The View From the Trenches

A Cautionary Tale: EAR, the Entity List, and Unintended Consequences

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broadband forum

- Industry consortium
- Stakeholders collaborate on open standards and open software that provides the basis for deployable solutions for the global broadband industry.



The Entity List

- A list of entities "... subject to specific license requirements for the export, reexport and/or transfer (in-country) of specified items"
 - Maintained by the Bureau of Industry and Security (Department of Commerce)
 - Includes businesses, research institutions, government and private organizations, individuals, and other types of legal persons
 - Originally created to limit transference of tech associated with WMD programs
 - Purpose has expanded to "... activities sanctioned by the State Department and activities contrary to U.S. national security and/or foreign policy interests"
- 2019: Communications companies added to Entity List
 - Effect in the communications standards community was immediate



EAR: Standards Development and "Technology"

- "Technology" subject to Export Administration Regulation defined broadly
 - "Published" technology is exempt
 - Must be publicly available with no restriction on further dissemination
 - Pre-2022, few other exemptions
- The standards development process
 - Stakeholders debate proposals with their peers frequently competitors
 - Resulting standards intended for publication and broad usage
 - By EAR definition:
 - Post-publication standards are almost always "published"
 - Pre-publication materials and process may or may not be "published"
- Standards development was not intended to be caught up in EAR



Unintended Consequences

- At the Broadband Forum
 - Immediate actions
 - *Restrict access* to pre-published material for affected members
 - Ban affected members from meeting sessions
 - Mitigating actions (≈6 months to implement)
 - Eliminate confidentiality policy
 - Create means to allow access to pre-published work meeting BIS requirements for "published technology"
 - These actions required changes to Bylaws
 - Meanwhile, affected members could not participate
 - Ongoing issues
 - Inconsistent policy for work in progress
 - Inability to share confidential received materials with members
 - Limited ability to liaison with other organizations

Unintended Consequences Part 2

- Impact on other SSOs
 - Varied based on existing policies and membership
 - Did not vary by jurisdiction
- Impact on industry and other stakeholders
 - Hesitation to engage in standards development
- Impact on US influence
 - Perception of unfairness in standards development process
 - Pressure to change jurisdiction of US-based SSOs
 - Bifurcation of standards development
 - Pressure to move work away from US-based SSOs



Welcome Changes (September 2022)

- Exemption for "standards-related activity"
 - Technology must be:
 - Designated as EAR99; or
 - Controlled for AT reasons only on the Commerce Control List; or
 - Specifically for the "development," "production," and "use" of cryptographic functionality
 - Release of technology must be made in the context of a "standards-related activity"
 - Must be intent to "publish" the resulting standard
- Includes all "standards-related activity" including industry consortia
 - Traditional standards development
 - Related software development
 - Standards-related conformance and certification testing
- Includes all entities on the Entity List
- Still some ambiguity and outstanding issues
 - Certification test reports?
 - Plugfests?
 - Definition of "published"?
- Resolution required three years!



Lessons learned

- Regulatory context evolves
 - List originally intended to limit WMD programs grew in scope
 - Increased scope → unintended consequences
- How could this have been averted? How can next issue be averted?
 - Difficulty: requires communication between policymakers and experts in fields of expertise that hadn't previously intersected
 - Policymakers: how to know when new expertise is helpful?
 - Experts: how to know when new areas need attention?
- Next issue may not be EAR

