

الهيئة العامة للميران المدني
GENERAL CIVIL AVIATION AUTHORITY



United Arab Emirates

Regulatory Framework Development for Flight Procedure Design in the UAE

GCAA - Air Navigation & Aerodromes (ANA)



Federal Authority | هيئة اتحادية



Topics

1. Historical Background (Before 1971)
2. Constitutional and Legal Foundations
3. The Union and the 1991 Civil Aviation Law
4. The Establishment of the GCAA (1996)
5. Delegation, Regulation, and the Current Framework
6. Current Responsibilities and Future Outlook



Historical Background (Pre 1971)

1. The first historic commercial aircraft landing in the UAE occurred at Sharjah (Al Mahatta) in 1932.
2. Methods of Navigations were:
(VFR - Low-Frequency Four-Course Radio Range - weather data)
3. Aviation activities in the Emirates began through local initiatives.
4. Each Emirate handled aviation matters through its local structures and partners.



Sharjah Airport 1930s

Historical Background (Pre 1971)

The earliest aviation period in the UAE relied on:

- visual flying practices
- basic early - era navigation methods

This was long before modern IFR procedure design and national regulatory oversight.



Dubai 1959



Abu Dhabi 1960s



Constitutional and Legal Foundations

The UAE Constitution created the national structure to:

- Implement federal laws across the Emirates
- Support the State's international commitments
- At the same time, it preserved the continuity of existing local arrangements and treaties.





The Union Era and Local Civil Aviation (1971–1991)

- After the Union, major Emirates established and strengthened local civil aviation authorities.
- These entities, with local ANS/airport operators, handled flight procedures operationally during this period.
- This was a local-led FPD phase before full federal regulation was formalized in 1991 and later centralized under the GCAA.

مركز النقل المتكامل
INTEGRATED TRANSPORT CENTRE





The 1991 Civil Aviation Law

In 1991, the UAE issued a federal Civil Aviation Law.

- It gave the State clear powers over such as:

- Rules of the air
- Air navigation
- Routes and airways

1991 Law – Chapter Three: Rules of the Air – Article (20)

1. The competent authorities shall establish the rules of the air and the regulations related to the flight of aircraft, air navigation, the protection of persons and property on the surface, and the use of airspace.
2. The competent authority shall determine the air routes and corridors that aircraft must follow when entering the territory of the State, departing from it, or flying within the airspace above it.



The Establishment of the GCAA (1996)

In 1996, the General Civil Aviation Authority (GCAA) was established as the federal civil aviation regulator.

This allowed:

- Unified national oversight of civil aviation.
- A single authority to regulate airspace and flight procedures.

1996 Law – Article (7) The Authority shall assume the following functions:

1. To set the State's civil aviation policy, develop the supporting laws and regulations, establish implementation committees, represent the State in relevant negotiations, and propose bilateral aviation and meteorology agreements in line with the Constitution.
2. To determine the air navigation routes that aircraft licensed to transit the territory of the State must follow, whether upon entering its airspace, departing from it, or flying over it.



Post Establishment of the GCAA (1996)

After the GCAA was established, the responsibility for FPD design and oversight were governed by the GCAA.

However, amid growing traffic and massive urban development, the GCAA maintained responsibility for FPD oversight while delegating the service to local CAAs—also acting as ANSP and aerodrome operators. Later, a more formal national regulatory framework was introduced to standardize FPD.



Later Regulatory Maturity and CAR-FPD

As more entities became involved in FPD, the UAE needed a single controlled national approach.

CAR-FPD was introduced to formalize oversight and standardize the design lifecycle.

- Certifies FPD providers for the UAE FIR, both local and international.
- Defines requirements for IPDSP certification, IFP acceptance, validation, maintenance, and APD training.
- Only certified providers may design IFPs for the UAE FIR.



CAR PART VIII

SUBPART 6

CAR-FPD

INSTRUMENT FLIGHT PROCEDURE DESIGN REQUIREMENTS



FPD Change Workflow

- FPD changes in the UAE (like new or amended SID/STAR/Routes/IAP/Holding) are treated as airspace changes and must be approved by GCAA.
- The Proponent owns the change and the overall design responsibility, and may either develop the procedure in-house (if appropriately certified) or contract a GCAA-certified procedure design organization to carry out the design.
- The Proponent submits via GCAA E-Services, and GCAA reviews compliance and impacts before approving or rejecting the change.
- If approved, GCAA issues a final approval letter for publication.





Current Framework

- **GCAA regulates and approves procedures before publication.**
- **Proponent (Airport/ANSP) requests changes.**
- **Certified FPD Providers design and the submission is done by the proponent.**



Conclusion

- **FPD started as local Emirate-led practice in the early era.**
- **The Constitution enabled federal authority while allowing continuity of local arrangements.**
- **The 1991 Civil Aviation Law created a strong federal legal base for air navigation.**
- **The GCAA (1996) unified national oversight of FPD.**
- **As complexity increased, the GCAA delegated operational FPD to local authorities/ANSPs while keeping regulatory control.**
- **CAR-FPD later standardized and strengthened the national system through certification and clear requirements.**



Thank you

