European Plan For Aviation Safety (EPAS) and the European ATM Master Plan

Your safety is our mission.

An agency of the European Union

Key Documents

Business Plan

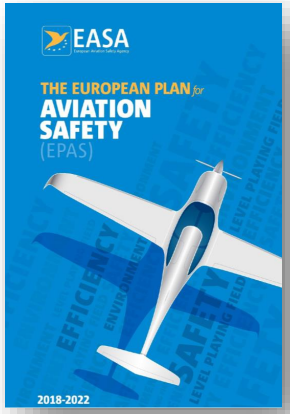
Incl. Strategic Plan

(Focus on EASA)

Planning tool for setting ATM priorities

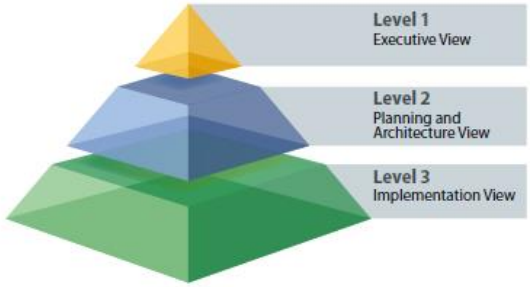
Risk areas

Safety Issues

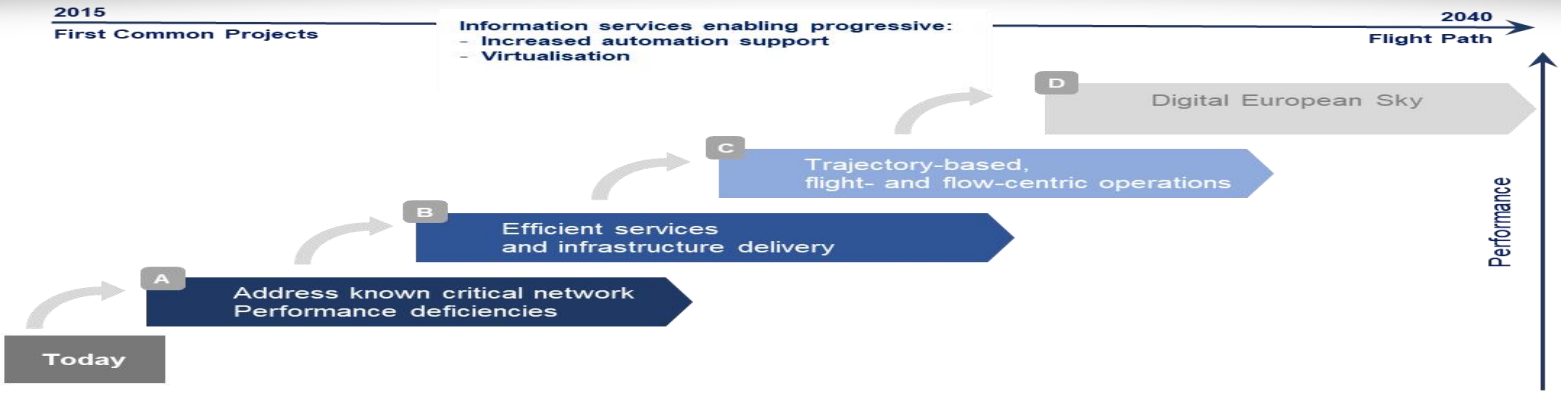


Strategic Priorities

Safety Actions



ATM MP



ANS/NMN	Country-based service provision Introduction of common standards for deployment Network Manager balances capacity and supports network tasks	Common support service provision and infrastructure Greater regional collaboration between air traffic control team and support staff Advanced network operations and Services	ATC operations increasingly de-coupled from infra-structure provision Initial flight- and flow-centric operations and virtualisation Flight-end flow-centric operations enabled by common support services and network operations	Multiple options to achieve Single European Sky High-Level Goals - Performance Based Operations - Highly automated ATM systems - End-to-end ANS service provision
Airport	Information exchange enabling improved passenger experience	Optimisation of airport infrastructure use through advanced collaborative operations and planning services	Airport fully integrated into the ATM network and airside-landside virtual integration	
FOC/WOC	Information exchange via CDM	Using extended flight plan services via SWIM	UDPP Big data	
Automation levels (Air and Gnd)			Automation level 2/3	Automation level 4/5
Vehicle		Large certified UAS/RPAS in controlled airspace New high altitude platforms	Integration of certified UAS/RPAS in all classes of airspace Urban airborne mobility	Delegation of separation responsibility to vehicle
U-space		Initial U-space services	Advanced U-space services	Full U-space services

Risks Areas & Issues All In One Place

Sources of Information

Reported occurrences: Mandatory and Voluntary (ECCAIRS)

Investigated Accidents and Serious Incidents

Input from Industry and States through collaborative groups

ATM MP

Planned operations

New source

D4S

Safety Issues identified

Safety priorities identified

Safety Performance monitored

What Action a new EPAS edition?

