



INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

Annex 19

Safety Management

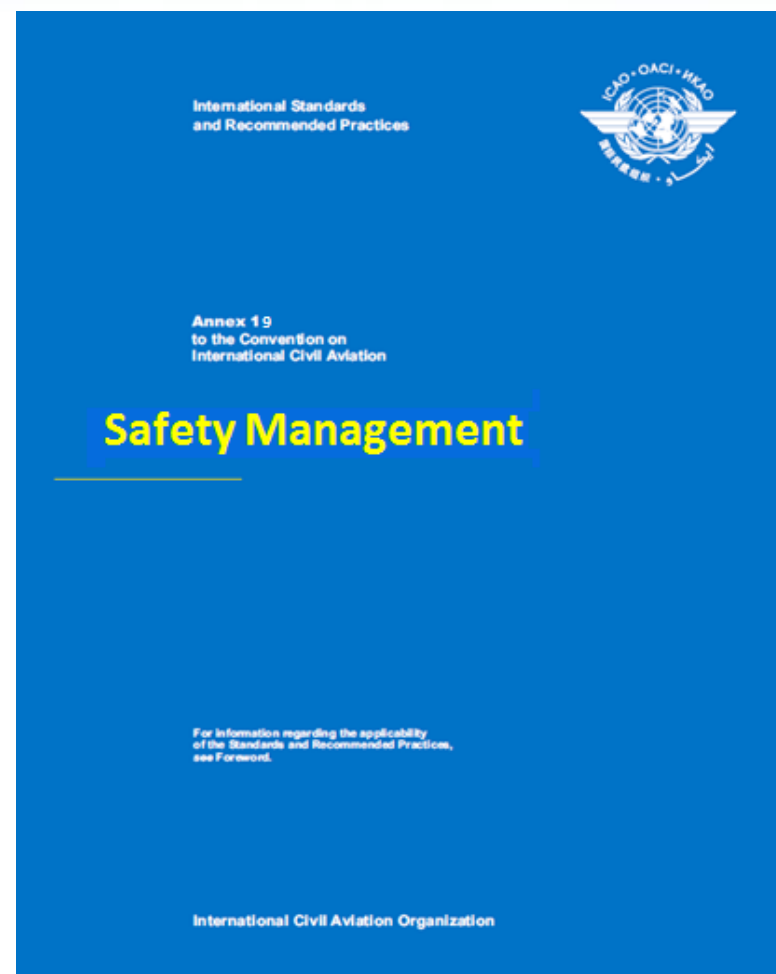
1st edition

ISM

Integrated Safety Management

June 2013 – initial version

- Why a new Annex?



Why a New Annex?

