

**Moderator's Summary of the Panel Discussion 2:
"An integrated approach to nuclear safety and nuclear security"**

1. An international initiative on 3S- (safety, security, and safeguards) based nuclear energy infrastructure was first proposed by Japan in the G8 Summit 2008 at Chitose, Hokkaido, Japan.
2. There is synergism between security and safeguards when the threats focus on the nuclear material, and the outcome (either terrorists acquiring or a host State diverting nuclear material) has weapons consequence. There is also synergism between security and safety when the threats involve nuclear facilities, and the results (accidents caused by system failure, human error, natural disaster, or by sabotage, malicious acts, etc.) have radiological consequence. However, there are distinct differences among the 3S due mainly to their different legal instruments.
3. The 3S should be adopted by all countries engaging in peaceful use of nuclear energy. The developed countries should provide cooperation and support on 3S to newcomer countries introducing nuclear power. The 3S would be best implemented at the early stage of nuclear power development and should be pursued with strong leadership. The multi-national approaches (MNA) may be a very effective means of implementing 3S in nuclear fuel cycle related activities. The IAEA should also take an active role in the integration of 3S.
4. The largely voluntary nature of and national approaches to the implementation of nuclear security and safety are in conflict with the fact that nuclear crises do not respect borders, as noted by the UN Secretary General. The lack of information transparency and policy consensus in nuclear security also makes harmonization of the safety and security regimes difficult. Nuclear security must overcome these barriers (sovereignty, transparency, consensus, and regime harmonization) for the effective application of elements of the safety regime into the nuclear security regime.
5. Increased transparency does not mean making sensitive information public; the United States and Russia have found ways to work together in improving nuclear security without compromising sensitive information. Also, IAEA safeguards and inspection practices in a Member State remain confidential.
6. The Fukushima accident on March 11, 2011, presented the second Nuclear Security Summit in Seoul, Korea in 2012, an opportunity to expand its scope to include nuclear safety. However, adopting nuclear safety in the Seoul Summit also presented a few challenges, e.g.:
 - It might be overwhelmed by nuclear safety.
 - It might get into the endless debate on whether a military action of one country against nuclear facilities of another country constitutes as a malicious act.
7. A country's rights to control its nuclear materials and facilities must be better balanced with its responsibilities to protect the international community from nuclear crises. Hence, the safety and security of nuclear materials and facilities have significant transnational implications and must be incorporated in the consideration of long-term global nuclear governance. We should heed the advice from IAEA DDG Flory that "a two-track approach: launching a carefully planned amendment process, and supplemented by a variety of mechanisms and non-binding tools available to the international community is the right way forward to respond to the need for urgent actions to strengthen nuclear safety (and nuclear security), without foregoing the longer term, more potent tools of a strengthened international legal regime"
8. Integration of 3S could enhance the regulatory framework and improve public confidence in nuclear power when each State demonstrates its commitment to effective cooperation and coordination across responsible domestic and international agencies and promotes dialogue and openness with the public as an key stakeholder.