Safety Risk Management

Strategy

Business planning

ATM Master Plan Deployment

Act

- **Rulemaking Programme**
- **Safety Promotion**
- **Focused Oversight**
- **Research**

Strategic Priorities | Safety

SYSTEMIC ENABLERS

Safety Management

Human factors and competence

OPERATIONAL ISSUES

Commercial Air Transport Aeroplanes:

- Aircraft Upset/ Loss of Control Inflight
- Runway Safety

Helicopter/ Rotorcraft:

- Aircraft Upset/ Loss of Control Inflight
- Terrain Conflict
- System Failure

General aviation:

- Staying in Control
- Coping with Weather
- Mid-air Collisions
- Managing the Flight

ATM MP similar areas

ATM MP:

- Runway Safety

Helicopter/ Rotorcraft:

- Terrain Conflict

General aviation:

- Coping with Weather
- Mid-air Collisions

EMERGING ISSUES

Drones (RPAS)

Security Risks with Impact on Safety

New/Emerging Business Models

ATM MP

Drone addendum

Rulemaking Programme

Safety Promotion

Focused Oversight

Research

Monitoring

EPAS

SSP
Self declaration
Monitoring

Standardisation

Focused Oversight

ATM MP

Level 3

EPAS Actions

Member State Tasks

- **MST** tasks are EPAS actions based on safety priorities identified in collaboration with Member States and owned by them. Most of them are continuous to ensure continuous monitoring of the underlying safety risks and regular reporting on progress of those MST actions

What is happening

Key risk Area

Runway excursions and runway collisions

Implementation of SESAR Runway safety solutions

- MS should evaluate together with the aerodrome operators and ANSPs the needs for implementing the related SESAR solutions such as those related to Ground situational awareness, Airport safety net vehicles and enhanced airport safety nets.

Airborne conflict (Mid-air collisions)

Implementation of SESAR solutions aiming to reduce the risk of mid-air collision en-route and TMA

- MS should evaluate together with ANSPs delegated to provide services in their airspace the needs for implementing SESAR solutions such as those related to enhanced Short Term Conflict Alerts (STCA)/enhanced safety nets

GASP and GANP

DOC 10004 AND DOC 9750

Backround | ANC-13

- AN-Conf/13- REPORT OF COMMITTEE A TO THE CONFERENCE ON AGENDA ITEM 1

Recommendation 1.1/1 – Vision and overview of the Sixth Edition of the Global Air Navigation Plan (Doc 9750, GANP) point (d) & (i)

States

'recognise the importance of a separate but aligned GANP and Global Aviation Safety Plan (Doc 10004, GASP)'

ICAO

'strengthen the relationship between the GASP, the GANP and the newly developed Global Aviation Security Plan (GASeP)'

Backround | ANC-13

AN-Conf/13

Recommendation 1.1/1 – Vision and overview of the Sixth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP)

ICAO

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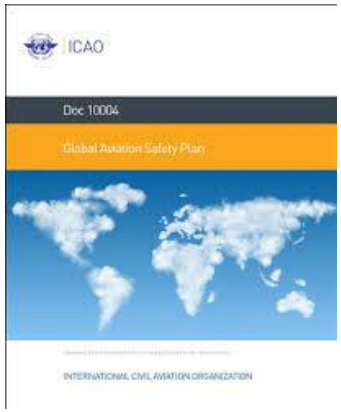
continue to work with States, international organizations, air traffic management (ATM) modernization programmes and other stakeholders on the development of the Sixth Edition of the GANP, for **subsequent endorsement at the 40th Session of the ICAO Assembly.**



AN-Conf/13

Recommendation 6.1/1 — Draft 2020-2022 Edition of the Global Aviation Safety Plan (Doc 10004, GASP)

ICAO

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take into consideration input from the Conference, the questionnaire and the future work of the GASP Study Group for **subsequent endorsement of the 2020-2022 edition of the GASP at the 40th Session of the ICAO Assembly.**

Proposal | GASP 2020-2022

- Review the GASP roadmap to add cross-references to relevant GANP actions in support of the existing SEIs.
  - Example:

GASP	GANP
SEI Mitigate contributing factors to RI accidents and incidents	**B0-SURF** Safety and efficiency of surface operations (A-SMGCS levels 1-2) and enhanced vision system (EVS) Airport surface surveillance for ANSP. **B1-SURF** Enhanced safety and efficiency of surface operations - SURF Airport surface surveillance for ANSP and flight crews, cockpit moving map displays and visual systems for taxi operations.