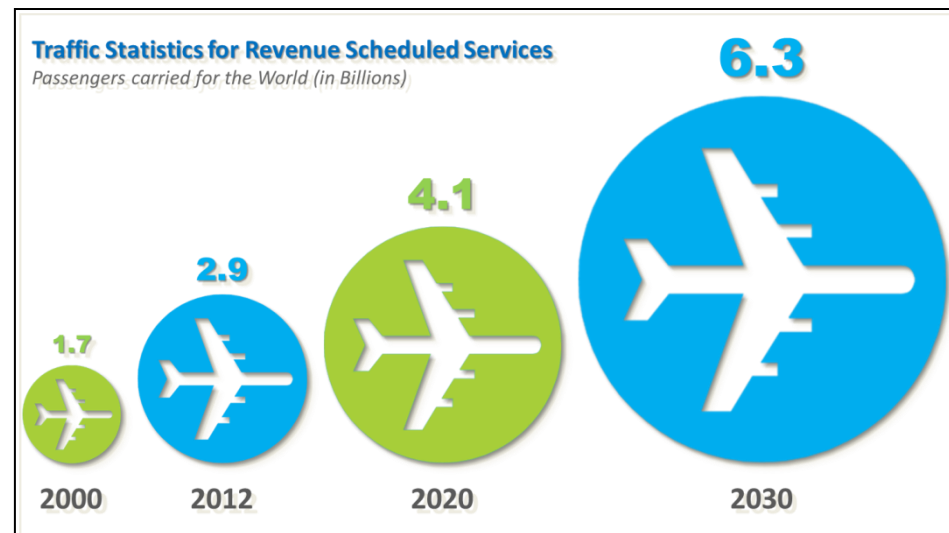


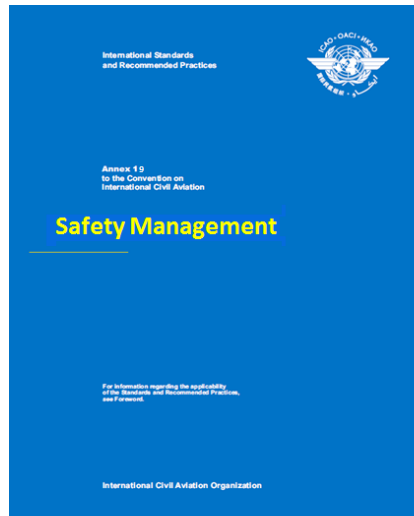
- **The ICAO High-level Safety Conference (HLSC) held in 2010 provided the impetus for the development of a new Annex dedicated to Safety Management.**
 - [ICAO doc 9335 refers](#)
- **The Conference concluded that safety management processes under the direct responsibility of States that are critical to civil aviation safety should be contained in a single Annex:**
 - Including the State Safety Programme (SSP) framework and the 8 critical elements of a safety oversight system;
 - Covering general and business aviation activities; and
 - Retaining the safety management system (SMS) requirements specific to one area of activities in individual Annexes.

Why a New Annex?



- With air traffic projected to double in the next 15 years, safety risks must be addressed proactively to ensure that this significant capacity expansion is carefully managed and supported through strategic regulatory and infrastructure developments.
 - An Annex dedicated to safety management will re-enforce the role played by the State in managing safety at the State level, stressing the concept of overall safety performance in all domains, in coordination with service providers.





Annex 19 – Safety Management

PROCESS FOR THE DEVELOPMENT OF THE NEW ANNEX

Annex 19 – Safety Management



- In response to the HLSC 2010 recommendation 2/5, the Air Navigation Commission recommended that the new Annex be developed in 2 phases:
 - Phase 1 involved the **consolidation of existing safety management provisions** currently contained in as many as 6 different Annexes, into a single new Annex.
 - The **development of enhanced requirements** will become the focus of **Phase 2**, once the new Annex (1st edition) becomes applicable.

Annex 19 – Safety Management



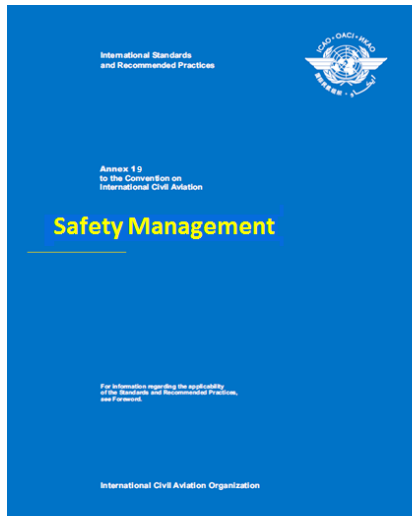
- This approach was intended to **expedite** the creation of the new Annex, while maintaining continuity with current SSP and SMS requirements.
- The ICAO Council approved this 2-phase approach.
- The Air Navigation Commission (ANC) established a Panel of Experts, the Safety Management Panel (SMP), for the development of Annex 19.

Annex 19 – Safety Management



- **Therefore, Phase 1 was limited to:**
 - The identification of existing provisions to serve as the basis for Annex 19, 1st edition;
 - With modification, as necessary, for clarity or harmonization.
- Phase 1 was completed in less than 2 years with the ICAO Council adoption on 25 February 2013.
- Annex 19, 1st edition has an **applicability date of 14 November 2013***.

