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# **Executive Summary**

## I - INTRODUCTION

The United States, with the cooperation of the European Space Agency (ESA), Canada, and Japan, is planning to build a space station by the mid-1990s. The habitable portions of the space station will be composed of separate but interconnected modules. Current plans call for the United States to build two of these habitable modules while ESA and Japan will each contribute an additional module. One of the U.S. modules will supply essential living facilities (i.e., areas for recreation, sleeping, and eating) while the other modules will be used as multipurpose laboratories for materials processing, life sciences, fluid physics, and other types of research. Canada plans to supply a mobile servicing facility that will be attached to the space station truss structure and will assist with space station construction and payload and satellite servicing. In addition to the manned base, current plans for the space station envisage the development of unmanned platforms in near-polar orbits and extensive ground support facilities.<sup>1</sup>

Recognizing that the development of a multinational space station would raise legal issues that "could have a significant long-term effect on the Nation's civilian space program," the Senate Committee on Commerce, Science and Transportation asked the Office of Technology Assessment to examine these issues,<sup>2</sup>

In response to the Senate Commerce Committee request, OTA prepared a background paper which discusses the legal consequences of developing and operating the space station. This background paper examines the different ways in which a multinational space station might be owned and operated and explains how each could affect the rights and responsibilities of the U.S.

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1 The phase B Memorandum of Understanding (Memorandum of Understanding Between the National Aeronautics and Space Administration and the European Space Agency for the Conduct of Parallel Detailed Definition and Preliminary Design Studies Leading Toward Further Cooperation in the Development, Operation and Utilization of a Permanently Manned Space Station, June 3, 1985) defines the space station as "a multi-purpose, permanent facility in low-Earth orbit, comprised of both manned and unmanned elements, that will significantly enhance space operations. It will consist of a manned base, associated man-tended platforms in low inclination and polar orbits, and a transfer vehicle for use as necessary between the Space Shuttle, the manned base and the associated platforms."

2 Letter from Senators John C. Danforth, Slade Gorton, Ernest Hollings, and Donald W. Riegle, Jr., Senate Committee on Commerce, Science, and Transportation, to John H. Gibbons, Director, Office of Technology Assessment, Apr. 22, 1985.

Government and its citizens. In addition, it gives special attention to the application of jurisdiction, tort law, intellectual property, and criminal law to nations and individuals living and working in space. The OTA background paper is Part I of this document.

Part 11 of this report is a summary of the workshop held by OTA to critique and expand on the initial drafts of Part I. In particular, Part II addresses the fundamental issues of timeliness of government intervention, the role of politics and technology in legal decisionmaking, the usefulness of air law and maritime analogies, and the conflict between State and Federal law and jurisdiction in the United States. In addition, new topics such as export law and product liability law are introduced though not critically discussed.

Although Parts I and II address the same subject matter, they do so from different perspectives and therefore offer different insights. This Executive Summary draws freely from the findings of both.