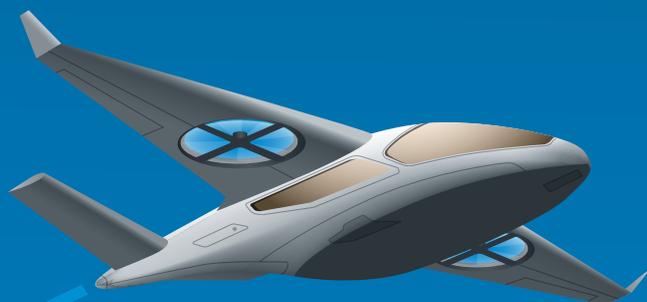




2020 - 2024 EPAS

Strategic priorities and key actions



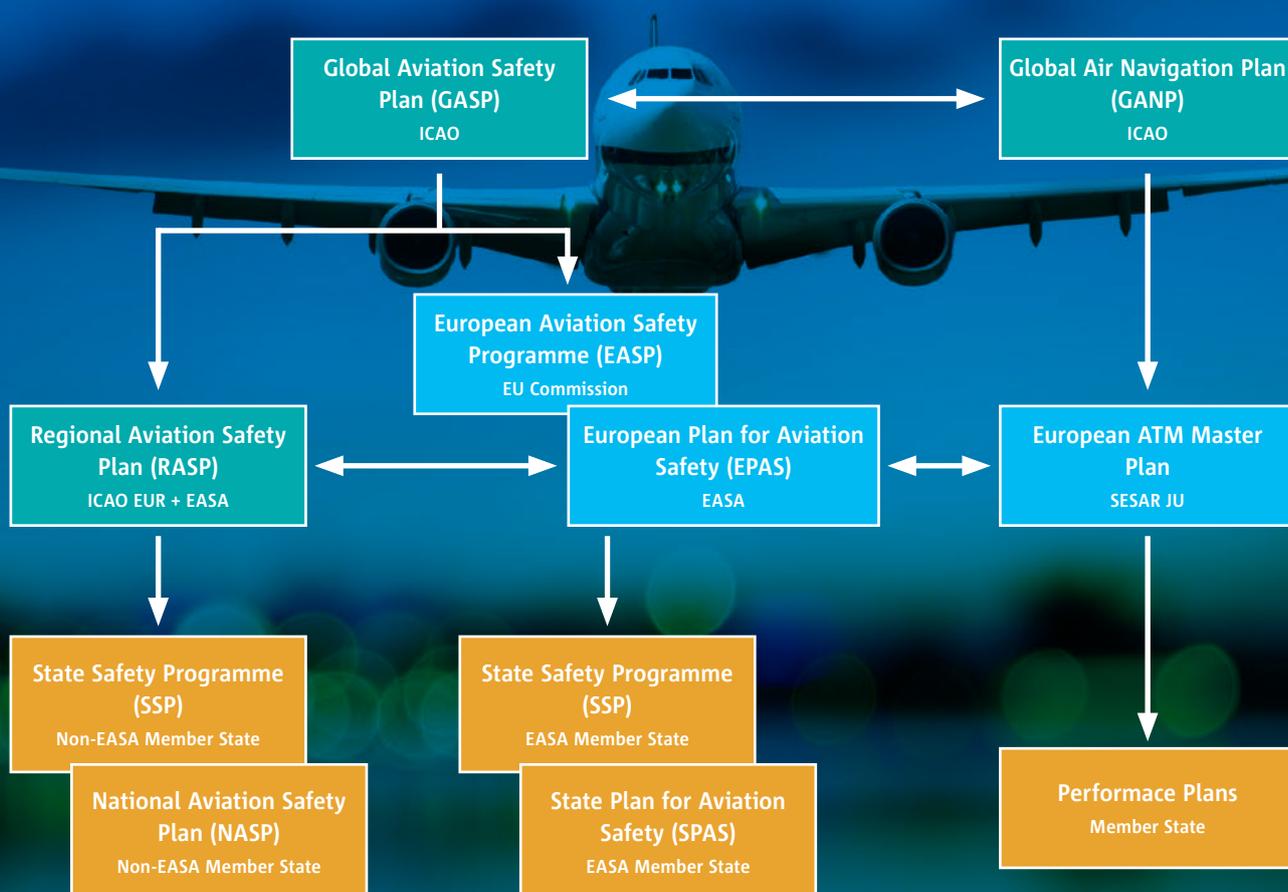
What is the European Plan for Aviation Safety (EPAS)?

EPAS is the regional aviation safety plan for EASA Member States, setting out the strategic priorities, strategic enablers and main risks affecting the European aviation system and the necessary actions to mitigate those risks and to further improve aviation safety. EPAS is a 5-year plan that is constantly being reviewed and improved, and updated on a yearly basis. The plan is an integral part of EASA's work programme and is developed by EASA in close consultation with the EASA Member States and industry. EPAS and related obligations for Member States are regulated through Chapter II of the EASA Basic Regulation¹.

