FRANCE

1. REGULATIONS

- ELT: Emergency Locator Transmitter
- ELT(DT): Emergency Locator Transmitter for Distress Tracking,
- EPIRB: Emergency Position Indicating Radio-Beacon,
- FGB: First-Generation Beacon (technology based on documents C/S T.001 and C/S T.007)
- LADR: Location of an Aircraft in Distress Repository,
- MMSI: Maritime Mobile Service Identity,
- PLB: Personal Locator Beacon,
- RLS: Return Link Service,
- S/N: Serial Number of the device,
- SGB: Second-Generation Beacon (technology based on documents C/S T.018 and C/S T.021)
- TAC : Cospas-Sarsat Type-Approval Certificate number.

1.1 General

For aeronautical use of beacons, see:

- French regulations on beacon carriage requirements,
- Amendment dated 14 August 2020 to By-law dated 21 December 2018 on coding and registration of 406 MHz beacons, for aircraft Search and Rescue purposes.

1.2 EPIRBs

French regulation is issued from ministerial decree of 23 November 1987[1].

Carriage of single-frequency-121.5 MHz EPIRBs is not allowed on French ships.

a) Passenger's ships (reference section 219 & 221 from ministerial decree):

GMDSS[2] A1 area:
At least one 406-MHz EPIRB [depending others equipment installed].
Relaxation for 4th and 5th category[3].

GMDSS A1 & A2 area and less than 200 passengers:
At least one 406-MHz EPIRB.

GMDSS A1, A2 & A3 area and less than 200 passengers:
At least one 406-MHz EPIRB [one more depending others equipment installed].

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[1] Decree of 23 November 1987 on the safety of ships.
[2] GMDSS: Global Maritime Distress and Safety System.
[3] Area category 3: less than 20 miles from the closest shore.
Area category 4: no more than 5 miles from the limit of the sheltered sea areas of the port of departure.
Area category 5: navigation inside sheltered sea areas only.

GMDSS A1, A2, A3 & A4 area and/or more than 200 passengers:
At least one 406-MHz EPIRB [one more depending others equipment installed].

From French Overseas territories and less than 200 passengers:
At least one 406-MHz EPIRB.

b) Cargo Ship (reference section 219 & 221 from ministerial decree):

GMDSS A1 area:
At least one 406-MHz EPIRB (depending others equipment installed).
Relaxation for area category 4 (less than 12 meters) and area category 5.
Relaxation for area category 3 (less than 300 gross tonnage).

GMDSS A1 & A2 area:
At least one 406-MHz EPIRB.

GMDSS A1, A2 & A3 area:
At least one 406 MHz EPIRB (one more depending others equipment installed).

GMDSS A1, A2, A3 & A4 area:
At least one 406 MHz EPIRB (one more depending others equipment installed).

From French Overseas territories:
At least one 406-MHz EPIRB.

c) Fishing vessel (reference section 219 & 228 from ministerial decree):

GMDSS A1 area:
At least one 406-MHz EPIRB (depending others equipment installed).
Relaxation for category 4 (except trawler) and category 5.

GMDSS A1 & A2 area:
At least one 406-MHz EPIRB (one more depending others equipment installed).

GMDSS A1, A2 & A3 area:
At least one 406-MHz EPIRB (one more depending others equipment installed).

GMDSS A1, A2, A3 & A4 area:
At least one 406-MHz EPIRB (one more depending others equipment installed).

From French Overseas territories:
At least one 406-MHz EPIRB.
Relaxation for category 4 (except trawler) and category 5.

d) Pleasure vessel (reference section 240, 241 & 242):

Pleasure craft with a hull shorter than 24 metres (private use):
Carriage of a 406-MHz EPIRB on a voluntary basis.

Charter craft with a hull shorter than 24 metres (commercial use):
At least one 406-MHz EPIRB if sailing more than 20 miles from the nearest land.

Pleasure yacht of 24 metres and upwards (private & commercial use):
At least one 406-MHz EPIRB.

Generally, additional 406-MHz EPIRBs may be carried on a voluntary basis, in addition to the requirements foreseen.

(!) Refer to appropriate section of ministerial decree to have more information or see section "5 - Point of Contact for beacon matters" to have a contact in order to have more information for the French maritime regulation.

On 1 May 2015, the ministerial decree on the safety of ships of 23 November 1987 was amended. The significant change regarding the Cospas-Sarsat regulations is as follows: at least one [406-MHz] EPIRB is required for all pleasure craft which intends to go more than 60 miles from ashore.

