

The Virtual Centre Initiative

8th Florence Air Forum, 21 October 2016

Disruptive Technologies in Air Traffic Management

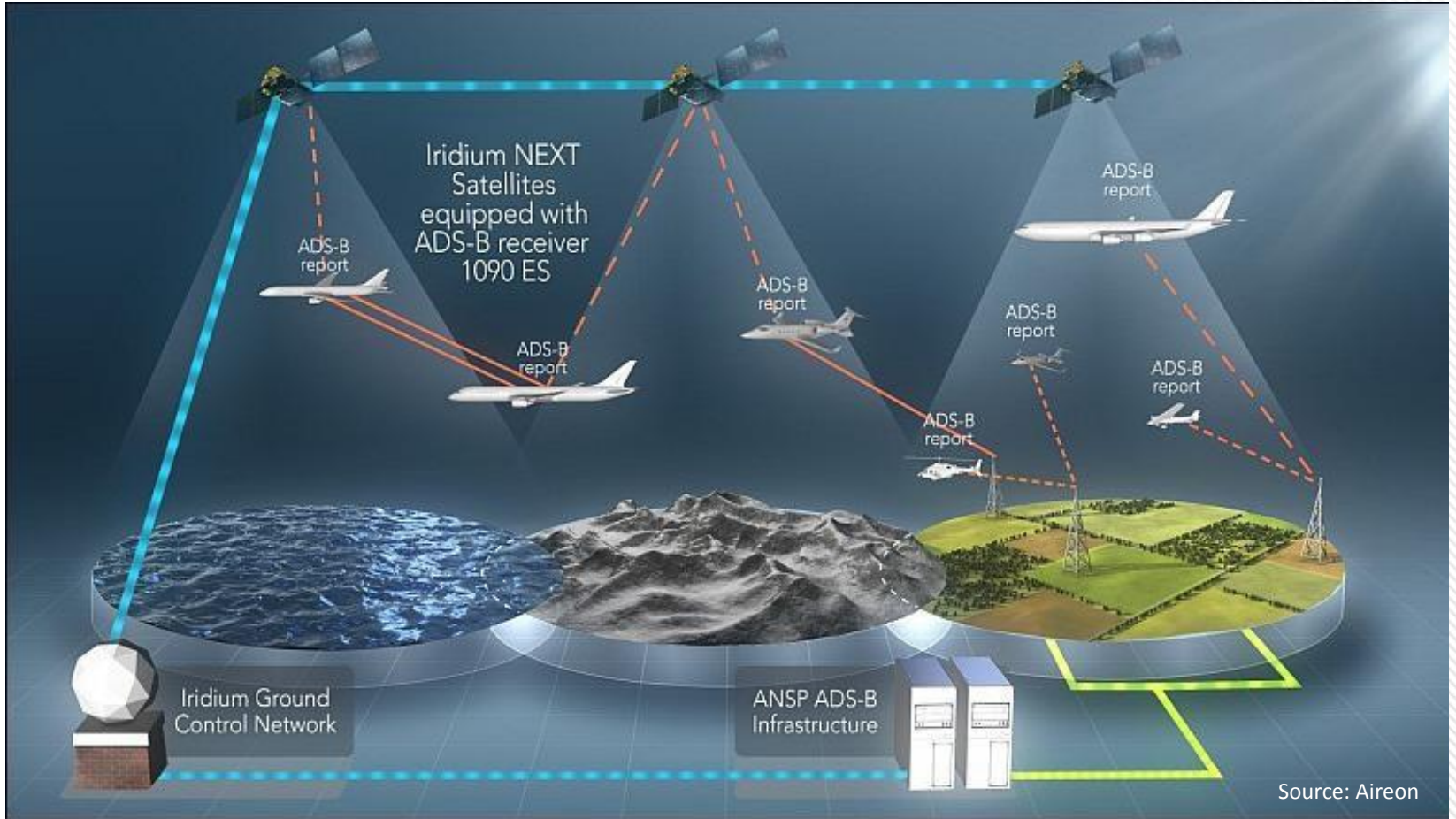
Klaus Meier, Daniel Weder

Disruption



Source: Aireon

Disruption

