



**Office of Nonproliferation and International Security (NIS)**

-  **Safeguard and Secure** nuclear material to prevent its diversion, theft and sabotage.
-  **Control** the spread of WMD-related material, equipment, technology and expertise.
-  **Negotiate, monitor and verify** compliance with international arms control and nonproliferation treaties and agreements.
-  **Develop and implement** DOE/NNSA arms control and nonproliferation policy to reduce the risk of weapons of mass destruction.

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**U.S Perspectives in Changing Nuclear Export Considerations**

*Session III: Nuclear Nonproliferation. The Role of Ukraine in Strengthening International Nonproliferation Regime*  
**Informational Conference "Current Trends in the development of Export Controls: International and National Aspects"**  
June 7, 2011



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# Overview

- Initiatives and Developments in the Nuclear Suppliers Group (NSG)
- Trends in U.S. Nuclear Technology Export Authorizations
- Trends in U.S. Nuclear Dual–Use Export Applications
- Conclusion

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## Nuclear Suppliers Group: Recently Adopted Initiatives

**Following the events of September 11, 2001, the Nuclear Suppliers Group (NSG) adopted the following changes to its Guidelines:**

- Provisions to strengthen requirements on physical security
- Prohibit states to authorize transfers where they (believe) might be diverted to acts of nuclear terrorism
- Provisions requiring the protection of sensitive (Trigger List) facility design information and related technology for the design, construction and operation of such facilities

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## Recent Accomplishments

**As a result of actions and deliberations in the NSG's Consultative Group (CG), the following were recently adopted:**

- Catch-all Controls
- Strengthened machine tool controls (Amendment to NSG Part 2 entry 1.B.3.a on coordinate measuring machines)
- UF6 Resistant Bellows-Sealed Valves
- Guidelines on Confidentiality and Transparency
- India Exception
- Halt in transfers of Trigger List items to states that are found to be in noncompliance with their safeguards obligations

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## Nuclear Suppliers Group: Current Issues

### The following issues are currently under discussion in the NSG's Consultative Group:

- Further restricting the transfer of enrichment and reprocessing (ENR) technologies
- Establishing the Additional Protocol as a condition of supply for Trigger List items
- Conducting a Fundamental Review of the NSG Control Lists
- Brokering and Transit
- Multilateral Nuclear Approaches
- NSG Relations with India

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## Nuclear Commerce

- As the volume of trade increases and the nuclear industry becomes increasingly global, it will become even more important to ensure that transfers of nuclear materials and technology are made for peaceful purposes.
- The NSG will play an increasingly important role in ensuring the peaceful nature of nuclear transfers by continuing to control technology and know-how, as well as dual-use equipment and components for the production of special nuclear material and nuclear explosive devices.
- It will do so by responding to the challenges at hand through the revision its Control Lists and development of various amendments to respond to threats that are new and familiar.
  - Participating Governments (PG) take evolving nonproliferation trends and peaceful uses of nuclear energy into consideration
  - NSG decisions are made by consensus, but individual PGs are responsible for implementing at home.

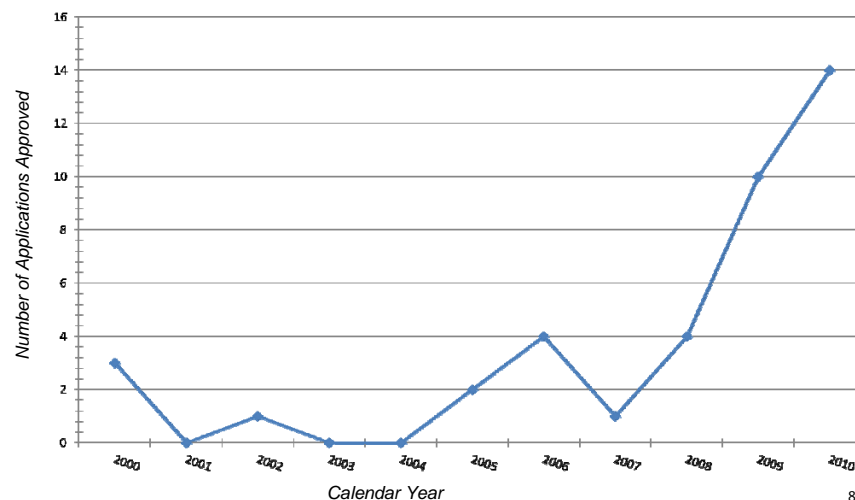
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## Trends in U.S. Nuclear Technology Exports

- Tremendous increase in Specifically Authorized activities overseas
- Such is especially true in the following areas:
  - Deemed export applications from U.S. companies that hire foreign nationals from countries on the 10 Code of Federal Regulations (CFR) 810.8(a) list
  - "Managing agents" and "owners engineers" exporting nuclear technology to new markets
  - U.S. companies bidding on new market reactor builds in consortiums
  - Consulting on business controls, engineering, operation and construction of foreign nuclear power plant builds
  - Joint research and development ventures on new reactor and system concepts
  - Training for foreign nuclear operators including nuclear power plant simulator technology

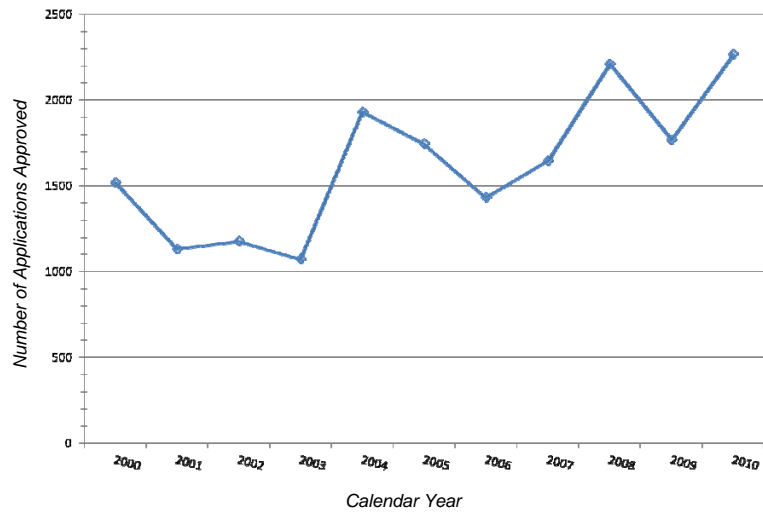
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## Trends in Part 810 Applications



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## Nuclear Dual-Use Applications (Materials, Equipment, Software & Technology)



## Conclusion

- The need for a strong export control regime will continue to become increasingly important.
- The NSG plays an important role in helping ensure that nuclear transfers are made for peaceful purposes.
- The NSG recognizes the importance of its role and is currently working to improve its effectiveness through a number of new initiatives in the CG.