



Agenda Item 2: Follow-up to the implementation of safety oversight priorities

FOLLOW-UP TO AERODROME CERTIFICATION GOALS

(Presented by the Secretariat)

SUMMARY	
<p>This working paper (WP) presents the status of completion of the aerodrome certification goal, the challenges encountered, and the follow-up to the proposed measures for achieving aerodrome certification in the SAM Region:</p> <ul style="list-style-type: none">- Adoption of the set of Latin American Aeronautical Regulations on Aerodromes (AGA LARs) or their harmonisation with aerodrome-related regulations of the State;- Training of regional aerodrome inspectors based on the Aerodrome Inspector Manual (MIAGA);- Initial aerodrome certification based on the PANS Aerodromes; and- Review of GREPECAS Project F1 for the SAM Region, aligned with the aerodrome certification objectives of the Region.	
References:	
<ul style="list-style-type: none">- ICAO Annex 14 – Aerodromes, Vol. I – Aerodrome design and operations, 7th Edition, July 2016- ICAO Doc 9981 - PANS Aerodromes, 2nd Edition, 2016- Fourth meeting of the Programmes and Projects Review Committee (PPRC/4)- ICAO Global Aviation Safety Plan (GASP) (Doc 10004, 2014-2016)- Tenth and eleventh meetings of the SRVSOP Aerodromes Panel	
ICAO strategic objectives:	<i>A - Safety</i>

1. Background

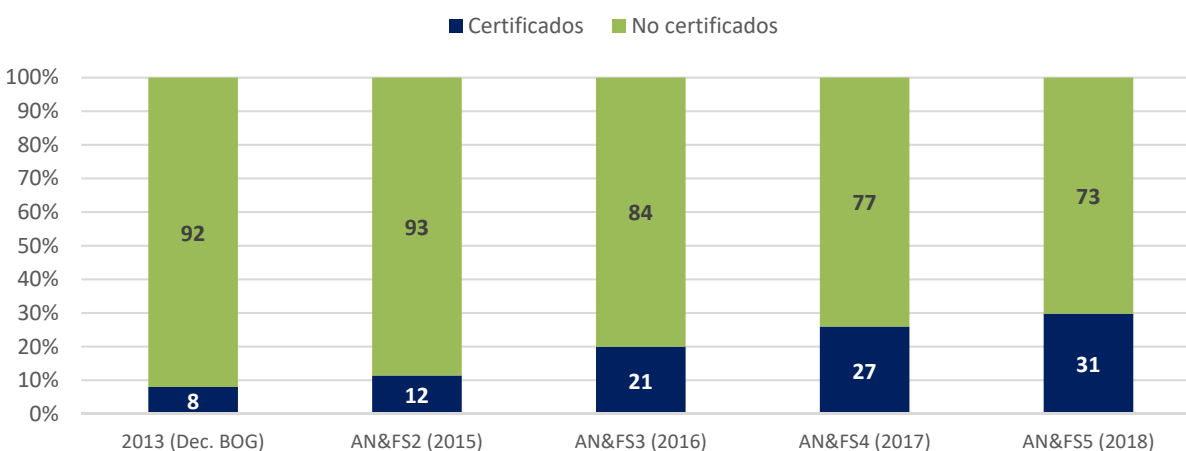
1.1 Aerodrome certification has been an ICAO standard since 2001 (Annex 14, Vol. I – *Aerodrome design and operations*). The Annex indicates that, when an aerodrome is granted a certificate, it signifies to aircraft operators and other organisations operating on the aerodrome that, at the time of certification, the aerodrome meets the specifications regarding the facility and its operation, and that it has, according to the certifying authority, the capability to maintain these specifications for the period of validity of the certificate. The certification process also establishes the baseline for continued monitoring of compliance with the specifications.

1.2 In 2016, ICAO published the second edition of the *Procedures for air navigation services – Aerodromes* (PANS-Aerodromes). The PANS-Aerodromes specify the procedures to be applied by aerodrome regulatory authorities and operators for initial aerodrome certification and continuous aerodrome safety oversight and for aerodrome compatibility studies, especially when full compliance with the SARPs of Annex 14, Volume I, is not possible.

2. Discussion

2.1 Status of State contributions to achievement of aerodrome certification goals

1.3 With regard to the **Aerodrome Certification** goals, the number of international aerodromes certified in the SAM Region that appear in the ICAO CAR/SAM Air Navigation Plan has risen from the twenty-seven (27) reported at the last AN&FS/4 meeting, to thirty-one (31) as of July 2018. An increase of four new aerodromes.



