



NUGENIA-Status (March 2015)

International association dedicated to
safe, reliable and competitive nuclear
energy technology

NUGENIA is mandated by SNETP to coordinate
nuclear Generation II & III R&D

NUGENIA

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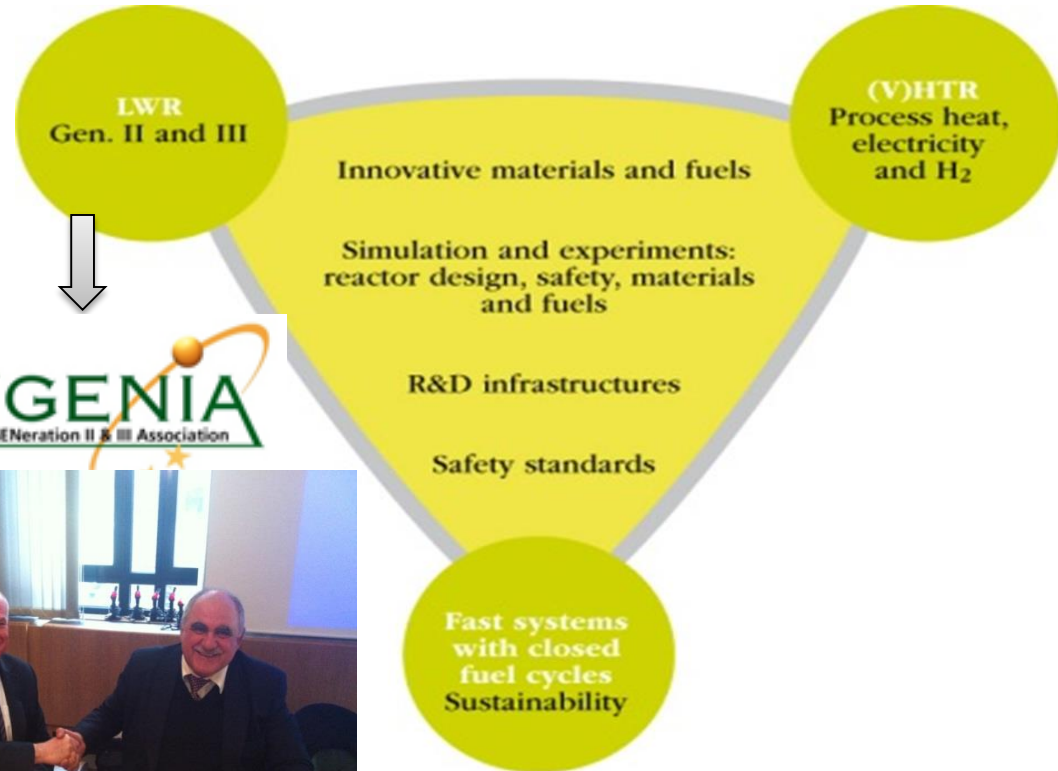
What is NUGENIA?



- NUGENIA is an **international non-profit association** founded under Belgian legislation in November 2011 and launched in March 2012
- Its **mission** is to be an integrated framework for **safe, reliable and competitive Gen II & III fission technologies**, which:
 - Fosters collaboration between industry, SMEs, RTOs, academia and technical safety organisations
 - Builds knowledge and expertise
 - Generates results with added value



NUGENIA operates under the mandate of SNETP since 2012



Brussels, 21 March 2012: Signature of the mandate

Who is NUGENIA?



Members: major nuclear stakeholders

- 102 full members and 4 honorary members from 24 countries (as of Feb' 2015): Industry, utilities, research institutions, SMEs and technical safety organisations



