

CAAC-ANAC Bilateral Roadmap

On
Aircraft Certification

2024-2027



Civil Aviation Administration of China



Brazilian National Civil Aviation Agency

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Preamble

ANAC and CAAC jointly developed this Bilateral Roadmap, outlining the goals and expectations on their bilateral relationship and their respective airworthiness procedures. The need to expand regulatory harmonization between countries, as well as to respond to common problems in the aviation industry, amid the increasingly diversified manufacturing of aeronautical products with the rise of new technologies, makes it essential that authorities work together a common path of collaboration, increasing trust and reducing administrative burden.

This Bilateral Roadmap was developed under the Memorandum of Understanding between ANAC and CAAC for the Promotion of Civil Aviation Safety, signed on February 15th, 2011. The activities related to cooperation on Training/Qualification of personnel are supported by the Memorandum of Understanding between ANAC and CAAC signed in February 22nd, 2024.

Bilateral Roadmap Vision and Purposes

The vision of CAAC and ANAC is that building an organized and stable common agenda in product certification will serve as the basis for a bilateral relationship that is increasingly efficient in articulation and effective in its results.

The purposes of this Bilateral Roadmap are:

- To have a formal strategic planning for the Brazil-China bilateral partnership in aircraft certification.
- To implement continuous improvement and strengthening of cooperation between ANAC and CAAC.
- To establish strategic objectives in which both authorities will focus efforts for cooperation and harmonization.
- To maintain mutual familiarity and trust in each other authority's regulatory systems for product certification.

Strategic Objectives

This document identifies the high-level strategic objectives the CAAC and ANAC will collaborate on. The strategic objectives under this bilateral collaboration strategy are:

New Technologies

The aeronautical industry is persistently striving to implement new technologies, for which authorities may not have specific regulations issued. This rapid innovation comes with challenges for the Authorities to assess the potential impacts to operational safety, as well as to incorporate into its regulatory framework the adequate regulation to timely respond to innovation. Moreover, existing agreement were not formulated with the potential adverse impacts of these new technologies in mind.

Prominent examples include electrical propulsion systems, electric vertical take-off and landing (eVTOL) vehicles, unmanned aerial vehicles (UAVs), unmanned aerial systems (UAS), and the broader concept of urban air mobility (UAM). As the industry races to fulfill market expectations, it is urging regulators to establish clear and harmonized standards. These standards are crucial for delivering safe and compliant products, while ensuring transferability of technologies across different regions.

Light Sport Aircraft

CAAC and ANAC have incompatible regulatory frameworks concerning Light Sport Aircraft (LSA). In China, the CAAC mandates type certification for LSAs, whereas ANAC recognizes LSA models developed according to industry-accepted standards, without issuing type certificates.

These differing approaches hinder the exchange and regular operation of small aircraft categorized as LSAs across regions. The lack of harmonized regulatory models creates barriers to international collaboration and market access for LSA manufacturers and operators.

Both Authorities recognize the importance of this aviation sector to foster the industry development. Therefore, it is of interest of ANAC and CAAC to harmonize and allow integration of market for LSA.

Rulemaking

Rulemaking processes led by civil aviation authorities often incorporate feedback from the aviation community. However, these processes can sometimes lead to unharmonized requirements or regulatory incompatibilities with other key authorities.

CAAC and ANAC recognize the need for improved collaboration in rulemaking. By engaging in the early conceptual stages and maintaining continuous cooperation throughout the process, they aim to develop harmonized/compatible policies and requirements. This collaborative approach seeks to eliminate barriers and inefficiencies in the exchange and operation of aeronautical products, thereby reducing costs, minimizing the need for repeated verifications, and shortening the time to market. Through such approach, CAAC and ANAC can assure the transferability of products and foster technological innovation across the aviation industry.

Training / Qualification

CAAC and ANAC recognize the significant potential for cooperation in the training and qualification of their technical staff in the area of airworthiness certification. Offering joint courses and training programs is highly beneficial. Such initiatives not only ensure the standardization of technical knowledge but also foster greater integration and cultural understanding among technical personnel.

