

ECOLE NATIONALE DE L'AVIATION CIVILE
7, Avenue Edouard Belin BP 54005
31055 Toulouse cedex 4.

**FRAMEWORK AGREEMENT FOR SUPPLIES AND
SERVICES**

*(ACCORD DE FOURNITURES COURANTES ET
SERVICES)*

**SPECIAL TECHNICAL SPECIFICATIONS
ENGLISH COURTESY TRANSLATION**

Contracting Authority: Ecole Nationale de l'Aviation Civile

ENAC
Ecole Nationale de
L'Aviation Civile
7 avenue Edouard Belin
CS 54005
31055 Toulouse Cedex 4

Technical Specifications of Agreement No 202600FCS023

Military Charts & Data for Flight Simulators

TABLE OF CONTENTS

1. CONTEXT
2. PROJECT PRESENTATION
 - 2.1 General context
 - 2.2 Scope of the expected services
 - 2.3 Technical proposal from bidders
3. EXPECTED SERVICES
 - 3.1 Lot 1: “Military” charts – Military airfields (on EFB)
 - 3.2 Lot 2: ARINC 424 database services for flight simulators

1. CONTEXT

The tenders for the supply of military charts on EFB and data for flight simulators are coming to an end. ENAC must therefore launch a new call for tenders to supply charts and flight simulator data adapted to ENAC equipment and operational constraints.

2. PROJECT PRESENTATION

2.1 General context

This Special Technical Specifications document covers the following services:

- Provision of military flight charts via licensed access available on EFB
- Provision of online databases for flight simulators

2.2 Scope of expected services

ENAC uses charts and various equipment for training and operational needs.
The services are divided into two lots:

Lot 1: “MILITARY” charts for French military air bases available on EFB

Lot 2: Supply of databases compliant with the ARINC 424 standard for flight simulators

2.3 Technical proposal from bidders

For each lot, the bidder shall provide a technical proposal detailing its offer and product functionalities.

Depending on technical feasibility, the bidder shall append either:

- a product catalogue, or
- a website link listing all products/services meeting ENAC needs, or
- secure credentials enabling product testing in a test environment.

3. EXPECTED SERVICES

3.1 LOT 1: “MILITARY” CHARTS FOR MILITARY AIRFIELDS (ON EFB)

ENAC currently operates a fleet of approximately **600 EFBs**.

The “MILITARY” chart requirement concerns about **20 EFBs** used for calibration operations of radio navigation aids for the French Ministry of the Armed Forces.

3.1.1 General requirements

Charts must operate on:

- Apple iPad tablets running the current iPadOS version
- Windows PC environment

The format must be compatible with the **ForeFlight** application.

3.1.2 Cartography requirements

Charts must be available offline.

AIP-type publications (IAC/MIAC) differ significantly from the civil JEPPESEN chart system used by ENAC for civil airport operations.

Military charts must therefore be as close as possible to JEPPESEN civil airport charts used by ENAC.

Publication must follow the regulatory update cycle.

Charts must allow visualization of:

- All instrument procedures for civil aircraft operating on military airfields, based on official MIAC publications
- Vertical and horizontal views of procedures on the same page
- Any safety-relevant information published in the AIP

3.1.3 Technical and operational support

Support contact details must be easily accessible from the tool interface.

3.2 LOT 2: ARINC 424 DATABASE SERVICES FOR FLIGHT SIMULATORS

For training, operations, and research, students, instructors and researchers use numerous systems, software and databases.

Databases are essential and critical for simulator operation. ENAC therefore wishes to procure services to meet its needs.

3.2.1 ARINC 424 database

The navigation database must comply with the **ARINC 424 standard** for flight simulator use.

ARINC 424 is the industry-recommended standard for preparing and transmitting data required to build onboard navigation databases. These data are integrated into simulator navigation software to provide a navigation reference source.

The bidder must specify the ARINC 424 specification version used.

This documentation is subject to **annual subscriptions including AIRAC cycle updates**.

Updates must be delivered electronically. The bidder must specify the delivery method (website, email, etc.).

Data must cover **Western Europe**, at minimum:

France, Spain, Portugal, Italy, Germany, Austria, Switzerland, Netherlands, Belgium, United Kingdom.

ENAC currently requires the following data types:

- VHF Navaid Records (D)
- NDB Navaid Records (DB, PN)
- Waypoint Records (EA, PC)
- Holding Pattern Records (EP)
- Enroute Airways Records (ER)
- Airport Records (PA)
- Airport SID/STAR/Approach Records (PD, PE, PF)
- Runway Records (PG)
- Airport LOC & Glide Records (PI)
- Airport LOC Marker Records (PM)
- Airport SBAS Path Point Records (PP)

This constitutes the **minimum dataset** to be provided.

The bidder must price in its offer:

1. Supply of the minimum dataset (or more) for **15 simulators**, including AIRAC updates
2. Addition or removal of simulators under the same conditions
3. Supply of an expanded dataset under the same conditions
4. One-off supply of the minimum dataset for a **non-certified simulator** (without annual subscription)

3.2.2 Technical support

The contractor shall respond to phone calls regarding subscriptions, updates or software covered by the contract.

Support hours:

08:30–12:00 and 14:00–18:00, Monday to Friday, excluding public holidays.