Honorary Members

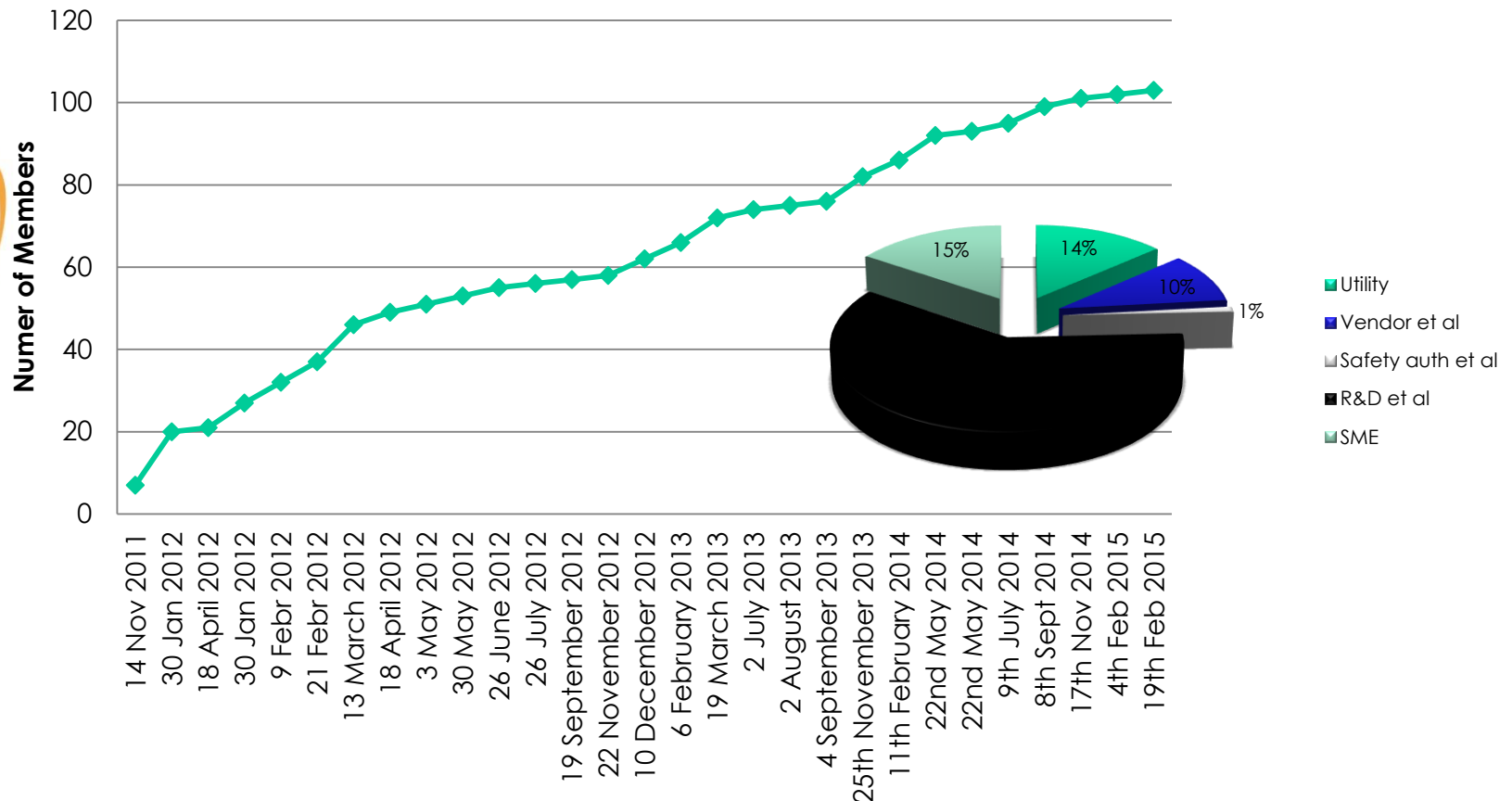


- 3 new members have been invited: COG, FNS, ENEN



Membership Development (Full Members-since the launch)

Membership development (full members)



Industry (Utility, vendor, suppliers, etc.) : 9 EU countries + China + Switzerland

SMEs : 9 EU countries + Ukraine

R&D : 15 EU countries + Canada, Japan, Russia, Republic of South Korea, Switzerland

Academia: 9 EU countries + Republic of South Korea

Technical Scope: 8 Technical Areas (TAs)

1. Plant Safety and Risk
 2. Severe Accidents
 3. Improved Reactor Operation
 4. Integrity of Systems, Structures and Component
 5. Fuel Development, Waste & Spent Fuel Management and Decommissioning
 6. Innovative LWR Design & Technology
 7. **Harmonisation**
 8. **In-Service Inspection and Qualification**
- } **Cross Cutting areas**

Many thanks to all TAL's and STAL's and their coordinator for the huge amount of work performed together on a voluntary basis to build a realistic and consensual R&D global vision

