



Agenda Item 7: Implementation of systems for the exchange of aeronautical information and aeronautical data

Implementation of the SDIA website

(Presented by Brazil)

SUMMARY

The purpose of this working paper is to present the Aeronautical Information Dissemination Request (SDIA) website used by Brazil to allow originators to directly and digitally deliver aeronautical data and information to providers, and for providers to deliver it to AIS professionals, who will make them available to users.

1. Introduction

1.1 Previously, information could be delivered in various ways, for example, in person, by email, or through the delivery of physical documents. By centralising and standardising reception, the SDIA facilitates tracking and monitoring of the entire information chain, which favours the perception of the national scenario in terms of meeting deadlines and quality requirements within the request process.

1.2 The system also allows originators and providers to deliver aeronautical data and information in accordance with the quality, competence and time requirements of the AIM (aeronautical information management) context.

1.3 The system was developed in PHP with *framework Slim, Template Porto Admin, MariaDB, PostGis*, which is a module that adds the support of geographical objects to the PostgreSQL object relational database, turning it into a spatial database for use in geographical information systems. It is published under general public license of GNU.

1.4 The SDIA website was developed by the Department of Airspace Control (DECEA) and may be accessed for free by the originators and providers at: <https://sdia.decea.gov.br/>.

2. What is the SDIA system?

2.1 SDIA means Aeronautical Information Dissemination Request and is a system developed to serve as the official means for delivery of aeronautical data and information to the entities responsible for their dissemination.

2.2 SDIA users are: companies that own vessels, companies that own air navigation aids, aerodrome operators, owners of private aerodromes or heliports, civilian sport flying entities, RPAS (drone) operators, the national civil aviation agency (ANAC), the air traffic service provider station (EPTA), aviation command units and other military commands.

3. What benefits provides the SDIA to users?

3.1 The SDIA was initially created to standardise the delivery of aeronautical data and information to AIS professionals, but it also allowed this delivery to be carried out in a direct and digital manner for processing and dissemination, respecting request authorisations and timelines.

3.2 With more clear and simple rules, it was easier to meet the quality, competence and time requirements of the AIM context. Automation, the level of specialisation and the current level of air navigation security gave rise to aeronautical data quality requirements, which differ from those previously applied in the Brazilian Airspace Control System (SISCEAB).

4. How to complete the aeronautical information dissemination request form?

4.1 In order to access the SDIA form, the functional email and password reported at the time of registration must be entered.

4.2 After accessing the system, the aeronautical information dissemination request (SDIA) can be completed in only six steps, as described below:

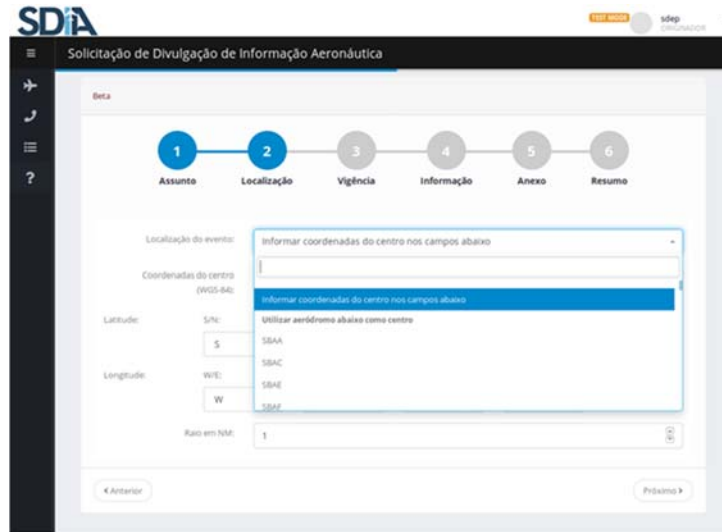
STEP 1 – ISSUE

The issue subject to dissemination must be selected.

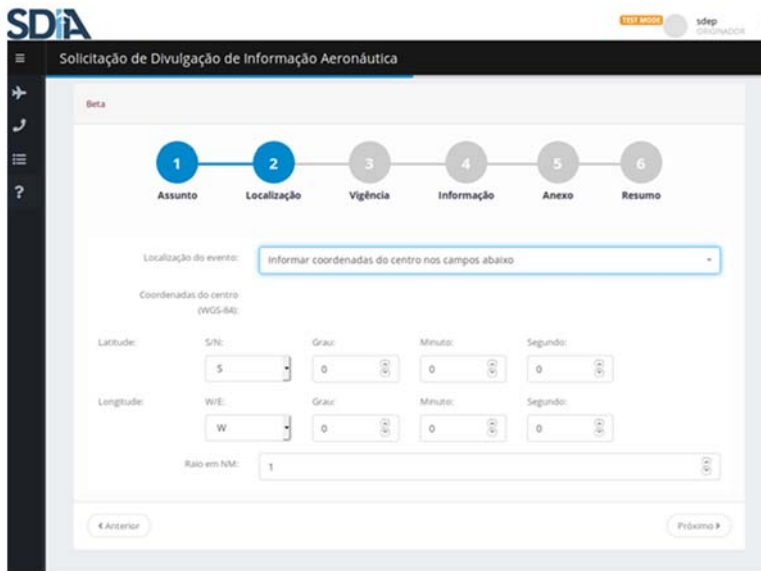
Important: The issues listed are related to the competencies foreseen for each type of registered originator, in accordance with ICA 53-4 (aeronautical information dissemination request), which is a document developed on the basis of ICAO 10066 and Annex 15.