1.3 ELTs

121.5 MHz

From 1 February 2009, all 121.5 MHz ELTs onboard aircraft must be deactivated (§7 of by law dated 26 December 2008). Furthermore, all 121.5-MHz ELTs must be removed from aircraft by 1 February 2010 (same reference).

406 MHz

Carriage of 406-MHz beacons is mandatory for all type of certified aircraft..

1.4 PLBs

1.4.1 PLBs on Ships

(reference: section 219 from ministerial decree of 23 November 1987)

a) Cargo ships above 300 GRT and passenger ships:

- Additional 406-MHz PLBs may be carried on a voluntary basis, in addition to the compulsory EPIRB requirements foreseen (see 1.1 above).
- PLBs shall be coded with the MMSI of the ship.

b) Fishing vessels:

- Ships working in GMDSS A1 area, manned with one person only: the competent authority has the possibility to give a dispensation to authorize the replacement of the EPIRB by a PLB. In this case, crewmembers must carry permanently their PLB.
- 3rd category fish farming ships working within 5 miles off the coast and manned with one person only may replace their EPIRB by a PLB. In this case, crewmembers must carry permanently their PLB.
- PLBs shall be coded with the MMSI of the ship.

c) Pleasure craft:

- 406 MHz PLBs may be carried on a voluntary basis.

(!) Refer to appropriate section of ministerial decree to have more information or see section "5 - Point of Contact for beacon matters" to have a contact in order to have more information for the French maritime regulation.

1.4.2 PLBs on Aircraft

See reference, section 1.1.

1.4.3 National Beacon Regulations for Serial-Coded PLBs

Administration	For Terrestrial Applications	In Maritime Environment	On Aircraft	Comments
	Country Recognises PLB Activations	Country Recognises PLB Activations	Country Recognises PLB Activations	
France	Y	Y	Y	Nil

Similar information is available in the new table on the Cospas-Sarsat website (www.cospas-sarsat.int) with the status indication in colors (**Y** = green, allows / **N** = red, not allowed / **R**estrictions = amber (see comments) and with the note that the national beacon regulations can be found on the Cospas-Sarsat website in document C/S S.007).

2. BEACONS CODING METHODS

2.1 EPIRB Coding Methods

(reference: section 175 from ministerial decree of 23 November 1987)

All French EPIRBs must be coded with the MMSI corresponding to the ship.

Country Codes	USER PROTOCOLS				LOCATION PROTOCOLS								
	Maritime User		Serial User	Radio Call Sign	User Location			Standard Location		National Location	RLS (Return Link Service)		
	MMSI	Radio Call Sign	TAC & S/N	Radio Call Sign	MMSI	TAC & S/N	Radio Call Sign	MMSI	TAC & S/N	S/N Assigned by Competent Administration	National RLS Number	TAC & S/N	RLS MMSI
See note below	Y	N	N	N	Y	N	N	Y	N	N	N	N	Y

Note: Country codes: 226, 227, 228, 329, 347, 361, 501, 540, 546, 578, 607, 618, 635, 660, 745

The following warning is provided to beacon manufacturers and beacon owners as general guidance:

WARNING:
Note for maritime protocols that use the Maritime Mobile Service Identity (MMSI) as the vessel identifier: As a result of recent developments, the International Cospas-Sarsat Programme has

become aware of maritime Emergency Position-Indicating Radio Beacons (EPIRBs) being coded pursuant to Recommendation ITU-R M.585 using as the beacon "country code" the form "98M", where "M" is the first digit of an MID (Maritime Identification Digits) assigned to an Administration, or using the form "974". No 406-MHz EPIRB should be coded in these ways. A distress message from a beacon so coded will be processed on receipt by Cospas-Sarsat as "invalid" and either discarded or subjected to exception handling. The "country code" of all 406-MHz beacons must be a valid MID assigned by the International Telecommunication Union (ITU) to an Administration, in the numerical range from 200 to 780. No exceptions.

2.2 ELT Coding Methods

2.2.1 ELTs

(Reference: see section 1.1)

(This subsection does not include FGB ELT(DT) coding methods.)

