

Civil Operations Concept Workshop

A faint, light-colored scale of justice is visible in the background, centered behind the text. The scale has a central pillar and two pans hanging from a horizontal beam. The pans are slightly tilted, with the right pan appearing lower than the left.

**OCX Effects Based Operations
Civil Signals are Navigation...not
Communication**

Workshop Goal

- OCX inputs needed for the development of the next generation

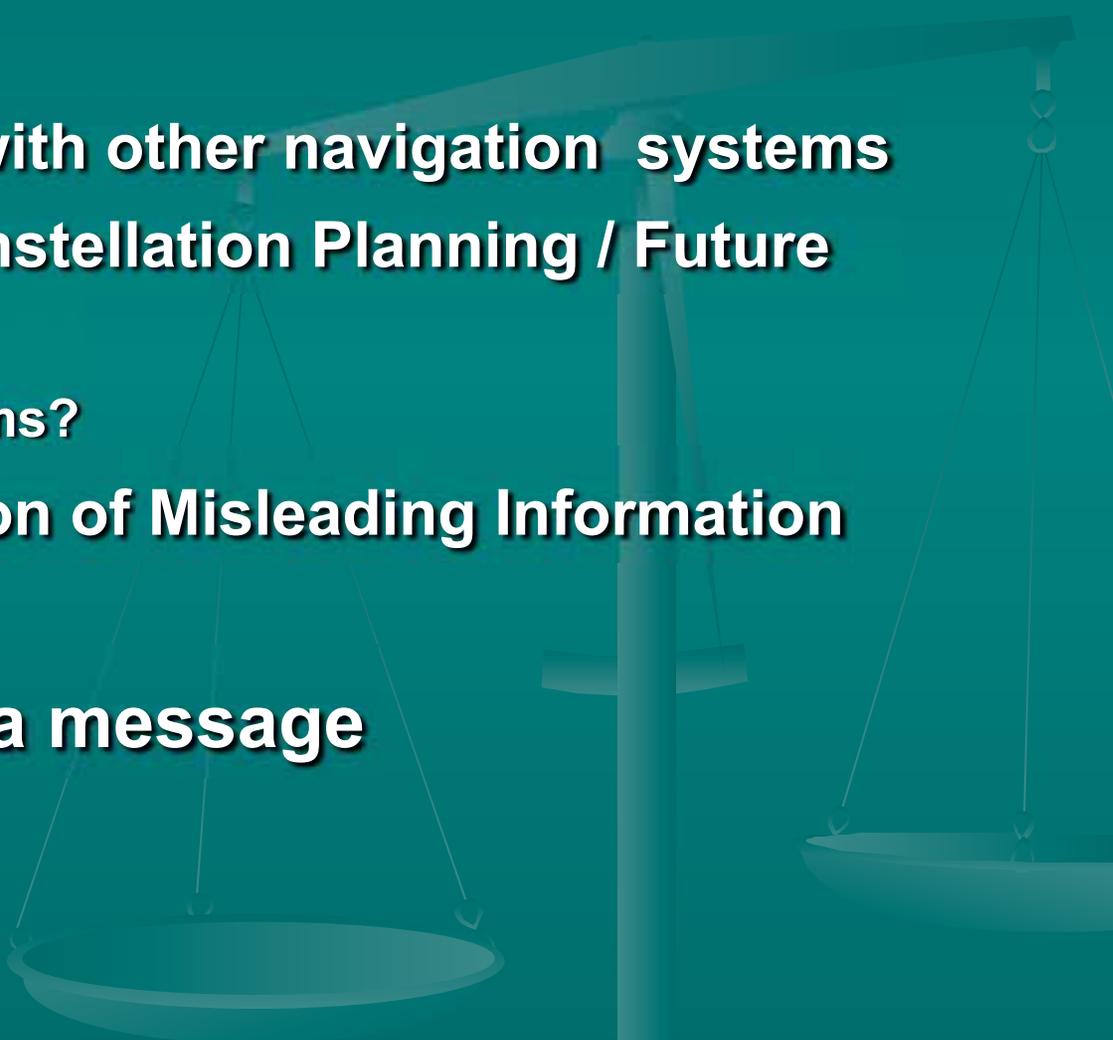
(Or are the concepts created in the 80's and in use today what we want for 2020?)