The main objective of EPAS is to further improve aviation safety and environmental protection throughout Europe, while ensuring a level playing field, as well as efficiency/proportionality in regulatory processes. EPAS' aspirational safety goal is to achieve constant safety improvement within a growing aviation industry.

In addition to being developed in accordance with the processes, roles and responsibilities described in the European Commission's (EC's) European Aviation Safety Programme (EASP)², EPAS is consistent with the ICAO global plans in the areas of aviation safety and air navigation and ensures alignment with the Single European Sky (SES) ATM Master Plan.

Figure 1: Relationship between EPAS and other programmes and plans



¹ Under the EU legal order, the Basic Regulation sets the legal basis for the creation of competences and establishes the scope of common aviation safety requirements. It is binding in its entirety and applicable in all Member States. For more details, refer to: <https://www.easa.europa.eu/document-library/regulations/regulation-eu-20181139>

² <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2011:1261:FIN:EN:PDF>

What is new in this EPAS edition?

This is the 9th edition of EPAS and offers the following new elements:

- Strategic priorities are consolidated based on input from the EASA Advisory Bodies and take account of new technological developments and business models;
- Strategic enablers are updated to reflect recent developments;
- Safety information stemming from both the Annual Safety Review (ASR) and the Standardisation Annual Report (SAR) is better articulated;
- Further alignment with the ATM Master Plan has been achieved and the recommendations stemming from the Report of the Wise Persons Group on the Future of the Single European Sky and of the Airspace Architecture Study performed by SESAR JU considered;
- New developments in the area of Unmanned Aircraft Systems (UAS) and U-space are included;
- The recommendations from the C-UAS Task Force are highlighted;
- New or amended roadmaps are presented on rotorcraft safety, general aviation and artificial intelligence (AI);
- A new structure is provided for Volume II (containing all EPAS actions): EPAS actions are grouped per aviation domain (instead of having the driver act as first filter) and the link with the domain risk portfolios in the ASR is strengthened. Actions that are relevant for more than one domain are included in the main domain and cross-referenced in the other domain(s).



Distribution of EPAS actions per action type and domain

This EPAS edition encompasses **180 actions**.

Figure 2: Distribution of EPAS actions per action type

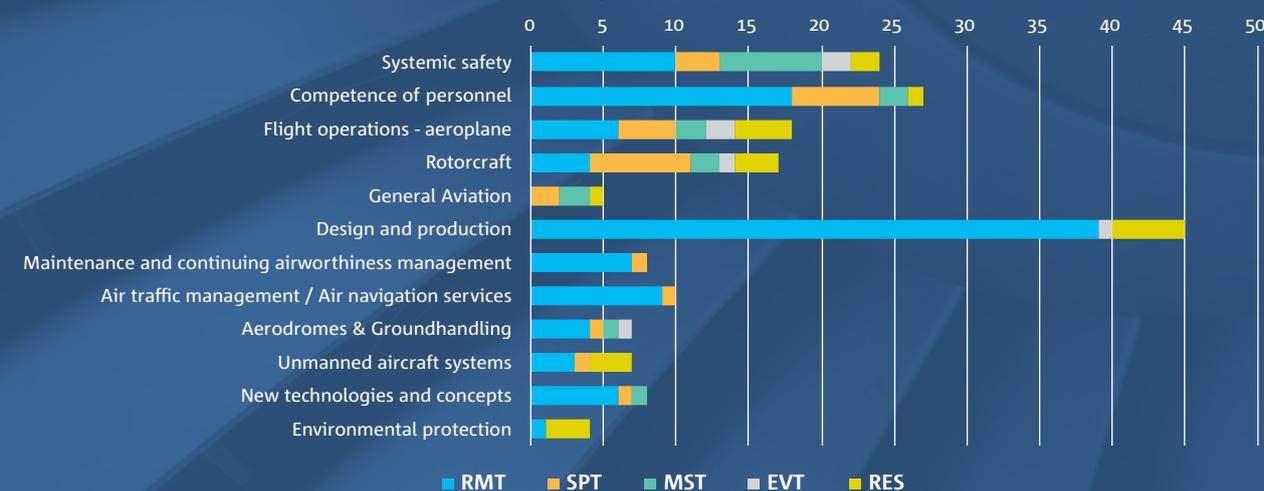


EPAS contains five different types of actions, defined to improve aviation safety, efficiency/proportionality, address the level playing field and environmental protection as follows:

