reprocessing of carbide fuels in molten chlorides	Scientific community
<b>CHALMERS and EVALION</b>	FISA 2013 Conference	14-17 October 2013, Lithuania, Vilnius Poster presentation	Ch.Ekberg, M.Stiljanova: General ASGARD poster presentation	Scientific community

<b>CTU and EVALION</b>	17th Radiochemical conference	11-16 May 2014, Czech Republic, Mariánské Lázně Poster presentation	J.John, P.Koran, M.Stilijanová: General ASGARD poster presentation	Scientific community
<b>CHALMERS</b>	Sustainable Nuclear Energy Conference SNEC	9-11 April 2014, UK, Manchester	General ASGARD poster presentation	Scientific community
<b>JULICH</b>	17th Radiochemical conference	11-16 April 2014, Czech Republic, Mariánské Lázně Oral presentation	E.L.Ebert,M.Cheng, M.Steppert,C.Walther, G.Modolo,D.Bosbach: Dissolution of Mo-based Cer-Met fuel:ESI-TOF MS speciation in nitric acid medium	Scientific community
<b>JULICH</b>	17th Radiochemical conference	11-16 April 2014, Czech Republic, Mariánské Lázně Oral presentation	C.Schreinemachers,A.A.Bukaemskiy,M.Klinkenberg,S.Neumeier, G.Modolo,D.Bosbach: Conversion of minor actinides in uranium based oxidic precursors by internal gelation	Scientific community
<b>NNL</b>	17th Radiochemical conference	11-16 May 2014, Czech Republic, Mariánské Lázně Oral presentation	C.Maher: Dissolution of titanium and uranium carbide	Scientific community
<b>NNL</b>	Element workshop	28-30 April 2014, UK, Manchester Oral presentation	T.Griffiths: Carbide dissolution experiments	Scientific community
<b>INCDTIM</b>	MRS Spring meeting and exhibit	21-25 April 2014, USA, San Francisco Oral presentation	A.Deptula,M.Brykala, M.Rogowski,T.Smolinski,T.Olczak,W.Lada,D.Wawaszczak,A.G.Chmielewski,K.C.Goretta: Fabrication of uranium dioxide microspheres by classic and novel sol gel process Oral presentation	Scientific community
<b>CTU</b>	17th Radiochemical conference	11-16 May 2014, Czech	T.Pavelková,V.Čuba, F.Šebesta: Photo and	Scientific

		Republic, Mariánské Lázně Oral presentation	radiation induced synthesis of nanocrystalline UO <sub>2</sub> , ThO <sub>2</sub> and mixed UO <sub>2</sub> -ThO <sub>2</sub> oxides Oral presentation	community
<b>CHALMERS, NMBU,UH</b>	Post-Fisa 2013 Workshop	October 2013, Lithuania, Vilnius Oral presentation	T.Retegan,X.Hou,L.S kipperud,T.Koivula: Scandinavian/Swedish approach to nuclear EandT-synergy between academia, research,industry regulators Oral presentation	Scientific community
<b>CEA</b>	17th Radiochemical conference	11-16 May 2014, Czech Republic, Mariánské Lázně Oral presentation	S.Bourg: Chemistry for the future nuclear fuel cycles Oral presentation	Scientific community
<b>ICHTJ, JULICH</b>	IAEA, Technical meeting on advanced actinide recycle technologies	18-20 November 2013, Austria, Vienna Oral presentation	M.Brykala,A.Deptula ,M.Rogowski,Ch.Sch reinemachers,G.Mod olo: Complex sol-gel proces as a method to synthesis of mixed oxide fuels Oral presentation	Scientific community
<b>IRS</b>	GDCh-Tagung 2013	1-4 September, 2013, Germany, Darmstadt	M.Cheng,M.Steppert, C.Walther: On the dissolution behavior of new Mo fuel matrices for Generation IV reactors Oral presentation	Scientific community
<b>CTU</b>	13 St.Nikolas meeting of Czech Nuclear Society	4-6 December 2013, Czech Republic, Brno	K.V.Mareš,J.John,F. Šebesta: Caesium separation from the solution issuing the reprocessing of CerMet fuels based on molybdenum (in Czech) Oral presentation	Scientific community
<b>PSI</b>	Global 2013	October 2013, USA, Salt Lake City	N.Shcherbina,D.Kuli k,N.Kivel,H.Pothast, I.Leopold-Gunter: Partitioning of fission	Scientific community

			products from irradiated nitride fuel using inductive vaporization Oral presentation	
<b>CHALMERS</b>	National radio	April 2015, Sweden, Göteborg	General project presentation, interview	General public
<b>CHALMERS</b>	National radio	May 2015, Sweden, Kristianstad	General project presentation, interview	General public

