Civil Operations
Concept
Workshop

OCX Effects Based Operations
Civil Signals are Navigation...not Communication
Workshop Goal

- OCX inputs needed for the development of the next generation
  (Or are the concepts created in the 80’s and in use today what we want for 2020?)
  - Civil message formats available (L5, L2C, L1C)
  - Military effects based operations a consideration
  - Information desired and for what purpose

- Workshop discussions process for potential OCX operations interfaces
  - Civil Operations Concept a myth
Civil Data Structure 1

- Timeliness of clock and ephemeris
  - Acquisition with NAV solution is 24 seconds
  - No. of SVs in Almanac (current), 40 (initial requirement in OCX block 1), 63 (final requirement)
- Type of Almanac - Bits required
- With or without WAGE2
  - Differential corrections to reduce age of data for civil users
Civil Data Structure 2

- Nav-related Info
  - Interoperability with other navigation systems
  - Nav systems Constellation Planning / Future Testing
    - GPS or all systems?
  - Timely Notification of Misleading Information
  - DASS
- Flexibility of data message
Overarching Opportunities

- Provide information to enable increased capabilities
- Field technologies to enable continuous upgrade to utility & new capability
- Integrate with operational planning tools
- Uses over and above aviation
- UE as a sensor feedback into the system like jamming and interference (JLOC)
What is Missing

- Net-centric posting by providers, with appropriate meta data
- Operating concepts
- Information assurance for inputs
- Feedback from users in near real time