

**MINIMUM
REQUIREMENTS
FOR
AUTHORIZATION
OF DRONE
OPERATIONS
IN THE PORT OF
BARCELONA**



Annex 1
Requirements by Zone



Port de Barcelona



1.

Preliminary considerations

- As a general rule, the following operations are restricted within the zones of the Port of Barcelona:
 - Operations with drones with a maximum take-off mass (MTOM) of more than 25 kg.
 - Operations in zones where military vessels are berthed, unless expressly authorized by the military.
 - Operations in zones where cruise ships are berthed, unless expressly authorized by the cruise ship.
 - For security reasons, overflying any of the following public buildings or entities, unless expressly authorized by the entity or building concerned:
 - WTC (APB)
 - TIR Building (Civil Guard headquarters)
 - TERSACO Building (National Police Corps headquarters)
 - ASTA Building (Port Police Headquarters)
 - Torre de Control (Harbour Master's Office)
 - PRÀCTICS Buildingunless it is duly documented and justified, and operations are subsequently authorized by the Port Authority.
- All airspace restrictions included in this document may be modified due to application of a NOTAM, or specific airspace segregation, subject to final authorization from the Port Authority of the Port of Barcelona.





2.

General requirements

- The following general requirements are established and applicable to all zones and operations:
 - Operations beyond the visual line of sight (BVLOS) are not permitted
 - Compliance at all times with the requirements established in the General Data Protection Regulation (GDPR)
- In all cases, in the zone defined in the scope of application of this procedure, proof must be provided of:
 - Having authorization from ENAIRE with the conditions of use applicable to the operation.
 - Having a CAT Helicopters Heliport authorization with its specific restrictions.
 - Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the pilot performing the operation must have the appropriate certification for the operation to be performed.
 - Operation category (open or specific), through operational risk assessment analysis, the operator's Spanish Aviation Safety and Security Agency or AESA registration ID, where the operation category can be verified, statement submitted to AESA of the specific standard scenario, the specific operating authorization or LUC.
 - Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.
- For operations in a zone that encompasses or affects more than one licensee, or with common zones, the requirements of both zones must be met and authorization must be obtained from all affected licensees.
- If operations are planned for a zone not defined in this document, the applicable requirements shall be those of the port zone closest to the drone operations at the time.





3. Requirements by Zone



1.	Public Area
2.	Restricted Area: DARK-BLUE ZONE
3.	Restricted Area: GREEN ZONE
4.	Restricted Area: ORANGE ZONE (Energy Wharf and CLH)
5.	Restricted Area: LIGHT-BLUE ZONE
6.	Restricted Area: RED ZONE
7.	Inner Maritime Zone
8.	Outer Maritime Zone



1. Public Area



USE: PROFESSIONAL

TERMS OF OPERATION

Maximum flight altitude permitted 60 metres

GENERAL REQUIREMENTS

- ✓ Having authorization from the Port Authority of the Port of Barcelona.
- ✓ Having authorization from ENAIRE with the conditions of use applicable to the operation.
- ✓ Having a CAT Helicopters Heliport authorization with its specific restrictions.
- ✓ Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the pilot performing the operation must have the appropriate certification for the operation to be performed.
- ✓ Proof of the type of category of operation (open or specific) through operational risk assessment analysis, the operator's Spanish Aviation Safety and Security Agency or AESA registration ID verifying the category of operation, statement submitted to AESA on the specific standard scenario, specific operating authorization or LUC.
- ✓ Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.



ZONE REQUIREMENTS	
✓ Having notified the Spanish Ministry of the Interior and the Catalan Ministry of the Interior of the operation and having the licensees' permission (as applicable). ✓ Having the landowners' permission (as applicable). ✓ Having a permit for drone operations from the management entity "Gerència Port Vell". The permit can be applied for as indicated on https://www.portvellbcn.cat/ca/ ✓ CAT Helicopters Heliport Radio Coordination. ✓ Radio Coordination with ENAIRE. ✓ The Pilot is authorized to use the radio frequency (RF) spectrum. ✓ Operational risk assessment analysis drawn up for the operation applied for. ✓ Civil liability insurance (pursuant to Regulation (EC) 785/204).	
TYPE OF OPERATION	REQUIREMENTS BASED ON DRONE WEIGHT
Open	MTOM < 250 g: ✓ Complying with the requirements established in Commission Implementing Regulation (EU) 2019/947 for subcategory A1 without the need to identify class Co.
	250 g < MTOM < 4 kg: ✓ A security perimeter has been established of 30 m or 5 m (only when the maximum drone speed is less than 11 km/h). ✓ The pilot has certified theoretical training in subcategory A2, pursuant to Commission Implementing Regulation (EU) 2019/947.
Specific	4 kg < MTOM < 25 kg: ✓ Description of the operation (ConOps). ✓ A 30 m security perimeter has been established. ✓ Being a registered operator in the specific category, through: ▪ Statement submitted to AESA on STS-ES-1 scenarios (where applicable), or ▪ AESA authorization for operation, or ▪ LUC with related scope ✓ The pilot has the training and qualifications required for the category of operation in the previous paragraph.