** Independently of the applicability date of Annex 19, the existing Standards and Recommended Practices (SARPS) retain their original applicability, dating from 2001 onwards.*



Annex 19 – Safety Management

WHAT IS THE BASIS FOR ANNEX 19, 1ST EDITION?

Basis of Annex 19, 1st edition



1. The **transfer of overarching** safety management provisions from the following Annexes:
 - **Annex 1** — *Personnel Licensing*;
 - **Annex 6** — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes, Part II — International General Aviation — Aeroplanes and Part III — International Operations — Helicopters*;
 - **Annex 8** — *Airworthiness of Aircraft*;
 - **Annex 11** — *Air Traffic Services*;
 - **Annex 13** — *Aircraft Accident and Incident Investigation*; and
 - **Annex 14** — *Aerodromes, Volume I — Aerodrome Design and Operations*

Note: *Independently of the applicability date of Annex 19, these SARPS retain their original applicability, dating from 2001 onwards.*

Basis of Annex 19, 1st edition (cont.)



2. The **adaptation** of Annex 6, Part I, Appendix 5 and Annex 6, Part III, Appendix 1, Safety oversight of Air Operators.
3. The **duplication** of Annex 13, Attachment E, Legal guidance for the protection of information from safety data collection and processing systems.

Basis of Annex 19, 1st edition

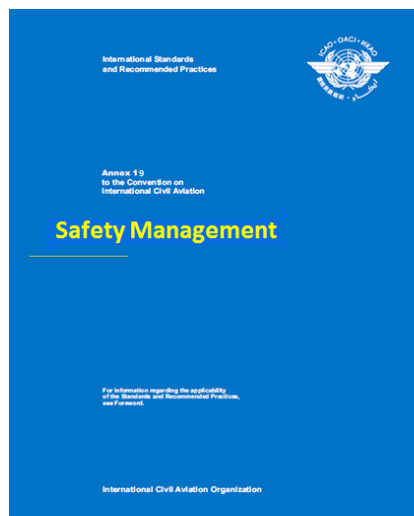


- **Sector-specific** safety management provisions were **retained** in their appropriate Annexes.
- **Examples include:**
 - Annex 1 (1.2.4.2) - basic safety management principles applicable to the **medical assessment** process of license holders; and
 - Annex 6, Part I and III - the **flight data analysis programme** is part of the aeroplane or helicopter operator's SMS.

Basis of Annex 19, 1st edition



- As a result of the **transfer** of the overarching safety management provisions to Annex 19, consequential amendments to existing Annexes were adopted by the ICAO Council, as follows:
 - Amendment 171 to Annex 1,
 - Amendment 37 to Annex 6, Part I,
 - Amendment 32 to Annex 6, Part II,
 - Amendment 18 to Annex 6, Part III,
 - Amendment 104 to Annex 8,
 - Amendment 49 to Annex 11,
 - Amendment 14 to Annex 13; and
 - Amendment 11 to Annex 14, Volume I.



Annex 19 – Safety Management

DETAILED CONTENT OF ANNEX 19, 1ST EDITION

Annex 19, 1st edition - Overview



- **CHAPTER 1** – Definitions
- **CHAPTER 2** – Applicability
- **CHAPTER 3** – State safety management responsibilities
- **CHAPTER 4** – Safety management system (SMS)
- **CHAPTER 5** – Safety data collection, analysis and exchange
- **APPENDIX 1** – State safety oversight system
- **APPENDIX 2** – SMS Framework
- **ATTACHMENT A** – SSP Framework
- **ATTACHMENT B** – Legal guidance for the protection of information from safety data collection and processing systems

Annex 19, 1st edition - Structure



- **CHAPTER 1 – Definitions**
 - Includes 12 existing definitions and 6 new definitions specific to the management of safety.
- **CHAPTER 2 – Applicability**
 - The Standards and Recommended Practices (SARPs) are applicable to safety management functions related to, or in direct support of, the safe operation of aircraft

