



How does FF-ICE fit in other ICAO initiatives

By Crystal Kim, Chief of Air Traffic Management Section

ICAO EUR/NAT FF-ICE Workshop
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**INTERNATIONAL
CIVIL AVIATION
ORGANIZATION**



Presentation overview

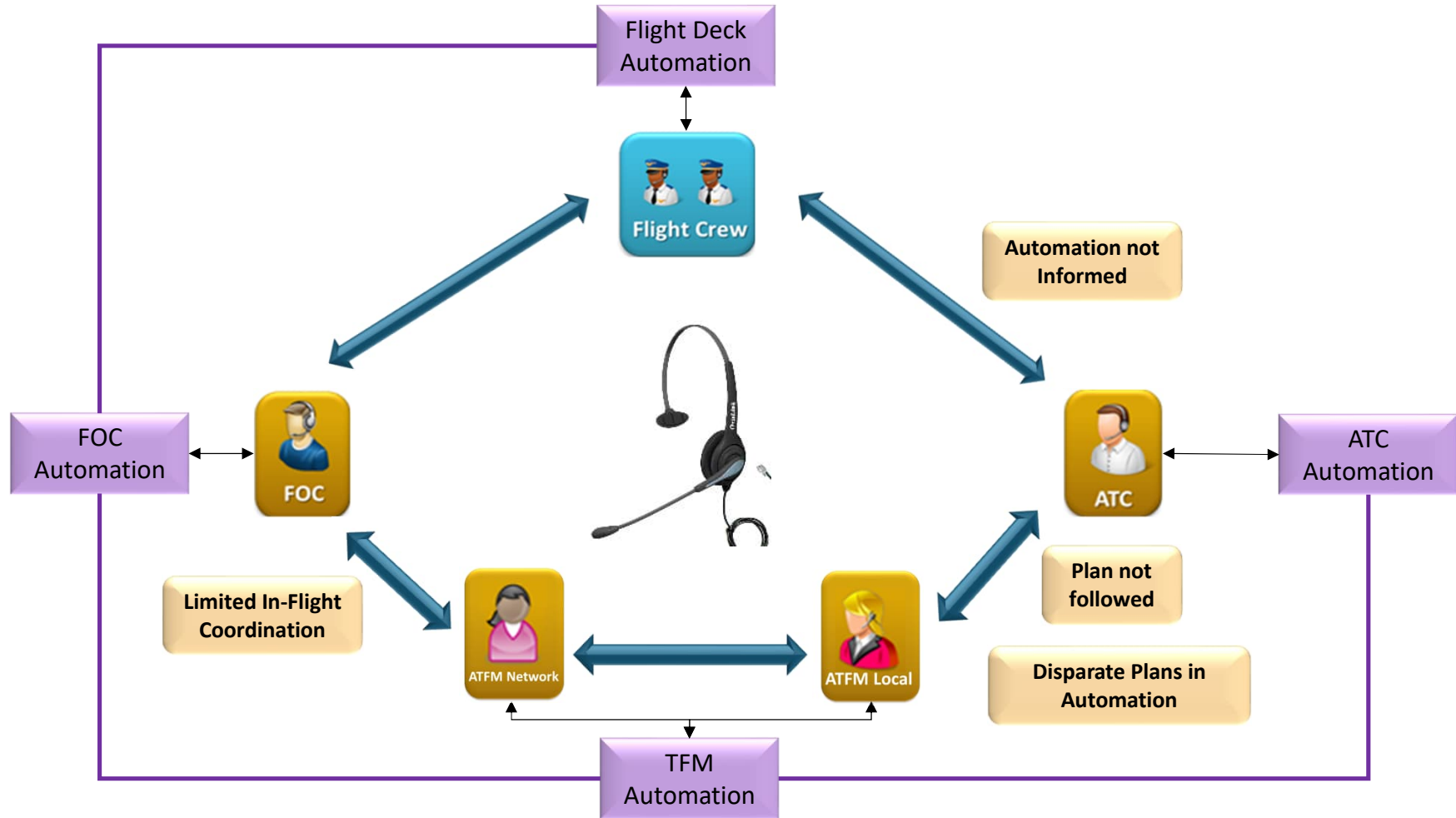
- 01 Trajectory-based operations
- 02 Air traffic flow management
- 03 System-wide information management



