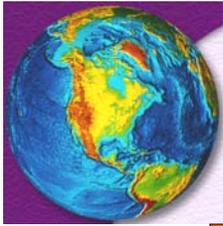




Office of
International Regimes and Agreements
NA-243

Richard Goorevich
Director
(202) 586-2331



NA-243: Technical Lead on Nuclear Technology for USG

Functional Overview

Domestic Controls

International Controls

Other

DOE Complex

Industry

Multilateral

Safeguards

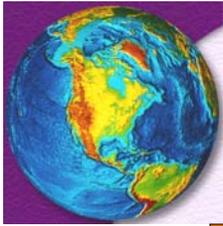
- Support to
 - DHS/CBP
 - DHS/ICE
- DHS/U.S. Coast Guard
 - FBI
 - DOC/BIS/EE

- Surplus Equipment
- Deemed Exports
- Nuclear Software
 - CRADAs
 - NCI/IPP
- NP Seminar Series
- ECI

- Part 810 Authorizations
- Munitions
- Dual-Use
- NRC Assurances

- NSG
- Zangger Cmtee
- Wassenaar Arrgmt.
- Add'l Protocol
- MTCR/AG

- Safeguards Policy
- Additional Protocol Implementation
- IAEA Board of Governors and General Conference



NA-20
DEFENSE NUCLEAR NONPROLIFERATION
 Deputy Administrator - **Paul M. Longworth**

NA-24
 ADA Cheri Fitzgerald
 DADA Cynthia Lersten

Acting Policy Director
Adam Scheinman

OFFICE OF DISMANTLEMENT
 & TRANSPARENCY
 Director - Kurt Siemen

**OFFICE OF INTERNATIONAL
 REGIMES & AGREEMENTS**
 Director - **Rich Goorevich**
 Budget - Lynn Ashby (FED)
 Admin - Renetta Zanco (GEM)
 Travel - Joanne Frysiak (GEM)

OFFICE OF GLOBAL SECURITY,
 COMPLIANCE & COOPERATION
 Director - Monte Mallin

LICENSING OPERATIONS AND COMPLIANCE
 Deputy Director - **Anatoli Welihozkiy**
 PINS - Barbara McIntosh

- U.S. Domestic Export Licensing (DOC/DOS/NRC/810s)
- DOE-Complex issues associated w/equipment and technology
- Interagency enforcement support

COUNTERING PROLIFERANT NETWORKS
 Deputy Director - **Bob Swartz**

Coordinates the following IRA crosscutting activities:

- Proliferation networks coordination (PSI ...)
- Asian Affairs

NON-NUCLEAR SECURITY
 Team Leader - Vacant

INTERNATIONAL TREATIES

- Biological Weapons Convention (BWC)

MULTILATERAL ARRANGEMENTS

- Australia Group
- Missile Technology Control Regime
- Wassenaar Arrangement

DOMESTIC (NON-NUCLEAR LICENSING)

- International Traffic in Arms Regulations (ITAR)
 - Export Administration Regulations (EAR)
- Non-Nuclear Interdiction Groups (MTAG/Shield)
- Sanctions Work

Team Leader Vacancy
 Michael Bedke
 Aysun Scott
 Mark Kinglsey
 CBW/MT Vacancy

NUCLEAR SUPPLY & TRANSFERS
 Team Leader - **Melissa Krupa**

DOMESTIC (NUCLEAR LICENSING)

- Nuclear Referral List from EAR / ITAR
- Technology Transfers (Part 810)
- Nuclear Interdiction (NIAG)
- Classified Tech Transfer

MULTILATERAL ARRANGEMENTS

- NPT Exporters Committee (Zangger Committee)
- Nuclear Suppliers Group (NSG)

IAEA AFFAIRS

- NUTRAN
- Physical Protection: Bilats, IPPAS, CPPNM, INFCIRC/225
- Code of Conduct of RAD Sources