### 5.5.2 EVENTS TO BE ORGANIZED BY THE PROJECT

Two international workshops with participation of representatives of selected target groups are planned to be organized in frame of ASGARD project. Their timing reflects the necessity of discussing the concrete project results, which will not be available during the initial period of the project. **The first international workshop was therefore scheduled for the second year 2 of the project and the second workshop should take place during the final year of the project duration.**

**Another two events are ASGARD Summer Schools.** The first was organized jointly with FAIRFUELS and CINCH in January 2013 in Petten (Netherlands).

See details at <http://asgardproject.eu/news/2013/02/20/winterschool-2013>

ASGARD Internal training session (presented as ASGARD 2014 Winter School) was organized attached to the January 2014 ASGARD progress meeting in Stockholm. This training session combined two activities:

- Fuel Characterization course given by KTH (1.5 half days including the laboratory exercises)
- Stable Isotope Separation course given by INCDTIM (half day course).

12 students took part on the course.

### 5.5.3 SCHEDULE OF ASGARD EVENTS

The events are planned in detail on 6 months basis. However, preliminary timing of project meetings, summer schools and courses are planned in advance at least 12 months. The following table, which is also available on internal project portal (Ping Pong), includes current (March 2013) status of the events' planning.

		Meetings	Venue	Organizer	Dates	Other events	Reports
2012	1	Kickoff Meeting, GB meeting, PCC meeting	Uddevalla	Chalmers	11.-13.1.		Project Presentation
	2						
	3						
	4						
	5						
	6	1 <sup>st</sup> Project Plenary and PCC Meeting	Jachymov	EVALION	11.-14.6.		1st PIR and DAR
	7						
	8						
	9		Montpellier		2-7.9.	Atalante 2012 – ASGARD session	
	10						
	11						
	12						2nd PIR and DAR
2013	13	2 <sup>nd</sup> Project Plenary and PCC Meeting, GB meeting	Petten	NRG, EVALION	28.1.-1.2.	1st ASGARD S.School, with FAIRFUELS and CINCH projects	
	14						
	15						
	16						Annual Public Report
	17						
	18	3 <sup>rd</sup> Plenary and PCC Meeting, SAC + IUG review	Warszawa, Poland	ICHTJ	10-14.6.	Internal ASGARD School, Warszawa	3rd PIR and DAR, WPS1, 1st PR
	19						
	20						
2014	21						
	22						
	23						
	24						
	25	4th Plenary and PCC Meeting, Interim SAC Meeting	Stockholm, Sweden	KTH		Fuel Characterization and Isotope Separation Courses, Stockholm	4th PIR and DAR
	26						
	27						

2015	28	3 <sup>rd</sup> EC Reporting Period					Annual Public Report
	29		Marianske lazne, CZ	CTU	12.- 16.5.	1st ASGARD Int. Workshop – NRC 2014 conference 12.-16.5.	
	30		5th Plenary and PCC Meeting, 3rd GB Meeting	Lancaster, UK	NNL	2nd Summer School?	5th PIR and DAR, 2nd WPS, 2nd PR
	31						
	32	3 <sup>rd</sup> EC Reporting Period					
	33						
	34						
	35						
	36						
	37		6th Plenary and PCC Meeting	Cluj, RO		INCDTIM	6th PIR and DAR
	38						
	39						
	40						Annual Public Report
	41						
	42		7 <sup>th</sup> Plenary and PCC Meeting, 4 <sup>th</sup> GB Meeting	Villigen, SUI		PSI	7th PIR and DAR
	43						
	44						
	45						
	46						
	47						
	48		Final Plenary, PCC and GB Meeting, Final SAC Meeting			2nd Int. Workshop	8th PIR, DAR, 3rd WPS, 3rd PR, Final Report
	49		3rd EC REVIEW MEETING	Brussels		to be confirmed	

### 5.5.4 CONFERENCES IN 2015

The following table includes events where ASGARD will/can be promoted in the year 2015.