- **Rulemaking tasks (RMTs)** lead to new or amended regulatory material (implementing rules (IR), acceptable means of compliance (AMC), certification specifications (CS), or guidance material (GM)).
- **Safety promotion tasks (SPTs)** involve safety training, awareness/education and dissemination of safety relevant information to further engage and interact with relevant aviation stakeholders and the general public in order to positively influence or change individual behaviour with the ultimate objective of achieving predetermined aviation safety objectives.
- **Research actions (RES)** are innovation- and/or efficiency-related research projects to support the safe integration of new technologies and concepts, and to measure the improvement of the environmental performance of the aviation sector. RES actions may also be triggered by the need to better understand a safety issue in view of determining intervention strategies in the future, or to assess the effectiveness of existing regulations, as an alternative to evaluations.
- **Evaluation tasks (EVTs)** are used to assess if existing aviation regulations and related initiatives are delivering the expected results at minimum cost.
- **Member State tasks (MSTs)** are owned by Member States and have to be considered for their State Plans for Aviation Safety (SPAS), together with the main risks identified in EPAS relevant for the State, as required by Article 8 of the Basic Regulation.

The majority of actions take the form of RMTs (59.5 %), followed by SPTs (15.0 %) and RES (12.2 %). Half of these actions are directly related to the EPAS strategic priorities that are presented on the following pages.

Figure 3: Distribution of EPAS actions per domain and type of action



Most of the EPAS actions are within the domain 'Systemic safety & competence of personnel', followed by 'Design and production', together representing more than 50 % of all EPAS actions.

EPAS strategy

Strategic priorities

EPAS strategic priorities are derived from the EC's Aviation Strategy¹ and EASA's strategic plan.

The main **safety risks** are determined through the European Safety Risk Management (SRM) process, in close coordination with the Member States and the industry, and published in the 2019 ASR². Data and information sources feeding EPAS include not only occurrence data, but also oversight and standardisation data and related information (feeding the Standardisation Annual Report (SAR), as well as the ATM Master Plan). The **efficiency and level playing field priorities** are primarily based on stakeholder feedback. The **environmental priorities** are aligned with the 2019 European Aviation Environmental Report (EAER)³.

Following Advisory Body consultation, the following strategic priorities were agreed for the 2020-2024 EPAS cycle:

Figure 4: EPAS 2020-2024 strategic priorities



1 <https://www.europeansources.info/record/communication-on-an-aviation-strategy-for-europe/>

2 <https://www.easa.europa.eu/document-library/general-publications/annual-safety-review-2019>

3 https://www.easa.europa.eu/eaer/system/files/usr_uploaded/219473_EASA_EAER_2019_WEB_LOW-RES.pdf

Systemic safety

Improve safety by improving safety management

Despite the fact that the last years have clearly brought continued improvements in safety across every operational domain, the latest accidents and serious incidents underline the complex nature of aviation safety and the significance of addressing human and organisational factor aspects. Aviation authorities and organisations should anticipate new emerging threats and associated challenges by developing SRM principles. Those principles will be strengthened by safety management system (SMS) implementation supported by ICAO Annex 19 and Regulation (EU) No 376/2014⁴ on the reporting, analysis and follow-up of occurrences in civil aviation.

KEY ACTIONS

- Support the implementation of a robust oversight system across Europe
- Incorporate safety management requirements in initial and continuing airworthiness
- Support States in implementing State Safety Programmes and State Safety Plans
- Encourage international harmonisation of SMS implementation and human factors principles

Human factors

As the aviation system changes, it is imperative that human factors and the impact on human performance are taken into account, at both service provider and regulatory levels. EASA monitors data relating to human performance and assesses feedback from stakeholders, through the Human Factors CAG (HF CAG) and through other regulatory and oversight activities. The following issues are being or will soon be assessed and may lead to new actions in future EPAS editions:

- Human factors competence for regulatory staff
- Design and use of procedures
- Senior management knowledge, competence, and commitment to human factors/human performance
- Organisational and individual resilience
- Training effectiveness and competence
- Fatigue

Competence of personnel

As new technologies, new business models and operational concepts emerge on the market and the complexity of the aviation system continues to increase, it is of key importance for aviation personnel to have the right competencies and for training methods to be adapted to cope with new challenges. It is equally important for aviation personnel to take advantage of the opportunity presented by new technologies to enhance safety.

KEY ACTIONS

- Introduce evidence- and competency-based training and assessment for flight crew licensing (FCL) and air operations (OPS), as appropriate
- Modernise the European pilot licensing and training system

Impact of security on safety

Within a holistic approach to management of aviation risks, security induced safety risks require special attention.

Cybersecurity

Citizens travelling by air are more and more exposed to cybersecurity threats. In order for the new generation of aircraft to have their systems connected to the ground in real time, ATM technologies require internet and wireless connections between the various ground centres and the aircraft. The multiplication of network connections and the surge in digitalisation of aviation systems increase the vulnerability of the whole system. It is essential that the aviation industry and authorities share knowledge and learn from experience to ensure systems are secure from individuals/organisations with malicious intent.

