



Project Document

Safety Data Collection and Processing System (SDCPS)

(2026 – 2029)

1.	Beneficiary State/Group of States:	AFI members states
2.	Project No.:	TBN
3.	Project Title:	Establishment of Safety Data Collection and Processing System
4.	Project starting	25 February 2026
5.	Project duration	36 Months
6.	Duration covered by this revision:	-
7.	Implementation Agencies:	ICAO WACAF and ESAF Regional Offices, States, AFCAC, RSOOs, RAIO in the region
8.	Source of Funding:	TBD
9.	Project estimated cost:	USD 500,000

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A. PROJECT JUSTIFICATION

1. The Annex 19 to the Chicago Convention requires States to establish a safety data collection and processing system (SDCPS) consisting of a series of integrated processes and schemes to capture, store, aggregate, process and enable the analysis of safety data and safety information.
2. The RASG-AFI/10 Conclusion 10/02: Safety Intelligence strategy in support of safety management and decision-making requires:
 - a. States to adopt a coordinated approach with stakeholders when establishing Safety Data Collection and Processing Systems (SDCPS), as well as the coordinated sharing of such information for predictive safety management; and promote the use of standardized aviation taxonomies;
 - b. ICAO, AFCAC, RSOOs, RAIOS, to continue to support States through workshops, training, guidelines and/or appropriate tools for the effective implementation of Safety intelligence.
3. To support the achievement of Goal 5 of the Global Aviation Safety Plan (GASP) and AFI -RASP—“Expand the use of industry programmes and safety information-sharing networks by service providers”—the number of States that have established Safety Data Collection and Processing Systems (SDCPS) is identified as a key performance indicator.
4. Accurate and timely collection, processing, and sharing of safety-related data is critical to enhance aviation safety performance. Many States of the AFI region lack a harmonized and efficient system for collecting, processing, and analyzing aviation safety data. This gap hinders proactive risk management and compromises the effectiveness of safety oversight.
5. Consistent with the Annex 19, RASG-AFI/10 Conclusion 10/02 and GASP, States are required to establish safety data collection and processing system and there is a need to support States effort.
6. Abuja Safety Target Goal 1 Target 1.1, Mitigation Measure 22. requires States *Establishing and maintaining effective accidents/incidents reporting system with adequate associated Safety Data Collection and Processing System (SDCPS)*. Further, Goal 5, Target 5.1, Mitigation Measure 1 requires States to *Establish and promote safety data collection systems at national and regional levels*.

B. PROJECT SCOPE

The scope of the project includes:

1. Development of an SDCPS tool for collection, storing, processing, analysis, and exchange of safety data and safety information.
2. Development of harmonised documentation, templates, and guidelines for safety data collection, protection, processing, analysis, and sharing;
3. Training and capacity building for relevant personnel in States of the AFI region;
4. Strengthening of States’ capabilities for promotion and protection of safety data and information sharing and safety analysis;
5. Provision of assistance and guidance to States with regards to the legislative requirements, associated Technical Guidance Materials and any SOPs related to SDCPS; and
6. Establishment of a forum for sharing best practices on SDCPS.



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C. End of Project Status/ Target / Overall Objective

By the end of the project, AFI States:

1. Have an established and functional SDCPS that is compliant with ICAO guidelines;
2. Have an appropriate number of personnel trained in safety data management concepts;
3. Are able to collect, process, and analyse safety data to enable data-driven decision-making;
4. Be connected to regional and global data-sharing platforms such as ICAO Reporting Portal;
5. Adopt a harmonised taxonomy and standardised protocols for safety data capture and recording; and
6. Have developed compliant regulations and guidance material on SDCPS.

D. Implementation Strategy

1. Gap Analysis

A gap analysis will be conducted to determine the capacity needs of States of the AFI region in establishing Safety Data Collection and Processing Systems (SDCPS). The analysis will assess existing safety data governance frameworks, data collection mechanisms, processing capabilities, and sharing arrangements at both State and regional levels. Further availability of technical expertise within the region will be identified and noted for engagement in the development, validation and operationalisation of a harmonised Regional SDCPS.

The following priority areas will be considered for development of the survey to States:

- a. Safety data governance, roles, and responsibilities;
- b. Safety data collection schemes and reporting systems;
- c. Safety data processing and validation processes;
- d. Safety data analysis and performance monitoring;
- e. Integration of safety data within SSP and NASP frameworks;
- f. Regional safety data sharing and exchange platforms;
- g. Use of standardised aviation taxonomies.