Country Codes	USER PROTOCOLS				LOCATION PROTOCOLS									
	Serial User			Aviation User	User Location				Standard Location			National Location	RLS (Return Link Service)	
	TAC & S/N	Aircraft Operator Designator and S/N	Aircraft 24-bit Address	Aircraft Nationality and Registration Marking	TAC & S/N	Aircraft Operator Designator and S/N	Aircraft 24-bit Address	Aircraft Nationality and Registration Marking	TAC & S/N	Aircraft Operator Designator and S/N	Aircraft 24-bit Address	S/N Assigned by Competent Administration	National RLS Number	TAC & S/N
See note below	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	N	Y

Notes:

- Country codes: 226*, 227, 329, 347, 361, 540, 546, 578, 660, 745, (* country code 226 is reserved for the State aircraft only).
- Only 24-bits address or beacon serial number (+TAC) are authorized for identification.
- Registration of ELTs to the national database is mandatory (https://www.registre406.cnes.fr).

2.2.2 ELT(DT)s

a) FGB ELT(DT)s

Country Code(s)	FGB LOCATION PROTOCOLS		
	ELT(DT) Location		
	TAC & S/N [1]	Aircraft Operator Designator and S/N [1]	Aircraft 24-bit Address [2]
See note below	N*	N*	Y*

Notes:

- Country codes: 226*, 227, 329, 347, 361, 540, 546, 578, 660, 745,
  - (*) Country code 226 is reserved for the State aircraft only),

(1) These protocols do not provide an 'Aircraft Identification' as required by ICAO for populating the LADR.

(2) This protocol provides an 'Aircraft Identification', and an 'Aircraft Operator Identity' only when the Aircraft Operator Designator (3LD) is included in the rotating PDF-2 field, as required by ICAO for populating the LADR.

* National regulation is in the process of being modified to include this FGB ELT(DT) coding.

b) SGB ELT(DT)s

SGB CODING OPTIONS		
SGB ELT(DT)		
Aircraft Registration Markings [1] **(Vessel ID #3)**	**Aircraft 24-bit Address [2]** **(Vessel ID #4)**	**Aircraft Operator Designator and S/N [3]** **(Vessel ID #5)**
N	Y	N

Notes:

(1) This option does not provide an Aircraft Operator Designator (3LD) which is required by ICAO for populating the LADR.

(2) This option provides an 'Aircraft Identification', and an 'Aircraft Operator Identity' only when the Aircraft Operator Designator (3LD) is also included, as required by ICAO for populating the LADR. Default 3LD values should be "ZGA".

(3) This option does not provide an 'Aircraft Identification' which is required by ICAO for populating the LADR.

2.3 PLB Coding Methods

2.3.1 PLBs on Ships

(Reference: section 175 from ministerial decree of 23 November 1987)

2.3.1.1 PLBs which carriage is mandatory

PLBs, which carriage is mandatory (see section "Regulation"), must be coded with the MMSI corresponding to the ship.

Country Codes	USER PROTOCOLS				LOCATION PROTOCOLS								
	Maritime User		Serial User	Radio Call Sign	User Location			Standard Location		National Location	RLS (Return Link Service)		
	MMSI	Radio Call Sign	TAC & S/N	Radio Call Sign	MMSI	TAC & S/N	Radio Call Sign	MMSI	TAC & S/N	S/N Assigned by Competent Administration	National RLS Number	TAC & S/N	MMSI
See note below	N	N	N	N	N	N	N	Y	N	N	N	N	Y

Notes:

- Country codes: 226, 227, 228, 329, 347, 361, 501, 540, 546, 578, 607, 618, 635, 660, 745
- For a non RLS-capable PLB, the bits 37 to 40 are coded as “EPIRB”, and the beacon is coded using the EPIRB–MMSI / Location protocol / Standard Location coding protocol.
- For an RLS-capable PLB, the bits 41 and 42 are coded as “PLB”, and the beacon is coded using the PLB / RLS-MMSI coding protocol (see Table 2 in section 2.3.1.2).

2.3.1.2 PLBs which carriage is not mandatory

PLBs, which may be carried on voluntary basis, can be coded:

- as an EPIRB, with the MMSI corresponding to the ship:

Table 1: PLB coded as an EPIRB

Country Codes	USER PROTOCOLS				LOCATION PROTOCOLS								
	Maritime User		Serial User	Radio Call Sign	User Location			Standard Location		National Location	RLS (Return Link Service)		
	MMSI	Radio Call Sign	TAC & S/N	Radio Call Sign	MMSI	TAC & S/N	Radio Call Sign	MMSI	TAC & S/N	S/N Assigned by Competent Administration	National RLS Number	TAC & S/N	MMSI
See note below	N	N	N	N	N	N	N	Y	N	N	N	N	Y

Notes:

- Country codes: 226, 227, 228, 329, 347, 361, 501, 540, 546, 578, 607, 618, 635, 660, 745.
- For a non-RLS-capable PLB, the bits 37 to 40 are coded as “EPIRB”, and the beacon is coded using the EPIRB–MMSI/ Location protocol/Standard Location coding protocol.
- For an RLS-capable PLB, the bits 41 and 42 are coded as “PLB”, and the beacon is coded using the PLB / RLS-MMSI coding protocol (see Table 2 in section 2.3.1.2).