KEY ACTIONS

- Implement a regulatory framework for cybersecurity risk management covering all aviation domains
- Introduce new cybersecurity provisions in the certification specifications

Conflict zones

Member States, European Institutions and EASA have established an alerting system with the objective of joining up available intelligence sources and conflict zone risk assessment capabilities in order to enable the publication of information and recommendations on conflict zone risks in a timely manner, for the benefit of all European Member States, operators and passengers. It complements national infrastructure mechanisms, when they exist, by adding, a European level common risk picture and corresponding recommendations.

EASA acts as the coordinating entity for activities not falling directly under Member States' or the EC's responsibility and initiates the drafting, consultation and publication of Conflict Zone Information Bulletins⁵, based on common EU risk assessments.

KEY ACTION

- Ensure timely dissemination of information to air operators in order to mitigate the risk associated with overflying conflict zones

Impact of socio-economic factors on safety

In accordance with Article 89 of the Basic Regulation, Member States, the EC, the Agency and other Union institutions, offices and agencies will strengthen their cooperation with a view to ensuring that interdependencies between civil aviation safety and related socio-economic factors are taken into account, in particular to address socio-economic risks to aviation safety. EASA will consult relevant stakeholders when addressing such interdependencies and will publish regular reviews giving an objective account of the actions and measures undertaken, in particular those addressing the interdependencies between civil aviation safety and socio-economic factors.

KEY ACTION

- Set up a consultation process on interdependencies between civil aviation safety and socio-economic risks through the Stakeholders Advisory Body (SAB) and the EU Aviation Social Dialogue platform

Data4Safety

Data4Safety (D4S) is, in essence, a collaborative partnership programme that aims at *collecting and gathering* all data (safety reports, flight, surveillance and weather data, etc.) that may support the management of safety risks at European level. This is achieved by organising a massive collection of safety data and, equally important, organising the analytical capacity amongst all European aviation safety system stakeholders. This will take the collaborative work with the industry to a scale never achieved before in Europe.

An initial proof of concept (PoC) phase has been launched with a limited number of partners to test the technical challenges as well as the governance structure of such a programme. The PoC is planned to be completed early 2021 and the programme will then open gradually the membership to the European aviation safety system stakeholders. A number of key building blocks have been achieved, in particular:

- The partnership principles have been framed into a programme charter
- The data protection rules have been agreed upon and captured into the rules and procedures document and in a data sharing and protection agreement template
- The use cases for the PoC phase have been agreed upon and specified
- The Big Data infrastructure has been set up and the initial set of data uploaded
- Data scientists have now joined the programme and started to work on the advanced analytics

Civil-military coordination and cooperation

Civil-military cooperation is a crucial element of safety management at State and regional level. Although only individual States can improve civil-military cooperation, within a regional approach in areas of highly fragmented airspace and in case of air encounters, certain facilities and services can be facilitated by EASA with limited effort, so as to ensure the safety, regularity and efficiency of civil aviation, while ensuring that requirements for military air operations are met. The regional approach may support the promotion of a common understanding, the sharing of best practices and the monitoring of their practical implementation.

KEY ACTION

- Member States to consider civil-military coordination aspects where relevant for their State Safety Programme



Operational safety

Address safety risks in commercial air transport (CAT) aeroplane operations (airlines and air taxi, passenger/cargo) and NCC operations

During 2018, there were no fatal accidents involving European air operator certificate (AOC) holders performing CAT passenger/cargo. In the European NCC operations category, there was 1 fatal accident, with 1 fatality. The number of serious incidents was also higher than usual, with 7 in 2018, compared with an average of 3.7 per year over the previous 10-year period.

The European SRM process identified **aircraft upset in flight** and **runway safety** as the most important risk areas for CAT aeroplane and NCC operations:

Aircraft upset in flight (loss of control)

Aircraft upset or loss of control is the most common accident cause for fatal accidents in CAT aeroplane operations. It includes uncontrolled collisions with terrain, but also occurrences where the aircraft deviated from the intended flight path or intended aircraft flight parameters, regardless of whether the flight crew realised the deviation and whether it was possible to recover or not. It also includes the triggering of stall warning and envelope protections.

KEY ACTIONS

- Review and promote training provisions on recovery from upset scenarios
- Member States to address loss of control in flight by taking actions at national level and measuring their effectiveness

Runway safety

Runway excursions cover materialised runway excursions (at both high and low speed) and occurrences where the flight crew had difficulties in maintaining the directional control of the aircraft, or of the braking action during landing, where the landing occurred long, fast, off-centred or hard, or where the aircraft had technical problems with the landing gear (not locked, not extended or collapsed) during landing.

Runway incursions refer to the incorrect presence of an aircraft, a vehicle or a person on an active runway or in its areas of protection that can potentially lead to runway collision as the most probable accident outcome.