2. Restricted Area: DARK-BLUE ZONE



USE: PROFESSIONAL

TERMS OF OPERATION

Maximum flight altitude permitted 40 metres

GENERAL REQUIREMENTS

- ✓ Having authorization from the Port Authority of the Port of Barcelona.
- ✓ Having authorization from ENAIRE with the conditions of use applicable to the operation.
- ✓ Having a CAT Helicopters Heliport authorization with its specific restrictions.
- ✓ Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the operator performing the operation must have the appropriate certification for the operation to be performed.
- ✓ Proof of the type of category of operation (open or specific) through operational risk assessment analysis, the operator's Spanish Aviation Safety and Security Agency or AESA registration ID verifying the category of operation, statement submitted to AESA of the specific standard scenario, specific operating authorization or LUC.
- ✓ Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.



ZONE REQUIREMENTS	
✓ Having notified the Spanish Ministry of the Interior and the Catalan Ministry of the Interior of the operation and having the licensees' permission (as applicable). ✓ The pilot is authorized to use the radio frequency (RF) spectrum; only if radio communication is required by ENAIRE or CAT Helicopters. ✓ Having prepared an operational risk assessment analysis for the operation applied for. ✓ Civil liability insurance (pursuant to Regulation (EC) 785/2004).	
TYPE OF OPERATION	REQUIREMENTS BASED ON DRONE WEIGHT
Open	MTOM < 250 g: ✓ Complying with the requirements established in Commission Implementing Regulation (EU) 2019/947 for subcategory A1 without the need to identify class Co. ✓ Description of the operation (ConOps). ✓ If the operation is to be carried out at a horizontal distance of 50 m between the pilot and the drone, a statement of compliance with the operation described must be submitted to the Port Authority. ✓ If the operation is to be carried out at a horizontal distance of more than 50 m between the pilot and the drone, authorization from the Port Authority of the Port of Barcelona must be applied for and submitted with all the documentation mentioned above, as well as an operational risk assessment analysis.
	250 g < MTOM < 4 kg: ✓ Description of the operation (ConOps). ✓ A security perimeter has been established of 30 m or 5 m (only when the maximum drone speed is less than 11 km/h). ✓ The pilot holds an A2 remote pilot certificate of competence, pursuant to Commission Implementing Regulation (EU) 2019/947. ✓ If the operation is to be carried out at a horizontal distance of 50 m between the pilot and the drone, a statement of compliance with the operation described must be submitted to the Port Authority. ✓ If the operation is to be carried out at a horizontal distance of more than 50 m between the pilot and the drone, authorization from the Port Authority of the Port of Barcelona must be applied for and submitted with all the documentation mentioned above, as well as an operational risk assessment analysis.





Specific	4 kg < MTOM < 25 kg: It is necessary to apply for authorization from the Port Authority of the Port of Barcelona, after: ✓ Description of the operation (ConOps). ✓ A 30 m security perimeter has been established. ✓ Being a registered operator in the specific category, through: ▪ Statement submitted to AESA on STS-ES-1 scenarios (where applicable), or ▪ AESA authorization for the operation, or ▪ LUC with related scope. ✓ The pilot has the training and qualifications required for the category of operation in the previous paragraph.
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3. Restricted Area: GREEN ZONE



USE: PROFESSIONAL

TERMS OF OPERATION

Maximum flight altitude permitted 60 metres

GENERAL REQUIREMENTS

- ✓ Having authorization from the Port Authority of the Port of Barcelona.
- ✓ Having authorization from ENAIRE with the conditions of use applicable to the operation.
- ✓ Having a CAT Helicopters Heliport authorization with its specific restrictions.
- ✓ Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the operator performing the operation must have the appropriate certification for the operation to be performed.
- ✓ Proof of the type of category of operation (open or specific) through operational risk assessment analysis, the operator's Spanish Aviation Safety and Security Agency or AESA registration ID verifying the category of operation, statement submitted to AESA of the specific standard scenario, specific operating authorization or LUC.
- ✓ Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.