STEP 2 - LOCATION

The location of the event indicated in the request must be specified, providing the coordinates of the centre of the event or selecting one of the listed aerodromes.



If it is decided to enter the coordinates of the centre of the event, they must be entered in the latitude and longitude (degree/min/sec) and radius (nautical miles) fields.



If it is decided to enter one of the associated locator indicators, the coordinates of the aerodrome will be automatically completed in the latitude and longitude fields. In this case, select radius (nautical miles) and go to the next step.

STEP 3 - VALIDITY

The effective date and time of the information must be indicated, or, if the information must become effective immediately, click on “start immediately”;

The date and time when validity ends must be indicated, or, if the information must become permanent, that is, be inserted in the aeronautical information publication, that option must be selected.

Important: It is possible to add as many day or hour intervals as may be needed to perfectly describe the duration of the event, clicking on “add” in the days and hours field as follows.

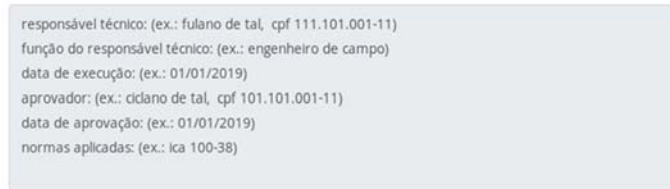
STEP 4 - INFORMATION

The information and data to be disseminated must be inserted in the text field in a clear and objective manner. Insert the metadata related to the information or data to be disseminated, in accordance with TCA 53-2 / 2019, which is a Brazilian document developed based on the requirement tables contained in the PANS-AIM (ICAO Doc 10066).

The types of metadata to be reported are the following:

Common – Regarding common metadata, only Unique Identifiers EE3, EE4, EE6, EE7, EE8, EE9 specified in TCA 53-2 / 2019 must be included in this space, since the rest are already contemplated during the registration and completion of fields in the tool.

For example:

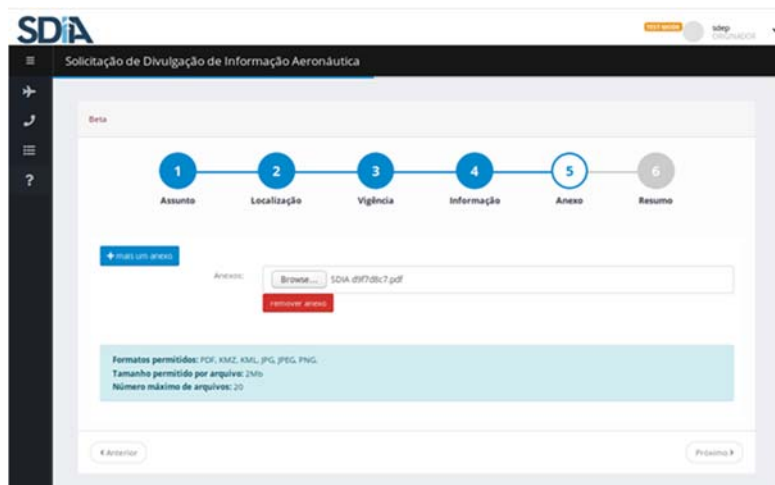


Specific – Depending on the data delivered, as described in table 5.2 and in item 6 of TCA 53-2 / 2019.

For example: The reference system used for deriving the coordinates (IU: FF1). If necessary, insert remarks, useful information too extensive for other stages of the SDIA up to its publication, in this field.

STEP 5 - ANNEX

The formal document shall be attached in digital format, issued and signed by the competent authority, reporting on the inclusion, deletion or modification of aeronautical information applied to AIS products. Other digital documents may be also attached as needed.



Important: When the SDIA refers to an issue that requires completion of a specific format other than a *webform*, it shall be signed and attached in PDF format to the request.

STEP 6 - SUMMARY

This step summarises the fields completed prior to delivery, requests acceptance of the terms of use, and the originator confirms the truthfulness of all the information.

Important: An SDIA is considered to be valid if it has the associated protocol number, reported through the confirmation email, allowing for subsequent queries to the SDIA portal to verify its status.

5. Conclusion

5.1 Process optimisation and control are of vital importance to support the strategies of any company, since each context requires a different management model.

5.2 The Brazilian airspace control system (SISCEAB) is undergoing a transition to the aeronautical information management model - AIM, which seeks to provide many benefits to the global ATM community in the short, medium, and long term. To this end, it must implement the means to obtain and share accurate, quality, timely information with an acceptable cost-benefit ratio, that will permit collaborative decision making (CDM) and create a sound foundation for the evolution of the national ATM concept and, consequently of the global ATM concept.