KEY ACTIONS

- Require on-board technology to reduce runway excursions
- Improve safety in relation to runway surface condition reporting and in-flight assessment of landing performance
- Promote and implement the European Action Plan for the Prevention of Runway Incursions (EAPPRI) and Excursions (EAPPRE)
- Member States to address runway safety by taking actions at national level and measuring their effectiveness





Rotorcraft safety improvement

The Rotorcraft Safety Roadmap⁶ covers safety and transversal issues that need to be tackled through actions in various domains, including training, operations, initial and continuing airworthiness, environment and facilitation of innovation. The following objectives are defined:

- Improve overall rotorcraft safety by 50 % within the next 10 years
- Make positive and visible changes to the rotorcraft safety trends within the next 5 years
- Develop performance-based and proportionate solutions that help maintain competitiveness, leadership and sustainability of the European industry

In 2019, the Agency created an internal team to evaluate and integrate the recommendations contained in the Roadmap document into the EASA work programme. It was decided not to launch new RMTs but to include the inputs from the Rotorcraft Safety Roadmap in the scope of the current RMTs.

Address safety risks in General Aviation in a proportionate and effective manner

In 2018, there were 49 fatal accidents causing 95 fatalities in non-commercial operations with small aeroplanes (above the 2008-2017 average of 86 fatalities per year in Europe), and 16 fatal accidents causing 17 fatalities in the domain of sailplane operations (the 2008-2017 average was 28.6 fatalities per year in Europe).

EASA, in cooperation with its Advisory Bodies, launched **GA Roadmap 2.0**. It will concentrate on making General Aviation not only safer, but also cheaper thanks to innovation and technology and on supporting the implementation of new or amended regulations.

KEY ACTIONS

- Improve the dissemination of safety promotion and training material by authorities, associations, flying clubs, insurance companies targeting flight instructors and/or pilots, to create a General Aviation Safety Promotion platform
- Support the introduction of new business models (i.e. cost sharing platforms)
- Adapt design and production rules ('Part 21 Light') to become more proportionate to the risks
- Bring data to the GA cockpits: weather, flight information services (FIS), and traffic information data should progressively be made available in all GA cockpits
- Support the implementation of new or amended regulations

Safe integration of new technologies and concepts

Digitalisation and automation are rapidly increasing in aviation systems. While this has resulted overall in significantly improved safety, the trend towards increasing automation requires a renewed safety focus on the interactions between humans and automation. The next generation of automation will be using artificial intelligence. In the near future, new EPAS actions will be required to maximise related safety benefits, while mitigating any threats induced by the implementation of these new technologies.

In this fast-evolving context, EASA is putting significant effort in preparing the future including the identification of dedicated resources to innovative projects, such as, but not limited to, electric and hybrid aircraft, airships, supersonic and hypersonic aircraft, tilt-rotor aircraft, higher airspace operations and suborbital aircraft, reduced crew.