ZONE REQUIREMENTS

- ✓ Having notified the Spanish Ministry of the Interior and the Catalan Ministry of the Interior of the operation and having the licensees' permission (as applicable).
- ✓ Having authorization from the licensees.
- ✓ Specific civil liability insurance (pursuant to Regulation (EC) 785/2004).



TYPE OF OPERATION	REQUIREMENTS BASED ON DRONE WEIGHT	
Open	MTOM < 250 g: ✓ Description of the operation (ConOps). ✓ Complying with the requirements established in Commission Implementing Regulation (EU) 2019/947 for subcategory A1 without the need to identify class Co, including the qualification of remote pilot.	
	If the operation is to be carried out at ▪ a horizontal distance of less than or equal to 50 m between the pilot and the drone; and ▪ a horizontal distance of more than 50 m between the drone and the Bulk Liquids Terminal or CLH area (zone 6, orange),	✓ Providing the Port Authority with a statement of compliance with the operation described.
	If the operation is to be carried out at ▪ a horizontal distance of more than 50 m between the pilot and the drone; or ▪ a horizontal distance of less than 50 m between the drone and the Bulk Liquids Terminal or CLH area (zone 6, orange),	✓ Applying for authorization from the Port Authority of the Port of Barcelona, together with all the above documentation, and attaching: ▪ An operational risk assessment analysis, and ▪ An emergency response procedure (ERP).
	250 g < MTOM < 4 kg: ✓ Description of the operation (ConOps). ✓ A security perimeter has been established of 30 m or 5 m (only when the maximum drone speed is less than 11 km/h). ✓ The pilot has certified theoretical training in subcategory A2, pursuant to Commission Implementing Regulation (EU) 2019/947.	
	If the operation is to be carried out at ▪ a horizontal distance of less than or equal to 50 m between the pilot and the drone; and ▪ a horizontal distance of more than 50 m between the drone and the Bulk Liquids Terminal or CLH area (zone 6, orange),	✓ Providing the Port Authority with a statement of compliance with the operation described.
	If the operation is to be carried out at ▪ a horizontal distance of more than 50 m between the pilot and the drone; or ▪ a horizontal distance of less than 50 m between the drone and the Bulk Liquids Terminal or CLH area (zone 6, orange),	✓ Applying for authorization from the Port Authority of the Port of Barcelona, together with all the above documentation, and attaching: ▪ An operational risk assessment analysis, and ▪ An emergency response procedure (ERP).



TYPE OF OPERATION	REQUIREMENTS BASED ON DRONE WEIGHT
Specific	4 kg < MTOM < 25 kg: ✓ Description of the operation (ConOps). ✓ A 30 m security perimeter has been established. ✓ Being a registered operator in the specific category, through: ▪ Statement submitted to AESA on STS-ES-1 scenarios (where applicable), or ▪ AESA authorization for the operation, or ▪ LUC with related scope. ✓ The pilot has the training and qualifications required for the category of operation in the previous paragraph. ✓ The following must also be submitted: ▪ An operational risk assessment analysis, and ▪ An emergency response procedure (ERP).



4. Restricted Area: ORANGE ZONE (Energy Wharf and CLH)



USE: PROFESSIONAL	
TERMS OF OPERATION	Maximum flight altitude permitted 60 metres
GENERAL REQUIREMENTS	
✓ Having authorization from the Port Authority of the Port of Barcelona. ✓ Having authorization from ENAIRE with the conditions of use applicable to the operation. ✓ Having a CAT Helicopters Heliport authorization with its specific restrictions. ✓ Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the operator performing the operation must have the appropriate certification for the operation to be performed. ✓ Proof of the type of category of operation (open or specific) through operational risk assessment analysis, the operator’s Spanish Aviation Safety and Security Agency or AESA registration ID verifying the category of operation, statement submitted to AESA of the specific standard scenario, specific operating authorization or LUC. ✓ Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.	



ZONE REQUIREMENTS

- ✓ Having notified the Spanish Ministry of the Interior and the Catalan Ministry of the Interior of the operation.
- ✓ Having authorization from the licensee, indicating their restrictions and establishing a 30 m security perimeter.
- ✓ Specific civil liability insurance (pursuant to Regulation (EC) 785/2004).
- ✓ Description of the operation (ConOps).
- ✓ Being a registered operator in the specific category, through:
 - AESA authorization for the operation, or
 - LUC with related scope.
- ✓ The following must also be submitted:
 - An operational risk assessment analysis
 - An emergency response procedure (ERP) to be coordinated with the Port of Barcelona's





