

The following is a more detailed description of ESIP's approach, what it does, and how that might be of use in the EarthCube context. For truth in advertising, the summary below was prepared as collaboration with ESIP staff. The goal here is to suggest an ESIP-like way for consideration in the EarthCube context.

Governance or Process: Building Community Through Collaboration for Shared Solutions

The Federation of Earth Science Information Partners (ESIP) is a broad-based, distributed community of science data and information technology practitioners that leverage collaboration and coordinate interoperability efforts across the geoscience community. Ultimately, these collaborations connect organizations, people, systems and data fostering a higher level of overall Earth science interworkability. As an organization, the ESIP Federation optimizes collaboration through in-person meetings and virtually through collaboration space on the Web. Participation in the ESIP Federation allows members to expose, gather and enhance their own in-house capabilities in support of their organization's own mandates. Partners utilize these neutral forums for knowledge exchange and collaboration – an intellectual commons – where practitioners solve shared problems.

This community-based approach is discipline neutral, with IT working side-by-side with scientists and improving discovery, access, integration and interoperability. In this context, the ESIP Federation is working in areas of high priority to NSF including: data architecture, data management and preservation, tool creation, data systems integration and data management professional development. The ESIP Federation has a 13-year track record of working on Earth science interoperability solutions that connect distributed and heterogeneous communities through the application of broad community technical expertise. The benefit of working across a broad community will allow NSF to leverage the collective community experience and reduce risk by having broader input into the evolution of systems that support its research mission at a lower cost.

Since its inception in 1998, the ESIP Federation has continually grown and attracted a diverse group of partners, now including more than 130 member organizations. The ESIP Federation's membership is broad, including federal data centers, government research laboratories, research universities, education resource providers, technology developers, and various nonprofit and commercial enterprises. This diversity (multi-sector, agency, and function) provides expert capabilities on which NSF can draw. In addition, by joining the ESIP Federation, NSF will leverage the investments being made by NASA, NOAA and EPA, the ESIP Federation's principal sponsors.

Participation in the ESIP Federation is open to organizations that work with Earth science data and who wish to work across communities to expose, gather and enhance in-house capabilities in support of their organization's own science data infrastructure that promote their broader agency mission. For more information on how the ESIP Federation might support the EarthCube initiative, visit

http://wiki.esipfed.org/images/9/92/ESIP101_NSF_Aug2011v3.pdf.