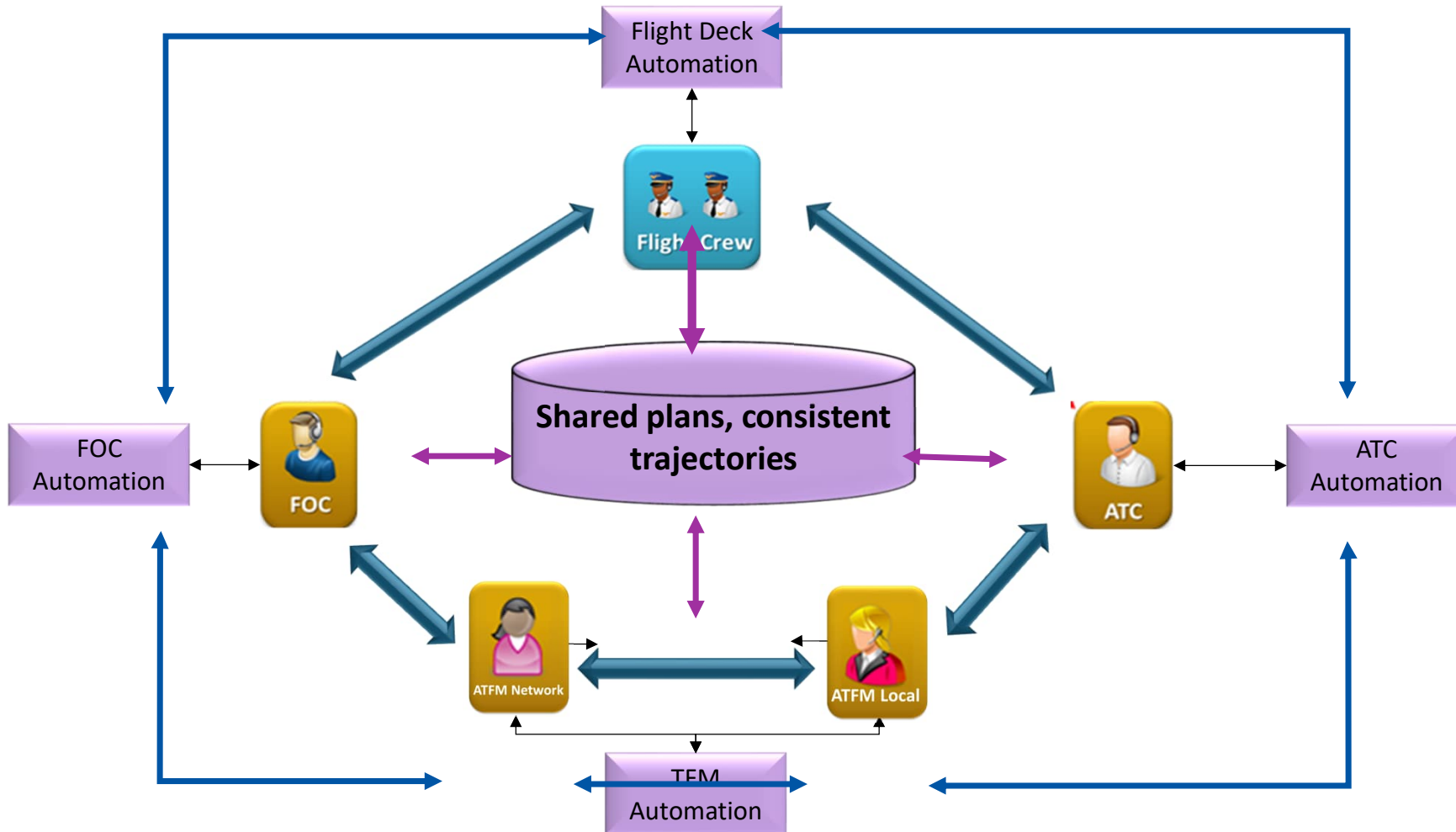
Trajectory-Based Operations



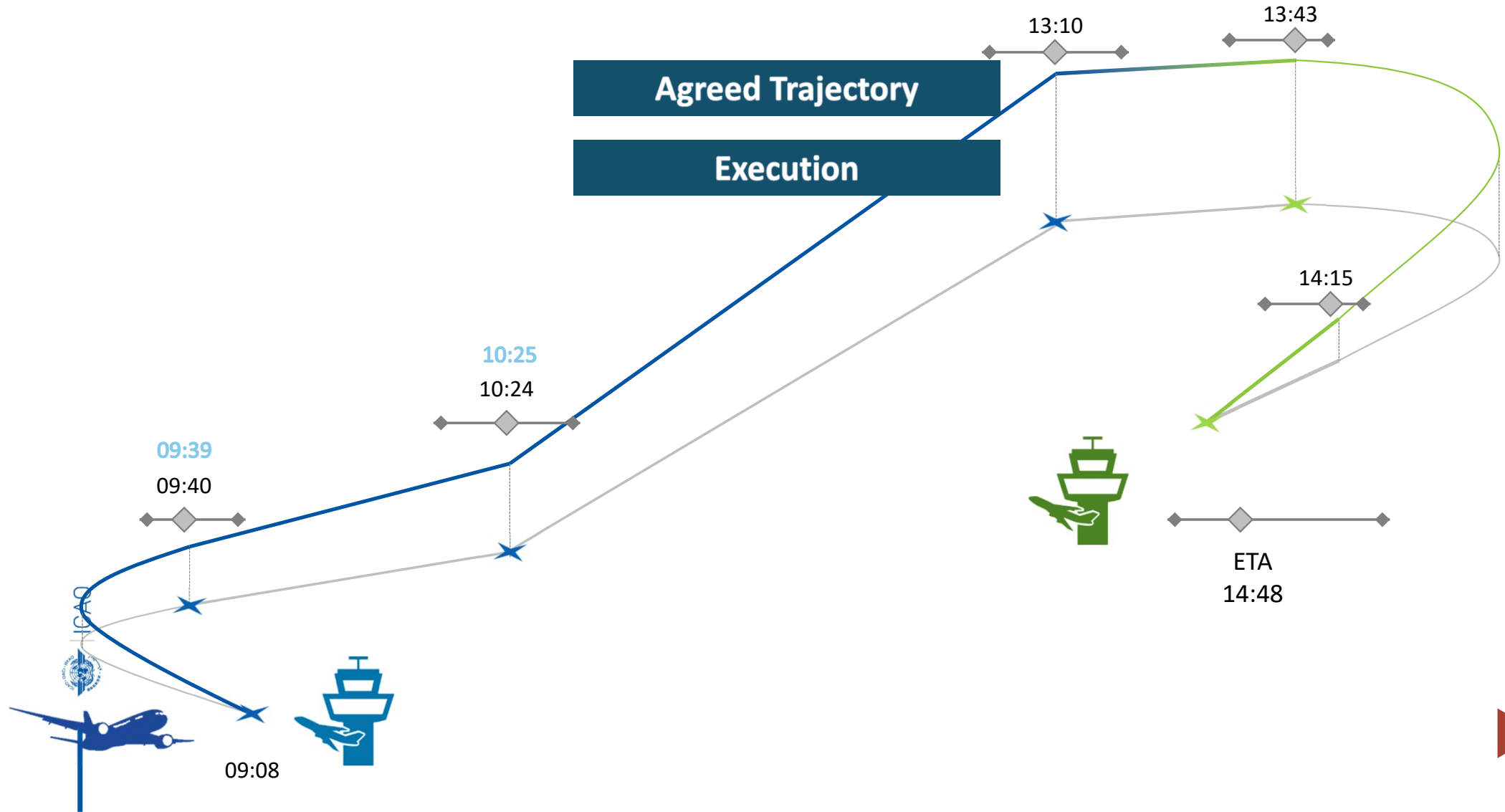
