

A third benefit worth mentioning is one that specifically highlights a possible role for the Open Skies regime. Environmental security threats are in their essence cooperative security threats. That is to say, the only "enemy" in a cooperative security design is the threat of strategic instability and the possibility of outbreak of military conflict among the parties rather than one of the parties themselves. As Van Ness points out, "...Rather than trying to build a security alliance against some feared opponent, cooperative security calls for inviting the most likely adversaries to join together to create an arrangement among themselves to attempt to resolve strategic differences and potential conflict within that institutional context."⁴ Put differently, cooperative security threats should best be handled by a cooperative security regime and these the Treaty on Open Skies could help to underwrite in two basic ways:

- As an arrangement directly concerned with the threat of military stability, the Open Skies regime already is a kind of cooperative security arrangement in its own right. Through its institutional machinery – the Open Skies Consultative Commission – the regime could provide a venue where environment-related "strategic differences" could be raised and discussed in detail and complete confidence.
- Perhaps more importantly, the regime already has in place a functional framework the sides could draw on for technical advice and direct data collection support. The smaller states-parties to the treaty stand to benefit the most from bringing their environmental concerns to the OSCC. Participation in the technical working group proceedings offers them an unmatched opportunity for tapping into much richer veins of expertise held by larger states-parties. The ability to purchase data at nominal cost might offer these states their only viable option for gaining full sovereign control over their own natural environment.

The section that follows should be seen as a first step taken toward evaluating the potential utility of the Open Skies regime as a means for collecting environmental data. That section is made up of three mini-case studies. Although connected by a common thread - environment - the cases vary by areas of application in order to explore as broad context of Open Skies missions as possible. The three cases are as follows:

1. Natural Disasters (crisis preparedness and humanitarian aid data);
2. Global Warming (verification of reporting provisions of the Kyoto Protocol);
3. Environmental Stress (scarcity and/or degradation of natural resources data)

In each of the three cases an attempt is made to determine, strictly from the technical point of view, the extent to which it might be practicable to stage an Open Skies overflight in support of these missions. To that end the study examines each of these missions with a set a standardized questions:

1. What are the mission monitoring requirements, i.e., what are its main phases, involving what activities?
2. What are the user requirements (URs) for each phase of the mission in terms of the following criteria: a) spatial resolution (what is the scale and best spatial resolution required on the ground); b) temporal requirement (what is the duration and/or frequency of the observation required; what is the imagery refresh rate); c) data delivery requirement (what is the timeliness with which the data needs to reach the end-user), and; d) wavelength/sensor requirement (in which part of the electromagnetic spectrum is it best to observe a given event and with which technique)?
3. How does the existing Open Skies sensor suite compare to these (optimal) user requirements? What, if any, are the information gaps? How well could the regime do the job right now?
4. What are the points where the Open Skies regime carries a clear-cut advantage over satellite-based observations, and vice-versa?
5. What are the areas of synergy between the Open Skies-type surveillance and other forms of environmental data collection, be it space remote sensing or on-site inspections?

⁴ For a useful discussion of the concept of "cooperative security" see Peter van Ness, "Alternative U.S. Strategies with Respect to China," *Contemporary South East Asia* (August 1998), pp. 154-167, cited in: Ib Damgaard Petersen, *Comprehensive Security in East Asia as Viewed in Light of the European Experience: A Case for Cooperative Security*. Copenhagen: Copenhagen Political Studies Press, 2000, p. 93.