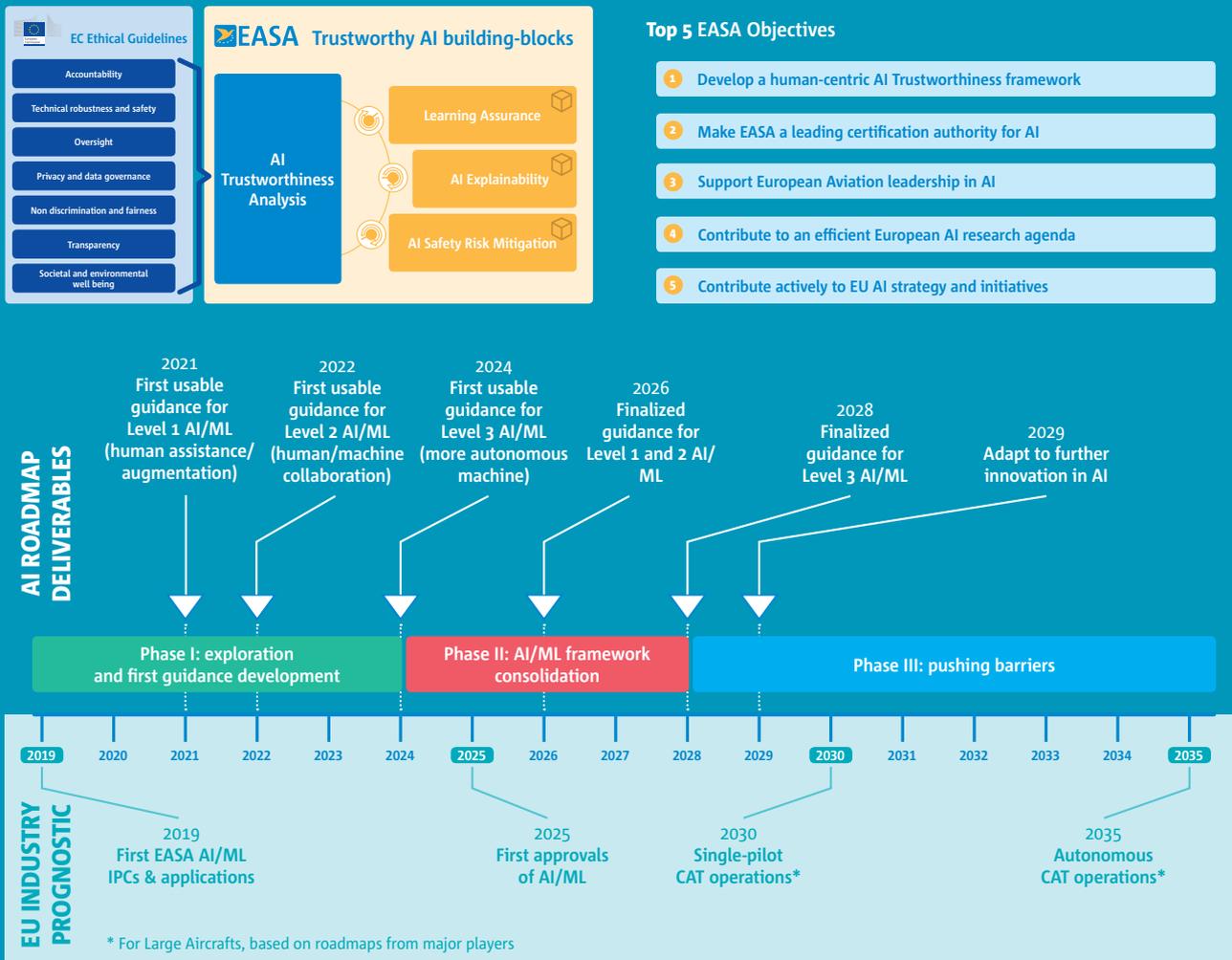
Artificial intelligence (AI) — EASA AI Roadmap

The EASA AI Roadmap aims at creating a consistent and risk-based ‘AI trustworthiness’ framework to enable the processing of AI/machine learning (ML) applications in any of the EASA core domains, from 2025 onwards.

Building blocks for the EASA AI Roadmap

The EASA approach is driven by the seven key requirements for trustworthy AI that were published in the report from the EC High-Level Expert Group on AI.

Figure 5: Relationship between AI Roadmap building blocks and AI trustworthiness



The main action streams identified in the EASA AI Roadmap are:

- Develop the AI trustworthiness building blocks
- Ensure competency of EASA for first AI applications
- Influence the European AI research agenda and cover identified gaps
- Support the European Aviation leadership in AI
- Implement and support development of EU AI strategy and initiatives

Engine/aircraft certification

In 2016, EASA, together with the Federal Aviation Administration (FAA), initiated a dedicated Engine/Aircraft Certification Working Group (EACWG) to streamline the overall certification process by improving engine/aircraft interface certification and standard-setting practices and to better identify and address gaps and overlaps when updating related CSs. An effective and efficient certification process, combined with streamlined certification requirements and standards, will have clear safety benefits.

The EACWG identified a total of 29 recommendations, in the following areas:

- conducting a certification programme;
- understanding and developing the regulatory requirements;
- understanding if the engine/airframe certification interface is working effectively; and
- addressing specific rule and policy gaps.

In September 2018, the Certification Management Team (CMT), following a request from EASA and the FAA, approved the creation of the Engine Aircraft Certification Tracking Board (EACTB), formed by authority and industry representatives of the aircraft and engine communities. The Board, co-led by EASA and the FAA, is tasked to prioritise the recommendations and follow-up on their implementation.

Ensure the safe operations of UAS (drones)

Common European rules for UAS operations and registration

In February 2019, Europe got one step closer to harmonised rules for safe drone operation as the EASA Committee voted unanimously to approve the EC's proposal for an implementing act to regulate the operations of UAS in Europe and the registration of drone operators and of certified drones. The Commission's Implementing Regulation (EU) 2019/947⁷, accompanied by the Commission's Delegated Regulation (EU) 2019/945⁸, defining the technical requirements for drones, were published in June 2019. With these Regulations, the EASA general concept, establishing three categories of UAS operations: 'open', 'specific' and 'certified', with different safety requirements, proportionate to the risk, is adopted at the European level.

Furthermore, EASA's Opinion No 05/2019 containing two standard scenarios, each allowing the use of a declaration, was published in November 2019.

As the number of UAS operations increases, there is a need to establish unmanned traffic management (UTM) systems (named 'U-space' in Europe). There has been a huge development of U-space during the last year and it is expected that this will develop even faster in the years to come. The ATM Master Plan reflects the details about the integration of UAS in the EU airspace.

