

- **Legal, Normative, and Institutional Developments** – Trends in multilateral space security norms and compliance with space security relevant international legal obligations. Developments with respect to space security relevant international institutions.

The Capabilities of Space Security Actors – Capability indicators provide an evaluation of who can access and use space, and who can affect space assets from the ground. These indicators are particularly critical because they evaluate who can affect space security and how they can potentially do so. The SSWG reached agreement on eight capability indicators:

- **Space Access** – Trends in the number of actors with access to space through an indigenous launch capability or through the launch capabilities of others.
- **Civil Space Programs and Global Utilities** – Trends in civil space programs as well as the development and management of global space-based utilities (e.g. Global Positioning Systems).
- **Space Industry** – Trends in the space industry sector related to the builders and users of space hardware (e.g. rockets, satellites, etc.), information technologies (e.g. software applications), and space products (e.g. remote sensing data).
- **Space Surveillance** – Trends in capabilities to track, identify, and catalogue significant objects in earth orbit, including functional satellites and space debris.
- **Space and Terrestrial Military Operations** – Trends in the development of space-based assets providing support to terrestrial military operations, including their vulnerability to attack.
- **Space Protection** – Trends in the development of capabilities related to the protection of space assets including trends related to the research, development, testing and deployment of systems designed to protect military and non-military space assets from potential interference by others.
- **Space Negation** – Trends in the development of capabilities related to space negation, including trends related to the research, development, testing and deployment of systems designed to negate the use of space by others.
- **Space-Based Strike Weapons** – Trends in the development of operational military doctrine related to space-based weapons, including trends related to the research, development, testing and deployment of space-based weapons.

Evaluating Space Security for 2003

As noted above, the objective of the second phase of this project was to complete an evaluation of the status of space security in 2003 using our draft definition of space security and its 12 indicators to assess the utility of this research approach. Using an enhanced Delphi methodology, the Space Security Working Group (SSWG) met in Washington in late November to complete a systematic evaluation of the status of space security for 2003.⁸ This was an enhanced Delphi approach in two key respects. First, like the initial phase of this project, SSWG members were asked to complete a pre-meeting questionnaire designed to evaluate their views on the space security issues. This Space Security Survey was also completed via the web by a larger group of space security experts and the results were used to inform and/or challenge the

⁸ This 26 member SSWG included individuals with a broad range of expertise on space issues: legal (4), scientific/technological (4), political/policy (9), civil/commercial (4), and military (5) dimensions of space security relevant issues. A list of participants is included in Annex C.