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# PRIVATE AND PUBLIC COOPERATION IN SST IN SUPPORT OF AN EFFECTIVE STM SYSTEM

**Abstract**

The concept of space traffic management has gained momentum in recent years in the international space community. Without aspiring to define it, the present article will focus on a specific segment of STM, namely space surveillance and tracking (SST), and on how through private and public cooperation a more effective information sharing system could be achieved, on which to ground future STM solutions. The analysis will start investigating the policy and legal instruments where an embryonic advocacy of the involvement of the private sector can be sought, among which the Guidelines for the Long-term Sustainability of Outer Space Activities where consensus has been reached and from which a certain level of international agreement on the way ahead might be inferred. In this regard, Guidelines B.1, B.2 and C.2 will be used to show a certain openness to the involvement of the private sector in SST, respectively referring, amongst others, to coordination among providers of information, combination and validation of data from different sources and non-governmental entities data sharing practices. Those references not only show a certain openness to the involvement of the private actors as providers of (SST) data and processing capabilities for improved SST but also reflect developments in the current practice. As a matter of fact, as shown by the Space Data Association (SDA), founded in response to the limitations of JSPoC and now having established its own SSA system (with the upcoming SDC 2.0 STM Service significantly enhancing accuracy of SSA in GEO) the provision of data (see ExonAnalytic and Lockheed Martin), or services (Analytical Graphics Inc and Applied Defence Solutions), is becoming both a necessity for the private sector and, in the upcoming years, a growing commercial market. The approach proposed in this article will be to integrate those private initiatives in future STM systems, rather than develop them as parallel data collectors, not only fostering accuracy and cost-effectiveness through industrial competitiveness, but also significantly enhancing space situational awareness, and as a result, ensuring a safe, secure and sustainable space environment. In this regard, the main advantages and risks linked to this model will be analysed and possible mitigation measures identified. Moreover, the article will also investigate the potential issues inherent to this solution, both in terms of responsibility in case of incorrect data and best dispute settlement mechanisms in case of claims deriving from inaccurate or erroneous value-added services based on commercial SSA data.