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International cooperation: goals, constraints and means (2)

Author: Ms. Whitney Lohmeyer

Massachusetts Institute of Technology (MIT), United States, wqlohmey@mit.edu

Ms. Morgan Dwyer

Massachusetts Institute of Technology (MIT), United States, mdwyer@mit.edu

Ms. Gwendolyn Gettliffe

Massachusetts Institute of Technology (MIT), United States, gvg@mit.edu

Ms. Anne Marinan

Massachusetts Institute of Technology (MIT), United States, marinana@mit.edu

Ms. Farah Alibay

Massachusetts Institute of Technology (MIT), United States, falibay@mit.edu

Dr. Annalisa Weigel

Massachusetts Institute of Technology (MIT), United States, alweigel@mit.edu

Dr. Kerri Cahoy

Massachusetts Institute of Technology (MIT), United States, kcahoy@mit.edu

THE GLOBAL IMPACT OF ITAR ON THE FOR-PROFIT AND NON-PROFIT SPACE
COMMUNITIES

Abstract

Since its inception in 1976, the International Traffic in Arms Regulations' (ITAR) content and implementation has evolved in response to changing international relations, political climates and security requirements. Importantly, in 1998, U.S. lawmakers responded to an increased technology transfer threat by placing all satellite technologies under the jurisdiction of ITAR. To this day, satellite technology remains a tightly controlled, sensitive item on the U.S. Munitions List, a classification that has significantly impacted the U.S.'s ability to collaborate and communicate with the international space community. In this paper, we will describe the evolution of export control as applied to satellite technology, use this historic context to illustrate ITAR's impacts on both the domestic U.S. and international space communities, and present recommendations for future ITAR reform that will enable the U.S. to participate more actively and collaboratively in a global context.

To develop these proposals, we examine ITAR's two major spheres of influence and analyze the policy's impact in the for-profit and non-profit space communities. In the for-profit community, significant data exists to document the U.S. commercial satellite industry's loss of global market share since 1998; however, despite this data, it is impossible to conclude whether this loss of market share should be attributed to ITAR or to an increasingly competitive international market. Through a comparison of U.S. and international commercial satellite technologies, we assess whether ITAR is hindering the U.S.'s ability to compete in an international marketplace and to enhance its domestic products through increased collaboration with international firms.

Even outside of the international marketplace, ITAR has significant impacts on the non-profit space community. Specifically, ITAR restricts the ability of international students and researchers to collaborate with their U.S. colleagues. Broad interpretation of ITAR applicability and the placement of compliance burden on the technology creator lead to a constrained environment for intellectual collaboration. We show how ITAR restriction affects hiring practices, contracting, foreign collaboration opportunities, the type of research that can be conducted, and the research process within the non-profit community.

Through combined analyses of ITAR's impacts within the non-profit and for-profit space communities, we will provide detailed assessments of the policy's effectiveness on a global scale. We conclude by deriving specific policy recommendations and suggestions for future ITAR reform that will enable the U.S. to become a more active and collaborative participant in the global space community.