EASA will continue the rulemaking work on the next **key actions** in the area of UAS:

KEY ACTIONS

- An NPA for UAS in the 'certified' category, addressing all aviation domains (initial airworthiness, continuing airworthiness, remote pilot licences, aircraft operations, rules of the air, ATM/ANS and aerodromes), VTOL operations, IFR operations of large cargo UAS in controlled airspace, as well as UAS operations in an urban environment
- An Opinion on a high-level regulatory framework for U-space

7 <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1570893991756&uri=CELEX:32019R0947>

8 <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1570894011520&uri=CELEX:32019R0945>

EASA Counter Drone (C-UAS)⁹ Task Force

The events in Gatwick/Heathrow in December 2018 showed that the unauthorised use of drones at or around aerodromes may — given the potential effect on aircraft safety and security — lead to unacceptable disruption of operations, affecting the air transportation system. Just after the events, an EASA internal Task Force was established to analyse the facts and develop an action plan in order to ensure that the aerodrome operators, aircraft operators and air traffic services (ATS) providers are prepared to prevent as far upstream as possible, and react to misuse of drones with minimum disruption of operations, while still being able to accommodate friendly drone operations. The ultimate goal of the proposed action plan is to maintain safety as a priority in case of misuse or unauthorised use of drones in the vicinity of aerodromes.

An action plan (Issue 2) was published in June 2019. It is articulated around five objectives and related actions (all coordinated by EASA):

KEY OBJECTIVES

- Educate the public to prevent and reduce misuse of drones around aerodromes
- Prepare aerodromes to mitigate risks from unauthorised drones use
- Support the assessment of the safety risk of drones to manned aircraft with scientific data
- Ensure that C-UAS measures are swiftly considered and implemented from a global safety perspective
- Support adequate occurrence reporting



New operating concepts and business models

New operating concepts and business models emerge in almost all aviation domains, such as those related to an increased demand for flying in the cities (e.g. urban air mobility) or those generated by the increased digitalisation in the aviation industry (virtual/augmented reality, digital twins, etc.), the possible introduction of more autonomous vehicles and platforms, single-pilot operations or completely autonomous cargo aircraft. All these concepts and business models will challenge the way authorities regulate and oversee the aviation system.

KEY ACTION

- Develop rules or amend existing ones, where necessary, to address new technologies and operational air transport concepts.

Electric and hybrid propulsion, vertical take-off and landing (VTOL) aircraft

Innovation in any industry is a key factor influencing competitiveness, growth and employment potential. With an increasing number of new aircraft manufacturers and suppliers working on aircraft using electric propulsion, there are very strong prospects as well as demand, from industry and governments, to support the development of hybrid propulsion and eventually fully electric aircraft, with the potential to significantly reduce the aviation environmental footprint.

To encourage the safe integration of new technological advancements in the wider electrical aviation sector overall, flexibility in the approach on all types of concepts, variations and design types will be enhanced.

To allow for these projects to thrive, a number of complex issues need to be tackled from a regulatory perspective, while at the same time fostering capability to certify new models. The certification of a first small aircraft type model with fully electric propulsion is ongoing and expected to be finalised early 2020.

KEY ACTIONS

- Apply special conditions (SCs) and/or derogations, in a flexible and innovative way, to certify electric/hybrid propulsion aircraft
- Address regulatory gaps with regard to electric and hybrid propulsion (RMT.0731)

Enable the implementation of new operational solutions developed by SESAR

EPAS also caters for the regulatory and implementation needs of the SESAR essential operational changes and other new technological advancements, such as, but not limited to, U-space technological solutions, virtualisation and cloud-based architecture and remote tower operations. Since the Basic Regulation repealed Regulation (EC) No 552/2204, global interoperability, civil-military cooperation and compatibility with other regions' development plans, such as NextGen, form an integral part of EASA's work. Furthermore, EPAS provides a proactive and forward-looking view to support the implementation of the essential operational changes required to achieve the SESAR target operational concept safely.

Moreover, EASA will consider additional implementation support actions that facilitate the achievement of operational improvements and new ATM operational concepts.

KEY ACTIONS

- Support the development of data link operations
- Support the implementation of performance-based navigation in the European ATM network
- Support the implementation of the regulatory needs of the SESAR projects



Enable all-weather operations (AWOs)

The European industry should have the capability to take full advantage of the safety and economic benefits generated through new technologies and operational experience. AWOs represent a widely recognised interoperability subject touching on a wide range of areas, including performance-based aerodrome operating minima, related aerodrome equipment to support such operations, and procedures for both CAT and GA.

KEY ACTION

- Review and update the AWO rules in all aviation domains (RMT.0379), supported with relevant safety promotion activities

As part of the AWO project, EASA created the ‘Weather Information to Pilots’ project, integrated with the RMT on AWOs. A ‘Weather Information to Pilots Strategy Paper’¹⁰ was issued in January 2018, to focus on weather phenomena that introduce risk to aviation, to describe the current mitigation measures, the deficiencies and how to overcome them. The scope of the paper is focusing on CAT aeroplanes. In the near future, similar work will be undertaken to address weather information to pilots in GA and rotorcraft operations.