EVENT	DATES				VENUE
11TH INTERNATIONAL CONFERENCE OF COMPUTATIONAL METHODS IN SCIENCES AND ENGINEERING –ICCMSE 2015	2015	Mar	20	23	Athens, Greece
45emes Journees des Actinides	2015	Apr	15	19	Prague, Czech Republic
World Nuclear Fuel Cycle	2015	Apr	21	23	Prague, Czech Republic
First SACSESS International Workshop: 'Towards safe and optimised separation processes, a challenge for nuclear scientists'	2015	Apr	22	24	Warsaw, Poland
AMNT 2015 — 46th Annual Meeting on Nuclear Technology	2015	May	5	7	Berlin, Germany
Used Fuel Management Conference	2015	May	5	7	Orlando, FL, USA
62nd Annual Industry Conference and Supplier Expo	2015	May	12	14	Washington, DC
North American Young Generation in Nuclear	2015	May	12	14	Washington, DC
Gordon Research Seminar: Nuclear Chemistry - Advancing Nuclear Science Through Structure and Reactions	2015	May	30	31	New London, USA
Gordon Research Conference on Nuclear Chemistry	2015	May/Jun	31	5	New London, USA
Radiological Effluents and Environmental Workshop (formerly RETS/REMP & EPRI Groundwater Protection)	2015	Jun	22	25	San Diego, USA
2015 ANS Annual Meeting	2015	Jun	7	11	San Antonio, USA
International Conference on Operational Safety	2015	Jun	23	26	Vienna, Austria
World Nuclear Association Symposium	2015	Sep	9	11	London, UK



TopFuel 2015	2015	Sep	13	17	Zurich, Switzerland
Processes in Isotopes and Molecules	2015	Sep	?	?	Cluj-Napoca, Romania
GLOBAL 2015 - International Nuclear Fuel Cycle Conference	2015	Sep	20	24	Paris, France
Progress in Cryogenics and Isotope Separation	2015	Oct	?	?	Calimanesti-Caciulata, Romania
2015 ANS Winter Meeting and Nuclear Technology Expo	2015	Nov	8	12	Washington, USA
International Conference on Research Reactors: Safe Management and Effective Utilization	2015	Nov	16	20	Vienna, Austria
MRS - Scientific Basis for Nuclear Waste Management	2015	Nov	2	6	Montpellier, France
NFSM-2016 — Nuclear Fuels and Structural Materials	2016	Jun	12	16	New Orleans, USA
9th INTERNATIONAL CONFERENCE ON NUCLEAR AND RADIOCHEMISTRY – NRC9	2016	Aug/Sep	29	2	Helsinki, Finland

## 6 ARCHIVING DISSEMINATION MATERIAL

ASGARD project partners aim to properly administer and preserve the dissemination material, activities planned and completed for internal purposes and for the European Commission.

### 6.1 ARCHIVING STRATEGY

ASGARD will use several tools for administration and archiving. The actual version of this plan will be available in the internal area of project website. Specific “folder” is dedicated to WP1.3. Partners have the possibility to upload all their dissemination materials or send them directly to WP leader. Partners are responsible to inform the WP leader of all their dissemination related activities and properly administer it. NNL is responsible for following the planned activities and collect all materials from the related partners after the activity took place. The materials are stored online on the project portal.

### 6.2 ARCHIVING TOOLS

#### *Archiving of electronic materials:*

All presentations, event materials, recorded interviews will be preserved in two places: Firstly at the partner responsible for the activity and secondly at the WP leader, NNL. Project website as the main tool for monitoring, reporting, management and dissemination of project will serve as online archiving space for partners. All partners will upload their dissemination materials in order to have them available as annexes to the regular project progress reports.

#### *Archiving of printed materials:*

All printed dissemination materials will be archived by NNL in at least 2 copies (Leaflets, posters, Newsletters, etc.). The partners are therefore asked to provide at least 2 copies of all printed promotional material to the WP leader as soon as possible.