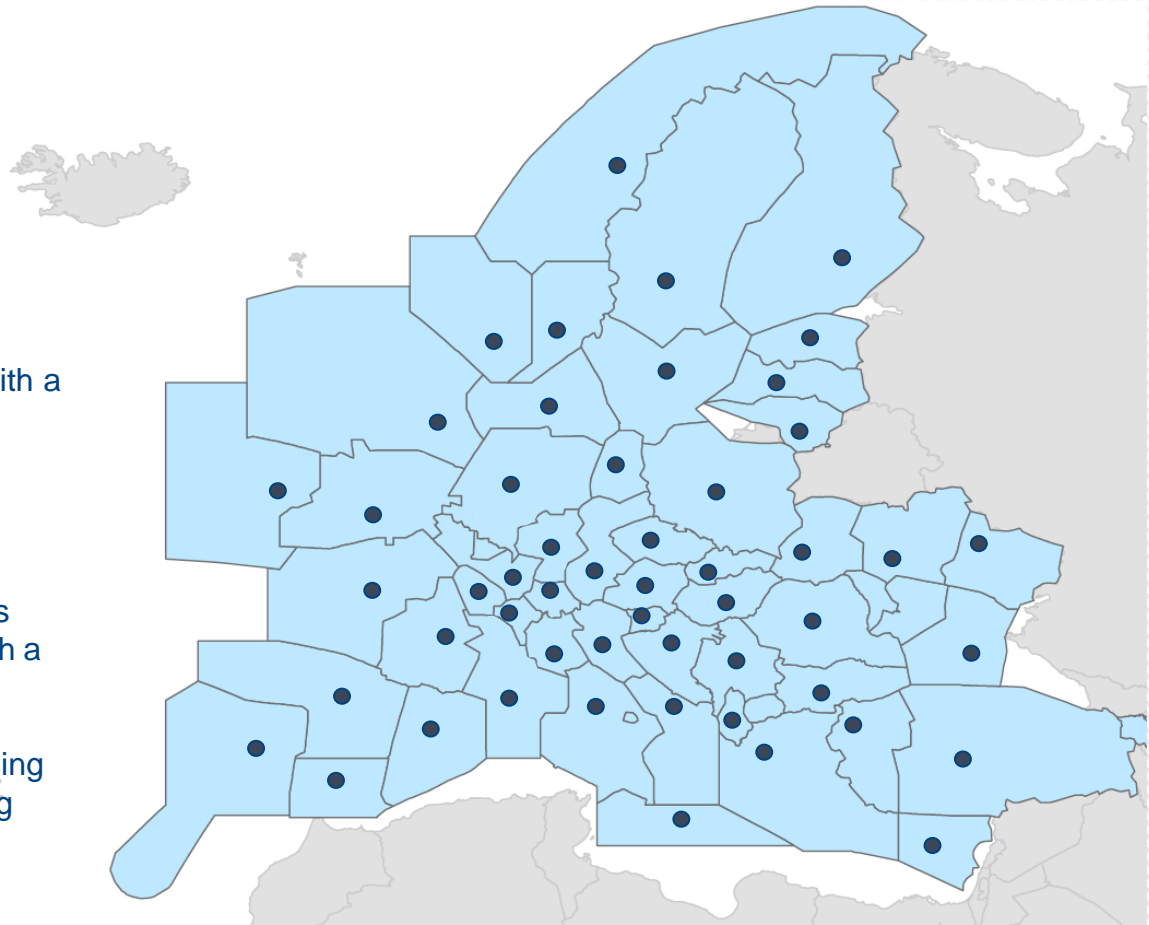


Air Traffic Management – 1960

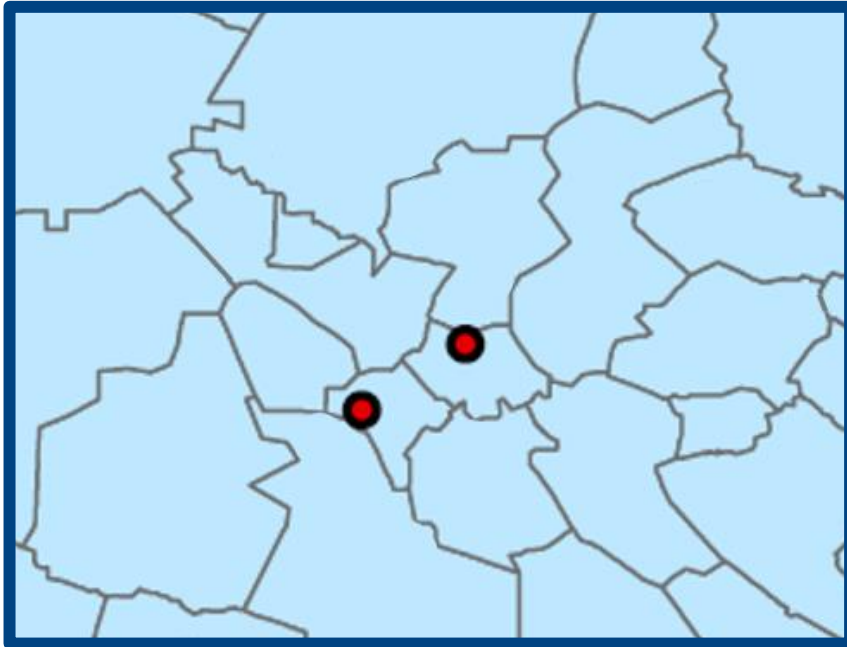


Air Traffic Management Today – Europe

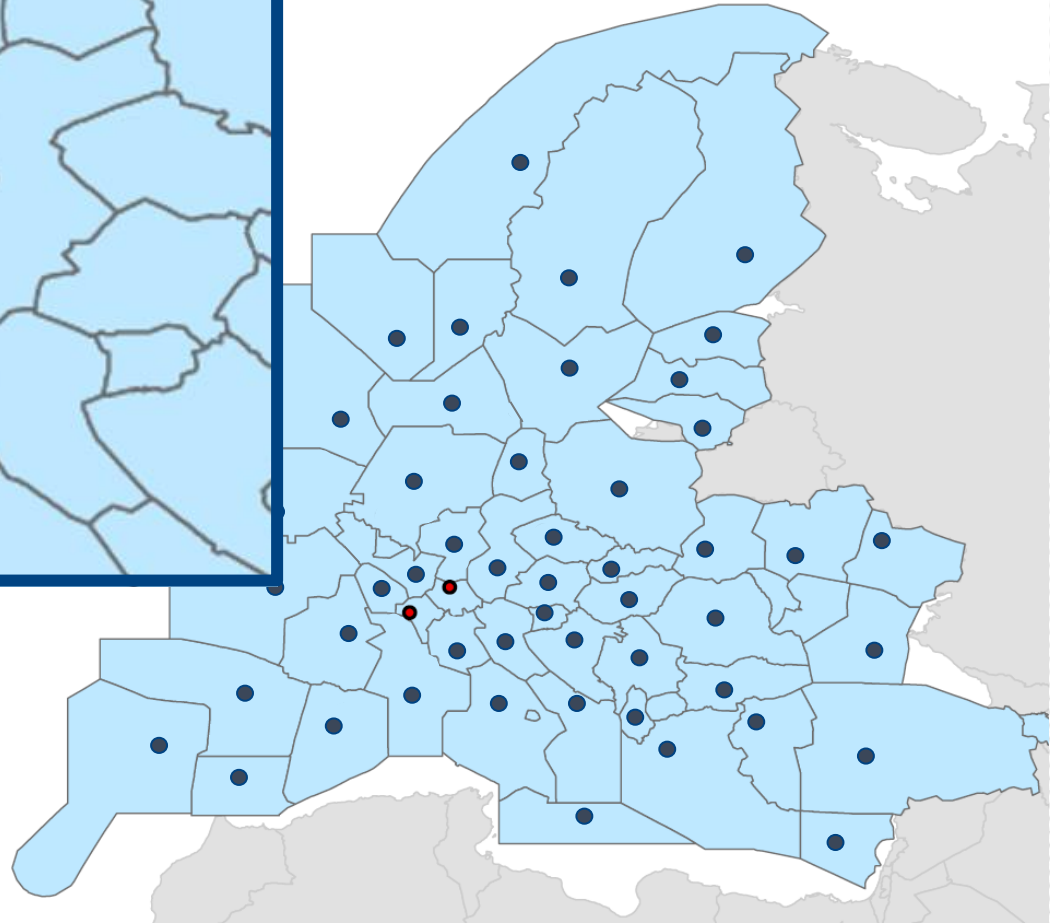
- Ground based *control* system
- 63 area control centers manage the airspace above with a data center below
- Very weak data links between centers
- Connection between centers is established by the pilot through a frequency change
- 37 different flight data processing solutions with "blocks" evolving around major suppliers