Melissa Krupa	Kim Mamodo
Tatiana Delorm	Drew Nickels
Ed Fox	Carl Thorne
Russ Hibbs	Arthur Wendel
Zan Hollander	
Heather Looney	

NUCLEAR TREATIES & AGREEMENTS
 Team Leader - **Sean Oehlbert**

MULTILATERAL AFFAIRS

- Conference on Disarmament

NUCLEAR TREATIES

- Treaty on the Non-Proliferation of Nuclear Weapons (NPT)
 - Technical Cooperation Program
- Nuclear Weapons Free Zones (NWFZ)
 - Treaty of Tlatelolco
 - Treaty of Rarotonga
 - Bangkok Treaty
 - Pelindaba Treaty
- Fissile Material Cutoff Treaty (FMCT)

BILATERAL AGREEMENTS FOR PEACEFUL COOPERATION (AEA SECTION 123)

- Administrative Arrangements
- Subsequent Arrangements
- Nuclear Material Management & Safeguards System (NMMSS)
- NRC Licensing
- Nuclear Non-Proliferation Workshops

Sean Oehlbert
 Tatiana Delorm
 Judy Gibson
 Dunbar Lockwood
 Drew Nickels
 Carl Thorne
 Vacancy

NUCLEAR SAFEGUARDS
 Team Leader - **Jon Phillips**

IAEA

- Safeguards Policy
- Additional Protocol Implementation
- U.S. Voluntary Offer (List of Eligible Facilities)
- Board of Governors

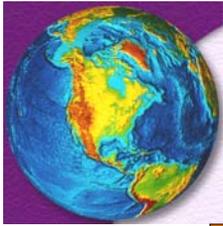
TECHNICAL

- Proliferation Resistant Fuel Cycle Technologies (PRFCT)
- Safeguards Equipment Development

Jon Phillips
 Michael Bedke
 Ron Cherry
 Zan Hollander
 Dunbar Lockwood
 John Murphy
 Ed Wonder

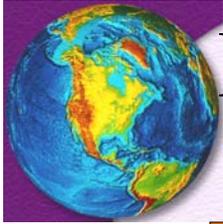


Nuclear Supply and Transfers



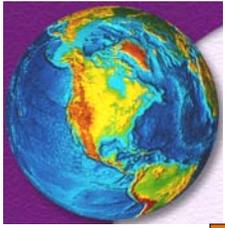
Nuclear and Non-Nuclear Security: Areas of Licensing Responsibility

- Industry
 - Part 810 Specific and General Authorizations
 - Dual-Use License Reviews
 - Chemical, Biological, Nuclear, Missile, and Electronic devices / Semiconductor Manufacturing Equipment
 - Munitions License Reviews
 - Sections 5 and 16: Explosives and Nuclear Weapon Design and Test Equipment
 - Assurance Requests for NRC Exports
- DHS/CBP & ICE & U.S. Coast Guard; FBI; DOC/BIS/EE Support
- DOE Complex
 - Maintain NP Guidelines/Sensitive Subjects/Countries Lists
 - Provide Guidance on:
 - Foreign Travel by DOE Funded Scientists and Engineers
 - Deemed Exports (Foreign Hires)
 - International Programs (IPP, NCI, MPC&A, etc.)
 - Surplus Property
 - ECI Review of DOE Publications
 - Review Transfer Nuclear Software
 - Provide NP Seminar Series
 - Support “Pit-Out” Reviews



