

57th IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)
Joint IAF/IISL Session on the Legal Framework for Cooperative Space Activities (7-B3.8)

Author: Dr. Alanna Krolikowski
Harvard University, United States, alanna.krolikowski@gmail.com

THE SECTOR-SPECIFIC LOGIC OF EXPORT CONTROLS ON DUAL-USE ITEMS: WHY TRADE
AND COOPERATION ARE DIFFICULT IN SPACE, BUT EASY IN AERONAUTICS

Abstract

Why are research, development, and production activities seamlessly global in some dual-use, strategic high-technology sectors, but confined to national systems in others? Why is it that, in the space sector, governments control exports of sensitive items so tightly as to prohibit international trade and cooperation, but, in other sectors, manage similarly sensitive exports in ways that allow regulated trade and cooperation?

This study explores this question through a comparison of China-U.S. relations in two strategic, high-technology sectors: civil-commercial aircraft manufacture and civil-commercial spacecraft manufacture. Between 1989 and 2009, China-U.S. relations took strikingly different trajectories in these two sectors. In the aircraft sector, the two countries' industries traded and integrated their activities and their civil agencies cooperated. In contrast, in the space sector, their industries did not trade or integrate, their civil agencies did not cooperate, and the two countries engaged in a form of technological competition. The divergent trajectories taken by China-United States relations in these two sectors are puzzling because both sectors present similar incentives and disincentives for both transnational integration and interstate competition.

This research indicates that this variation is traceable to underlying differences in how specialists in each sector, including technical and policy experts, implicitly reason about and represent technologies in general. In both countries, the air and space specialist communities each hold distinct understandings of the relationship between humans and technology. Performing representational practices that reflect these distinct assumptions, aeronautic and space specialists discursively constitute each sector and its technologies as distinct objects of policy, requiring different forms of state action and, in particular, export control. In air, these include policies adopted by both countries to enhance bilateral trade, industrial partnership, and technical cooperation. In space, these include measures to inhibit bilateral trade and cooperation and tightly restrict technology transfer while preparing for a coming bilateral confrontation.