5. Restricted Area: LIGHT-BLUE ZONE



USE: PROFESSIONAL

TERMS OF OPERATION

Maximum flight altitude permitted 40 metres

GENERAL REQUIREMENTS

- ✓ Having authorization from the Port Authority of the Port of Barcelona.
- ✓ Having authorization from ENAIRE with the conditions of use applicable to the operation.
- ✓ Having a CAT Helicopters Heliport authorization with its specific restrictions.
- ✓ Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the operator performing the operation must have the appropriate certification for the operation to be performed.
- ✓ Proof of the type of category of operation (open or specific) through operational risk assessment analysis, the operator's Spanish Aviation Safety and Security Agency or AESA registration ID verifying the category of operation, statement submitted to AESA of the specific standard scenario, specific operating authorization or LUC.
- ✓ Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.

ZONE REQUIREMENTS

- ✓ Having notified the Spanish Ministry of the Interior and the Catalan Ministry of the Interior of the operation and having the licensees' permission (as applicable).
- ✓ Having authorization from the licensees.
- ✓ Specific civil liability insurance (pursuant to Regulation (EC) 785/2004).



TYPE OF OPERATION	REQUIREMENTS BASED ON DRONE WEIGHT
Open	MTOM < 250 g: ✓ Description of the operation (ConOps). ✓ Complying with the requirements established in Commission Implementing Regulation (EU) 2019/947 for subcategory A1 without the need to identify class Co. ✓ Applying for authorization from the Port Authority of the Port of Barcelona, together with all the above documentation, and attaching: ▪ An operational risk assessment analysis. ▪ An emergency response procedure (ERP).
	250 g < MTOM < 4 kg: It is necessary to apply for authorization from the Port Authority of the Port of Barcelona, after: ✓ Description of the operation (ConOps). ✓ A security perimeter has been established of 30 m or 5 m (only when the maximum drone speed is less than 11 km/h). ✓ The pilot holds an A2 remote pilot certificate of competence, pursuant to Commission Implementing Regulation (EU) 2019/947. ✓ In addition to: ▪ An operational risk assessment analysis. ▪ An emergency response procedure (ERP).
Specific	4 kg < MTOM < 25 kg: It is necessary to apply for authorization from the Port Authority of the Port of Barcelona, after: ✓ Description of the operation (ConOps). ✓ A 30 m security perimeter has been established. ✓ Being a registered operator in the specific category, through: ▪ AESA authorization for the operation, or ▪ LUC with related scope. ✓ The following must also be submitted: ▪ An operational risk assessment analysis, and ▪ An emergency response procedure (ERP).



6. Restricted Area: RED ZONE



USE: PROFESSIONAL

TERMS OF OPERATION

According to the indications set by ENAIRE

GENERAL REQUIREMENTS

- ✓ Having authorization from the Port Authority of the Port of Barcelona.
- ✓ Having authorization from ENAIRE with the conditions of use applicable to the operation.
- ✓ Having a CAT Helicopters Heliport authorization with its specific restrictions.
- ✓ Being a registered operator (except for MTOM < 250 g without recording equipment) and fulfilling all the requirements of the applicable standard mentioned in paragraph 3. In particular, the operator performing the operation must have the appropriate certification for the operation to be performed.
- ✓ Proof of the type of category of operation (open or specific) through an operational risk assessment analysis, the operator's Spanish Aviation Safety and Security Agency or AESA registration ID verifying the category of operation, statement submitted to AESA of the specific standard scenario, specific operating authorization or LUC.
- ✓ Document in which the pilot analyses compliance with the different requirements of Delegated Regulation (EU) 2019/945, depending on the size of the drone and its operation. Compliance with all the requirements of the relevant class is not required. Instead, the pilot must analyse the drone and its operation.



ZONE REQUIREMENTS

- ✓ Description of the operation (ConOps).
- ✓ Confirmation of having coordinated an operating window for the specified drone with the air navigation service provider (ENAIRE).
- ✓ The limitations and requirements imposed by ENAIRE must be submitted to the Port Authority of the Port of Barcelona.
- ✓ Having notified the Spanish Ministry of the Interior and the Catalan Ministry of the Interior of the operation and having the licensees' permission (as applicable).
- ✓ Having authorization from the licensees.
- ✓ Specific civil liability insurance (pursuant to Regulation (EC) 785/2004).
- ✓ Being an AESA-approved operator for that particular operation.
- ✓ A 30 m security perimeter has been established.
- ✓ The pilot is authorized to use the radio frequency (RF) spectrum.
- ✓ The pilot must have a level of English language proficiency that is greater than or equal to 4.
- ✓ An operational risk assessment analysis.
- ✓ An emergency response procedure (ERP) to be coordinated with the Port of Barcelona's procedure.