Nuclear and Non-Nuclear Security: Non-Licensing Areas of Responsibility

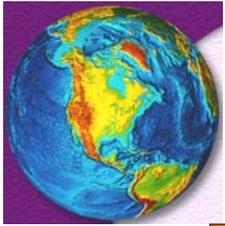
- **Multilateral Regime Support**
 - Nuclear Suppliers Group
 - NPT Exporters Committee (Zangger)
 - International Atomic Energy Agency (IAEA)
 - Missile Technology Control Regime (MTCR)
 - Wassenaar & Australia Group (AG)
- **Other Issues**
 - Bilaterals
 - IAEA Code of Conduct for Radioactive Sources
 - Interdiction (NIAG, President's Proliferation Security Initiative (PSI))
 - Sanctions
 - NISS (NSG Information Sharing System)
- **Physical Protection**
 - Convention on the Physical Protection of Nuclear Material
 - IAEA INFCIRC/225 Updates
 - Physical Protection Bilateral Consultations
- **Technical Projects**
 - Economic Globalization
 - Machine Tools
 - SNET List Review
 - Technical Review Group
 - Commercialization of DOE lab technology (CRADAs)
 - Stable Isotope Separation
 - Graphite Controls
 - Proliferation Research and Analysis (PRAP) Projects
 - Proliferation Trade Control Directory (PTCD)



Nuclear Supply & Transfers: Multilateral Export Controls

Purpose:

- Prevent the proliferation of nuclear weapons by:
 - delaying a nuclear program and allowing other means, such as diplomacy, to help;
 - causing an end-user to accept a less capable and more costly option; and
 - allowing for countries to take a principled position on nuclear nonproliferation

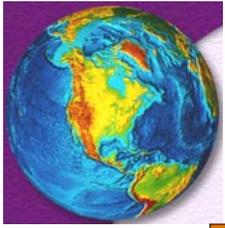


Nuclear Supply & Transfers: Multilateral Export Controls

Strategies:

- Strengthen the multilateral supplier regimes through continued U.S. technical leadership
- Cooperate with the U.S. interagency, DOE and NNSA offices, and like-minded multilateral partners to promote peaceful nuclear trade and nonproliferation objectives
- Promote adherence to multilateral nuclear supplier arrangements in support of USG nonproliferation policy
- Ensure that the NNSA program offices and contractors are fully apprised of all multilateral commitments and obligations

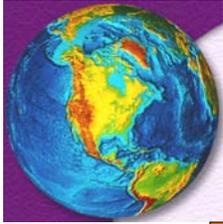
Strategies



Nuclear Supply & Transfers: Technical and Nonproliferation Studies

Mission:

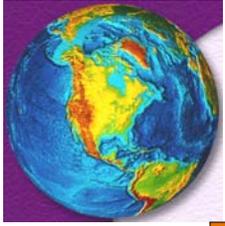
- Initiate studies on rapidly developing technologies and initiatives before problems arise
 - Technical studies: Accelerator Production of Tritium; Naval Reactor Technologies
 - Multilateral negotiations: Conversion technologies; Plutonium Isotope Separation
 - Policy studies: Globalization study
- Pursue an active role in preventing proliferation.
- Protect U.S. national security interests and peaceful nuclear trade.
- Conceptual change from “export control” to “supplier policy.”



MULTILATERAL SUPPLIER GROUP MEMBERSHIP

- **As of the 2004 Plenary in Sweden, the newest NSG members are: China, Estonia, Lithuania and Malta.** (*Date of Information: June 2005*)

Argentina	Greece	Romania
Australia	Hungary	Russia
Austria	Ireland	Slovakia
Belarus (NSG only)	Italy	Slovenia
Belgium	Japan	South Africa
Brazil	Kazakhstan (2002)	Spain
Bulgaria	Korea, Republic of	Sweden
Canada	Latvia	Switzerland
China (2004)	Lithuania (2004)	Turkey
Cyprus (NSG only)	Luxembourg	Ukraine
Czech Republic	Malta (2004)	United Kingdom
Denmark	Netherlands	United States
Estonia (2004)	New Zealand	
Finland	Norway	
France	Poland	
Germany	Portugal	



Nuclear Supply & Transfers: Physical Protection

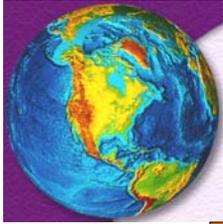
- Amending the Convention on the Physical Protection of Nuclear Material (CPPNM) to address new post-9/11 nuclear terrorism concerns
- Updating IAEA INFCIRC/225 to address these new nuclear security concerns and threats
- Bilateral Physical Protection Consultations and Visits:
 - to evaluate the application of physical protection measures for exported U.S.-origin materials as outlined in the Atomic Energy Act and Nuclear Nonproliferation Act as export license requirements!