2. Technical Assistance

Through ICAO Regional Offices, the project team will explore the possibility of getting technical expertise and financial assistance where applicable, from champion States to support the project team in providing assistance to AFI States in establishing or enhancing their SDCPS. This assistance will be aligned with the Annex 19 requirements, RASG-AFI/10 Conclusion 10/02, and the goals of GASP and AFI-RASP.

- a. **Existing Systems:** For States that already have partial or fully functional safety data collection mechanisms in place, the project team will collaborate with national focal points to assess, refine, and align existing systems with regional and international standards or to share best practices.



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- b. **Systems Under Development:** Where States have initiated SDCPS development but have not yet finalised their frameworks, the project team will support for the completion and alignment with standardised taxonomies, formats, and processes.
- c. **Non-existent Systems:** In States where no SDCPS exists, the project team will provide end-to-end technical assistance covering system design, governance frameworks, data architecture, and implementation.

3. Capacity Building

To ensure sustainable and effective operation of SDCPS, the project will build the capacity of national safety data focal points and relevant CAA/AIA technical staff. This will be achieved through the conduct of one virtual training on safety data collection, processing, and analysis and one virtual Safety Occurrence Reporting for Practitioners training. Two workshops, one to validate the SDCPS tools and another for implementation of the tool targeting all States of the AFI Region will be organised. Technical assistance targeting 24 States; 12 from ESAF and 12 from WACAF will be provided. Experts will be identified and qualified to support ongoing delivery of technical assistance across the region.

4. Engagement with Academia

Universities and academic institutions will be onboarded to support the development of tools and solutions for a Safety Data Collection and Processing System. Academic partners will contribute research, analytical capabilities, and innovation to complement the technical assistance provided by stakeholders and partners. Collaboration with academia will be structured to ensure that all developed tools and methodologies comply with ICAO Annex 19, Doc. 9859, and Doc. 10159 and are informed by the guidance contained in ICAO Doc 10159 – Safety Intelligence Manual.

The project management team through State experts will informally engage States to determine States that are willing to participate as champion States in providing technical assistance and in the development of a harmonised SDCPS while awaiting approval of the project. The project management team will at the same time identify suitable academic institutions within the AFI region, as well as internationally recognised universities with relevant expertise in aviation safety data systems, to participate in this initiative. Once the Project is approved by the AASPG, formal agreement will be made with the champion States and academia outlining clear terms of engagement and the expected outcomes of the engagement.

5. States Involvement

States from the AFI region will be identified as Champion States, to lead the SDCPS initiative within the region. States will play a pivotal role in driving system development, implementation, coordinating with academic partners, and demonstrating the practical application of a functional SDCPS. These Champion States may also support the financing of related activities, thereby contributing to the sustainability and regional ownership of the initiative. The experience and lessons learned from the Champion States will inform the rollout of SDCPS across other participating States.

6. Regional Platform Development

The project will support the establishment of a regional safety data and information sharing platform to enable aggregation and analysis of State safety data at regional levels. A pilot application will be developed in collaboration with the Champion States and academic partners, with a view to broader regional adoption. All platform developments shall comply with ICAO Annex 19 and the ICAO Doc 10159 – Safety Intelligence Manual, Doc. 10053 Protection of Safety Information as well as ICAO Doc 9859 – Safety Management Manual.



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7. Coordination and Project Management

Project activities will be coordinated among project team members, the Project Coordinator, and the Project Facilitator, mainly through teleconferences. Seminars, workshops, and meetings will be scheduled in accordance with work programme activities. The Project Coordinator will monitor progress and adjust based on feedback and lessons learned and will coordinate with the Project Facilitator for the inclusion of additional experts, including from academia, if warranted by the tasks and work to be performed.

8. Roles and Responsibilities

A. Project Facilitator

- a. Facilitate the availability of the necessary resources
- b. Coordinate with States for the nomination of subject matter experts (SME)
- c. Support the project management to organise meetings and workshops
- d. Ensure effective project documentation
- e. Monitor implementation of project activities
- f. Ensure the project remains aligned with its objectives
- g. Ensure alignment with ICAO SARPs, GASP, and regional priorities.
- h. Liaise with States, RSOOs, and other stakeholders for effective collaboration.
- i. In consultation with the PTCs shall coordinate and circulate the provisional agenda of Project Team meetings or teleconferences.

B. Project Team Coordinator (PTC) and Assistant Project Team Coordinator (APTC)

- a. Coordinate the activities of the PMT
- b. Chair PMT meetings
- c. Monitor the progress of the project and adjust as necessary;
- d. Arrange for the inclusion of additional experts, if warranted by the tasks and work to be performed, in liaison with the Programme Facilitator;
- e. Report progress to the SMO/SG or to the AASPG as necessary.

