



# NEW CONCEPTS

**Rapporteur's Report**

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4<sup>TH</sup> USA / Europe  
Air Traffic Management  
**ATM2001**  
R&D Seminar



# Sector-Less Air Traffic Management

*Vu Duong, Eurocontrol Experimental Centre*

- Flight Trajectory Based vs. Airspace Based
- Today's Sector → Super Sector → Mega Sector → **Sector-Less**

## Promising

- Proposes a paradigm change

## Open Questions

- Role of ATCo in sector-less environment
- Transition from “convoy MSP” to sector-less

Very early work ... which should continue



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# Automated Airspace Concept

*Heinz Erzberger, NASA Ames*

- Ground Based Trajectory Monitoring
  - Automated Airspace Computer System +
  - Tactical Separation Assisted Flight Environment System +
  - Ground-to-Air Datalink = **Separation Assurance**

## Promising

- New concept relying strongly on automation, progress on failure modes

## Open Questions

- Mixed (equipped vs. non-equipped) traffic
- Role of automation vs. human controllers
- System and functional reliability

Very early work ... which should continue



# Recommendations

## Sector-Less

- Concentrate on operational issues in sector-less mode rather than working on transition issues
- Continue Investigation on operational issues for super / mega sector concept (convoy)

## Automated Airspace Concept

- Continue investigations on
  - failure modes
  - operational issues for mixed traffic

Both concepts are promising and are addressing limitations in sector capacity - we recommend increased collaboration !