



| ICAO | UNITING AVIATION

Global Developments – Setting the scene

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Technical Officer Air Navigation

Marrakesh/10th December 2018





Agenda

- ICAO Global Air Navigation Events
 - GANIS/SANIS, ANC, General Assembly
- The Global Air Navigation Plan



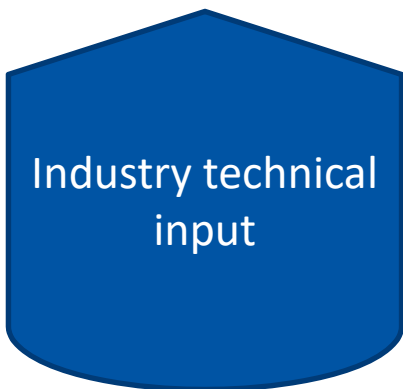


Global Air Navigation Events



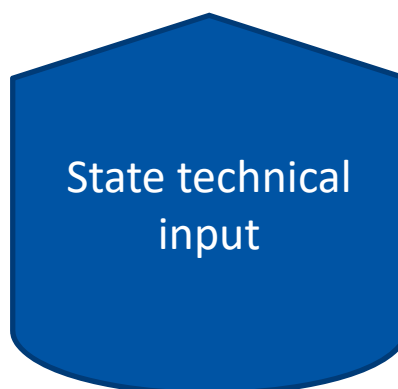
Symposiums:
GANIS/SANIS

December 2017



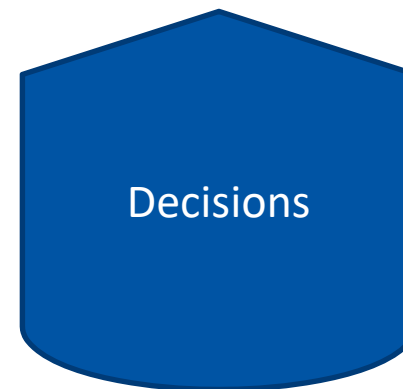
13th Air Navigation
Conference

October 2018



40th Session
General Assembly

September 2019





GANIS/SANIS

- 5 days
- 762 participants
 - 79 States and 25 IOs
- Parallel Streams:
 - GANIS

- Innovative and emerging operations
- Future of CNS and avionics
- Cyber threats
- Information management
- Airport operational performance
- Civ-mil cooperation
- Meteorology



– SANIS

- Modernization of the ANS
- Safety
- Airports
- PBN
- Aerodrome operating minima
- Civ-mil cooperation
- From concept to operation



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GANIS/SANIS outcomes



GANIS

INNOVATIVE AND EMERGING OPS

The future of the ANS

FUTURE OF CNS AND AVIONICS

Fast technology development

Performance & interoperability

INFORMATION MANAGEMENT

Key for the ANS evolution

CYBER THREATS

The value of trust

AIRPORT OPERATIONAL PERFORMANCE

Airborne-based solutions

CIV-MIL COOPERATION

Shared challenges

MET

Service evolution



SANIS

MODERNIZATION OF THE ANS

Innovation
Performance
Planning framework

SAFETY

New technologies
System performance requirements
Safety Management

Experiences sharing on..

AIRPORTS

PBN

PERF-BASED AERODROME OPERATING
MINIMA

CIV-MIL COOPERATION

FROM CONCEPT TO OPERATION



13th Air Navigation Conference

- Two weeks
- 1213 members and observers
 - 116 States and 37 IOs
- Papers
 - 311 WPs



- Two Committees:

- **Committee A: Air Navigation (2 weeks)**

- AI1: Air navigation global strategy
 - AI2: Enabling the global air navigation system
 - AI3: Enhancing the global air navigation system
 - AI4: Implementing the global air navigation system

- **Committee B: Safety (1 week)**

- AI5: Emerging issues
 - AI6: Organizational safety issues
 - AI7: Operational safety risks
 - AI8: Emerging safety issues



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13th ANC Main outcomes



Safety (as an economic enabler)

GASP

Great ideas for the next edition
Safety Targets
Data-driven decision making

GASOS

Misunderstanding - some pushback
Concept (re-)definition
Future work

SSP

Conceptually sound
Difficult for some States
Training Required

USOAP

Review Recommendations
What follows the CMA



Air Navigation

GANP

Complicated
Stable
Agile Tech Specs
Standards vs Implementation

Airport Operations

Steady as she goes
Frequency Mgt
CNS and MET

Airspace

FF-ICE & TBO
SWIM
Civ/mil

New Business

Low and high operations
Trust Framework
New entrants
Artificial Intelligence



Other Conversations

Preamble to the Chicago Convention

Our focus on the technical can sometimes lead us to miss the human side of aviation

ICAO as a group of like-minded States

and the willingness of RSOOs and Industry to help us with our work

Safety as an economic enabler

and a contributor to the UN SDGs rather than as an end in itself

ALOS for the future

We can't deliver 9 zeros for Space but, do we need to?

Performance SARPs vs Prescriptive SARPs

Foremost aviation nations as against the mother ship

The Modernization of the Voluntary workforce of ICAO

Agility, transparency, cost management and the locus of expertise

Evolving Standardization

Camera ready SARPs and Proof of Concept candidates



40th Session General Assembly

40 th

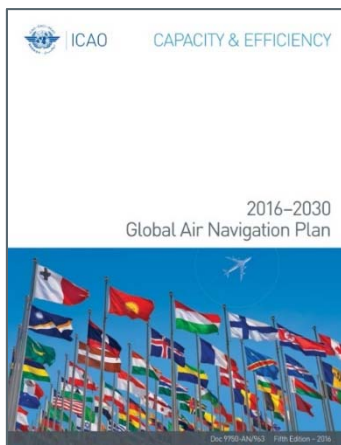
TRIENNIAL ASSEMBLY

- Two weeks → 2 days
- 192 States and xIOs
- Organization:
 - Executive Committee
 - Technical Commission
 - Economic Commission
 - Legal Commission
 - Administrative Commission
- Air Navigation papers: 7
 - Endorsement Assembly resolution on GASP/GANP
 - Agreement on strategic direction of GASOS
 - Note recommendations from the Conference
 - Agree to the continuing Assembly resolution in the field of Air Navigation
 - Aviation medicine disinfection paper (report back)



DRAFT GANP 2019

MULTILAYER STRUCTURE



<https://www4.icao.int/ganportal>





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European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

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Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU