

# US-Japan GNEP Action Plan Safeguards and Physical Protection Working Group (SGPPWG) Meeting: Physical Protection Collaboration

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# Physical Protection Collaboration

## Proposed Topics for 2008

- Introduce two collaboration ideas today:
  - For Facility Protection
    - Security by Design
  - For Transport Security
    - Sabotage Mitigation



# Facility Security by Design

- Need:
  - Next-generation nuclear energy facilities will require more affordability and effectiveness in physical protection systems
- Long Term Objective:
  - Develop a Security by Design Handbook with physical protection system design process integrated with new-facility engineering design process



# Facility Security by Design

- Phased Approach:
  - Review PPS design principles
  - Document effective PPS design practices
  - Develop PPS design process steps
  - Integrate PPS design process into facility design process, including:
    - Facility operations
    - Safety design
    - Safeguards (in collaboration with Safeguards WG)



# Transport Sabotage Mitigation

- Need:
  - Expanding global nuclear transport will require assurance of sabotage protection and mitigation
- Long Term Objective:
  - Report on analysis of sabotage scenarios, mitigation measures, and recommendations for new mitigation approaches/technologies



# Transport Sabotage Mitigation

- Phased Approach:
  - Develop and rank potential sabotage scenarios based on radiological consequences for expected global nuclear transport environment
  - Analyze effectiveness of existing sabotage mitigation approaches and technologies
  - Identify gaps and make recommendations for development of new mitigation measures
  - Consider coordinating with US-France mitigation project and international working group (WGSTSC)
    - Possibly focus on sea-based transport



# Next Steps

- February 20, 2008 US-Japan GNEP Action Plan SGPPWG physical protection meeting in Tokyo with JAEA and JNFL
  - Further discussion of these ideas
  - Possibly introduce additional ideas
  - Develop high-level work plan for 2008
  - Finalize physical protection input for SGPPWG report to Steering Committee for US-Japan GNEP Action Plan



# Potential U.S. Issues

- Sharing of sensitive information
  - May require new US-Japan agreement
- Coordination with NE program direction
  - Timing of decision regarding fuel types
- FY08 and beyond available funding
  - Coordination with R&D funding organization