EPAS 2019-2023 and beyond

The EPAS to embraces European actions stemming from the ATM MP.

- Alignment is ensured as follows:
  - **Volume I (Strategy)** is in line with the ATM MP Level 1 (Executive View), Edition 2019 **-> aligning objectives;**
  - **Volume II (actions)** is aligned with the ATM MP Level 3, Edition 2018 and includes references to those existing solutions in the ATM MP that aim to mitigate existing safety risks **-> identifying common actions.**

Proposal | GASP 2023-2025

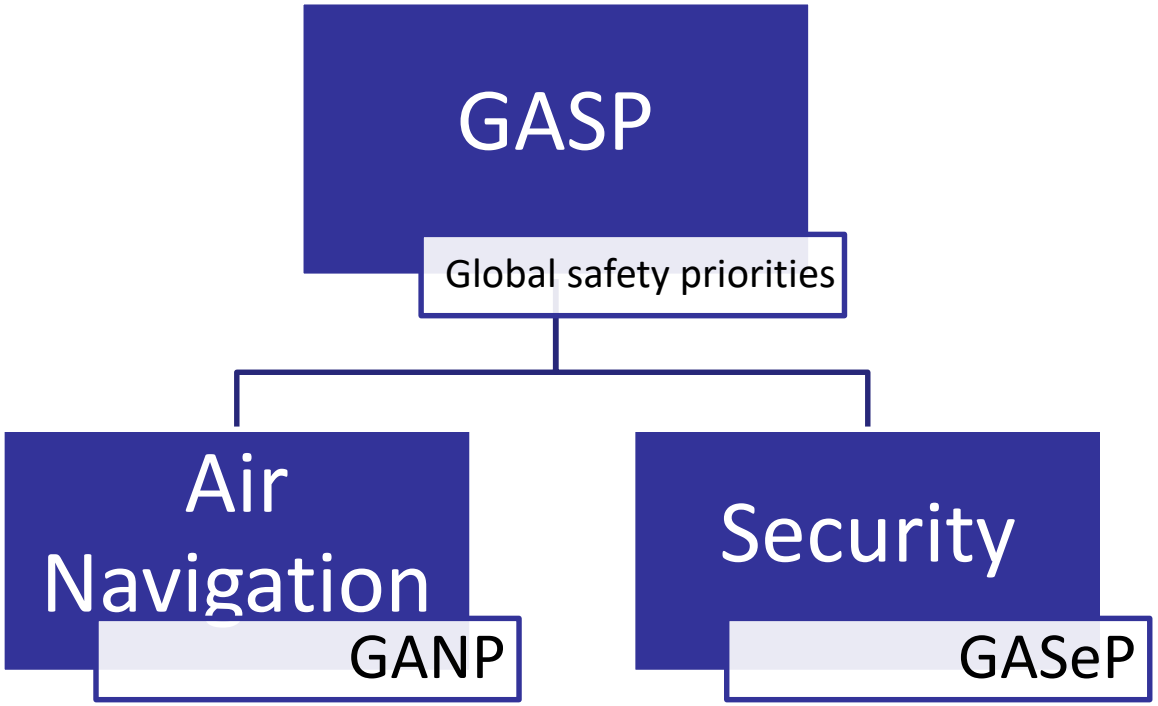
- GASP is the overall strategic safety plan.
  - GASP reflects safety decisions
  - GANP includes the blocks/tools how to implement the GASP in the ATM/ANS domain
- GANP may still include additional actions on efficiency.
  - However, once a safety assessment has to be made, it needs to link to the GASP.
- GASP will establish that something is both efficient and safe to implement.

Proposal | GASP 2023-2025

- Develop a concept for the alignment between GASP/GANP
  - short-to medium-term goal: better alignment
  - long-term goal: a merge might be possible.
- Long-term goal requires defining the hierarchy between different ICAO plans (GASP, GANP, GASeP etc…)

Proposal | GASP 2023-2025

- Main benefits:
  - integrated programming of safety actions
  - efficient reporting, better coordination



EASA
European Aviation Safety Agency

Thank you!
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An agency of the European Union