Flight-Centric ATC

Conventional  Flight-Centric ATC

Allocation Strategies:

Flight centric ATC, example workload based traffic assignment
Flight centric ATC, example flow based traffic assignment

Operating method with sectorisation

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Expected Benefits

- Human Performance
- Fuel Efficiency
- Cost Efficiency
- Flexibility
- Predictability
Key R&D Needs

- Allocation Strategies
- Conflict Management
- Radar Display Adaption
  Traffic Filtering
- Wide-Area Communication
- Roles & Responsibilities
  Tasks Allocation
Partners

Prague Exercise
Air Navigation Services of the Czech Republic

Hamburg Exercise
DFS Deutsche Flugsicherung

Madrid Exercise
ENAIRE

Budapest Exercise
HungaroControl

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Madrid Exercise

- Feasibility of the OPS room configuration with Allocator and Flight-Centric planners.
- Algorithms for the flights assignment criteria.
- Coordination with adjacent conventional control areas.
- Executive and planner controllers’ HMI and supporting tools.
Prague Exercise

- Different allocation strategies: basic, complexity based, conflict based
- Dynamic airspace configuration

Flight Efficiency  
ATCO Workload  
Capacity

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Prague Exercise
Budapest Exercise

- Dynamic Traffic Allocation based on
  - Number of A/C
  - Number of Conflicts
  - Vertical Movements
- Enhanced Conflict Detection Tool
  - Conflict Resolution Advisories
  - Priority Rules reducing need for coordination
- Wide Area Communication Prototype in Real-Time Simulation
Budapest Exercise

- All Traffic
- Filtered Traffic

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