

NMMSS



2011

Users Annual Training Meeting

San Diego, CA
May 17-19, 2011

Accountability

Accuracy

Compliance

NMMSS Reporting Associated with Foreign Obligations and New Agreements for Cooperation

Jessica Norles, Savannah River National Laboratory

Jim Warden, U.S. Department of State

- Agreements for Cooperation pursuant to Section 123 of the Atomic Energy Act of 1954, as amended, are required for significant nuclear cooperation
- Items subject to an Agreement for Cooperation are “obligated”
- Can be multiple obligations on material
- Requires safeguards, consent rights & reporting

Country/Entity Obligations

■ Currently tracking

- Australia
- Canada
- EURATOM*
- Japan
- China
- Switzerland
- Argentina
- Brazil
- Chile
- LES Centrifuge
- Former Soviet Union Weapons Material

■ Facilities need to be able to track all permutations of obligations, as necessary

* Euratom is comprised of the following 27 member states: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom

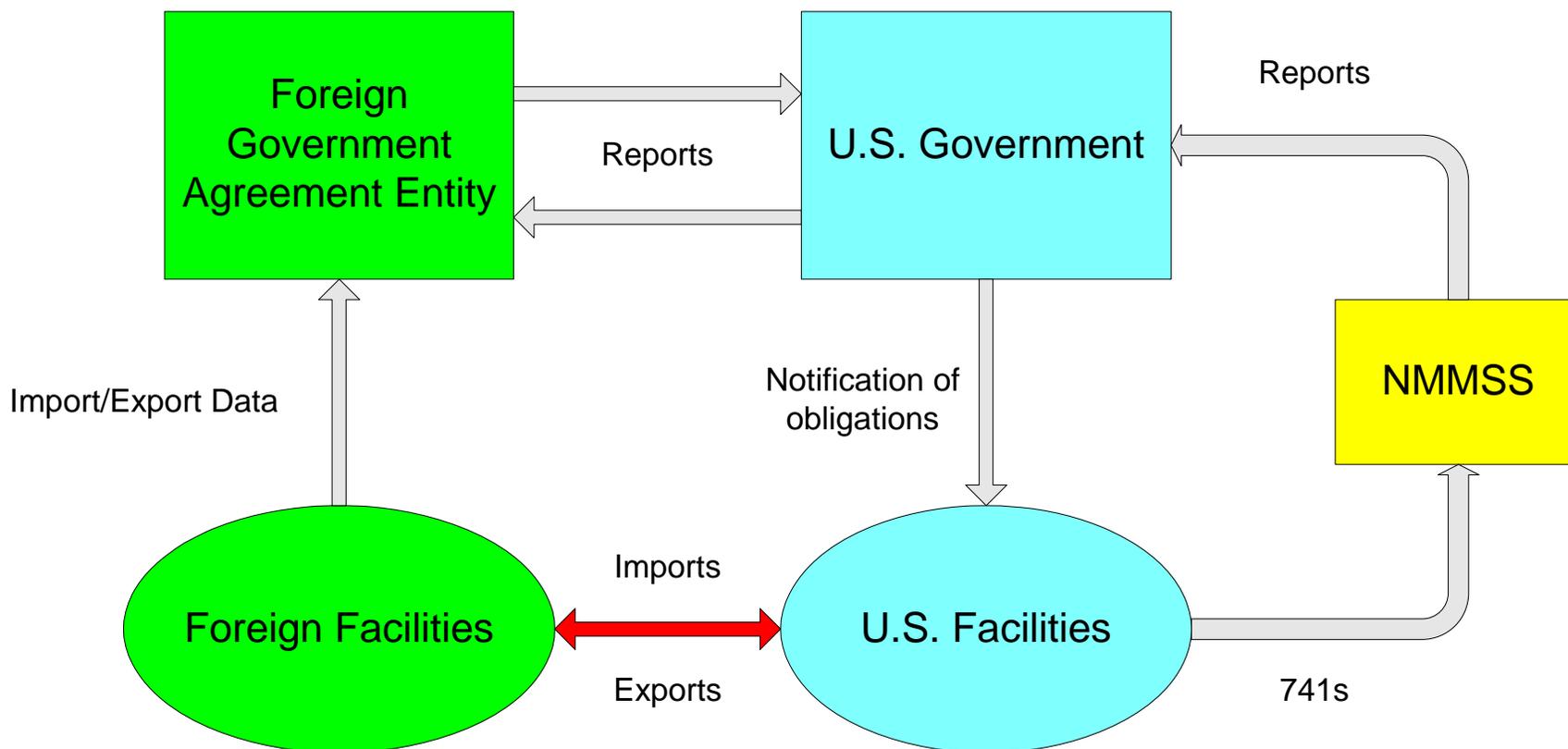


San Diego, CA
May 17-19, 2011

Responsible Agencies

| Foreign Country/Entity | Agreement for Peaceful Nuclear Cooperation | Implementing U.S. Government Agency |
|------------------------|---|--|
| Australia | | Dept. of Energy/Nuclear Regulatory Commission |
| Canada | | Dept. of Energy |
| EURATOM | | Dept. of State/Dept. of Energy |
| Japan | | Dept. of State |