1.4 It is important to highlight that **9 of the 14** SAM States/Territories have at least one certified aerodrome, which shows the capacity of States to carry out this process, as indicated in the following chart:

AERODROME CERTIFICATION CAPACITY



2.1.1 The contribution of States to the aerodrome certification goal is shown in **Appendix A** to this working paper.

2.2 Aerodrome certification challenges

2.2.1 As harmonisation with the SRVSOP LAR AGA regional standards is taking place, States having difficulties in starting certification have a regulatory framework for conducting the process. As a result, and with the assistance of the SRVSOP, two SAM States have successfully completed their aerodrome certification process in accordance with their regulations and in line with LAR AGA regulations.

2.2.2 However, aerodrome certification continues to be a challenge for States. Some have yet to start their aerodrome certification process, or have been unable to continue the process in the rest of their international aerodromes.

2.2.3 Recommendation AN&FS/4-01 requested States to conduct an “*internal analysis of aerodrome certification*” to review the main challenges that prevented completion of certification of their aerodromes. Replies are summarised below:

- Aerodrome regulatory authorities lack the appropriate combination of experts to conduct certification and oversight tasks.
- Lack of the appropriate tools and guidelines to prepare, assess and accept the aeronautical studies and/or safety assessments required to demonstrate an equivalent or acceptable level of safety in face of non-compliance with requirements.
- Concern over the grounds for granting an exemption (related with the item above).
- Aerodrome operators (both State and private) are not prepared to face a certification process.
- The infrastructure does not meet the standard; accordingly, aeronautical studies need to be carried out to guarantee an equivalent level of safety.

2.2.4 As reported by the States, some good practices applied in some States, such as Brazil, Chile, Colombia and Uruguay to obtain the certification, have been identified. These and other guidelines are provided in **Appendix B** to this working paper.

2.3 Regional aerodrome certification strategy

2.3.1 The regional aerodrome certification strategy continues to change in order to accommodate State needs. The strategy of using the AGA LAR set as a regulatory framework model continues, so that its adoption/harmonisation enables aerodrome certification. Training of aerodrome inspectors also continues through multiple training activities and improvement of guidance material (manuals and circulars).

2.3.2 Likewise, a first multinational certification trial was carried out, which served as a basis for DINACIA Uruguay to undertake the successful certification of its main international aerodrome.

2.4 GREPECAS actions regarding aerodrome certification

2.4.1 To better support and assist CAR and SAM States/aerodromes with the aerodrome certification process, the Eighteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/18) formulated Conclusion 18/19, urging CAR/SAM States/Territories to send a 3-year aerodrome certification plan to the respective ICAO Regional Office, taking into account their contribution to the total figure for the Region.

2.4.2 Another action taken as a follow-up to the certification strategy was the modification of GREPECAS Project F1, Aerodrome Certification, which was restructured and changed to "Safety implementation and aerodrome certification project ", as per GREPECAS Decision 18/18.

2.5 **Aerodrome certification guidelines for CAAs**

2.5.1 As a follow-up to Recommendation AN&FS/4-02, which requested the Secretariat to prepare a summary of best practices for high-level personnel (DGCA/DFS) based on the results of Recommendation AN&FS/4-01, to serve as a guide for action to be taken by the CAA to achieve aerodrome certification, the Secretariat is presenting a proposal for review by the Meeting in **Appendix B** to this working paper.

3. **Suggested action**

3.1 The Meeting is invited to:

- a) take note of the information contained in this working paper;
- b) analyse and comment on the guidelines proposed in Appendix B to this working paper;
and
- c) take any other action it may deem appropriate.

