



# ***ICG and ITAR Update***

## **U.S. PNT Advisory Board Meeting**

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***International Committee  
on GNSS (ICG)***



# *Multilateral Cooperation*

## **International Committee on GNSS (ICG)**

- Pursuing a Global Navigation Satellite System-of-Systems to provide civil GNSS services that benefit users worldwide
  - Promote the use of GNSS and its integration into infrastructures, particularly in developing countries
  - Encourage compatibility and interoperability among global and regional systems
- U.S. priorities include spectrum protection, system interoperability and information dissemination



# 16<sup>th</sup> Meeting of the International Committee on GNSS (ICG)



- Held in hybrid format with both in-person and virtual participation
  - More than 200 people participated
  - All 6 GNSS Providers, as well as other members and observers
- Agenda included:
  - Meeting of the Providers' Forum
  - System Provider Updates
  - Applications and Experts Session
  - Meeting of all four Working Groups





# *ICG Important Activities*

## GNSS Interference and Spectrum Protection

- Interference Detection and Mitigation (IDM) – 10<sup>th</sup> Workshop being planned
  - U.S. leading organization – focused on AIS and ADS-B for interference detection
- Closely monitoring ITU/WRC proposals and regulations related to RNSS spectrum
- Spectrum Protection Educational outreach – Focused on the importance of protecting GNSS spectrum

## Interoperability and Service Standards

- Performance Standard Template
  - “Guidelines” document developed as a template for Providers
- International GNSS Monitoring and Assessment (IGMA)
  - Trial Project with IGS continues
- Interoperable Time – Focus on System Time Offsets



# *Other Important ICG Activities*

## Space Service Volume

- UN booklet "The Interoperable GNSS SSV" 2<sup>nd</sup> edition published by the ICG
  - Prepared by GNSS Providers through WG-B Space Use Subgroup
  - On-going work to develop 3rd edition of booklet, to include expansion of multi-GNSS SSV coverage throughout Cislunar space
- Technical discussions and outreach efforts continue under U.S. leadership – focused on benefits of an interoperable space service volume and development of space-based user equipment

## Search and Rescue (SAR)

- Discussion on interoperability for GNSS-based SAR and development of capabilities for users throughout Cislunar space