- as a PLB, with a Serial Number:

Table 2: PLB coded as a PLB

Country Codes	USER PROTOCOLS	LOCATION PROTOCOLS					
	Serial User	User Location	Standard Location	National Location	RLS (Return Link Service) Location		
	TAC & S/N	TAC & S/N		S/N Assigned by Competent Administration	National RLS Number	TAC & S/N	MMSI
See note below	Y	Y	Y	N	N	Y	N

Notes:

- Country codes: 226, 227, 228, 329, 347, 361, 501, 540, 546, 578, 607, 618, 635, 660, 745.
- All PLBs on ships must be registered (reference: section 175 from ministerial decree of 23 November 1987):
  - on the French 406 MHz database (https://www.registre406.cnes.fr) for the PLBs coded with a serial number;
  - on the database of the Authority in charge of the GMDSS licences (Agence Nationale des Fréquences (ANFr)) for the PLBs coded with MMSI.
  - (!) Some "Country Codes" are reserved. See section "5 - Point of Contact for Beacon Matters" to have the contact of French Administration.

2.3.2 PLBs on Aircraft

(Reference: see section 1.1)

- For PLBs with GNSS receiver, Standard Location Protocol only is to be used.
- Only beacon serial number (+TAC) are authorized for identification.
- Registration of PLBs to the national database is mandatory (https://www.registre406.cnes.fr).

Country Codes	USER PROTOCOLS	LOCATION PROTOCOLS					
	Serial User	User Location	Standard Location	National Location	RLS (Return Link Service)		
	TAC & S/N	TAC & S/N		S/N Assigned by Competent Administration	National RLS Number	TAC & S/N	MMSI
See note below	Y	Y		N	N	Y	N

Note:

- Country codes: 226*, 227, 329, 347, 361, 540, 546, 578, 660, 745.
  - (*) Country code 226 is reserved for the State aircraft only).

2.3.3 PLBs for Individuals

- Registration of PLBs to the national database is mandatory https://www.registre406.cnes.fr.
- Only beacon serial number (+TAC) are authorized for identification.
- In case of versatile use of the beacon:

Country Codes	USER PROTOCOLS	LOCATION PROTOCOLS					
	Serial User	User Location	Standard Location	National Location	RLS (Return Link Service)		
	TAC & S/N	TAC & S/N		S/N Assigned by Competent Administration	National RLS Number	TAC &S/N	MMSI
See note below	Y	Y		N	N	Y	N

Notes:

- Country codes: 226 *, 227, 228**, 329, 347, 361, 501**, 540, 546, 578, 607**, 618**, 635**, 660, 745.
  - (*) Country code 226 is reserved for State actors only.
  - (**) Country codes 228, 501, 607, 618, 635 are not to be used for PLBs on aircraft).

2.4 Return Link Service (RLS) Protocols

On 23 January 2020 and 14 August 2018 respectively, French Maritime Administration (DAM) and French Civilian Aviation Administration (DGAC) notified the Cospas-Sarsat Programme of the implementation of proactive handling of RLS-protocol distress alert messages, and authorization for return-link-service-capable beacons to be coded with its country codes:

- Maritime use (EPIRBs and PLBs): 226, 227, 228, 329, 347, 361, 501, 540, 546, 578, 607, 618, 635, 660 and 745 (see sections 2.1 and 2.3.1. above);
- Aeronautical use (ELTs and PLBs): 226, 227, 329, 347, 361, 540, 546, 578, 660, 745 (see sections 2.2, 2.3.2 and 2.3.3 above)

The Cospas-Sarsat Council declared effective 26 March 2021 the Return Link Service (RLS) at Full Operational Capability (FOC) within Cospas-Sarsat.

In March 2022, the Cospas-Sarsat Council decided to approve the operational use of RLS FGBs coded with MMSI. More information on RLS-enable beacons is available at https://cospas-sarsat.int/en/beaconownership/rls-enabled-beacon-purchase.