The new structure of NA-243 allows the coordination of these two important elements of nuclear transfer security: export controls and physical protection requirements!





Non-Nuclear Security

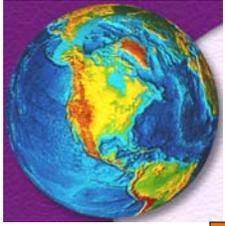


Non-Nuclear Security

- Since FY03, NA-243 has been reviewing missile and chem-bio export license cases
- Participation in missile and chem/bio multilateral regimes: Australia Group, Biological Weapons Convention and MTCR
- Non-nuclear interdiction groups: MTAG, Shield
- Technical and Nonproliferation Studies
- Technical Review Group to identify cross-over items controlled for both nuke & missile reasons



Nuclear Treaties & Agreements

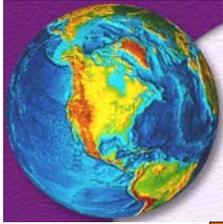


Nuclear Treaties & Agreements

- Subsequent Arrangements
- Nuclear Nonproliferation Treaty (NPT)
- Conference on Disarmament
- Fissile Material Cutoff Treaty (FMCT)
- Nuclear Weapons Free Zones
- Nuclear Material Management & Safeguards System (NMMSS)
- DOE's Nuclear Nonproliferation Seminars
- IAEA Technical Cooperation Program

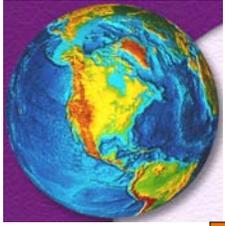


Nuclear Safeguards



Nuclear Safeguards

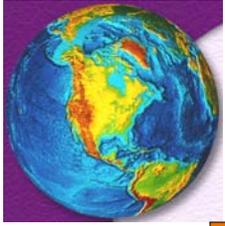
- Safeguards Policy
- Safeguards Equipment Development (w/NA-242)
- IAEA Board of Governors and IAEA General Conference Support
- Additional Protocol implementation
- Proliferation Resistant Fuel Cycle Technologies
- U.S. Voluntary Offer (List of Eligible Facilities)



Technology Transfer Control

Objectives:

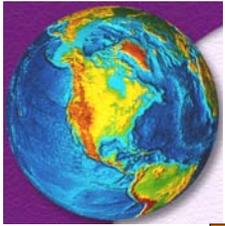
- To identify materials, equipment, and technology of proliferation concern
- To prevent transfers to proliferants (through foreign national visits and assignments in DOE complex)
- To protect against inadvertent transfers (of ECI and proprietary data)
- To weigh proliferation and security concerns against value of scholarship, technology advance, and economic benefit
- To implement U.S. Government policy on transfers of materials, equipment, and technology



Technology Transfer Control

Mechanisms of Transfer:

- Sales, donations, loans, leases, exports
- Technical exchanges and communications
- Work-for-others, Cooperative Agreements, patent assignments
- Publications and presentations
- Visits and assignments to DOE sites
- Foreign travel by DOE personnel



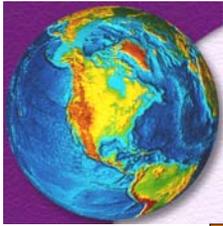
Technology Transfer Control

Transfer Control Principle:

- Whatever the transfer mechanism, export control review is mandatory by U.S. law and regulation

Control Measures:

