Satellite Sensornet Gateway (SSG)

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**Objective**

- Enable rapid deployment of in-situ terrestrial sensors, particularly in remote or challenging environments
  - Provide a flexible, extensible interface between terrestrial in-situ sensornets and satellite communications networks.
  - Provide a structured and reusable management facility and suite of tools for remote sensor management.

**Approach**

- Design and prototype a open and scalable sensornet gateway that provides storage and aggregation of data from wireless sensors, reliable transmission to a central datastore, and sensor instrument management and control.
- Blue-ribbon Science Advisory Board will shape system requirements based on research needs.
  - Design validation will be accomplished through a series of increasingly functional field deployments supporting Board members' projects.

**Key Milestones**

- Review technology state-of-the-art
  - Jan 2007
- Define mgmt/metadata architecture
  - Mar 2007
- Bench test single-stream prototype
  - Jul 2007
- Field test single-stream prototype
  - Sep 2007
- Architecture revision
  - Jan 2008
- Field test small-network prototype
  - Jun 2008
- Realistic multi-network field deployment
  - Jun 2009

**Co-I's/Partners:** None

**TRL\textsubscript{in} = 3**

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