3. LIST OF BEACON MODELS TYPE APPROVED BY ADMINISTRATION

- ELTs: All 406 MHz beacons which are type approved by Cospas-Sarsat.
- EPIRBs: All 406 MHz beacons which are type approved by Cospas-Sarsat.
- PLBs which carriage is compulsory on ships: Models which are type approved by Cospas-Sarsat **and** certified in accordance with the directive RED 2014/53/UE (Radio Equipment Directive) for placing radio equipment on the market (CE marking) and with the standard ETSI EN 302 152.
- Other PLBs: All 406 MHz beacons which are type approved by Cospas-Sarsat.

4. BEACON TESTING REGULATION

Generally, there are two types of tests:

4.1 Self-Test Requirements

EPIRBs and PLBs on ships – fitted with a self-test function - can be tested at any time, using the self-test function, without the need to notify FMCC and/or MRCC.

➔ On this case: follow your beacon manufacturer's procedure to conduct this self-test and for analysis of the result.

For ELT and PLB on aircraft, and PLB for individual, tests required by the national aviation authority or by the beacon manufacturer must be coordinated with ARCC/ARSC and with the closest active Air Traffic Service unit. In any case, refer to French AIP GEN 3.6 before performing tests.

4.2 Operational Testing Requirements

For some reasons (e.g., prototype, beacon testing (new model), SAR (Search & Rescue) exercise, calibration/validation of a pathfinder, etc.) an operational testing can be required by manufacturer, industrial, SAR forces, etc.

Any test of a 406 MHz distress beacon in the operational mode requires prior approval from FMCC (ask "Notification form for beacon test" to fmcc@cnes.fr) and the requirements hereafter must be satisfied.

➔ On this case, three conditions must be satisfied simultaneously:

1) the beacon has to be (re)coded with a "test protocol";
2) the homing signals 121.5 MHz and 243 MHz have to be disabled; and
3) a notice shall be provided to FMCC.

4.3 Specification for France

In France Search and Rescue Region (SRR), operational testing with an "operational protocol", for any country codes, is forbidden. All over the world, operational testing with an "operational protocol" and a French country code is forbidden too.

In French legislation, an intentional false alert with operational beacon ("operational protocol") conduct to prosecution with a penalty of 30,000 Euros and two years in jail.

5. POINT OF CONTACT FOR BEACON MATTERS (CODING, REGISTRATION AND TYPE APPROVAL)

The points of contact for beacon matters (Regulation) are:

- EPIRBs and PLBs Used at Sea: Ministère de l'Ecologie, du Développement Durable et de l'Energie (MEDDE) / Direction Générale des Infrastructures des Transports et de la Mer (DGITM) / Direction des Affaires Maritimes (DAM) / Bureau de la Réglementation et du Contrôle de la Sécurité des Navires (DAM/SM2).
- ELTs and PLBs on Aircraft: Direction Générale de l'Aviation Civile (DGAC).

The points of contact for beacon matters (Registration) are:

- ELTs / PLBs: FMCC,
- EPIRBs and PLBs Coded with MMSI: Agence Nationale des Fréquences (ANFr).

Updated point of contact details for administrations are available at:
https://www.cospas-sarsat.int/en/contacts-pro/contacts-details-all.

6. BEACON REGISTRATION

6.1 Regulation

6.1.1 ELT & PLB (coded with a serial number)

FMCC maintains a French Beacon Registration Database (RFBD) for ELTs and PLBs and provides SAR data information extracted from it.

Address of RFBD's website: https://www.registre406.cnes.fr.

6.1.2 EPIRB & PLB (coded with a MMSI)

(reference: section 175 from ministerial decree of 23 November 1987)

EPIRBs and PLBs coded with MMSI are registered in the French GMDSS stations register, maintained by the French Authority in charge of the GMDSS licences (Agence Nationale des Fréquences (ANFr)) at https://www.anfr.fr/licences-et-autorisations/radiomaritime/licence-mmsi/.

SAR data information can be supplied on request formulated to MRCC GRIS NEZ or to the FMCC (see link to contact details in section 5).

6.2 Forms

The website to register online French beacons (ELTs and PLBs (coded with a serial number)) is available at: https://www.registre406.cnes.fr (e-mail address: fmcc@cnes.fr).

For EPIRBs and PLBs (coded with a MMSI), the following e-mail address is available: licence@anfr.fr.

- END OF SECTION -