ATM Environment Today with Limitations



Full TBO Environment in the Future

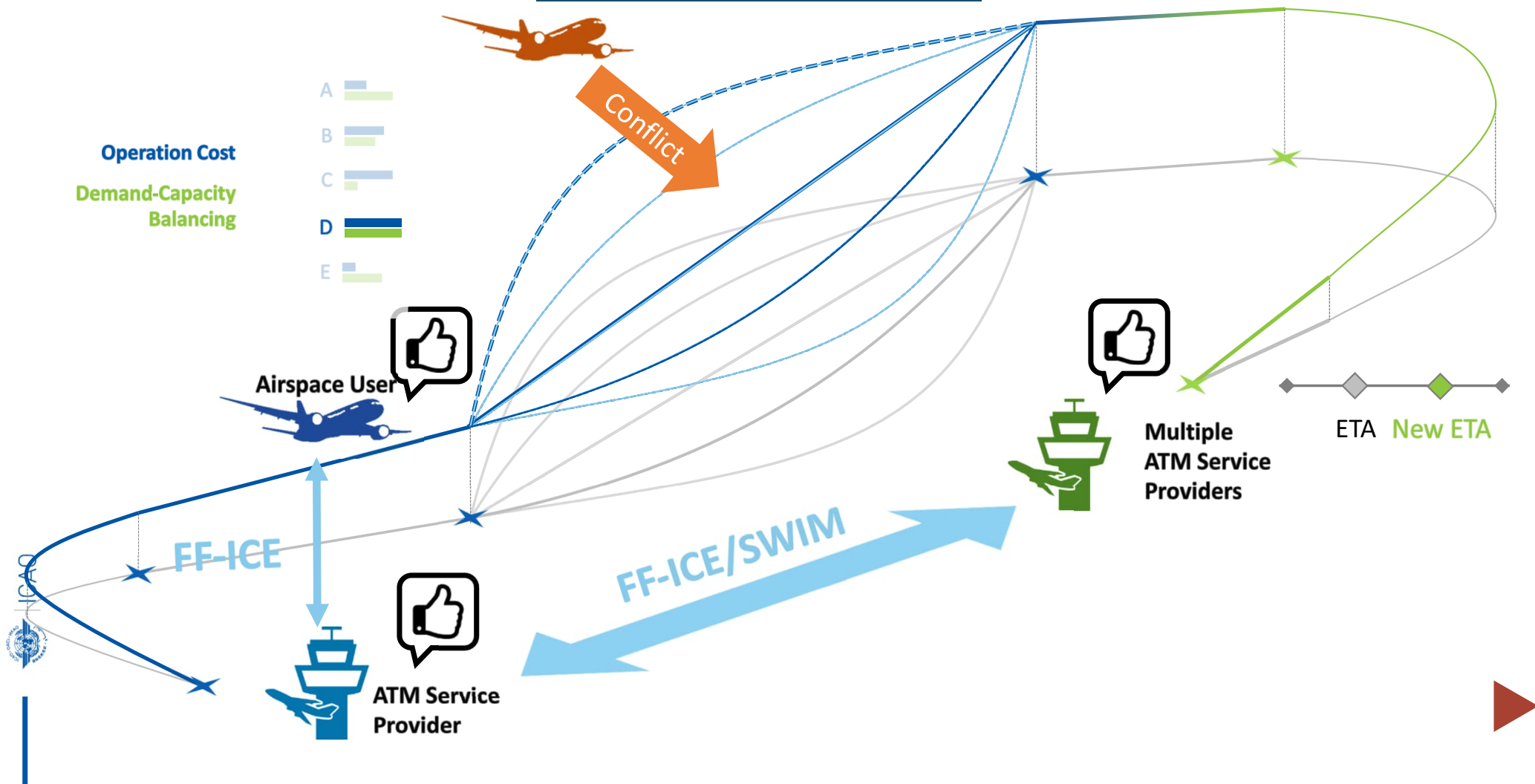


Another way of looking at TBO



Another way of