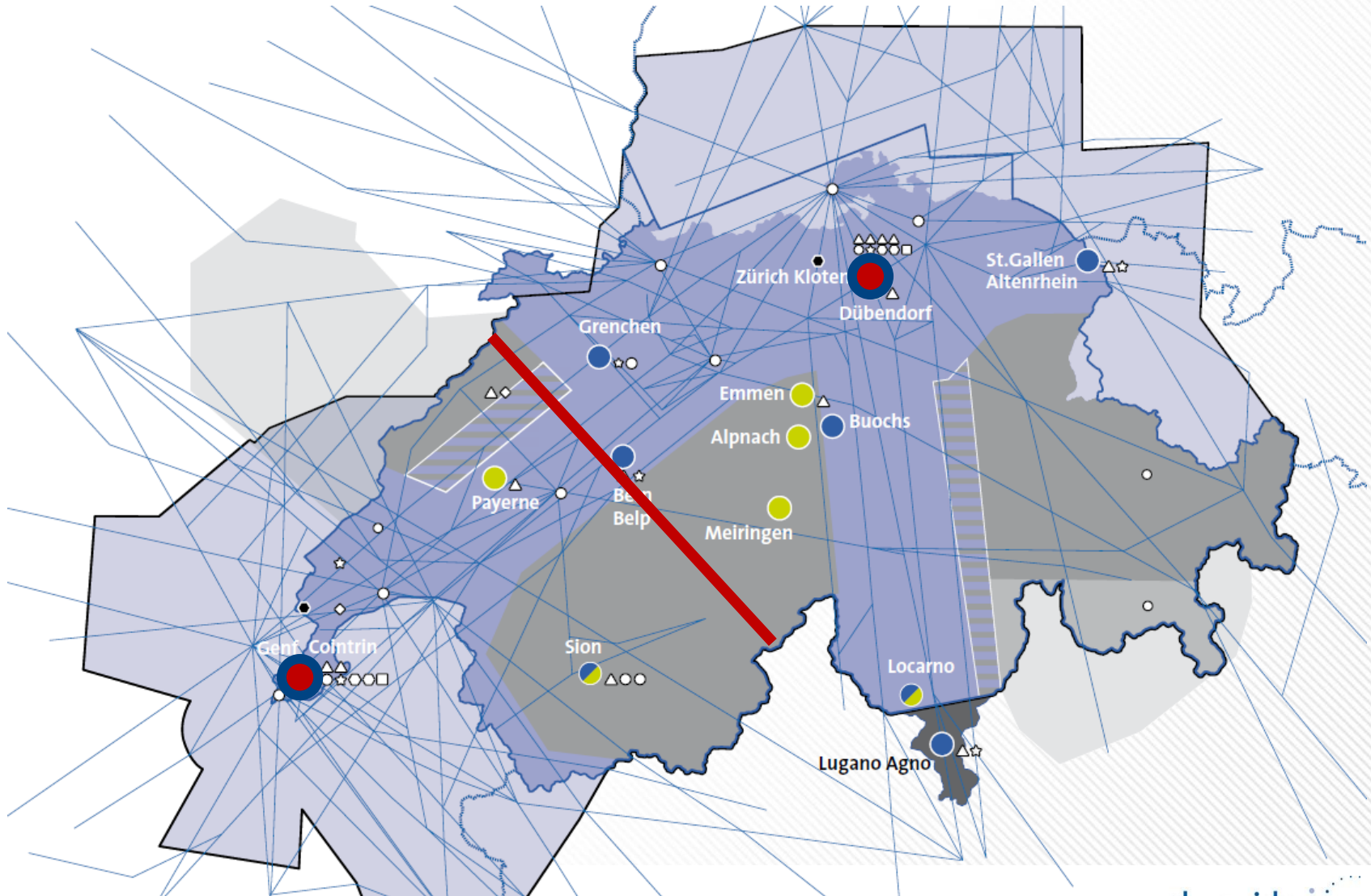
Air Traffic Management Today – Europe



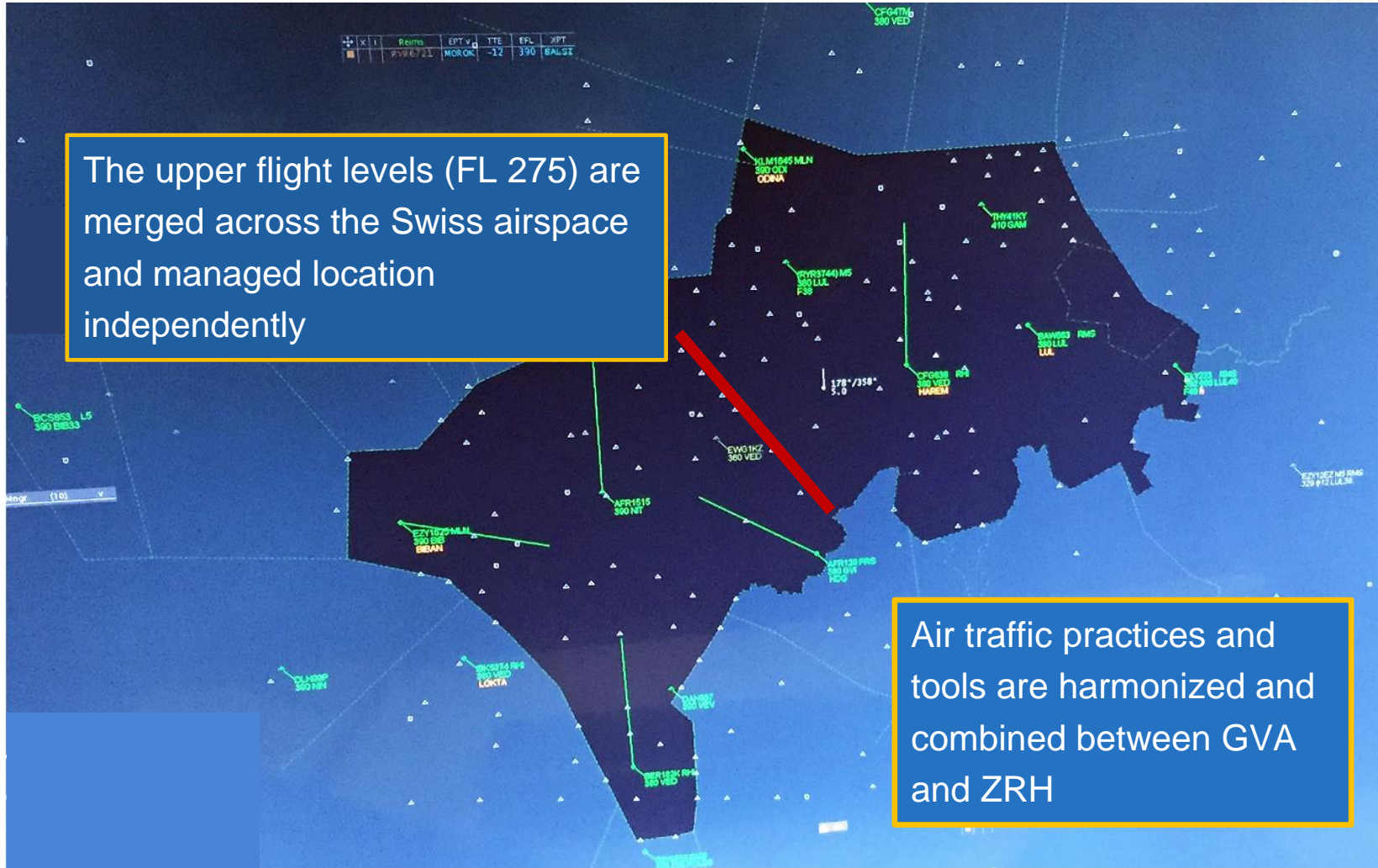
- Connection between centers is established by the pilot through a frequency change
- 37 different flight data processing solutions with "blocks" evolving around major suppliers