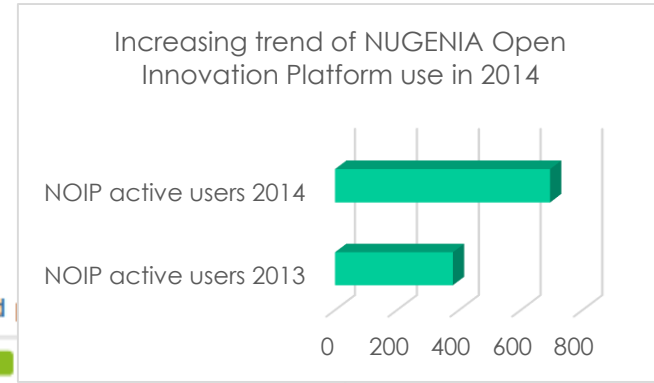
NUGENIA Project portfolio

- **2012-2014:** 17 collaborative projects with a total budget ~80M€ (60% from private and national sources, 40 from the EC-Euratom mainly) involving more than 50% of NUGENIA members:
 - **TA1: 2 projects running**
 - **TA2: 1 finished and 3 on-going**
 - **TA3: 1 finished**
 - **TA4: 6 finished and 5 on going**

- **Valorisation of the results:** Identification of 18 deliverables with high added value to the end-users (publications are being reviewed).

NUGENIA Project ideas

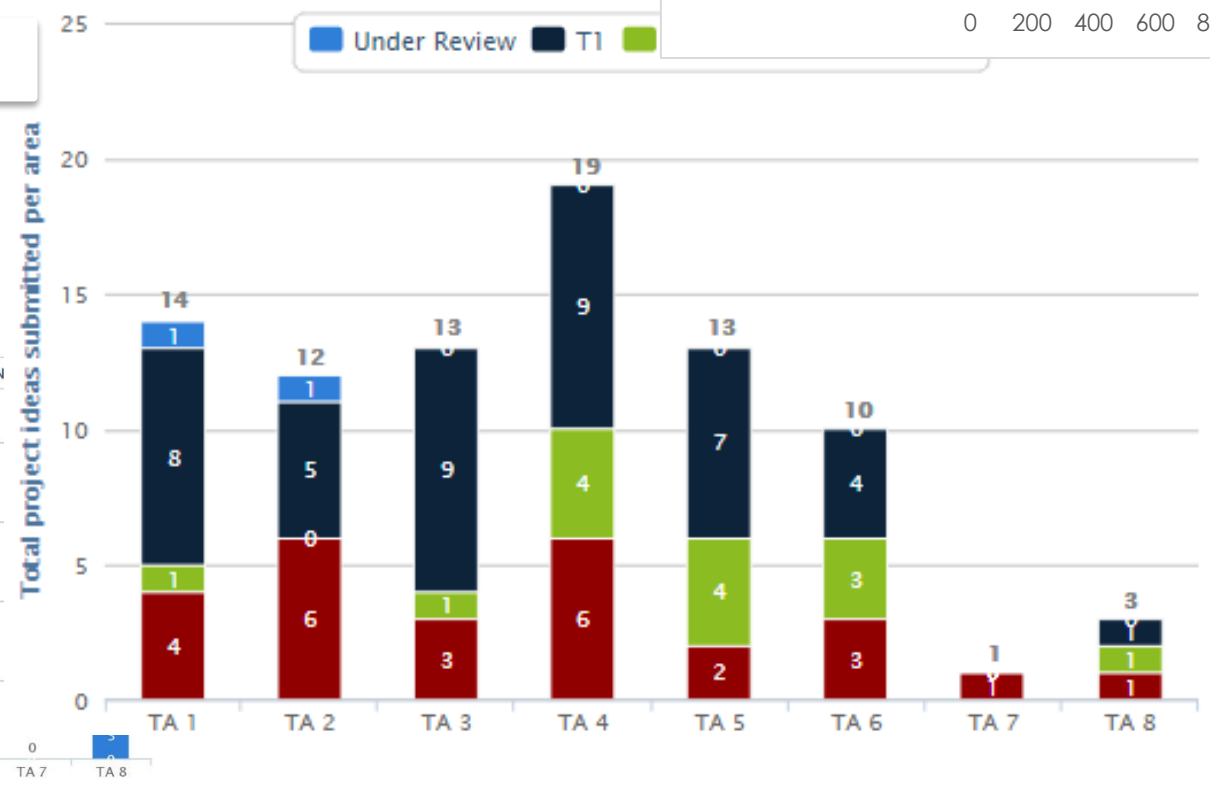
- NUGENIA Open Innovation Platform (NOIP) allowed identification of over 80 project ideas (more than 600 users)
- 26 project ideas labelled since May 2014