APPENDIX A

LIST OF CERTIFIED AERODROMES AS OF 15 JULY 2018

State	No. of intl. aerodromes according to CAR/SAM ANP Vol. II	Certified aerodromes *	% of AD certified by State	Share in regional goal	Contribution to regional goal	Remarks
		Jul-18			Jul-18	
Argentina	16	0	0%	15.4%	0%	
Bolivia	3	3	100%	2.9%	3%	
Brazil	29	17	59%	27.9%	16%	
Chile	8	3	38%	7.7%	3%	2016 - Arica (SCAR) 2017 - Iquique (SCDA) & Antofagasta (SCFA) 2018 - Punta Arenas (SCCI) & Puerto Montt (SCTE) 2019 - Isla Pascua (SCIP) & Concepcion (SCIE) 2021 - Santiago (SCEL)
Colombia	11	2	18%	10.6%	2%	2017 - Cali (SKCL) 2018 - Pereira (SKPE)
Ecuador	4	2	50%	3.8%	2%	Quito (SEQM) & Guayaquil (SEGU)
French Guiana	1	0	0%	1.0%	0%	
Guyana	2	2	100%	1.9%	2%	
Panama	6	0	0%	5.8%	0%	
Paraguay	2	0	0%	1.9%	0%	Decision to adopt LAR AGA
Peru	8	1	13%	7.7%	1%	Lima (SPJC) certified.
Suriname	1	0	0%	1.0%	0%	
Uruguay	2	1	50%	1.9%	1%	2018 - Montevideo (SUMU)
Venezuela	11	1	9%	10.6%	1%	Maiquetia (SVMI)
Total	104	32			30.77%	

*Note: aerodromes that have been formally notified to the Regional Office as certified by the State are shown.

APPENDIX B

GOOD PRACTICES ON AERODROME CERTIFICATION FOR CAAs

Background

Aerodrome certification has been an ICAO standard since 2001 (Annex 14, Vol. I – *Aerodrome design and operations*). Annex 14 states that, when an aerodrome is granted a certificate, it signifies to aircraft operators and other organizations operating on the aerodrome that, at the time of certification, the aerodrome meets the specifications regarding the facility and its operation, and that it has, according to the certifying authority, the capability to maintain these specifications for the period of validity of the certificate. This is a responsibility of the State signatory of the Convention, towards both the international community and the general public.

The certification process also establishes a point of reference for continuous oversight of compliance with specifications. Accordingly, it is a key element for operational planning of the Aerodromes (AGA) Standards and Safety Directorate or its equivalent, of the civil aviation authority of every ICAO member State.

Many States are facing difficulties in complying with this requirement. Therefore, based on a survey conducted amongst member States (AN&FS/4-01), and on direct consultations and discussions at various aerodrome panels, a list of good practices that have given good results is provided below for consideration by the respective decision makers to facilitate aerodrome certification.

Good Practices

GP #1:	Top management gives a clear directive or mandate to AGA units on the establishment and presentation of an initial international aerodrome certification goal, in accordance with ICAO SARPs
Responsible:	Director of Civil Aviation
Rationale:	If top management issues a detailed and realistic directive (in writing) on international aerodrome certification, the AGA unit would have the tools (mandate) to restructure its processes in accordance with this goal.

GP #2:	Ensure an appropriate combination of experts in various fields in the AGA unit (available on site or otherwise), to undertake the initial certification and oversight tasks.
Responsible:	Director of Civil Aviation
Rationale:	The certification task is multidisciplinary. If the CAA does not have the appropriate combination of experts, top management could obtain support from external experts, through secondment or other mechanisms. In the case of States that have harmonised their legislation with the SRVSOP AGA LAR set, the experts could be obtained from the Regional System.

GP #3:	Reach the understanding that the aerodrome certification process is based on a performance/risk approach, which contemplates the possibility of certifying aerodromes applying exemptions.
Responsible:	Flight Safety Director / Director of the AGA unit
Rationale:	The main obstacle for aerodrome certification, as noted for many years, is infrastructure non-compliance. However, there are mechanisms available to demonstrate an equivalent level of safety, deviations, restrictions or exemptions to achieve certification.

GP #4:	Facilitate the operator-regulator communication in the AGA field
Responsible:	Director of Civil Aviation
Rationale:	When giving the mandate within the CAA, the Director should hold initial meetings with the directors or persons in charge of aerodrome operations, in order to ensure their commitment towards achieving this goal.

GP #5:	Have in place the appropriate regulations to carry out the certification process
Responsible:	Director in charge of the AGA unit
Rationale:	In case the State does not have the appropriate regulations, the adoption of, harmonisation with, the AGA LAR set would be advisable in order to take advantage of economies of scale as regards regulatory updates, training, access to experts, and guidance material

GP #6:	Have a detailed and realistic plan for certifying international aerodromes, with clearly established and measurable annual goals.
Responsible:	Person in charge of the AGA area
Rationale:	This plan shall take into account the level of maturity of the various aerodrome operators, the resources available or that could be obtained, in order to have a realistic, specific, detailed, and consistent plan.