Annex 19, 1st edition - Structure



- **CHAPTER 3 – State Safety Management Responsibilities**
 - This chapter outlines safety management responsibilities directly applicable to the State, including the SMS requirements be implemented by the following service providers* (as described in the relevant Annexes):
 1. **Approved training organizations;**
 2. **Operators of aeroplanes or helicopters** authorized to conduct international commercial air transport;
 3. **Approved maintenance organizations** providing services to operators as described in bullet 2;
 4. Organizations responsible for the type **design or manufacture of aircraft;**
 5. **Air traffic services (ATS) providers,** and;
 6. **Operators of certified aerodromes.**

** For the purposes of Annex 19, the term “service provider” refers to the list above.*

Annex 19, 1st edition - Structure



- CHAPTER 3 – State Safety Management Responsibilities (cont.)
 - In particular, it addresses the elements of the State Safety Programme (**SSP**) and the State safety oversight Standards, respectively described in Attachment A (**SSP framework**) and Appendix 1 (**State safety oversight system**).

Annex 19, 1st edition - Structure

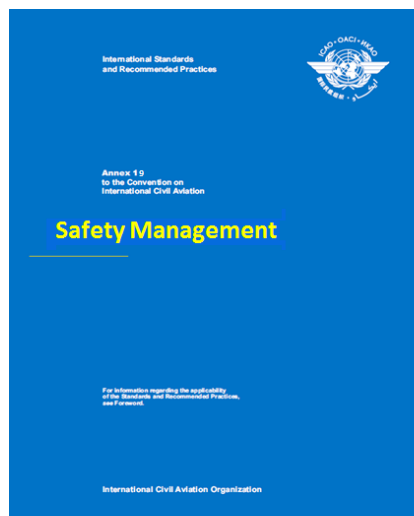


- **CHAPTER 4 – Safety Management System (SMS)**
 - Outlines the safety management responsibilities of service providers, described in Appendix 2 (**SMS framework**);
 - Also includes the safety management responsibilities of **international general aviation operators**, conducting operations of large or turbojet aeroplanes.

Annex 19, 1st edition - Structure



- **CHAPTER 5 – Safety Data Collection, Analysis and Exchange**
 - Outlines the specifications to support safety management activities by collection and analysis of safety data and by exchange of safety information, as part of the SSP.
 - Complemented by Attachment B - *Legal guidance for the protection of information from safety data collection and processing systems.*



Annex 19 – Safety Management

WHAT IS NEW IN ANNEX 19, 1ST EDITION?

What is new in Annex 19, 1st edition? (1)



- **The following 4 changes establish new provisions:**
 1. The SMS framework now applies to organizations responsible for the type design and manufacture of aircraft.
 2. The four components of the SSP framework are elevated to the status of Standard in chapter 3
 3. The State Safety Oversight (Appendix 1) are applicable to the oversight of all product and service providers; and
 4. The Safety Data Collection Analysis and Exchange (Chapter 5) and the Legal Guidance for the Protection of Safety Information from Safety Data Collection and processing systems (Attachment B) complement the SSP.

What is new in Annex 19, 1st edition? (2)



- 1. The SMS framework now applies to organizations responsible for the type design and manufacture of aircraft:**
 - Annex 8 had already established SMS provisions applicable to these service providers and the SMS framework was expected to be introduced in the next amendment in any case.
- 2. The following four components of the SSP framework were elevated to the status of Standard in chapter 3:**
 - State Safety policy and objectives
 - State Safety Risk Management
 - State Safety assurance
 - State Safety promotion

What is new in Annex 19, 1st edition? (3)

