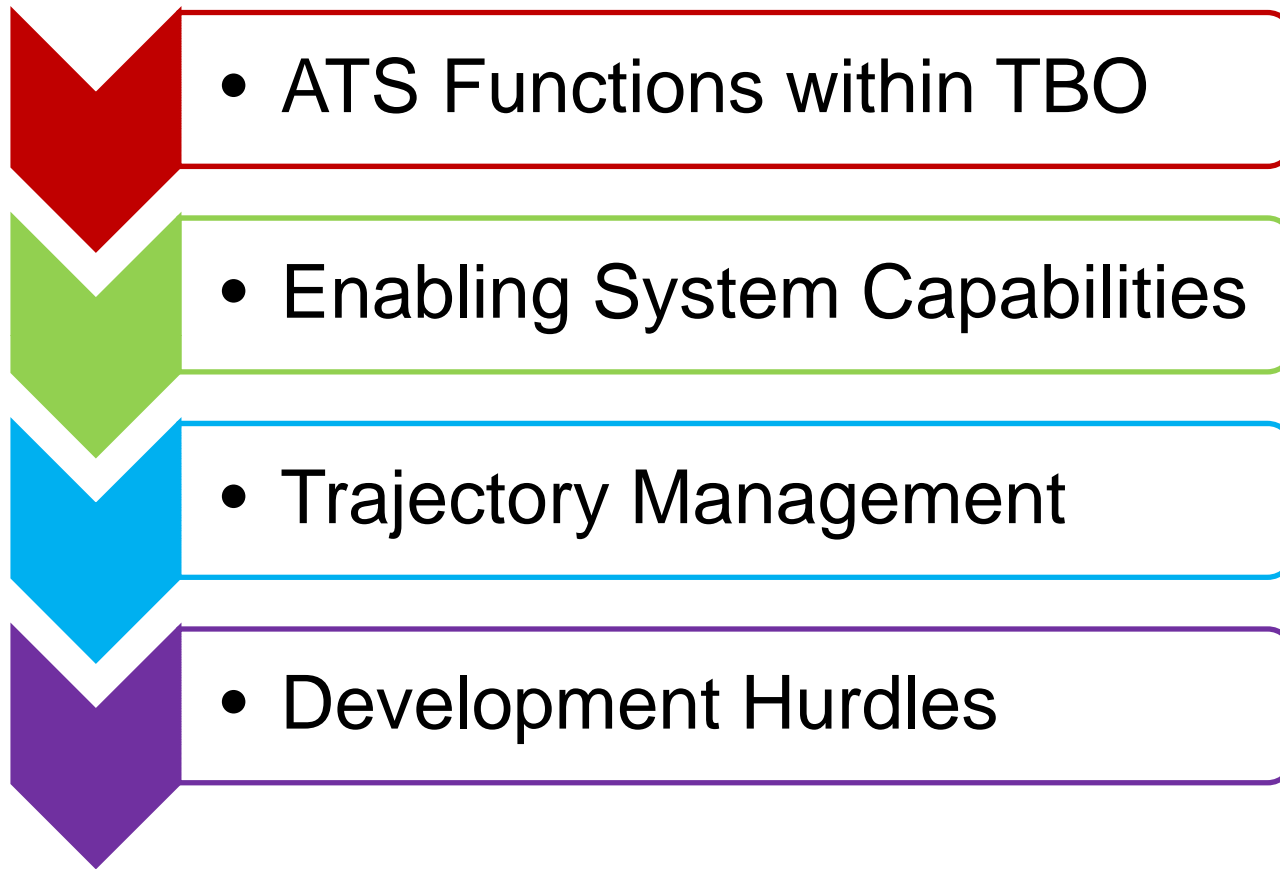


Enabling TBO: ATC Decision Support Systems

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May 18, 2009



Overview



ATS Functions within TBO



- **Example ATS Functions Amenable To Advanced Decision Support:**
 - **Assure Separation**
 - **Alleviate Congestion**
 - **Avoid Severe Weather**
 - **Integrate Arrival and Departure Management**

Decision Support to Balance Individual User Preferences with Throughput

Enabling System Capabilities



- **Air/Ground Data Communication:**
 - **Negotiation of Flight Profiles**
 - **Monitoring Conformance with Airspace Plans**
 - **Rapid Dissemination of Updates to Plan**
- **Multi-Objective Optimization Balances Demand for**
 - **Ample Airspace Capacity and**
 - **Efficient Individual Flight Profiles**