looking at TBO

Synchronisation

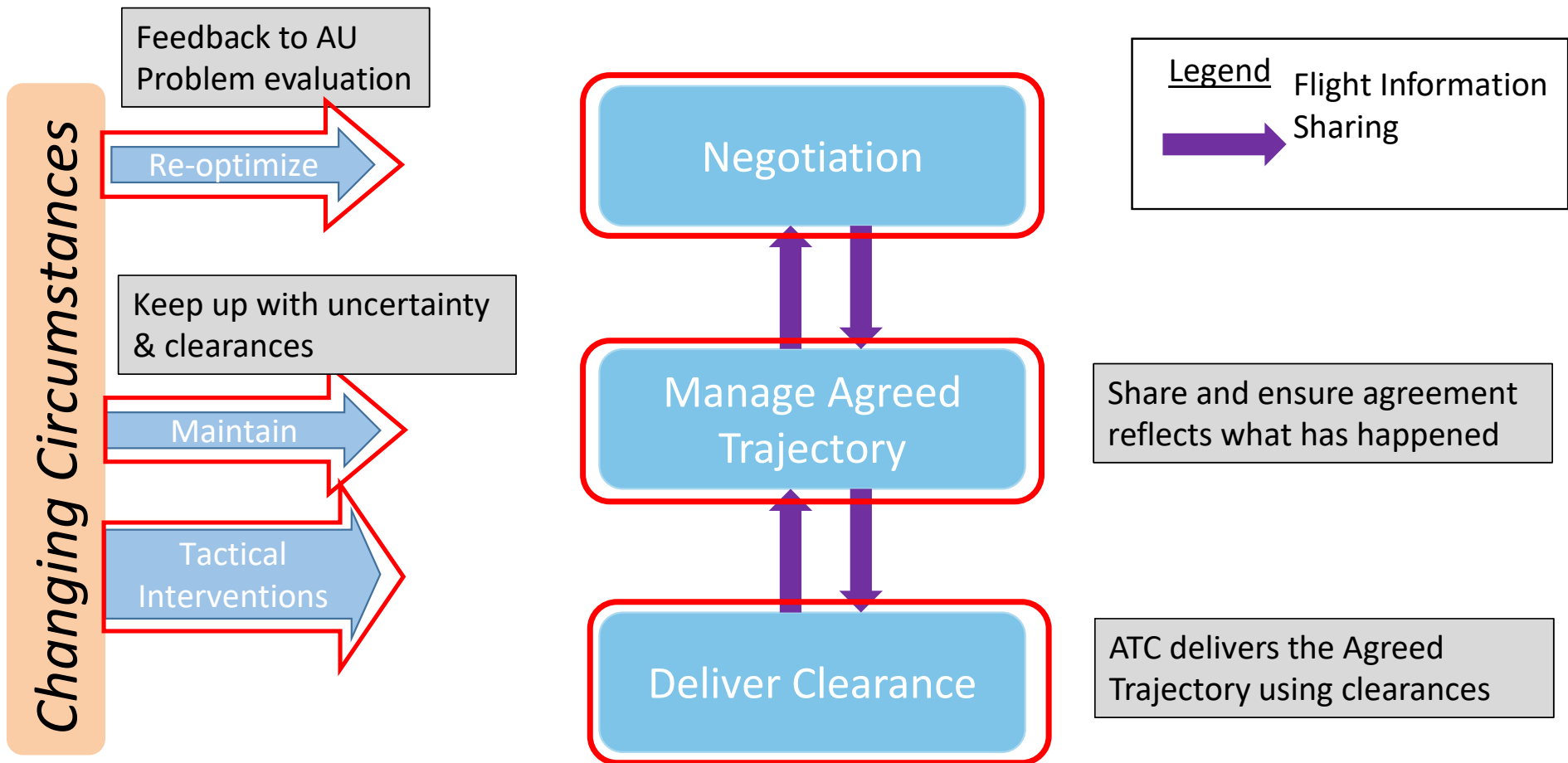