- 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

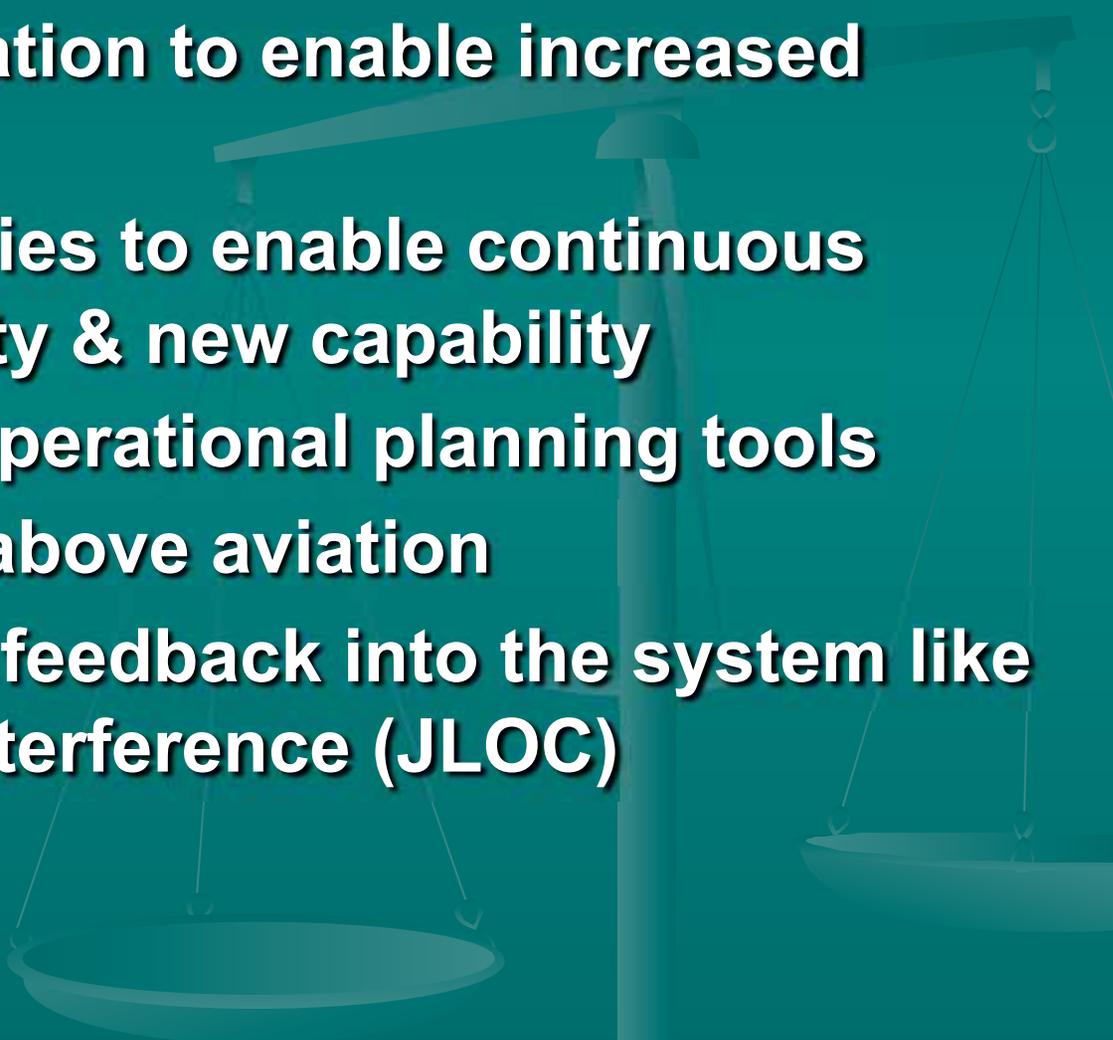
Civil Data Structure 1

- **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

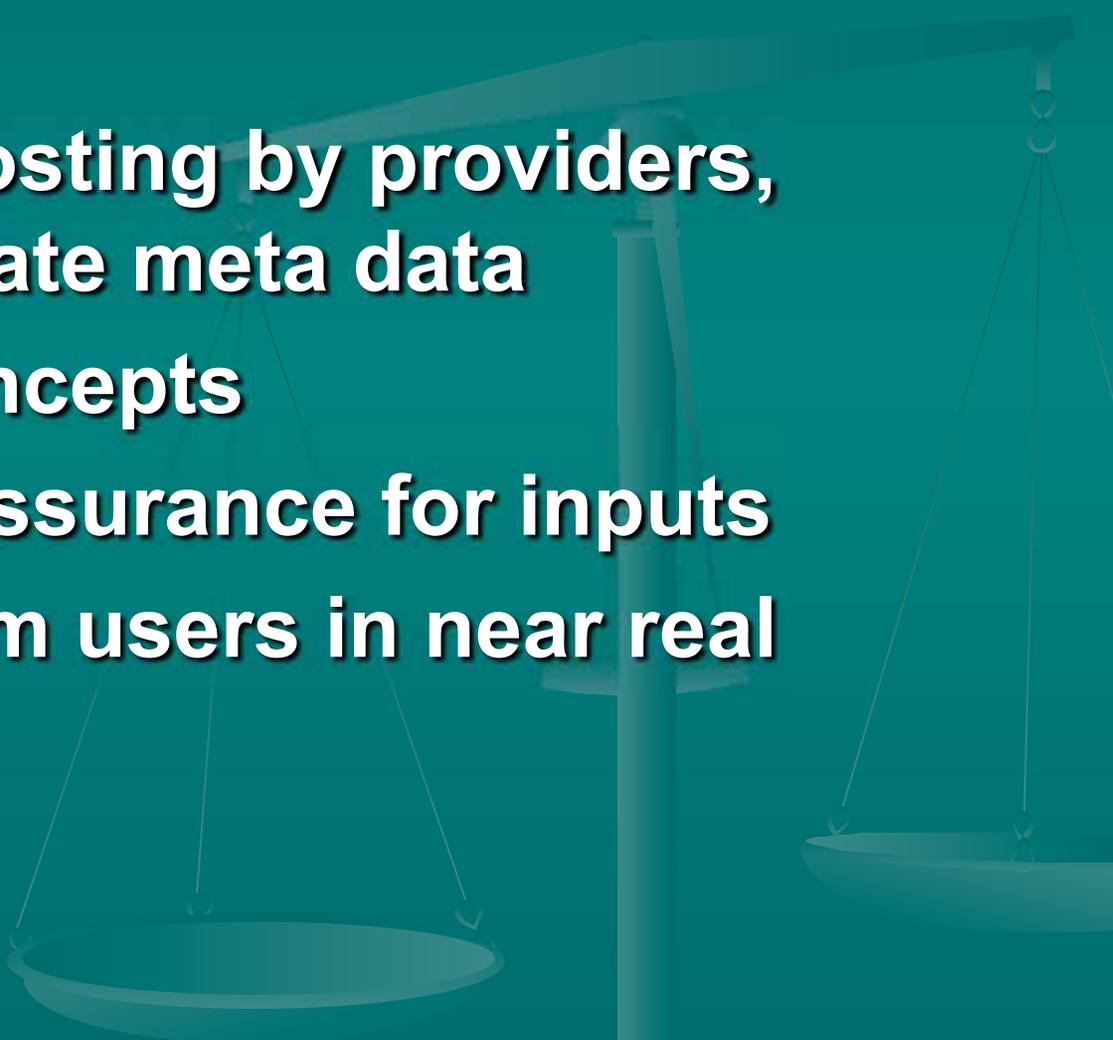
Civil Data Structure 2

- **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**
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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)
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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**