Foreign Obligations Information Exchange



References for Reporting Foreign Obligations

- Facility
 - DOE M 470.4-6
 - NUREG/BR-0006, Revision 7
 - NUREG/BR-0007, Revision 6
 - D-15: RIS Codes for Foreign Facilities
 - NMMSS Website and Staff
- Country
 - Administrative Arrangements



San Diego, CA
May 17-19, 2011

Reporting

- Facility
 - Detailed transaction/obligation information is submitted NMMSS
 - Transaction (DOE/NRC Form 741)
 - Material Balance (DOE/NRC Form 742, Part B)
- Country
 - NMMSS provides reports on all facility-reported obligation information to the DOE/NNSA Office of Nonproliferation and International Security for forwarding to the foreign government agreement entity.
 - Periodic reporting

Challenges

- Timeliness of notifications/reports
- Incomplete/incorrect reporting
- Prior year adjustments
- Late reporting or corrections after year end close
- Reconciliation frequency
- Software/transmission issues
- Issues occur throughout fuel cycle within U.S.

- Occurs throughout the year on individual transactions as well formal reconciliation meetings for annual inventories
 - Australia—annually (2009 inventory closed)
 - Canada—ongoing (2005 most recent inventory closed)
 - EURATOM, Japan, and Switzerland—several years ago
- 2009 Inventory
 - Australia: 10 transactions
 - Canada: 2 transactions



San Diego, CA
May 17-19, 2011

Contributing Factors for Improved Reporting

- Quad and bilateral meetings
 - Unified reporting/tracking
- Reconciliation
 - Foreign governments—increased frequency
 - U.S. facilities—training and experience
- NMMSS upgrade



San Diego, CA
May 17-19, 2011

Items of Interest

- Australia Prior Notification and EURATOM Annex IA: Annual forecast
- EURATOM Annex II: Global notification for confirmation of shipments
- Imports of obligated equipment subject to NMMSS reporting since October 1, 2003—Japan (13) reactor vessel closure heads
- New obligation codes for LES Centrifuge for transaction and material balance reporting

EURATOM Facility Codes

| EURATOM Facility Alpha Code | Annex I-A Third Country Obligation | NMMSS Obligation Code |
|-----------------------------|--|-------------------------------------|
| A | None (U.S. obligated) | 33 (EURATOM) |
| C | Canadian obligated | 92 (Canada & EURATOM) |
| D | Canadian (& U.S. obligated) | 92 (Canada & EURATOM) |
| S | Australian obligated | 91 (Australia & EURATOM) |
| T | Australian (& U.S. obligated) | 91 (Australia & EURATOM) |
| P | None | 33 (EURATOM) |
| N | None | 33 (EURATOM) |



San Diego, CA
May 17-19, 2011

NMMSS RIS Codes for URENCO Facilities

| URENCO Centrifuge Facility | NMMSS RIS |
|-----------------------------------|------------------|
| Almelo, Netherlands | RNED |
| Capenhurst, United Kingdom | RUDL |
| Gronau, Germany | RGSC |



San Diego, CA
May 17-19, 2011

Looking Ahead

- NMMSS software change to convert weekly export reports into electronic data file
- Foreign government and U.S. government agencies to continue streamlining notification and reporting process
- NMMSS I training (DOE)—June 21-24
- Quad meeting—late 2011



San Diego, CA
May 17-19, 2011

Important Information

- NMMSS website www.nmmss.com
- DOE contractors – James Crabtree
301-903-6008
James.Crabtree@hq.doe.gov
- NRC licensees – Santiago Aguilar
301-492-3569
Santiago.Aguilar@nrc.gov
Foreign.Obligations@nrc.gov



San Diego, CA
May 17-19, 2011

Agreements for Cooperation (123 Agreements)

■ Ongoing Negotiations

- Jordan

- United States is in negotiations with Jordan; we've recently negotiated one other 123 agreement in the Middle East (UAE)

- Republic of Korea (ROK)

- Current agreement expires in 2014; both states require a successor agreement to continue cooperation
- ROK now a highly advanced nuclear program, as evidenced by the UAE reactor bid

■ Negotiations Likely to Begin Soon

- Vietnam- information briefings conducted, draft text has been tabled but no negotiations yet



San Diego, CA
May 17-19, 2011

Agreements for Cooperation (123 Agreements)

- Current Agreements Soon to Expire
 - Peru (April 2012)
 - Bangladesh (June 2012)
 - Colombia (September 2013)
 - Taiwan (June 2014)
 - Thailand (June 2014)
 - Norway (July 2014)
 - IAEA (August 2014)
 - China (December 2015)
- Other States Considering Nuclear Power?



San Diego, CA
May 17-19, 2011

Agreements for Cooperation (123 Agreements)

- **House Resolution (H.R.)1280**
 - Introduced into House Foreign Affairs Committee (HFAC) on April 1; passed out of HFAC on a 34-0 vote on April 14
- **H.R. 1280 Conditions**
 - All future 123 agreements lacking enrichment and reprocessing restrictions would require positive Congressional approval
 - All subsequent arrangements would require positive Congressional approval
 - Some 123 agreement obligations would be made to apply to other suppliers' obligated items
 - Cooperating partner must maintain a legal regime providing adequate liability protection to U.S. suppliers



San Diego, CA
May 17-19, 2011

Contact Information

- Jessica Norles
 - 202.586.2271
 - jessica.norles@nnsa.doe.gov

- Jim Warden
 - 202.736.4431
 - wardenjr@state.gov