7. Inner Maritime Zone



USE: PROFESSIONAL

TERMS OF OPERATION

Maximum altitude depending on the zone of operation

ZONE REQUIREMENTS

Any operation intended to be carried out in the inner maritime zone of the Port of Barcelona must indicate:

- ✓ If it is carried out with the pilot from a zone on land, in which case, the following requirements must be fulfilled:
 - The same as those applicable to the zone where the pilot is located: the requirements listed above for each zone, and
 - Do not overfly any vessel. If the possibility of doing so arises, it will be necessary to mention this in the operational risk assessment with appropriate mitigation actions.
 - The operation will always be in the VLOS.
- ✓ It is carried out by the pilot from a boat, in which case the requirements to be fulfilled are as follows:
- ✓ The pilot must make flights in a specific category, subject to authorization.
 - Do not overfly any other vessel from where the pilot is located. If the possibility of doing so arises, it will be necessary to mention this in the operational risk assessment with appropriate mitigation actions.
 - Having authorization from the owner of the vessel.
 - The operation will always be in the VLOS.
 - The operating restrictions, in particular, restrictions on the maximum operating altitude, are those applicable to the closest port zone on land to the drone at any given time.



8. Outer Maritime Zone



USE: PROFESSIONAL

TERMS OF OPERATION

Maximum altitude depending on the zone of operation

ZONE REQUIREMENTS

For any operation intended to be carried out in the outer maritime zone, but managed by the Port of Barcelona (including the area 2 NM offshore from the entire outer perimeter of the map included in Annex II), you will need to distinguish whether:

- ✓ It is carried out by the pilot from a zone on land, in which case, the following requirements must be fulfilled:
 - The same as those applicable to the zone where the pilot is located: the requirements listed above for each zone, and
 - Do not overfly any vessel. If the possibility of doing so arises, it will be necessary to mention this in the operational risk assessment with appropriate mitigation actions.
 - The operation will always be in the VLOS.
- ✓ It is carried out by the pilot from a boat, in which case the requirements to be fulfilled are as follows:
 - The pilot must make flights in a specific category, subject to authorization.
 - Do not overfly any other vessel from where the pilot is located. If the possibility of doing so arises, it will be necessary to mention this in the operational risk assessment with appropriate mitigation actions.
 - Having authorization from the owner of the vessel.
 - The operation will always be in the VLOS.
 - The operating restrictions, in particular, restrictions on the maximum operating altitude, are those applicable to the closest port zone on land to the drone at any given time.

If you wish to carry out operations BVLOS, you must have a NOTAM issued for this purpose and submit it with the application for operation to the Port Authority of the Port of Barcelona, in which case you must carry out the flights in a specific category under the authorization system or LUC.

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Annex 2
Scope of Application for the Port of Barcelona.



Port de Barcelona



**MINIMUM
REQUIREMENTS
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Annex 3
Applicable aviation regulations



Port de Barcelona



- Regulation (EU) 2018/1139 of 4 July 2018 of the European Parliament and of the Council.
- Commission Implementing Regulation (EU) 2019/947 of 24 May 2019. Acceptable Means of Compliance (AMC) and Guidance Material (GM) should also be taken into account.
- Commission Delegated Regulation (EU) 2019/945 of 12 March 2019.
- Law 48 of 21 July 1960 on air navigation, as well as any amendments, including the ones imposed by Royal Decree Law 26/2020.
- Aviation Safety Act 21 of 7 July 2003, as well as any amendments.
- Royal Decree 1180 of 21 September 2018 amending the Air Traffic Regulations / SERA.
- Regulation (EU) 376/2014 of 3 April 2014 on reporting, analysis and follow-up of civil aviation accidents and incidents.
- Royal Decree 1036 of 15 December 2017 in all those points not contrary to European regulations and still in force.
- Royal Decree 704 of 20 May 2011 approving the regulation on the protection of critical infrastructure.
- General Data Protection Regulation (EU) 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data.
- Regulation (EC) 785/2004 of 21 April 2004 on insurance requirements for air carriers and aircraft operators.
- For recreational use, Royal Decree 37/2001 of 19 January 2001 updating the amount of compensation for damages provided for in Law 48 of 21 July 1960 on air navigation.
- Additionally, although it is not a regulation, but an Acceptable Means of Compliance (AMC) with Commission Implementing Regulation (EU) 2019/947, the information contained in the SORA risk analysis methodology for drone operations will be taken into account.

