Ground System Working Group

The Ground System Working Group Charter

- **The Ground System working group will develop a platform independent Service Oriented Reference Architecture for future Ground Systems.**
- **This architecture will result in Ground Systems that will be cost effective, modular and 'plug and play' and provide the capabilities fundamental to Net Centricity:**
  - **Open standards based**
  - **Composeable**
  - **Extensible**
  - **Interoperable**
  - **Scalable**

Objectives

- Collaborate with NCOIC members, other working groups, government agencies and standards bodies to develop a platform independent Service Oriented Reference Architecture model for future Ground Systems
- Assure that the architecture describes Ground Systems that will be cost effective, modular and plug and play and provide the capabilities fundamental to Net Centricity:
  - Open standards based
  - Composeable
  - Extensible
  - Interoperable
  - Scalable
- Make the model general enough so that it is neither ITAR sensitive nor dependent on any specific platform, technology or vendor.
- Work to have the architecture adopted as an international standard.

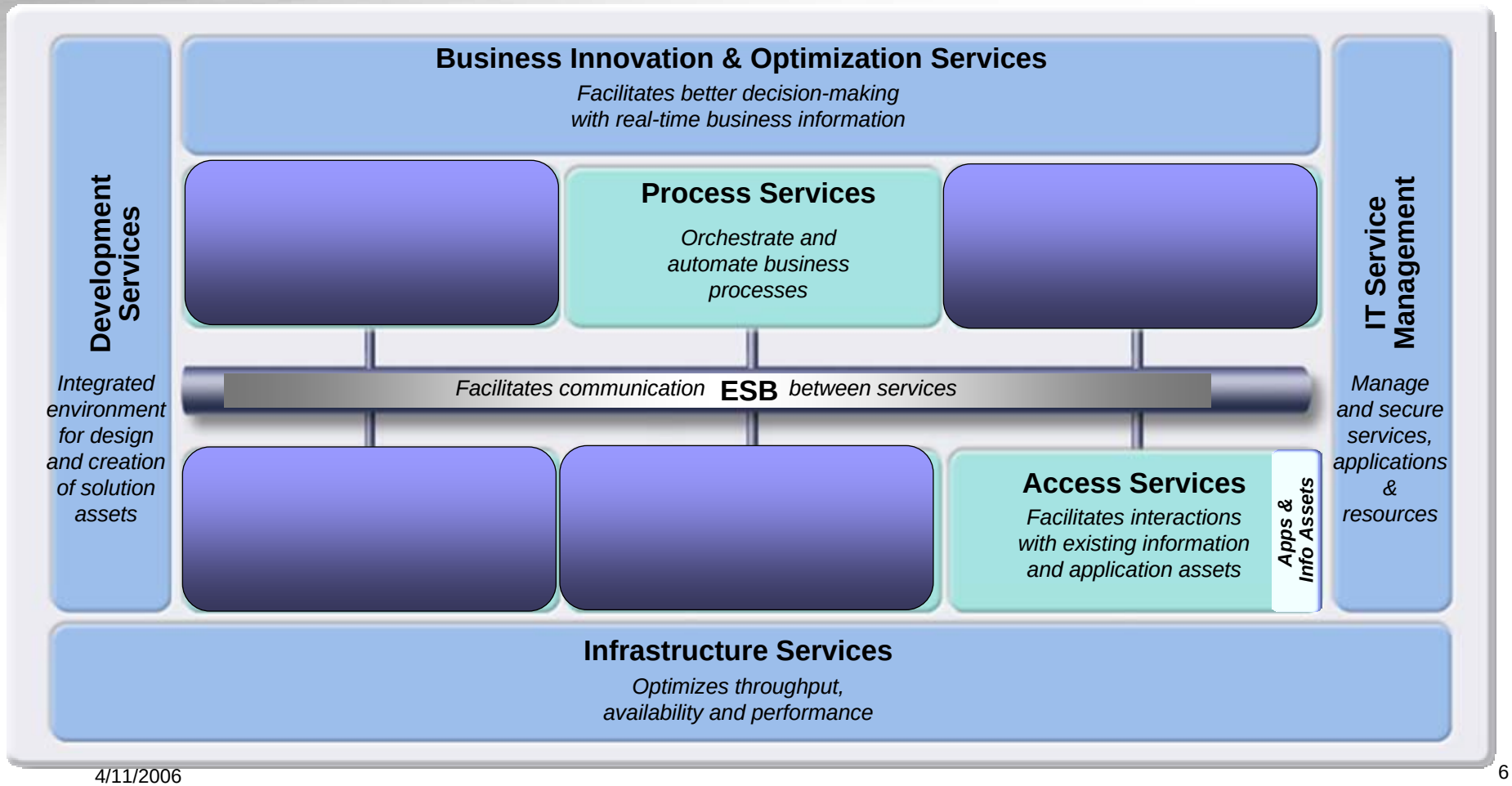
Strategies

- Develop working relationships with NCOIC working groups, members, government agencies, and commercial concerns to assure an architecture that meets the needs of these parties - their various sensors, vehicles, forms of data collection and instrumentation.
- Create a formal model of the architecture utilizing UML2 (and SysML and DoDAF extensions as appropriate) to assure rigor and efficacy resulting in the widest adoption of the model.
- Provide at least one set of concrete, language specific, reference Interfaces (e.g., Java), as defined in and generated directly from the model, sufficient to assure that the model is realizable

Expected Outcomes

- **Adoption of NCOIC tools and techniques throughout the member and customer community.**
- **Strong working relationships with various agencies.**
- **Ability of our members to develop highly efficient Ground Systems that can integrate and interoperate with any other Ground System.**
- **Ground Systems that are interoperable, agile, affordable and extensible.**

Generic SOA Architecture Structure



Architecture Overview - Tiered Service View