

PROJECT 30/10: OPERATIONAL PERSPECTIVES ON NETWORK CAPACITY, SAFETY AND HUMAN PERFORMANCE

International Federation of Air Traffic Controllers'
Association (IFATCA)

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THE CORE PREMISE: “DIFFERENT”, NOT JUST “REDUCED”

- Project 30/10 is a network capacity enhancement programme.

	Conventional Standards	Project 30/10 Standards
Buffer Margin	Generous tactical buffer to absorb routine operational variations (weather, pilot response). 	Reduced tactical buffer; relies heavily on precision, automation, and prompt intervention. 

THE COGNITIVE CEILING: CAPACITY VS WORKLOAD

- Theoretical Airspace capacity does not equal human cognitive capacity.
- Sectors reach human performance limits long before physical volume limits.



THE COGNITIVE CEILING: CAPACITY VS WORKLOAD

The Ripple Effect



- In a reduced separation environment, aircraft are tightly sequenced. A single tactical intervention forces the controller to recalculate the entire stream, drastically compounding cognitive load.

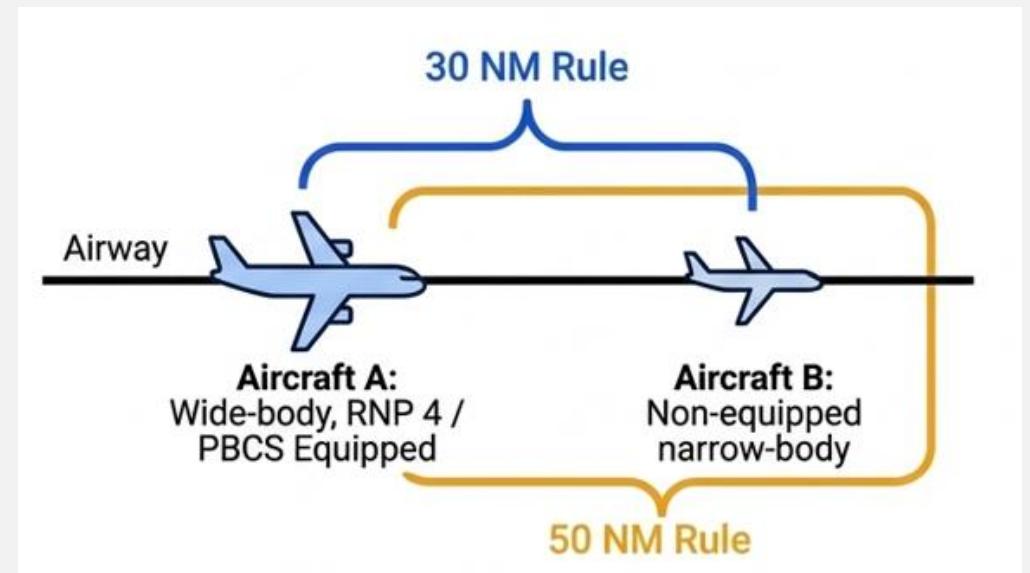
Actionable Insight



- Where traffic demand spikes, dynamic sectorization and appropriately qualified personnel are as critical as the separation standard itself.

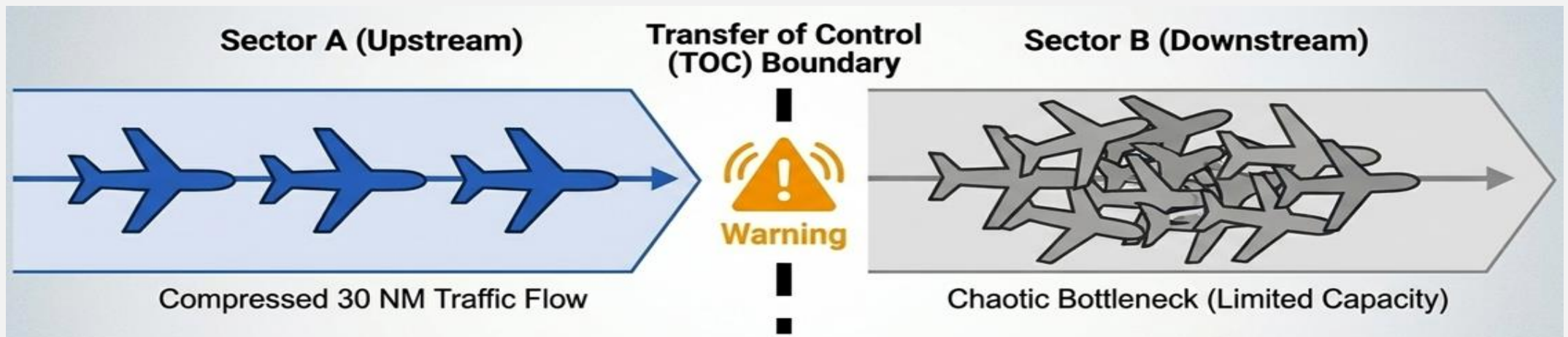
THE OPERATIONAL FRICTION: MANAGING MIXED CAPABILITIES

- Airspace transition is not binary. Controllers must manage highly complex geometries, applying disparate separation minima within the exact same airspace and traffic stream.
- Conflicting separation standards for mixed equipage force complex tactical adjustment.
- Constantly verifying aircraft equipage and dynamically adjusting tactical buffers between mixed fleets severely limits anticipated capacity gains.



NETWORK-WIDE FLOW: THE DOWNSTREAM RIPPLE EFFECT

- Capacity Improvements in one sector are futile and potentially hazardous if downstream constraints remain unresolved.
- Delivering compressed traffic streams into an adjacent FIR operating under legacy constraints creates immediate workload spikes and capacity bottlenecks for the receiving controllers.



THE PROJECT 30/10 ENABLERS AND THE POSITIVE SAFETY CULTURE

Regulatory Framework and Flow Management :

Regional Seamless ANS Plan, LoAs
and coordination procedures to
harmonize cross-FIR
coordination.

CNS/ATM Capability and Automation:

Traffic conflicting alert, Required
Surveillance Capability, Onboard
Equipage, automation in flight data
transfer.

Positive Safety Culture

Safety Assessment :

Human performance, controller
workload, traffic complexity, sector
interactions, traffic flow dynamics,
technical failure and disruptions.

Personnel Training:

Realistic high and low traffic
volumes, operational disruption
and different contingency
situations.

**THANK YOU.
QUESTIONS?**

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