## Geodetic Reference Frames

- Focus on improving interoperability through alignment of reference frames

***International Traffic in  
Arms Regulations (ITAR)***

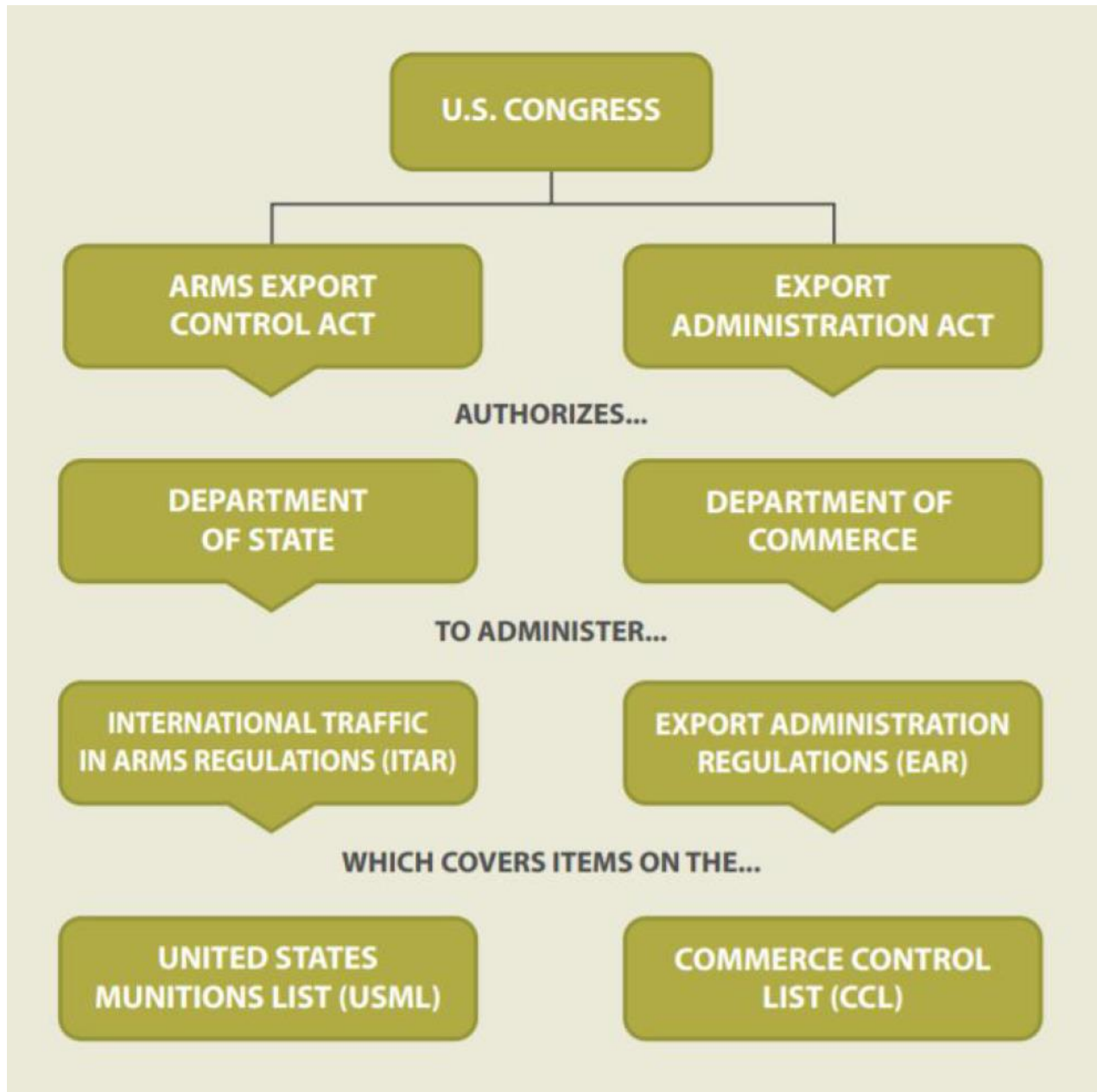


# *Space Policy Directive (SPD-7)*

- Exports of any United States PNT capabilities included on the **United States Munitions List** or the **Commerce Control List** will continue to be licensed pursuant to the **International Traffic in Arms Regulations** or the **Export Administration Regulations**, as appropriate, and in accordance with all existing laws and regulations.
- Exports of **sensitive** dual-use or **advanced** PNT information, systems, technologies, and components will be considered on a **case-by-case** basis in accordance with existing laws and regulations, as well as relevant national security and foreign policy goals and considerations.
- As a general guideline, most exports of **civil, mass-market** space-based PNT capabilities that are currently available or are planned to be available in the global marketplace will continue to be considered **favorably**
- Export controls shall be updated to ensure that unnecessary controls that undermine or restrict the **resilience and global use of civil GPS** are reduced or eliminated without compromising United States navigation warfare, national security, or homeland security.



# USML Categories





# ***USML Categories***

- I. Firearms and Related Articles
- II. Guns and Armament
- III. Ammunition and Ordnance
- IV. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines
- V. Explosives and Energetic Materials, Propellants, Incendiary Agents, and Their Constituents
- VI. Surface Vessels of War and Special Naval Equipment
- VII. Ground Vehicles
- VIII. Aircraft and Related Articles
- IX. Military Training Equipment and Training
- X. Personal Protective Equipment
- XI. Military Electronics**
- XII. Fire Control, Laser, Imaging, and Guidance Equipment**
- XIII. Materials and Miscellaneous Articles
- XIV. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment
- XV. Spacecraft and Related Articles**
- XVI. Nuclear Weapons Related Articles
- XVII. Classified Articles, Technical Data, and Defense Services Not Otherwise Enumerated
- XVIII. Directed Energy Weapons
- XIX. Gas Turbine Engines and Associated Equipment
- XX. Submersible Vessels and Related Articles
- XXI. Articles, Technical Data, and Defense Services Not Otherwise Enumerated



# *USML Reviews*

- State Department leads rolling review of all 21 USML Categories, several at a time
- Commerce, DOD, NASA, other agencies involved
- State and Commerce issue parallel rulemaking notices in the Federal Register when transferring items from ITAR to EAR

**Advance Notice of  
Proposed Rulemaking  
(ANPRM)**



**Notice of Proposed  
Rulemaking  
(NPRM)**



**Final Rule**



## *USML Category XI*

(c) Parts, components, accessories, attachments, and associated equipment, as follows:

...

(10) Antenna, and specially designed parts and components therefore, that

- (i) Employ four or more elements, electronically steer angular beams, independently steer angular nulls, create angular beams, create angular nulls with a null depth greater than 20 dB, and achieve a beam switching speed faster than 50 milliseconds;
- (ii) Form adaptive null attenuation greater than 35 dB with convergence time less than one second;
- (iii) Detect signals across multiple RF bands with matched left hand and right hand spiral antenna elements for determination of signal polarization; or
- (iv) Determine signal angle of arrival less than two degrees (e.g., interferometer antenna);

Note to paragraph (c)(10): This category does not control Traffic Collision Avoidance Systems (TCAS) equipment conforming to FAA TSO C-119c.