### 6.3 MATERIALS TO ARCHIVE

The following materials should be archived *if available*.

#### *In case of events*

- Event brochure
- Event programme (highlighting ASGARD presentation)
- List of participants

- Pictures taken at the event
- Presentation held

#### *Press*

- Press releases published
- Articles published in any language (link and screenshots if online, copy of the newspaper/magazine if printed)
- Scientific papers (copy, pdf or similar)

#### *ASGARD workshops*

- Invitation to the event
- Programme
- List of participants
- List of lecturers
- Pictures taken at the event
- Presentations held
- Workshop/Conference material distributed
- Report on the event

#### *Online cooperations*

- Screenshots

## 7 VISUAL IDENTITY OF ASGARD

This section provides thumbs of the main promotional materials and tools available at the time of this report completion (or update). Full files are available online at [asgardproject.eu](http://asgardproject.eu) and/or on PingPong.

### 7.1. PROJECT WEBSITE:

In May 2014 the project webpage design was completely changed and the content was migrated from the previous version. The project website is available at <http://www.asgardproject.eu>



Figure 1 ASGARD website

## 7.2 LOGO



Figure 2 ASGARD logo

## 7.3 POSTER



Figure 3 ASGARD poster no. 1



## 7.4 LEAFLET

### Project partners

Chalmers University of Technology - project coordinator	(Sweden)
Forschungszentrum Jülich GmbH	(Germany)
Instytut Chemii i Techniki Jądrowej	(Poland)
National Nuclear Laboratory Limited	(United Kingdom)
Paul Scherrer Institut	(Switzerland)
Nuclear Research and Consulting Group	(Netherlands)
Karlsruher Institut für Technologie	(Germany)
Commissariat à l'énergie atomique et aux énergies alternatives	(France)
Česká vysoká škola technická v Praze	(Czech Republic)
Kungliga Tekniska Högskolan	(Sweden)
E.ON a.s.	(Czech Republic)
Westinghouse Electric Sweden	(Sweden)
Institut National de Recherche et de Développement pour la Technologie	(Romania)
University of Leeds	(United Kingdom)
University of Manchester	(United Kingdom)
University of Cambridge	(United Kingdom)

### Core information

ASGARD is a Large Scale Integrated Project supported by the EU within European Atomic Energy Community's 7th Framework Programme (FP7 2007-2011), ED-Grant Agreement No. 259825. Time Frame: January 2012 - December 2015 (duration 48 months)

### Contact

Christian Ekberg  
(project coordinator)

Chalmers University of Technology  
Nuclear Chemistry  
Department of Chemical and Biological Engineering  
S-412 96 Göteborg, Sweden

Tel: +46-31-7722801  
Fax: +46-31-7722801  
email: [info@asgardproject.eu](mailto:info@asgardproject.eu)  
Website: [www.asgardproject.eu](http://www.asgardproject.eu)

**ASGARD**  
Advanced fuelS for  
Generation IV reActors:  
Reprocessing and  
Dissolution.

[www.asgardproject.eu](http://www.asgardproject.eu)

### Objective

ASGARD project's main objective is to provide a structured R&D framework bridging the research on fuel fabrication and reprocessing issues. The main focus will lie on future fuels for a sustainable nuclear fuels cycle. The main problem today is to tie the recycling of the nuclear fuel to the fabrication of new fuels.

### Scope

In order to make nuclear power sustainable there is a clear need to close the fuel cycle and at the same time, if possible, find methods that shorten the storage time of the waste and increase energy utilization. New fuel reactor systems together with a fully developed recycling strategy are needed to achieve this ambitious goal.

The scope of the project is to bridge existing knowledge in nuclear fuel manufacturing with existing knowledge in separation techniques used for waste treatment and recovery and to investigate the production and behaviour of new novel and improve nuclear fuels for the next generation of nuclear reactors. The targeted result of the project itself is to interconnect the recycling of the nuclear fuel to the fabrication of new nuclear fuel. Both oxide, nitride and carbide fuels are addressed with focus on dissolution, reprocessing and fabrication behaviour.

### Expected results

Results from carbide fuel production and reprocessing will provide an insight into the safest and most economical carbide fuel design and establish the safest way to process carbide fuel while minimising waste production.