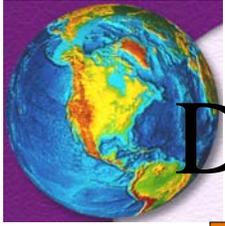
- Export control review of all proposed transfers, exchanges, publications, presentations, visits and assignments, and foreign travel
- Export control requirements placed in all transfer agreements
- DOE/NNSA approval required for retransfers



Technology Transfer Control

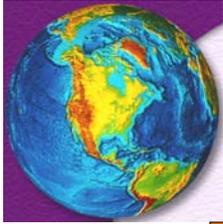
Areas under 30-day export control review by DOE

- Nuclear Suppliers Group (NSG) list
- Missile Technology Control Regime (MTCR) list
- Australia Group (AG) chemical and biological warfare related list
- Category 3:
- Export control regulations – Departments of Energy, Commerce, and State, and Nuclear Regulatory Commission
- DOE/NNSA
 - Guidelines on Export Control and Nonproliferation
 - Sensitive Countries List
 - Sensitive Subjects List
 - Technology experts and export control personnel



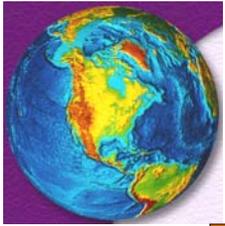
DOE Guidelines on Export Control and Nonproliferation Updated

- Separated export control concerns for equipment and technology.
- Added more footnotes for technical background.
- Sale of equipment in the U.S. is not a deemed export, if sale is open to public. ***
- Added more info on Part 810 authorizations.
- Added more on exceptions and exemptions.
- Updated ECI markings.
- Emphasized the NSG, SSL, NTRB are just references, the governing documents are the laws and regulations.
- *** Proposed DOC regulation in F.R. (May 27th comment deadline) on “use” would be deemed export if export controlled equipment is “operated”.



Guidelines (continued)

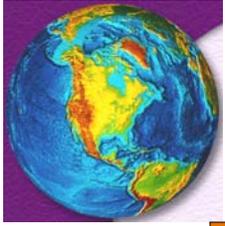
- **Added a statement about originating organization using discretionary publication control over EAR 99 unclassified information that might be a proliferation concern.**
- **Added a reference to the Federal Property Regulations.**
- **Added a 5-year record retention period for the export or deemed export of ECI.**
- **Added a note that property transfer approval be addressed in the initial funding document.**
- **Added a section on the prerelease of software.**
- **Added Appendix 3 on DOE directives.**
- **General update and editing**



Export Controlled Information (ECI)

Export Controlled Information (ECI) - Technical information whose export requires a license

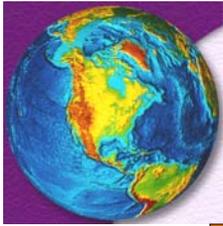
- ECI should be protected if uncontrolled dissemination would adversely affect U.S. national security or nonproliferation objectives
- DOE policy on dissemination of ECI must balance commitments to:
 - U.S. nonproliferation and national security goals
 - Scientific and technological advance
 - Benefit to U.S. industry
 - Benefit to U.S. taxpayer
 - Freedom of Information Act (FOIA) requirements



Export Controlled Information (ECI)

ECI (continued):

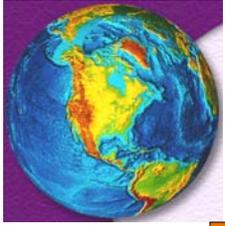
- Restricting release of ECI:
 - Publications:
 - Edit sensitive data
 - Limit distribution
 - Presentations:
 - Edit sensitive data
 - Limit audience



Surplus Property

Transfer of Surplus Property:

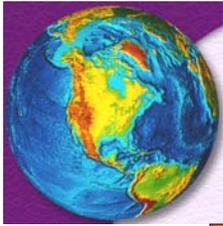
- Equipment and materials must be made useless for nuclear purposes
- Transfer agreement must include strict nonproliferation conditions
- There is a presumption of destruction for NSG Trigger list items and for weapons components
- For items deemed too valuable to destroy:
 - Request exception from DOE/NNSA Deputy Administrator for Defense Nuclear Nonproliferation
 - May require modifying equipment to render it useless for nuclear purposes
 - Must get DOE/NNSA approval for retransfer or export