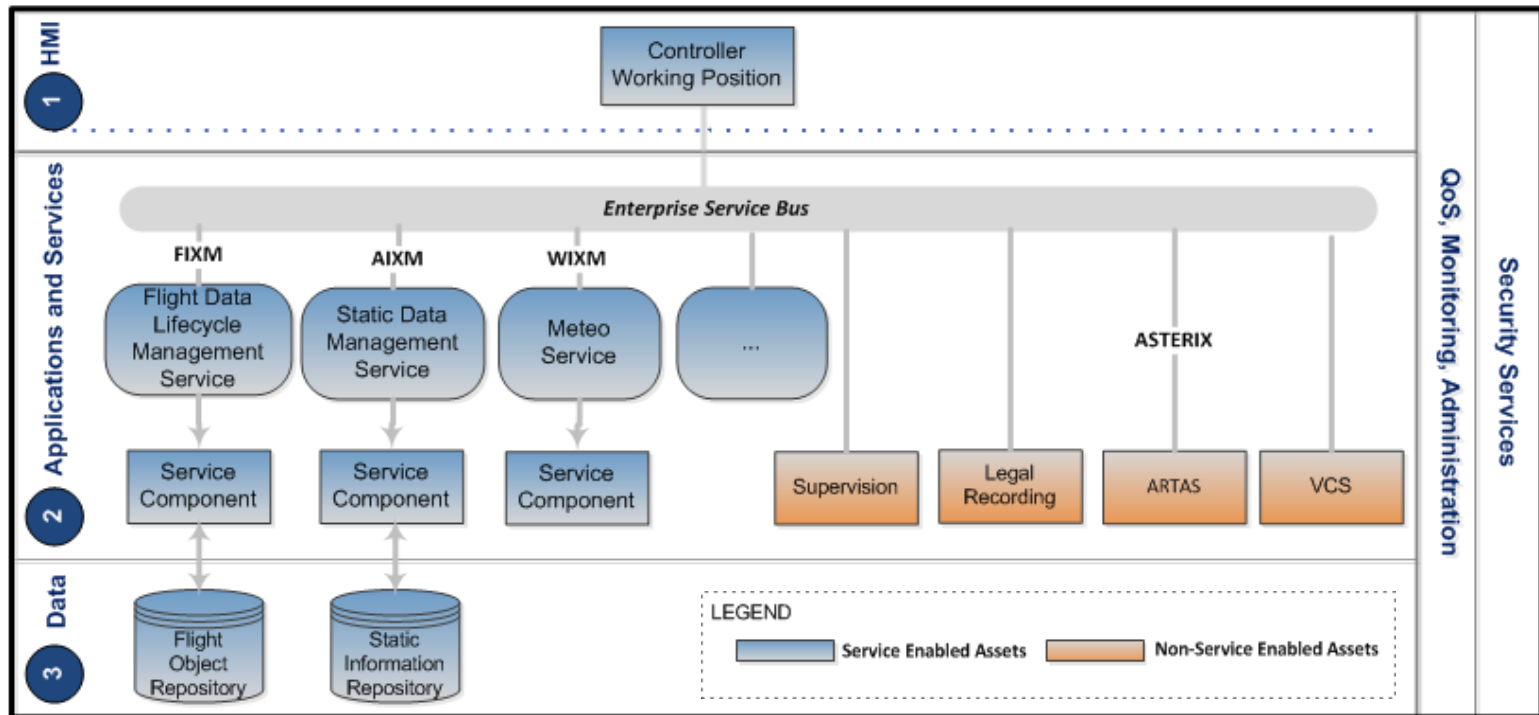
Air Traffic Management – Switzerland



One Sky by One System

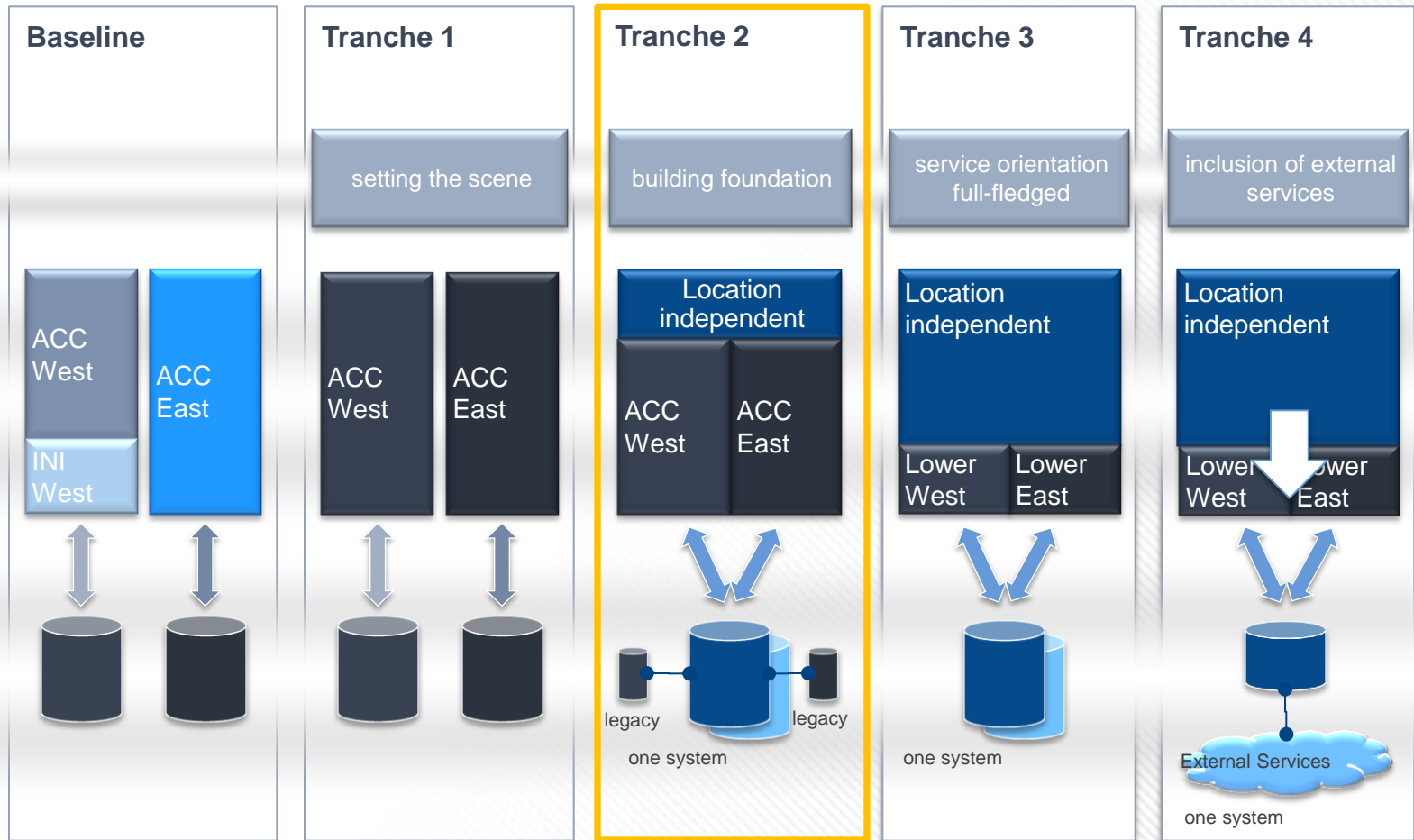


Open System Architecture – Services Orientation