C. Project Team Members

- a. Attend PMT meetings;
- b. Participate and support capacity building activities meetings, training, workshops, and seminars;
- c. Contribute technical expertise to the development of tools, templates, and guidance;
- d. Support States in the establishment and implementation of SDCPS.



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9. Follow-up and Feedback

ICAO Regional Offices in Dakar and Nairobi in coordination with the project management team will be responsible for supervising the project implementation activities within their respective jurisdictions. Follow-up will be conducted to ensure the project has a measurable impact on the safety oversight and safety data management capabilities of participating States.

10. Invitations to States or Experts

Invitations to States or experts to participate in activities organised by the Project Management Team (PMT) such as Meetings and Workshops either as participants or experts will be sent by the ICAO ESAF and WACAF Regional Offices to all identified participants. Letters of invitation will be addressed to Directors General of CAAs, AIAs, Organisations, industry representatives, stakeholders, and partners and will also serve to sensitize States to project objectives, formally adopt implementation plans, and confirm commitment. Academic institutions will similarly be formally engaged through champion States, ICAO, AFCAC, and RSOOs.

11. Expert Resources

a. Role of stakeholders and partners

Stakeholders and partners will deploy subject-matter experts in safety data governance and architecture, safety data collection and processing systems, safety data analysis and performance monitoring, and integration of safety data.

b. Composition of Expert Team

- i. Subject-matter experts in safety data systems from AFI States, stakeholders, and partners;
- ii. ICAO Regional Offices' experts in safety management and oversight;
- iii. National safety data focal points designated by participating States;
- iv. Experts from RSOOs, RAIOS, AFCAC, and relevant international organisations.

c. Role of Project Team

The project team will serve as project managers, liaising with Regional Offices, coordinating expert missions, and ensuring timely delivery of outputs.

12. Participating States and Champion States

States from the ESAF and WACAF regions will be invited to participate and/or provide experts. Designation of national safety data focal points and provision of existing safety data sources and documentation will be required from participating States. The Champion States will take on a leadership role in supporting regional efforts and providing project support through provision of technical expertise and/or financing of select activities as may be applicable.



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E. Project Deliverables

Project deliverables					
Refer ence	Description	Responsible party	Implementation Status	Delivery Date	Comments
1	Composition of the project team and data gathering				
1.1	Selection of project team experts	SMO/SG Secretary; SMO/SG Chairperson	Completed		Coordinate with States and Organisations for the nomination of subject matter experts possessing the required qualifications and experience to compose the project team
1.2	Project launching virtual meeting	SMO/SG Secretary, SMO/SG Chairperson	Completed 25/02/26		Organise an initial virtual meeting to nominate Project Team Coordinator and Assistant Coordinator; and identify Project Team Members nominated by States for vetting.
1.3.	Launch a survey tool for project data gathering	Project Facilitators, PTC, APTC, SMO/SG Secretary	Final paper to be presented – issue to States 01/08/26, require 30 days for completion .	31/08/26	Create and distribute a survey to obtain the status of the member State's SDCPS requirements and implementation progress.
1.4	Establishment of a Forum for Sharing Best Practices	Project Facilitators, PTC, APTC,		15/08/26	Engage all stakeholders in establishing a forum to share best practices on SDCPS implementation, leveraging expertise from other regions and organisations (e.g., RSOOs, RAIO, EASA, SAA, FAA). to shape project data gathering process.
2	Documents and tools for SDCPS				
2.1	Identification of necessary documents and tools	PTC, APTC, Project Team	File to be established in shared file.	31/08/26	1. Identify regulation status, technical guidance, templates, required 2. Identify SDCPS technical and functional specifications 3. Identify supporting tools (Excel, Power BI, Forms etc.)