This Strategy Paper proposes nine recommendations to improve weather information and awareness:

RECOMMENDATIONS

- Education and training
- Improved weather briefing presentation
- Promotion of in-flight weather information updates
- Pan-European high-resolution forecasts
- Use of supplementary ‘Tier 2’ weather sources for aviation purposes
- Development and enhancement of aircraft sensors/solutions
- Connectivity to support in-flight updates of meteorological information
- Provision of enhanced meteorological information
- On-board weather radar, installation of latest generation equipment

An impact assessment is underway to determine the need for additional EPAS actions. These could then be considered for subsequent EPAS planning cycles.

Environment

In a changing world, environmental sustainability (climate change, air quality and noise) are becoming major driving forces for the aviation industry. EASA has defined a new strategic orientation to support the decarbonisation of the aviation system and to act towards sustainable aviation through the following set of objectives and key actions:

Robust, efficient and innovative certification

EASA's product certification activities ensure that aircraft are as quiet and clean as possible, thereby reducing negative impacts on the health of citizens. At the same time, the Agency innovates to develop **the most cost-effective environmental certification process in the world**, thereby contributing to the competitiveness of the European industry.

KEY ACTIONS

- Robust certification against environmental protection standards
- Exercise EASA's new mandate to collect and verify aircraft noise and performance information for noise modelling around airports

It is envisaged that not only the traditional stakeholders, but also the aviation environment non-governmental organisations (NGOs) will be engaged in these actions.

Technical leadership for smart and proportionate standards

The Basic Regulation in Article 9 makes direct reference to the relevant Volumes of ICAO Annex 16. The Agency's vision of 'smart rules' in terms of environmental standards is fulfilled through effective involvement upstream in the ICAO Committee on Aviation Environmental Protection (CAEP) process.

KEY ACTIONS

- A key priority from the European perspective is the CAEP work on supersonic transport to safeguard the current high level of aviation environmental protection in Europe and a level playing field between subsonic and supersonic jets
- EASA expertise in ICAO standard setting will continue to be made available to the EC to support the implementation of CORSIA
- As the Basic Regulation permits Europe to create environmental standards in those areas that are not regulated by ICAO standards, efficient rulemaking will focus on areas where Europe would like to take the lead (e.g. hybrid and electric aircraft). EASA is continuously improving its impact assessment capabilities by collecting and analysing flight data (D4S) and developing state-of-the-art tools to monitor and forecast aviation's noise and emissions as well as the costs of candidate policies to mitigate those (H2020)





Effective transversal actions at European level

According to Article 87(1) of the Basic Regulation, the Agency's mandate on environmental protection has broadened in order to 'prevent significant harmful effects on climate, environment and human health'.

Article 87(2) of the Basic Regulation stipulates that the EC, EASA, other EU institutions as well as Member States shall cooperate on environmental matters including on the EU Emissions Trading System (ETS) and on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)¹¹.

KEY ACTIONS

- EASA provides technical assistance to the EC in order to support the definition and coordination of policies and actions
- The latest European Aviation Environmental report (EAER) was developed by EASA, with support from the European Environment Agency (EEA) and EUROCONTROL, and published in January 2019. A new, stand-alone, independent publication with technical recommendations on how to improve the environmental performance of the aviation sector is planned to be published in 2020
- Following the publication of the EAER 2019, EASA is looking to improve the oversight of sustainable aviation fuels used in Europe and their associated environmental benefit. The Agency will also provide technical assistance in discussions on how to facilitate the uptake of these fuels by the aviation sector
- Based on the outcome of the 2019 work on circular economy indicators and life cycle assessments of novel technologies, the Agency will build an effective circular economy policy both for traditional airline activities as well as new urban air mobility concepts

Finally, based on its technical expertise and independence, EASA is ideally placed to provide expertise and strategic steer in international cooperation and research activities, to act as contract manager or as technical partner to the EC in order to support the implementation and monitoring of environment-related research projects, and to support the European Chemicals Agency (ECHA) by providing aviation technical expertise into the REACH process.

¹¹ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the **Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)**, establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Where can I find more information?

The full EPAS document and related materials can be found at
www.easa.europa.eu/easa-and-you/safety-management/european-plan-aviation-safety

Inquiries concerning the EPAS can be sent to:
EPAS@easa.europa.eu

European Union Aviation Safety Agency

Postal address

Postfach 101253
50452 Cologne

Visiting address

Konrad-Adenauer-Ufer 3
50668 Cologne
Germany

Tel. +49 221 89990-000

Mail epas@easa.europa.eu

Web www.easa.europa.eu