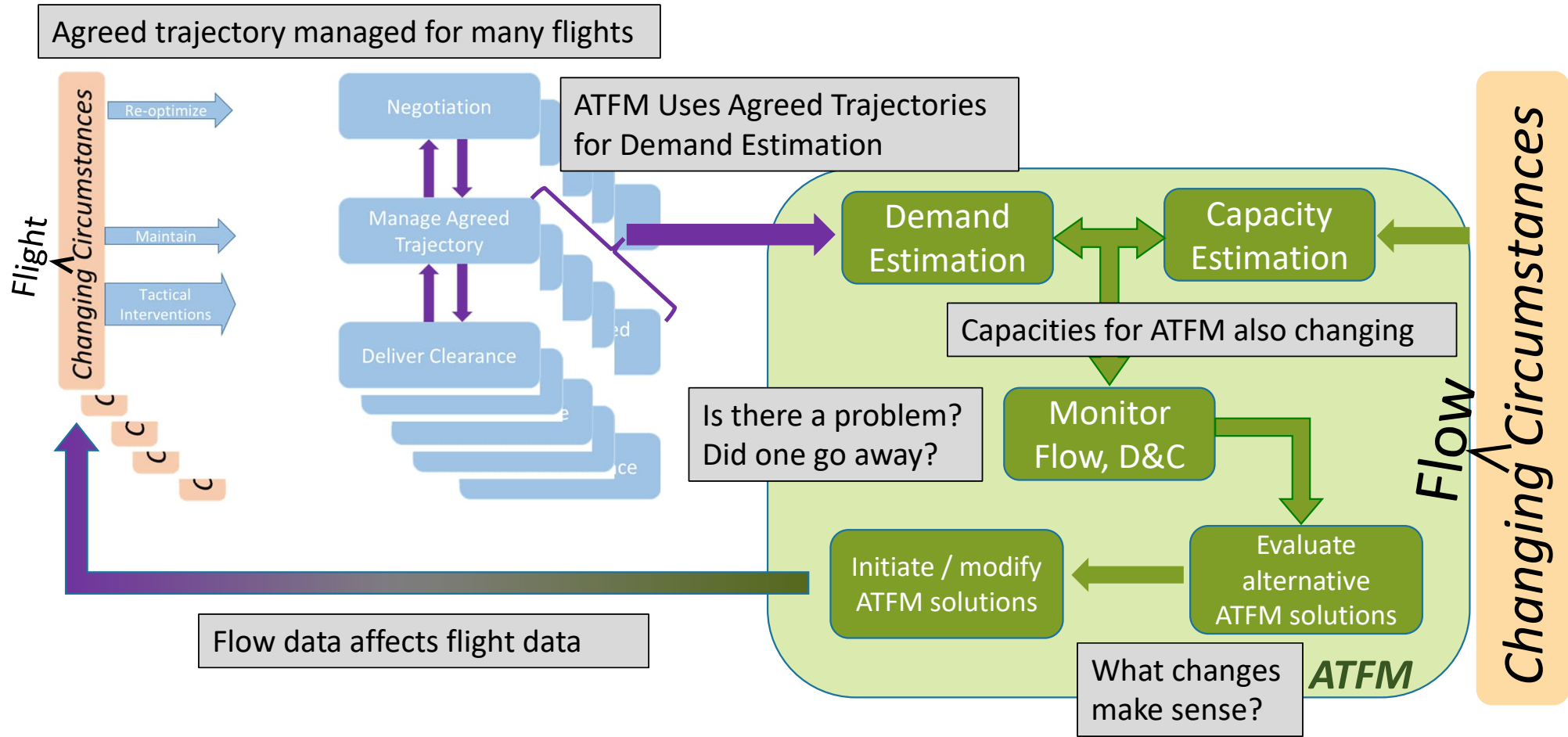
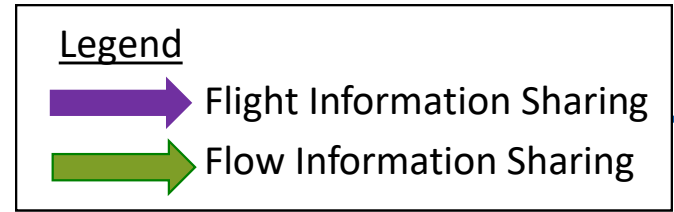
Air Traffic Flow Management