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2.2	Development of Documents	PTC, APTC, Project Team	Requires AASPG approval to initiate, starting in 15/11/2026	15/6/27	1. Develop extracts of model regulations for SDCPS 2. Develop technical guidance, templates and 3. Develop supporting tools for SDCPS
2.3	Development of Technical Specifications	PTC, APTC, Project Team, SME		01/04/27	Develop technical and functional specifications for SDCPS tool
2.4	Validation of technical specifications	Secretariat, PTC, APTC, Project Team		01/05/27	Validation of SDCPS technical and functional specifications, and supporting tools
2.5	Workshop for Validation of Documents	Secretariat, PTC, APTC, Project Team		15/08/27	Validation of model regulations and technical guidance
2.6	Development of SDCPS tool	PTC, APTC, Project Team, SME, Academia		31/12/27	Development of SDCPS tool
2.7	Development of regional SDCPS tool (platform)	PTC, APTC, Project Team		31/12/27	Integration of SDCPS into a regional platform
2.8	Workshop for Validation of Tools	Secretariat, PTC, APTC, Project Team		28/02/28	Validation of the SDCPS tool and regional platform
3	Roll-out of SDCPS tools and Documents and capacity building				
3.1	Training and Workshops on Safety Data Collection, Processing, and Analysis	Project Facilitators, PTC, APTC, Project Team	Beginning 01/02/27	30/06/28	
3.2	Roll out of SDCPS tool	Project Facilitators, PTC, APTC		30/06/28	Meeting with member States for onboarding.
3.3	Technical Assistance and Guidance to States	PTC, APTC, Project Team	Beginning 31/3/28	30/09/28	Provide technical assistance and guidance to selected member States on SDCPS tools and documentation, delivered virtually or on-site as required.
3.4	Feedback Collection and Evaluation	Project Facilitators, Project Team	Beginning 30/09/28	28/02/29	Collect feedback from member States that have implemented the tools and documentation using an online platform; assess effectiveness and ensure continuous review and improvement.



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F. Resources

Resources Required	a. Project Team Experts from States and Organizations to conduct the project activities, based on following qualification criteria: i. Good knowledge of ICAO Standards and Recommended Practices (SARPs) and related procedures, with civil aviation oversight and industry experience; and ii. Good knowledge and experience in SDCPS. b. Funds for conducting the validation workshop and Training / Workshops on safety data collection, processing, and analysis. c. Funds for technical assistance. d. Experts outside the AFI Region for sharing best practices on SDCPS. e. Data analysis tools and apps
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G. Project Costing

Activities	Expenditures				
	2026	2027	2028	2029	Total (USD)
Deliverable 1 Composition of the project team	9,000	00	00	00	9,000
Activity #1.1 Selection of Project Team experts	00	00	00	00	00
Activity #1.2 Project launching virtual meeting, election of PTC, APTC, Rapporteurs	00	00	00	00	00
Activity #1.3 Launch a survey tool for project data gathering	00	00	00	00	
Activity #1.4 Establishment of a Forum for Sharing Best Practices	9,000	00	00	00	9,000
Deliverable 2 Documents and tools	5,000	280,500	7,500	00	293,000
Activity #2.1 Identification of necessary documents and tools	00	00	00	00	00
Activity #2.2 Development of necessary documents (regulation, technical guidance, templates)	00	00	00	00	00
Activity #2.3 Technical and functional specifications with SME (virtual)	5,000	00	00	00	5,000
Activity #2.4 Validate technical and functional specifications with SME (virtual)	00	00	00	00	00
Activity #2.5 Workshop for validation of documents (regulation, technical guidance, templates) (virtual)	00	10,500	00	00	10,500
Activity #2.6 Development of SDCPS Tool	00	240,000	00	00	240,000



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Activity #2.7 Development of regional SDCPS tool (platform)	00	30,000	00	00	30,000
Activity #2.8 Workshop for the validation of SDCPS tools	00	00	7,500	00	7,500
Deliverable 3 Roll-out of SDCPS tools and Documents and capacity building	00	70,000	91,000	00	198,000
Activity # 3.1 Training and Workshops on Safety Data Collection, Processing, and Analysis	00	70,000	00	00	70,000
Activity # 3.2 Roll out of SDCPS tool and onboarding	00	00	00	00	00
Activity #3.3 Provide technical assistance and guidance to States on SDCPS tools and documentation (Up to 24 States, 12 from WACAF and 12 from ESAF)	00	00	128,000	00	128,000
Activity # 3.4 Gather feedback from States that have implemented the tools and documentation to assess their effectiveness and ensure continuous review and improvement as necessary.	00	00	00	00	00
Activity # 3.5 Safety Information Protection: Virtual training	00	00	00	00	00
Activity # 3.6 Safety Occurrence Reporting for Practitioners: Virtual training	00	00	00	00	00
Total (USD)					500,000 USD

Costing Notes:

#2.6/2.8 – Options will include, in order of increasing costs, in-house resources from CAAs/RSOs, academia, and system developers

#3.1 Training cost 1,200 per participant x 48 = 57,600 + Venue = 8,640 + 5% Contingency = +/- USD 70,000

#3.3 Onsite Workshop for Implementation 4 days + venue for 54 participants including coffee, lunch, tea = 8,640; Technical Assistance, sponsorship for 24 States DSA 250 x 6 x 24 x 2 = 72,000 + Facilitators Ticket = 24 x 750 x 2 = 36,000 + 5% contingency: +/-USD 128,000