Industry Export Control

Dual-Use Export Licensing:

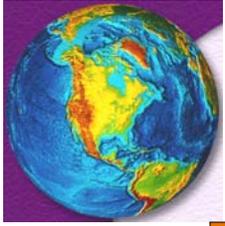
- Export Administration Act of 1979 gives Commerce the lead
- Export Administration Regulations (EAR) implements
 - Sections of note:
 - 15 CFR Part 738, Special Country Policies
 - 15 CFR Part 742, Control Policy -- CCL Based Controls
 - 15 CFR Part 744, Control Policy -- End-User and End-Use Based Catch-All Controls
 - 15 CFR Part 752, Special Comprehensive Licenses
 - 15 CFR Part 774, Commerce Control List (includes Nuclear Referral List)



Industry Export Control

Munitions Licensing:

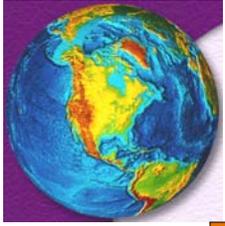
- Under jurisdiction of the Department of State, Office of Defense Trade Controls
- International Traffic in Arms Regulations, 22 CFR Part 121
- DOE reviews nuclear-related cases
 - Category V - Explosives, Propellants, Incendiary Agents
 - Category XVI - Nuclear Weapons Design and Test Equipment
- Authority
 - Arms Export Control Act 1976
- Review process similar to dual-use cases, except without time limits or escalation



Industry Export Control

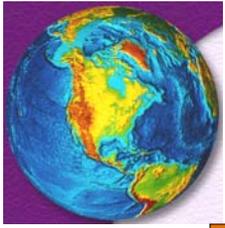
NRC Exports:

- Nuclear exports requiring special or general licenses
- 10 CFR Part 110
- Authority
 - Atomic Energy Act of 1954
- DOE assists NRC in securing assurances from foreign governments that exports of nuclear materials and equipment will be for peaceful uses
- DOE provides general license request confirmations



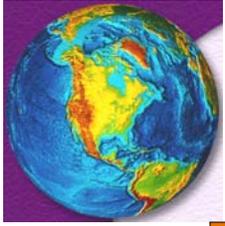
New Export Control Initiatives

- Developing a self-assessment program aimed at the DOE Complex. Elements being contemplated are sensitive subject list training, “deemed export” procedure review in Complex and export control classification procedures for high risk property.
- Pilot funding has been provided to Sandia, ORNL and SRNL to examine high risk property classification. The self-assessment program is currently being developed by NA-243 with support from ORNL and SRNL.



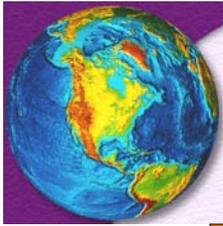
New Export Control Initiatives

- To provide an aid to high risk property classification, and other NA-243 projects, a data base is under development, the Proliferation Trade Control Directory (PTCD), that will serve as a reference identifying export controlled equipment, material and components, their available images, U.S. and foreign suppliers, technical specifications, and Export Control Commodity Numbers (ECCNs) and cross - referenced Harmonized Tariff System Numbers.



