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GIF Engagement with the broader Nuclear Industry

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Engaging with Industry

- **GIF launched in 2001** - A multilateral forum focused on the R&D required to progress next generation of advanced nuclear technologies
- **The GIF Charter indicates next generation nuclear must be licenced, constructed and operated in a manner that will**
 - Provide competitively priced energy supply
 - Optimise natural resources
 - Keep existing safety imperatives
 - Address waste and proliferation resistance challenges
- **Generation IV technologies are now moving towards demonstration and deployment phases from viability and performance phases**
- **As such GIF, in line with existing stakeholder engagement strategies, proposes a further optimised approach for engagement with the Nuclear Industry using a suite of existing governance frameworks and engagement methodologies**

GIF Instruments of Collaboration

- Framework Agreement
- Systems Steering Arrangements
- Project Arrangements
- Data sharing / transfer agreements
- Material transfer / equipment loan / lease agreements
- GIF working groups and task forces
- Participating in GIF workshops and access to GIF publications



Key Principles for Engagement:

- *Structured collaboration mechanisms* that allow flexible and timely engagement;
- *Identification of crosscutting activities*, in addition to those already undertaken by the GIF working groups and task forces as the near-term opportunities;
- *Use of existing System Arrangements (SAs) and Project Arrangements (PAs)*;
- *All engagements with Nuclear Industry organisations being endorsed by at least one GIF member*;
- *More frequent consultations with relevant System Steering Committees (SSC's) and Project Management Boards (PMB's) on requirements for industry engagement for their specific areas*;
- *Openness to Nuclear Industry expectations* and thorough review of expressed expectations to check if collaborative activities are likely to meet them, at least partially, and to adapt GIF activities to better meet industry needs within the existing GIF framework;
- *Engagement with the Senior Industry Advisory Panel (SIAP) as advisors to help establish the optimum approach.*

Mechanisms already exist for engagement and as such collaborations with industry can occur in a timely fashion and through existing mechanisms although in a more streamlined manner.

Areas of mutual interest decided through GIF Governance Committees. Examples may include:

- Advanced Materials Manufacturing and Construction
- Common nuclear R &D infrastructures for nuclear validation, testing or demonstrations
- Risk informed methods and methodology
- Fuel
- Sustainability, taking lifetime management into account
- In-service inspection methodologies and associated instrument qualification
- Nuclear safety & reactor lifetime management of innovative designs
- Advanced reactor materials irradiation, development, and testing
- Code Validation, Modelling & Simulation and Benchmarking
- Optimization/harmonization of regulatory licensing processes.
- Instrumentation and control systems
- Non-electric nuclear heat applications and end user requirements
- Advanced reactor techno-economic assessments
- Supply readiness assessments

Guidelines for GIF / Industry Engagement

- GIF / Industry cooperation should;
 - Align with GIF goals driving Sustainability, Safety & Reliability, Proliferation Resistance & Physical Protection
 - Enable design maturity
 - Create mutual benefit
- For each collaboration;
 - Eligibility from within GIF active member countries
 - Industry participant referred by at least one GIF member
 - Industry participant are self-funded
 - Industry participant wishing to join are accepted by consensus with existing members of appropriate GIF governance arrangement (Project Arrangement, Working Group, Task Force etc.)
 - All participants adhere to established GIF policies and procedures
 - Industry participant recognized as represent own views, and not the views of the Implementing Agent / Government that has referred them.

Final Thoughts

- GIF will continue with R&D
- We are working hard to pivot towards demonstration and deployment through engagement with industry
- The window is here and we need to act now
- We aim to learn from industry and also be useful to you
- Let's continue to engage in this important dialogue and hear from you on industry requirements

Thank you!



GIF Forum with Industry 2022

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