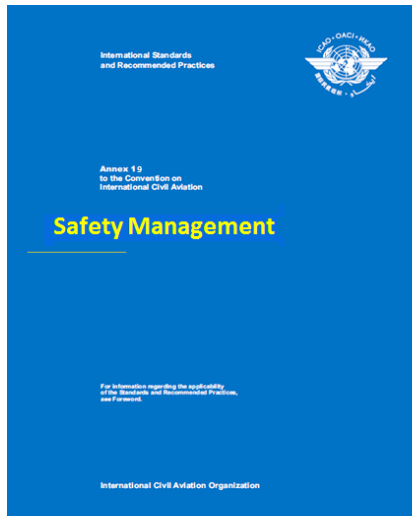


- 3. The State Safety Oversight (Appendix 1) are applicable to the oversight of all product and service providers.**
 - These Standards, more commonly known as the Critical Elements (CEs), are not really new to States:
 - They had been already introduced in Annex 6, Parts I and III; and
 - States have already signed MoUs with ICAO, introducing the use of the 8 CEs as the foundation of the Universal Safety Oversight Audit Programme (USOAP)

What is new in Annex 19, 1st edition? (4)



- 4. The Safety Data Collection Analysis and Exchange (Chapter 5) and the Legal Guidance for the Protection of Safety Information from Safety Data Collection and processing systems (Attachment B) are complementary to the SSP.**
 - These provisions, transferred from Annex 13, provide the necessary foundation for the collection, protection, analysis and exchange of safety data to complement the SSP provisions.



Annex 19 – Safety Management

WHAT ARE THE BENEFITS OF ANNEX 19?

Benefits of Annex 19



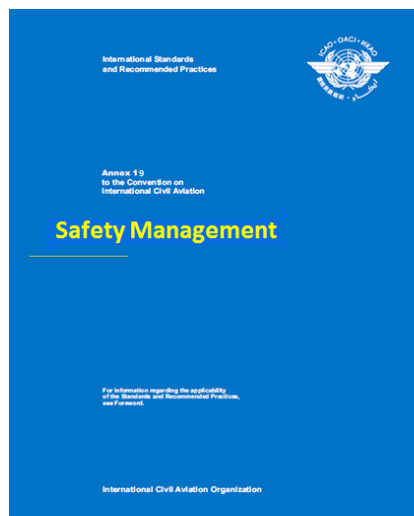
- Highlights the **importance of safety management** at the State level;
- Enhances safety by **consolidating safety management provisions** applicable to multiple aviation domains
- Facilitates the **evolution of safety management** provisions;
- An opportunity to **further promote the implementation of SMS and SSP** provisions; and
- A process established to **analyze feedback** received regarding Annex 19 and safety management implementation.

COST IMPACT OF ANNEX 19, 1ST EDITION

Cost Impact of Annex 19, 1st edition



- The overall cost impact is light because Annex 19 is mostly based on existing provisions gradually introduced since 2001.
- **Impact to the States:**
 - Administrative work for the review and amendment of existing legislation and regulations;
 - Update to references to existing Annex provisions;
 - Notification of differences to Annex 19, if any (SL 8/3 13/30 refers).
- **Impact to the Service providers and international general aviation operators:**
 - Updates to operations manuals and other materials.