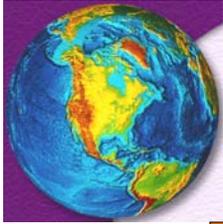
AREAS FOR ASSISTANCE

- Continue to maintain existing and develop new expertise necessary to support NA-243 initiatives
- Incorporate export licensing and nonproliferation awareness into security briefings for new personnel
- In the interim, ensure that “deemed exports” and ECI applicability review are done for all foreign national visits and assignments and foreign travel by federal and contractor personnel
- Target professional societies and groups of industry for nonproliferation awareness training
- Actively participate in Nuclear Nonproliferation Workshops and Seminars



NA-243 NEWS

- Develop introductory export licensing and nonproliferation awareness material for new DOE and DOE contractor personnel to be distributed as part of security briefing
- Expand outreach to scientific and technical communities to increase export licensing and nonproliferation awareness
 - Seek opportunities to promote awareness at professional society conventions and meetings, or through publications



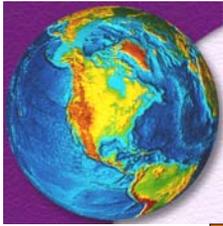
Forward Thinking for Export Licensing

- New nuclear weapons reduction agreement with Russia will require increased nonproliferation effort
- Propose to add a mandatory check-off block to FACTS to ensure that visited offices conduct “deemed exports” applicability review
- Propose to add a mandatory check-off block to FTMS to ensure traveling official conduct export control applicability review
- Develop an unclassified database of questions and responding guidance from NA-243
 - Categorize by areas of NA-243 responsibilities
 - Make accessible through the NA-243 web site
 - Continuously update database with newly posed questions



The New Age of Export Controls?

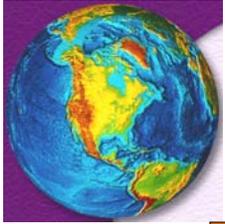
**Recent developments influencing
export controls**



The President's Initiatives

President Bush's February 11 WMD speech at the National Defense University outlined a number of new initiatives, **including initiatives related to export controls**, to help mend the gaps in the nonproliferation regime which allow proliferators to acquire WMD-significant items and technologies

- The **Nuclear Suppliers Group** and the G-8 are now working to adopt these measures

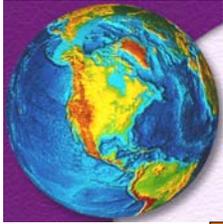


New NSG Initiatives

In his speech, the President specifically called on the NSG to implement some of these measures, including:

- Establishing the Additional Protocol as a condition of supply by '05
- Banning transfers of enrichment and reprocessing technologies
- Suspending nuclear trade to states found in noncompliance with IAEA safeguards obligations

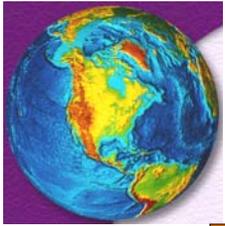
These issues are now being deliberated within the NSG



UNSCR 1540

Another positive step for export controls was the passage of **United Nations Security Council Resolution 1540** in April 2004, which obligates all countries to:

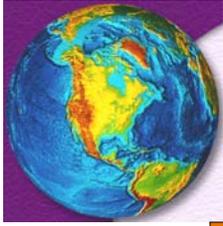
- **Refrain from providing support in acquiring, manufacturing, transferring or using WMD**
- **Adopt and enforce adequate export controls**
- **Adopt and enforce transit, transshipment and retransfer controls**
- **Work with their industries and public to inform them of these obligations**



Radioactive Source Export Controls

The 2003 **IAEA Code of Conduct on the Safety & Security of Radioactive Sources** calls for import and export controls on a subset of radioactive sources which could be used in a “dirty bomb”

- Over 40 countries developed import/export Guidance to support this objective
- This import/export Guidance calls for end-use and end-user evaluations, notifications of shipments, and recipient authorization
- The USG is currently developing regulations to uphold these import/export provisions, to go into effect January 1, 2006



The New Frontier of Export Controls

- Recent revelations such as the A. Q. Khan illicit procurement network demonstrate the need for strengthened export controls
- The President's Initiatives and the passage of UNSC Resolution 1540 emphasize the importance of export controls as a nonproliferation tool
- PSI and other interdiction efforts are reinforcing export control efforts by interdicting illegally-transferred and/or illicitly-procured items

What next for export controls?



THE END