Methodology

For each strategic objective established in this Bilateral Roadmap, CAAC and ANAC identified specific key results, which will be used to monitor and manage the initiatives. The idea of establishing key results exposes the desire of CAAC and ANAC to give this Bilateral Roadmap the most practical approach possible.

Strategic Objectives and Key Results

Strategic Objective	Desired Outcome	Desired Key Results	Target
1. New Technologies	A product certified with new technology by the CA will be able to obtain approval by the VA with equivalent level of safety to domestic products.	1.1. Establish and charter specific task teams Establish a specific task group for each new technology, develop and approve a charter for each task group, specifying its scope, frequency of meetings, milestones, necessary resources, desired outcomes and points of contact.	4Q24 eVTOL, UAVs
		1.2. Familiarization on regulatory framework To develop and approve a familiarization report, evaluating impacts of new technologies in both authority's regulatory frameworks, as well as identifying commonalities and gaps between certification systems.	3Q25
		1.3. Policy recommendations To develop and approve policy recommendations to both authority's managements, considering results of the familiarization report and international known policies, guidance and/or regulations.	2Q26

2. Light Sport Aircraft	A LSA certified/recognized by one authority will be able to obtain approval or recognition by the other authority with equivalent level of safety to domestic equivalent LSAs.	2.1. Establish and charter a specific task team Establish a specific task group and develop and approve a charter, specifying its scope, frequency of meetings, milestones, necessary resources, desired outcomes and points of contact.	4Q24
		2.2. Familiarization on regulatory framework To develop and approve a familiarization report, evaluating impacts of LSAs in both authority's regulatory frameworks, as well as identifying commonalities and gaps between certification systems.	2Q25
		2.3. Policy recommendations To develop and approve policy recommendations to both authority's managements, considering results of the familiarization report and international known policies, guidances and/or regulations.	1Q26

3. Rulemaking	The authorities will be able to discuss and coordinate on studies and development of new/revised standards during each other's rulemaking processes. The new/revised standards will be implemented in a harmonized manner, to the maximum extent possible, given the specific authority's rulemaking processes.	3.1. Systematic communication on rulemaking Establish a routine of consultation/communication among authorities on intended subjects for rulemaking, as well as ongoing rulemaking with potential impacts in the bilateral cooperation, considering the existing legal boundaries of each authority rulemaking processes.	3Q24
		3.2. Cooperative pre-rulemaking studies Establish mechanism to allow authorities to jointly perform pre-rulemaking studies or coordination on topics of common interest.	1Q25

4. Training/Qualification	Authorities will be able to maintain leveling of their staff in each other concepts and practices, fostering cooperation and harmonization by sharing training opportunities.	4.1. Establish and charter a specific task team Establish a specific task group and develop and approve a charter, specifying its scope, frequency of meetings, milestones, necessary resources, desired outcomes and points of contact. The objective is to assess and propose means for facilitating the provision of courses and training programs to each other, as well as the participation of their technical staff.	4Q24
		4.2. Joint training demands and opportunities Identify relevant opportunities, and specific needs of training between the authorities and how these opportunities will be provided (existing courses or dedicated/specific programs).	2Q25
		4.3. Develop a joint training program Develop a training program to cover the demands approved in the previous phase. Includes contact information for the responsible areas and offers general guidelines for participation and obtaining certificates. The program may be composed of virtual courses, in person courses and other formats as appropriate.	4Q25

Final considerations

Once established, this Bilateral Roadmap serves as a systematic and controlled guide for achieving shared goals in aeronautical product certification. Which can be reviewed and adjusted to enhance efficiency and better meet objectives.

The Authorities will review the progress of this Roadmap on a yearly basis during the bilateral annual meeting. At their discretion the Authorities may revise this Bilateral Roadmap based on the progress or the rise of new demands.

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