FF-ICE concept framework



FF-ICE concept framework

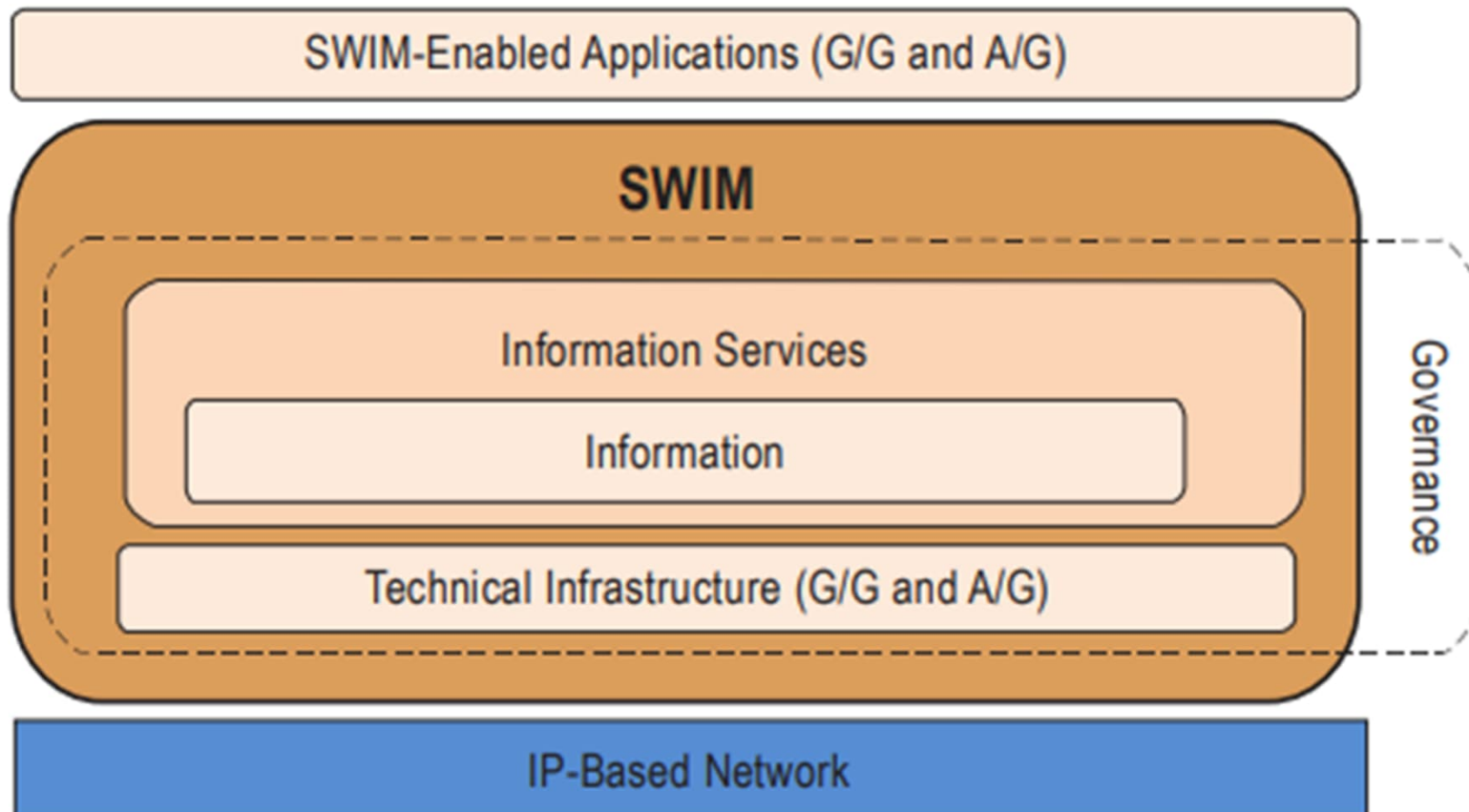




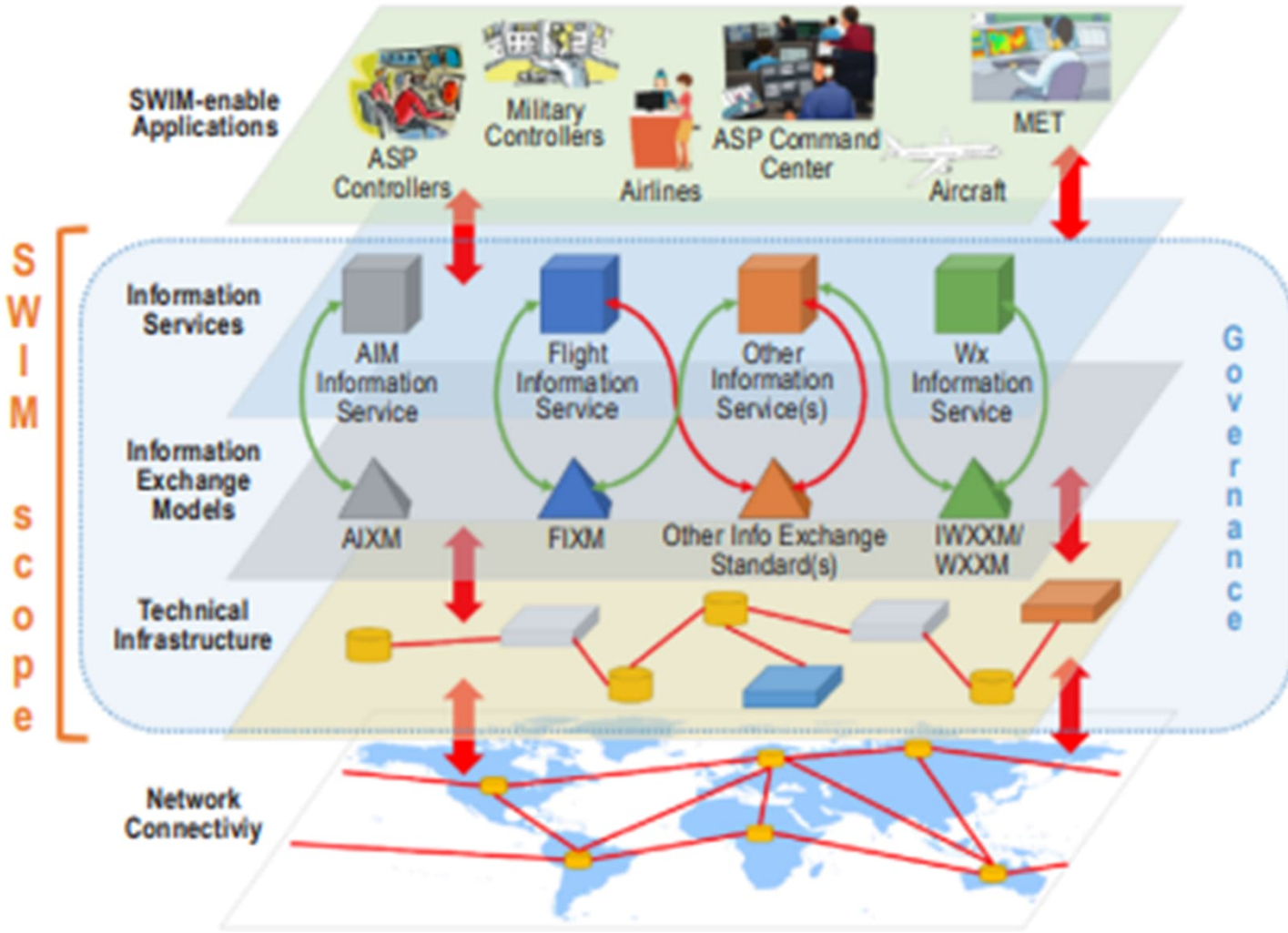
System-wide information management



FF-ICE services make use of SWIM components – Information Services



SWIM enables global interoperability required for FF-ICE services



- ✓ SWIM enables FF-ICE (No SWIM = no system-wide digital information exchange).
- ✓ FF-ICE enables TBO (No FF-ICE = no shared, collaboratively optimized trajectory)
- ✓ FF-ICE enhances ATFM (ATFM can exist without FF-ICE, but with FF-ICE it becomes far more predictive and collaborative)



In Summary

Subject	Depends on SWIM	Depends on FF-ICE
SWIM	-	NO
FF-ICE	Yes	-
ATFM (Basic)	No	No
ATFM (Advanced)	Yes	Yes (strongly enhanced)
TBO	Yes	Yes (essential)

Thank You