Concerning nitride fuels, the impact of carbon and oxygen impurities on the dissolution rate in nitric acid will be clarified. As data from the literature are ambiguous, these results will be of particular importance for industrial application of nitride fuels in Gen-IV systems. From the industrial perspective, an even more important result will be the ability to enrich N-15 at a sufficiently low cost, as well as to recover N-15 during the dissolution process. The feasibility of reaching this goal will depend on the required N-15 enrichment, the corresponding cost of enrichment, losses of N-15 in the fabrication process and the efficiency of N-15 recovery during dissolution. The ASGARD project will provide industrial objectives for the combined performance of these aspects.

### Societal impacts

Seen in this context, ASGARD contributes significantly to increasing the sustainability of nuclear energy by bridging the investigations of the fuel recycling research.

ASGARD will investigate the fabrication and dissolution behaviour of novel fuels for fast critical reactors. The knowledge advances of ASGARD will allow to Governments, European Utilities and Technology providers that there are several options to the manufacturing and recycling of the novel fuels. It is of vital interest for the project that the outcome will be meaningful for the fuel manufacturing industry. To analyse the results of ASGARD with respect to their applicability in industry, an Industrial Users Group is involved in the project.

Seen in this context the outline of the work on each of the fuel types will be:

DISSOLUTION CONVERSION FABRICATION  
of irradiated and non-irradiated fuel

The sustainability circle for nuclear fuel where ASGARD project fills the gap between the main focus of FP7 ACSEPT and FP7 FAIRFUELS projects.

### Organisation of the project

European Commission

Governing Board

Coordinator

Scientific Advisory Committee

Administrative Management Office

Industrial Users Group

Project Coordinator Committee

DM1: Management (Coordination and training)

DM2: Oxide fuels

DM3: Nitride fuels

DM4: Carbide fuels

Initiation: SNETP, ENEM

Projects: ACSEPT, ACTINET, CINCH, FAIRFUELS

Figure 4 ASGARD leaflet

## 7.5 STANDARD PPT TEMPLATE



Figure 5 Frontpage of official ASGARD presentation



## 8 PUBLICITY OBLIGATIONS

The main obligations of all project partners have been defined in Article II.12 of the Annex 2 of the Grant Agreement concluded between the coordinator and the European Commission. The partners should especially understand that:

- 1) **Any publicity**, including at a conference or seminar or any type of information or promotional material (brochure, leaflet, poster, presentation etc), **must specify that the project has received research funding from the European Union, EURATOM programme and display the official European emblem.** When displayed in association with a logo, the European emblem should be given appropriate prominence. This obligation implies no right of exclusive use. It is subject to general third-party use restrictions which do not permit the appropriation of the emblem, or of any similar trademark or logo, whether by registration or by any other means. Under these conditions, project partners are exempted from the obligation to obtain prior permission from the Commission to use the emblem. Detailed information on the EU emblem can be found on the European Commission web page.
- 2) **Any publicity** made by the beneficiaries in respect of the project, in whatever form and on or by whatever medium, **must specify that it reflects only the author's views** and that the European Union and Euratom programme are not liable for any use that may be made of the information.
- 3) **The Commission shall be authorised to publish, in whatever form and on or by whatever medium, the following information:**

the name of the beneficiaries; contact addresses of beneficiaries; the general purpose of the project in the form of the summary provided by the consortium; the amount and rate of the financial contribution foreseen for the project; after the final payment, the amount and rate of the financial contribution accepted by the Commission; the geographic location of the activities carried out; the list of dissemination activities and/or of patent (applications) relating to foreground; the details/references and the abstracts of scientific publications relating to foreground and, where provided pursuant to Article II.30.4 of the Annex 2, the published version or the final manuscript accepted for publication; the publishable reports submitted to it; any picture or any audiovisual or web material provided to the Commission in the framework of the project.

The consortium shall ensure that all necessary authorizations for such publication have been obtained and that the publication of the information by the Commission does not infringe any rights of third parties.

## 9 CONCLUSIONS

By following this strategy, it should be ensured that the dissemination efforts achieve the goals of broad awareness and utilisation of ASGARD results.