

Terms of Reference for the NOAA Science Advisory Board Satellite Task Force (SATTF)

1. Background

NOAA's Satellite and Information Service (NESDIS) is facing unprecedented budget challenges with substantial appropriation shortfalls and future budget outlooks that are inconsistent with current plans. These challenges are threatening service gaps in core services, loss of important remote sensing resources (e.g., the QuikSCAT ocean vector winds mission) and impairment of NOAA's ability to take full advantage of new NASA and international satellite resources.

In response to this austere environment, NESDIS is doing a comprehensive reevaluation of future plans. The objective is to develop an executable plan which optimally serves NOAA's satellite needs while accommodating unprecedented uncertainty in future appropriations. This reevaluation may lead to a significantly different approach to NOAA's satellites, which should have a careful and thorough review by the best-available outside experts. Furthermore, future changes may also significantly impact NOAA's ability to meet strategic goals. Thus, NESDIS considers both NOAA-wide and community-wide engagement to be critical before adopting new plans with potentially significant ramifications. The Science Advisory Board (SAB) will be asked to validate NESDIS' future plans or to recommend specific adjustments that will enhance overall value to NOAA while continuing to be executable.

The Satellite Task Force (SATTF) shall advise the National Oceanic and Atmospheric Administration (NOAA) SAB on NESDIS' proposed satellite service replanning. As experts in satellites, satellite technology and satellite applications, the SATTF will be a critical resource to the SAB's review and consideration of NESDIS plans.

2. Charge

The task force will provide advice to the SAB only and will act in the public interest in order to recommend a way forward for NOAA's satellite program, starting with initial NESDIS recommendations and seeking a more affordable, flexible and robust satellite and services architecture, while considering:

- long term sustainability of NOAA satellite programs (and gap risks)
- current plans, including flight segment of JPSS-2 and the GOES-T and beyond
- ground segment, including data receipt, distribution and processing
- cost estimates and the estimating methodology
- the National Space Policy call on NOAA for operational continuity
- research and technology plans and investments by NASA and others
- system adaptability to accommodate changing technical and programmatic environments
- international collaborations and opportunities
- collaborations and opportunities with DoD, NASA and the USGS

- effective and enhanced use of academia and the private sector
- feasibility, considering the anticipated difficulty in achieving needed future funding
- flexibility to accommodate unpredictable future appropriations

3. Meetings

The Task Force may meet in person at the discretion of the Chair, with the concurrence of the members and the sponsoring office (for financial considerations). Other meetings may be conducted by telephone or using other meeting technology.

4. Timeline and Milestones

The task force shall be a short-term working group of the SAB. A preliminary draft report should be provided to the SAB approximately 90 days after receipt of NESDIS recommendations (which should be the end of calendar year 2011). If feasible, the preliminary draft report on the SATTF's assessment should be provided to the SAB by the spring 2012 meeting. The task force final report should be provided to the SAB at the next in-person SAB meeting following the presentation of the preliminary draft report.

5. Membership

The task force will consist of between six (6) and eight (8) members representing a diversity of expert knowledge relevant to the task force scope.

- a. Task force members shall provide expertise regarding environmental satellites (broadly interpreted) or end-user applications.
- b. The members will be nominated by a team consisting of SAB members and individuals in NOAA with an interest in the product. The SAB will approve the final membership.