GLOBAL AIR NAVIGATION PLAN

The need for a harmonized evolution of the global air navigation system

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HOW STANDARDS PROLIFERATE:
SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.

SITUATION:
THERE ARE 14 COMPETING STANDARDS.

14?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES. YEAH!

SOON:

SITUATION:
THERE ARE 15 COMPETING STANDARDS.
The Global Air Navigation Plan (GANP)

- Strategy to achieve a global interoperable air navigation system offering safe, secure and efficient air transport for people and goods worldwide, while limiting the impact of aviation on the environment.

- The GANP serves as a worldwide reference to transform the air navigation system in an evolutionary and inclusive manner so that no State or Stakeholder is left behind.
Flight Plan

• Our goal
• Trends and emerging opportunities
• The air navigation system ahead of us
• Evolutionary transformation
• Scalable implementation
• Conclusion
Global Air Navigation Plan

OUR GOAL
SOCIAL WELLBEING ALL PEOPLES OF THE WORLD

- More quiet
- Cleaner
- Safer
- More resilient
- More profitable
Global Air Navigation Plan

TRENDS AND EMERGING OPPORTUNITIES
A NEW ERA IN AVIATION

• Demand, including new entrants
A NEW ERA IN AVIATION

• Technology and information
  – Autonomous systems
  – Artificial intelligence
A NEW ERA IN AVIATION

• Technology and information
  – Full connectivity

“ANYTHING THAT CAN BE CONNECTED, WILL BE CONNECTED”
A NEW ERA IN AVIATION

• Humans
A NEW ERA IN AVIATION

• Business Models
Global Air Navigation Plan

THE AIR NAVIGATION SYSTEM AHEAD OF US
A high-performing Air Navigation System

<table>
<thead>
<tr>
<th>Global interoperability</th>
<th>Ensure global interoperability</th>
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<tbody>
<tr>
<td>Access and equity</td>
<td>Access and equity to all airspace users</td>
</tr>
<tr>
<td>Capacity</td>
<td>Capacity to accommodate forecast demand</td>
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<tr>
<td>Efficiency</td>
<td>Increase efficiency of air operations</td>
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<td>Flexibility and predictability</td>
<td>Enable flexibility to meet arrival times</td>
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<tr>
<td>Sustainability</td>
<td>Secure air navigation system sustainability</td>
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<tr>
<td>Resilience</td>
<td>Resilience to cope with system disruptions</td>
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Global Air Navigation Plan

TRANSFORMATIONAL EVOLUTION
Key Concepts

• Management by trajectory
• Information sharing
• Network and flight centric
• Integrated infrastructure
• Multi-modal transport system
Global Air Navigation Plan

SCALABLE IMPLEMENTATION
Aviation System Block Upgrades Framework

• Global interoperable scalable implementation enabled by technological innovation

“ONE SIZE DOES NOT FIT ALL”
Global Air Navigation Plan

CONCLUSION
No State left behind
DRAFT GANP 2019

MULTILAYER STRUCTURE

- Web based application: reports
- Global Frameworks: BBBs & ASBUs
- Performance-based Approach
  - Performance-based decision making method for defining implementation strategies
- KPIs Catalogue
  - Front door for all stakeholders to ICAO
  - Document endorsed at highest political level
  - Written in executive language
  - Contents derived from underlying
- Global Performance Ambitions
- ICAO Regional Air Navigation Plans
  - Online tool for PfAs

Components:
- GATMOC Vision
- Conceptual Roadmap
- Global Performance Ambitions
- Framework
- Method
- Performance Based Decision Making Method
https://www.icao.int/Meetings/anconf13/Pages/default.aspx