Annex 19 – Safety Management

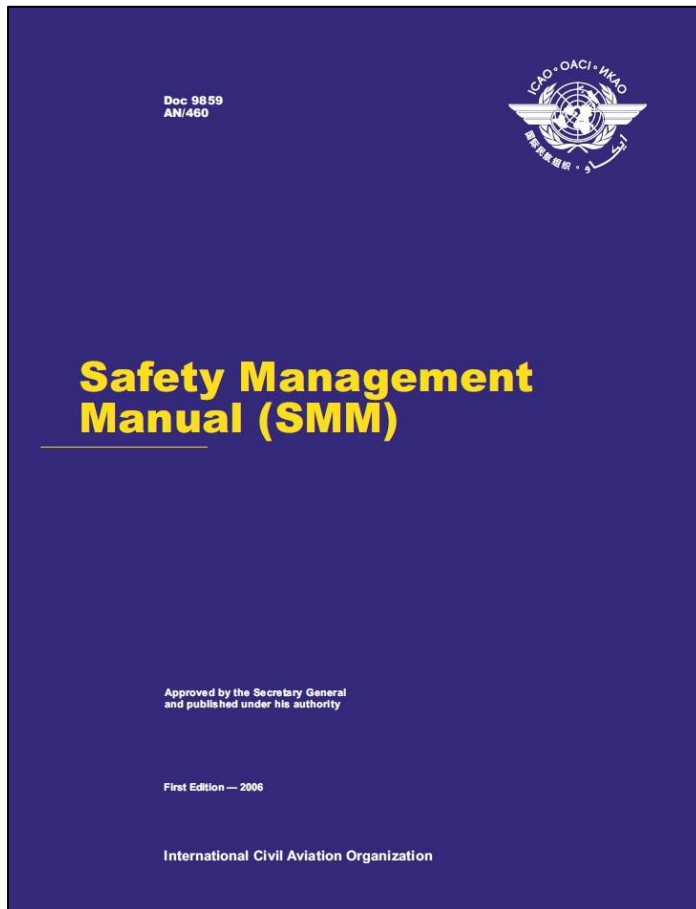
ANNEX 19 ROLL OUT PLAN

Publication of Annex 19, 1st Edition



- **State Letter 8/3 13/30** dated 8 April 2013 includes the following:
 - A link to Annex 19, 1st edition, as adopted by the Council;
 - Guidance on the determination and reporting of differences;
 - The mapping of the safety management provisions from sources in existing Annexes to Annex 19, 1st edition (download [here](#)); and
 - Further information regarding Annex 19 and its implementation (download [here](#)).

Safety Management Guidance Material



- **Safety Management Manual (SMM) third Edition, Doc 9859, was published on 8 May 2013:**
 - Restructured according to the SSP and SMS Frameworks.
 - Detailed guidance and tools for SSP and SMS implementation
 - A presentation, SMM 3rd Edition Highlights, identifying the main differences between 2nd and 3rd editions of the SMM (Doc 9859) can be accessed [here](#).

Safety Management Guidance Material



- In addition, further **sector specific safety management** guidance material can be found in ICAO manuals supporting the following Annexes:
 - Annex 1 — Personnel Licensing;
 - Annex 6 — Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes, Part II — International General Aviation — Aeroplanes and Part III — International Operations — Helicopters;
 - Annex 8 — Airworthiness of Aircraft;
 - Annex 11 — Air Traffic Services;
 - Annex 13 — Aircraft Accident and Incident Investigation; and
 - Annex 14 — Aerodromes, Volume I — Aerodrome Design and Operations.
- These manuals will be updated as necessary to harmonize the terminology used in Annex 19 and in the SMM, 3rd Edition.

Training Material



- The ICAO safety management training material is **being updated** to reflect the 1st edition of Annex 19 and the 3rd edition of the SMM, and is expected to be completed in **2014**.
- In the interim, a **supplementary module** highlighting the changes introduced by Annex 19 and the 3rd edition of the SMM has been added to the ICAO safety management training courses.

ICAO Safety Management Public Website

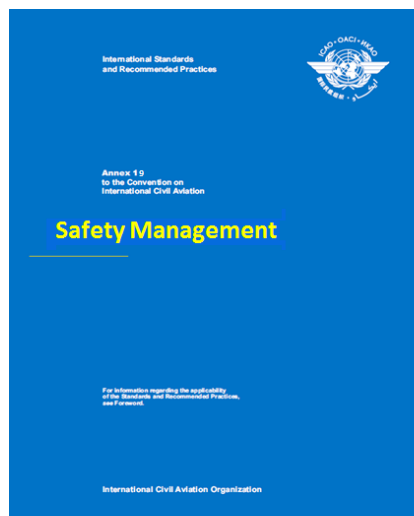


- In order to support the implementation of safety management provisions, the ICAO Safety Management public website has been updated and contains:
 - History and overview of ICAO safety management provisions;
 - List of safety management guidance material;
 - ICAO safety management tool kit;
 - Links to safety management material developed by other organisations;
 - Information on how the USOAP will address safety management provisions;
 - Annex 19 promotional material
 - Latest developments; and
 - Frequently Asked Questions (FAQs).
- For further information, refer to: <http://www.icao.int/safety/SafetyManagement>

