

Space Traffic Management and
Enabling Sustainable Commercial
Development of Space:
Perspectives on Regulation

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Regulatory Environment

Today

- Launch
 - FAA, DoD, NASA
- Spectrum
 - FCC
- Remote Sensing
 - DoC
- SSA
 - DoD

“Tomorrow”

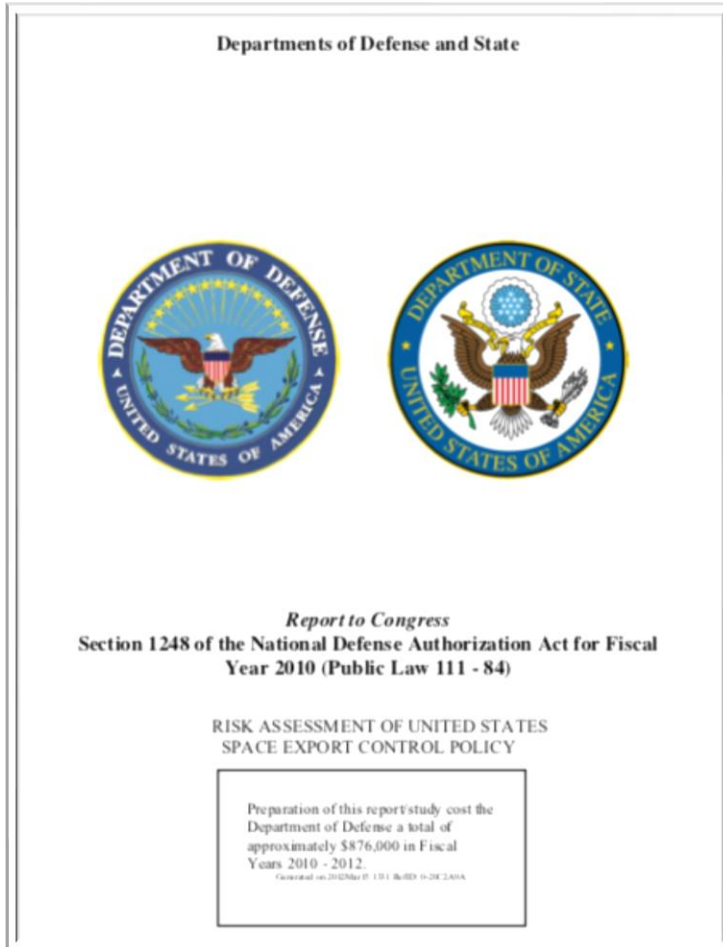
- Launch
 - FAA, DoD, NASA
- Spectrum
 - FCC
- Operation of “Space Objects”, inc. Remote Sensing
 - DoC
- SSA/STM
 - DoC/DoD

Really? That's it?

Space Policy Directive – 2

- Jun, 2018:
 - DoC to submit to OMB legislative proposal for **consolidating authorities for commercial space** activities.
- Aug, 2018:
 - NOAA to **streamline remote sensing rules**, in consultation with DoD, State, and FCC.
- Sept, 2018:
 - DoC, State, & DoD to send legislative proposal to OMB for **expanding licensing for commercial remote sensing** activities.
 - DoC, OSTP, & FCC to provide the President recommendations on **improving U.S. competitiveness through RF policies, regulation, and activities at the ITU.**
- Nov, 2018:
 - Nat'l Space Council to recommend **changes to U.S. export controls.**
- Feb, 2019:
 - DoT to **streamline regulations for launch & reentry**; including possible single license for all activities and performance based criteria.
 - DoD & NASA to **streamline requirements for launch from federal ranges.**

SPD-2 Builds on the 1248 Report



Recommendations

(2) The Administration then would:

[...]

(c) Establish processes for:

(i) Moving items to a lower level of control on the CCL only upon consensus of the Departments of State, Defense, and Commerce; and

(ii) **Conducting periodic reviews by the relevant departments and agencies** and using ECR's "Bright Line" USML review process **to determine whether additional space items** and related technologies on the USML **should, for the sake of national and economic security, be transferred to the CCL, and vice-versa.**

- SPD-2 is consistent with what the Obama Administration told Congress would follow movement of civil communications satellites to the EAR.

H.R. 2809

American Space Commerce Free Enterprise Act

Organization Chart



Bill elevates Office of Space Policy to Assistant Secretary.

- “One Stop Shop” Licensing.
 - Certification for operation of space objects.
 - Licensing for remote sensing.
 - Presumption of approval.
 - Very Limited Space Traffic Management authorities.

Space Traffic Management

- Certification process authority broad enough to require disclosure of intended orbits.
 - No authority to regulate orbits.
 - No authority to condition or deny certification on STM.
- Secretary of Commerce to identify orbital conflicts between certified space objects and Federal Government space objects.
 - Statute silent on conflicts between privately owned space objects and conflicts with space debris.
 - Encourage consultation and voluntary agreements on STM conflict resolution, but no power to regulate.
 - Why so limited?

Take Aways

- A major effort to streamline regulations is underway.
- Assistant Secretary of Space Commerce will presumably have direct access to NSC Policy Coordinating Committee.
- Unless there is a serious legal reason not to put a space object on orbit, the policy defaults to yes.
- Cannot discriminate against space-based imaging, where similar is available from other sources.
- Consideration should be given to explicit authority to regulate orbits.
- Consideration should be given to beefing up STM/SSA authorities.



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Reserve Slides

Space Object Certification Application

- Name and contact information of U.S. national designated as responsible for operation of space object.
- Proof that applicant is U.S. entity.
- If available, launch provider, date, and place.
- Physical form and composition of space object.
- Description of proposed operation; inc. where and when will operate and terminate operations.
- Debris mitigation plan.
- Information on third party liability insurance.
- Whether space object includes remote sensing.
- Whether operations involves certain waveforms.

Approval in 90 days or default to “Yes.”

Space-Based Remote Sensing

- May waive license requirement for “ancillary” or “trivial” systems.
- One permit may cover multiple systems.
- Application requirements substantially similar to those for space object certification except:
 - Need not be U.S. entity applicant.
 - Waveform disclosures not relevant.
- 90 day approval or default to Yes.*

* Subject to 60 day Presidential delay to further evaluate national security concerns.

FAA and FCC Retain Jurisdiction

...but with new limitations.

- Repeals provision that gave DoD and State primacy in remote sensing approvals.
- FAA would not be able to deny launch or reentry on national security, foreign policy, or international obligations grounds for DoC certified space objects.

Cannot Discriminate Against Space-Based Remote Sensing

The Secretary may not deny an application for, or place a condition on, a permit for the operation of a space-based remote sensing system for which the same or substantially similar capabilities, derived data, products, or services are already commercially available or reasonably expected to be made available in the next 3 years in the international or domestic marketplace. ***The exception in the previous sentence applies regardless of whether the marketplace products and services originate from the operation of aircraft, unmanned aircraft, or other platforms or technical means or are assimilated from a variety of data sources.***