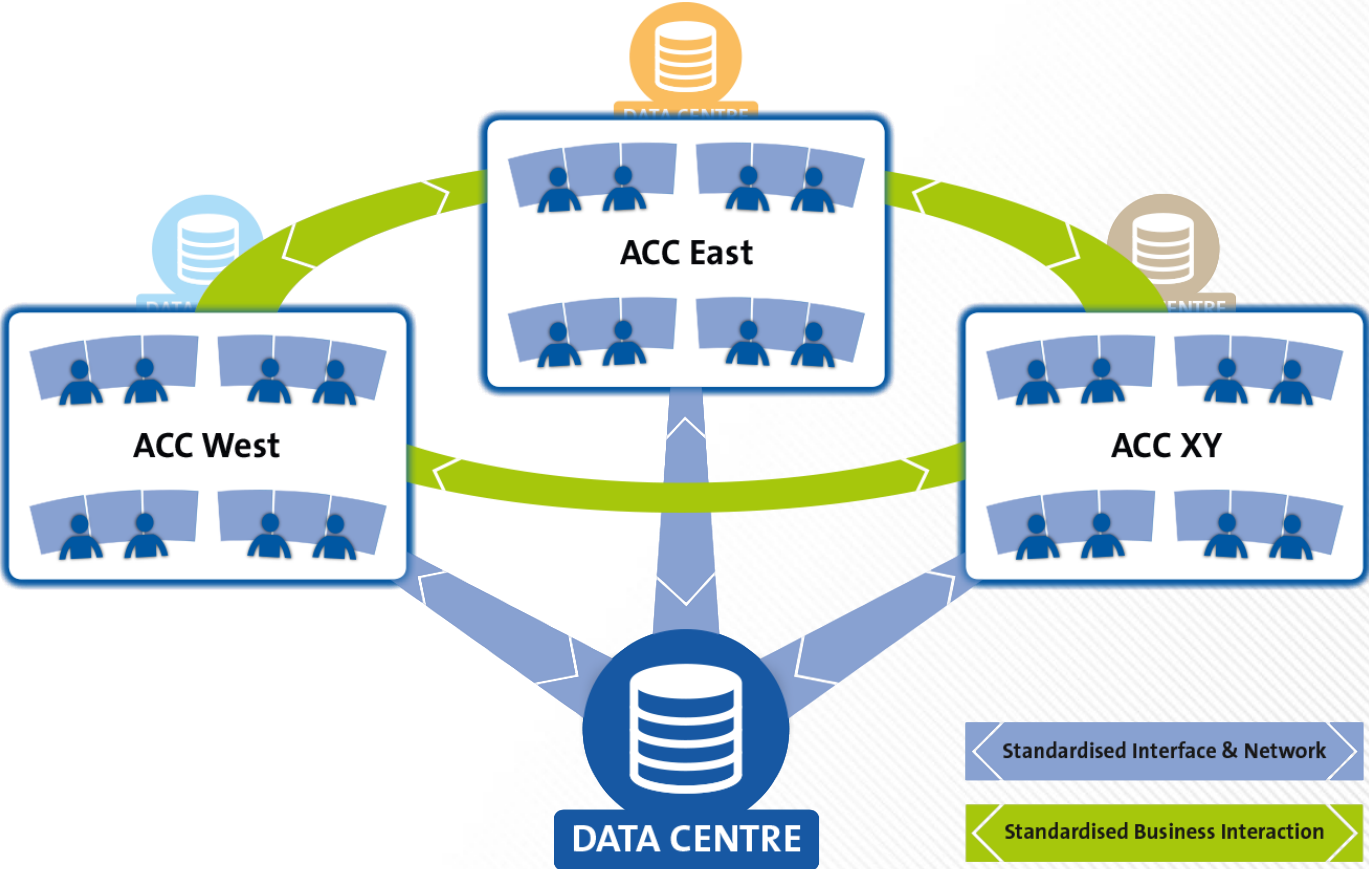
- 1 No Tight Coupling
- 2 No Point-to-Point Integration
- 3 No Data Duplication

Virtual Centre Implementation Phases 2014 - 2022



ACC : Area Control Center
 INI : Lower airspace segments in Geneva

The Virtual Center – new business model



One Sky by One System



member of FABEC

skyguide 