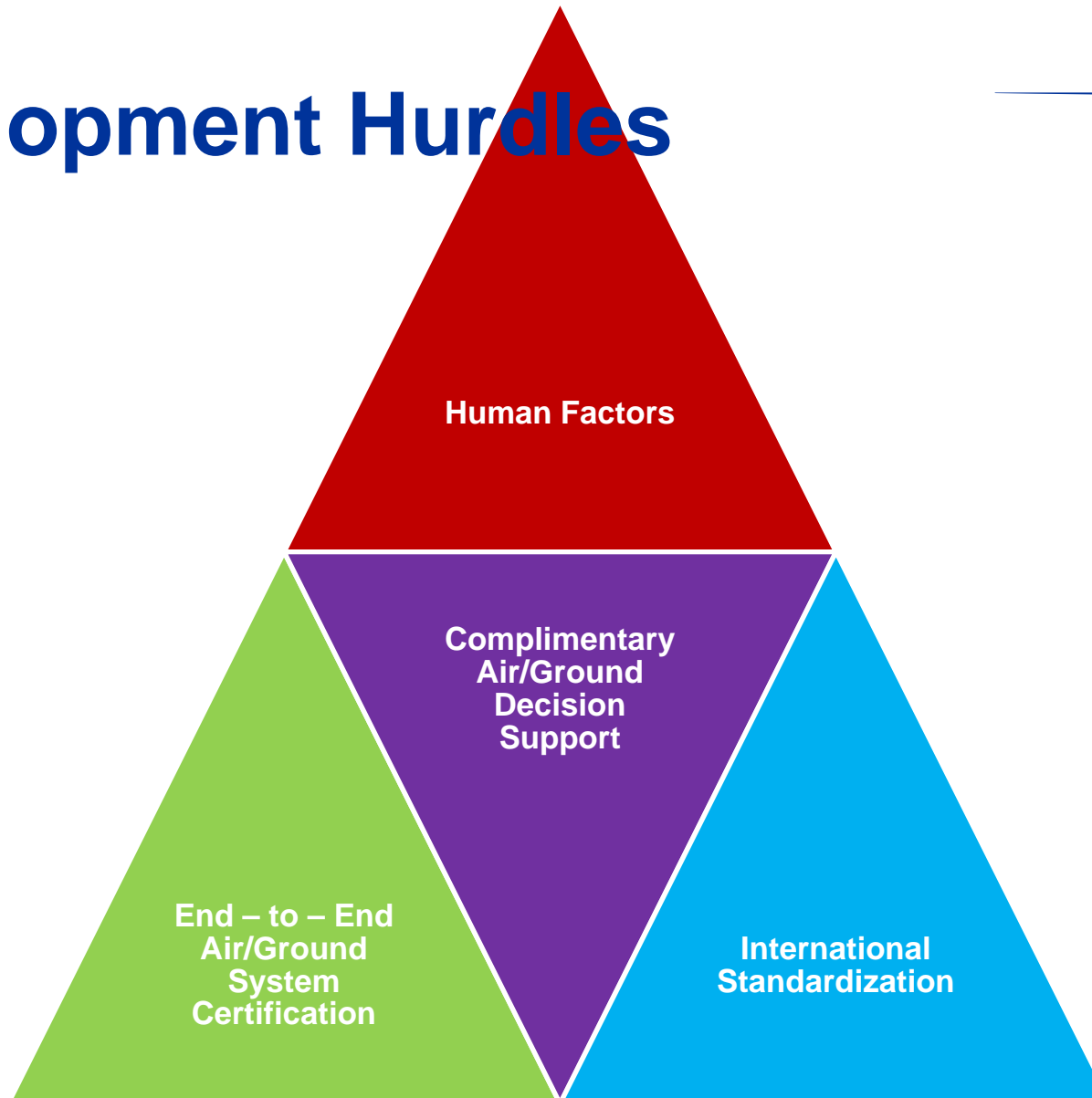
Large Scenario Management Tools Coupled with Powerful Airspace Analysis

Trajectory Management



TBO Needs A Range of Universally Accessible Trajectory Predictors

Development Hurdles



TBO Introduces Fundamental Changes to Development Processes

