

# INTERNATIONAL PROJECT ON INNOVATIVE NUCLEAR REACTORS AND FUEL CYCLES (INPRO)

## ***Break-out Sessions on the Topic 4:***

### ***How to increase the trust between partners involved in collaboration on innovations to support the development of sustainable NESs***

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**IAEA**

International Atomic Energy Agency

# Key points, major observations and conclusions *trust building*



## 1. Two Presentations during the breakout

1. *National Energy Plan in Georgia* by Ms. Margalita ARABIDZE
2. *Nuclear infrastructure and institutional arrangements for the development and deployment of sustainable nuclear energy systems—experience of MNPC, as a dedicated NEPIO* by Mr. Mohd Zamzam JAAFAR

## 2. Seven topics were suggested by the organizers

1. Achievement of a win-win situation
2. Tension between self interest and collective interest
3. Impact of commercial interests
4. Potential impact of restrictions (e.g. IP)
5. Public-private partnerships for financial support
6. Motivations to bear disproportional cost
7. Measures to increase mutual trust

# Key points, major observations and conclusions (cont'd) *trust building*



- A good example of a win-win situation in the collaboration between the US NGNP Alliance and the European NCIIR for the development and deployment of high temperature reactors
- Unique example of regional cooperation in control of nuclear materials
- Examples of regulator collaboration on licensing innovative technology
- Practical barriers such as cost
- Buy, learn, advance...
- Suppliers as teachers
- Cultural difference in trust basis
- Relative to trust building, nuclear is not that different
- Restrictions in IP and trade secrets important, but manageable
- Professional organizations (e.g. ANS, ENS) important in peer trust
- Information is key; participants must benefit from exchange
- For newcomers, anything nuclear is innovative
- Benchmark participation identifies potential trusted partners

# Key points, major observations and conclusions (cont'd) *trust building*



- Cyber security concerns generate trust issues
- Industries build trust by starting small and monitoring behaviour
- Supplier/client relationships: example of fuel testing
- Personal relationships are important—trust in individuals
- Limited number of suppliers—many eyes view performance
- Modern financial approach seen in Finland, UK, and Turkey
- Formal agreements or contracts are needed
- Evolution of supplier into more diverse business partnership
- Sometimes collaboration is just not in the best interest of both parties
- Disproportionate cost may be born in anticipation of future benefits
- Mutual interests
- Clear objectives for the collaboration
- Regional motivations such as a shared grid
- Examples of public-private partnerships to increase support for new technologies

# Key points, major observations and conclusions (cont'd) *trust building*



1. Be patient—trust building takes many small steps
2. Intergovernmental support needed to overcome issues such as access and taxes
3. Find common objectives and synergies
4. Establish clearly understood mutual expectations
5. Frequent, personal and transparent communication
6. Establish and follow rules of engagement through legal framework