Access to ICAO Documentation



- **FOR ICAO Member State's Civil Aviation Administration and governmental bodies/agencies involved in non-commercial aviation activities**
 - Free access is provided to all ICAO State Letters and saleable documents through the ICAO Portal (ICAO NET). Click [here](#) to download instructions for obtaining access to ICAO NET.
- **FOR ALL OTHERS**
 - Annex 19 is available for purchase in hard copy or electronic format through <http://store1.icao.int/> or Email at sales@icao.int



Annex 19 – Safety Management

SUPPORT FOR ANNEX 19 IMPLEMENTATION

Support for Annex 19 Implementation



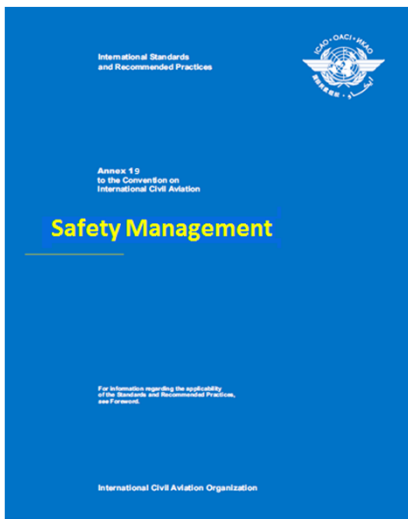
- The Regional Aviation Safety Groups (RASGs) have been invited to identify activities, included required resources, to **support the Annex 19 roll-out plan** and the effective and continuing **implementation of SMS and SSP provisions**.
- The States, through their RASGs are strongly encouraged to **report progress**, regarding the **implementation of SSP and SMS provisions**, which is essential to guide the future development of safety management provisions (Phase 2)

THE FUTURE DEVELOPMENT OF THE SAFETY MANAGEMENT SARPS *ANNEX 19 – PHASE 2*

Strategy for Annex 19 Implementation



- The implementation of safety management provisions are additionally highlighted in ICAO's newly-amended Global Aviation Safety Plan (GASP).
- The GASP prioritizes the implementation of a State safety oversight system as a prerequisite to the establishment of a State Safety Programme.
- The implementation of the safety management provisions are highlighted in ICAO's newly amended Global Aviation Safety Plan (GASP), which has been provisionally approved by the ICAO Council and is accessible from the [38th ICAO Assembly website](#).



Annex 19 – Safety Management

THE FUTURE DEVELOPMENT OF THE SAFETY MANAGEMENT SARPS *ANNEX 19 – PHASE 2*

Annex 19 Development – Phase 2



- As previously explained, the development of Annex 19 was split in two phases:
 - Phase 1, which was completed with Annex 19, 1st edition; and
 - Phase 2, which focuses on the development of **new requirements and further guidance material**.
- ICAO continues to work in close collaboration with its Member States and international organizations on the development of safety management provisions.
- Many of the comments received and issues identified during Phase 1 are addressed in the on-going work programmes of the SMP and/or other groups of experts.

Annex 19 Development – Phase 2



- **The on-going safety management work programme includes:**
 - Development of amendments to SSP provisions
 - Development of amendments to SMS provisions
 - Development of emergency response plan provisions;
 - Enhancement of provisions for the collection, analysis and protection of safety data and safety information;
 - Further development of SMS and SSP implementation and assessment tools;
 - Extension of the applicability of the SMS provisions; and
 - Enhancement of provisions for the integration of SMS and SSP activities

Annex 19 Development – Phase 2



- Future amendments to Annex 19 are expected to follow a **three year** amendment **cycle**.
- An **impact assessment** will be required for any proposed changes to Annex 19 provisions **to ensure stability and continuity** in the implementation of SSP and SMS for all States.
- While overarching safety management SARPs will be included in Annex 19, **new sector-specific management provisions** are expected to be included **in the appropriate Annexes**.



INTERNATIONAL CIVIL AVIATION ORGANIZATION

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Any questions should be addressed at
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Thank You