Early 2015

Status of submitted/published

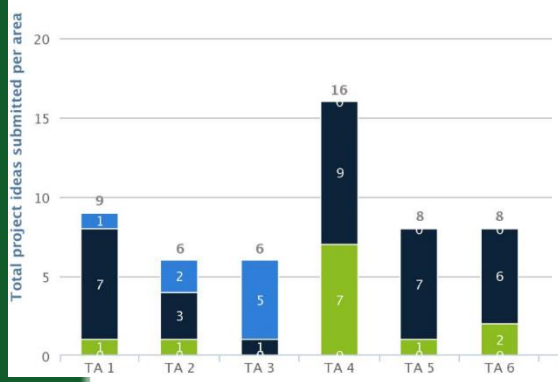
- Under Review
- T1
- T2



Early 2014

Submitted project ideas (per TA)

- T2
- Labelled NUGEN



NUGENIA activities:

Since September 2014



- Continuous Consolidation of NUGENIA portfolio: identification of deliverables with high added value to the end-users (12 publications are being drafted+ 4 are being edited)
- **Continuous gathering** of project ideas through the NOIP: more than **85 proposals** have been submitted and discussed
- 3 EXCOM meetings: evaluation of the project ideas to be labelised, **2 more proposals (26 in total)** have received the label so far: each of the proposal is followed/supported by an EXCOM member to identify a dissemination scheme
 - *24 proposals have been submitted to the H2020-NRFP call 2014-2015*
 - *4 have been retained, 17 are on the reserve list. and only 3 did not achieve the threshold; ways are being under consideration to facilitate the launch of these outstanding proposals*

- **NUGENIA call for proposals for mini R&D projects via the FP7 project NUGENIA+ on high level objectives listed in roadmap:**
 - ✓ *Improve safety in operation and by design*
 - ✓ *High reliability and optimized functionality of systems*
 - ✓ *High reliability of components*
 - ✓ *Improve modeling of phenomena in NPPs*
 - ✓ *Increase public awareness*
 - ✓ *Efficient integration of NPPs in the energy mix*
 - ✓ *Prepare the future to avoid technology obsolescence*
 - ✓ *Performance and ageing of NPPs for long term operation*
- Publication (mostly via Web pages) done on 18/9/2014:
- 26 Proposals have been submitted within the deadline (end of Nov'2014) from the whole nuclear community (including non-NUGENIA-members),
- 24 proposals meet criteria and have been evaluated by independent experts in January 2015.
- 14 proposals were successful evaluated and will be kicked off soon, which allows more than 50% of the members to be involved in this project

Next Events:

- **Publication of the results foreseen mid Feb'2015 (After EXCOM decision on 4&5th February 2015)**
- **NUGENIA organises its 4th General assembly on the 17th of March: a new EXCOM will be voted according to the status.**
- **NUGENIA holds its 1st stakeholders meeting in conjunction with the GENII,III, I V event on the 18th March:**
 - Information on the main achievements since its birth
 - Exchange on the knowledge management and technology transfert
 - Discuss on the competences needed to tackle the on-going/forthcoming challenges: operation lifetime management,
- **NUGENIA organizes its 4th annual Forum : 13 to 15 April 2015 at Ljubiana/Slovenia**
 - 4 scientific and technical sessions are foreseen (call for abstracts will be issued soon)
 - Project ideas dating: round table discussion will be moderated in each technical area.
 - Information on the on-going and just-launched projects
 - Kick –off of NuGENIA+ projects

2015: the year of strengthening

- **Increase the visibility of NUGENIA** through publications: release of NUGENIA Publications
- **Widen the vision:** release of the “Global Vision” document
- **More synergy between the technical areas:** Open FORUM to be held at Ljubljana from April 13 to 15, 2015
- **Open and continuous dialogue with all stakeholders:**
 - Stakeholders conference on March 18, 2015 at Brussels
 - Open SME day: Autumn 2015
 - Open Academia day: Winter 2015
 - Coordinators day: Winter 2015

Further

- **Facilitate the emergence of innovation**
- **Achieve projects with high added value to the community,**
- **Maintain and develop the needed skills, competences and infrastructures to tackle the upcoming challenges (LTO, new build, dismantling,)**
- **Strengthen the involvement of NUGENIA-bodies in the decision making process to:**
 - Prioritise the project topics;
 - Valorize the R&D results;
 - Increase the visibility of NUGENIA;
 - Establish balanced collaboration with international organisations;
 - Harmonise public and private R&D programming



Thank you for your attention

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