



2024

GUIDE TO BEST PRACTICES FOR UAS OPERATORS WHEN USING PLANEA

COOP

ENAIRE'S OPERATIONS COORDINATION DEPARTMENT

V080424





SHARED USE OF AIRSPACE

The coordination of UAS flight operations carried out by ENAIRE, and specifically this department together with the affected air control units, is part of the Airspace Management Service that ENAIRE provides to all users of Spanish airspace.

All of us, as citizens and operators, must be able to access controlled airspace in a safe and orderly manner; so that we can continue using it.

Over the last few years, we have seen a number of cases on Planea that, despite being correctly planned, can be improved. This guide aims to make a series of recommendations so that UAS activities can be performed in a way that is more beneficial for everyone.

2.

WHAT ARE THE DIFFERENCES BETWEEN A CTR AND AN ATZ? THE DIFFERENT AIRSPACE VOLUMES

Like any other group of professionals, we typically deal with various technical topics with certain fluency and ease, which is why we believe that by offering some basic notions about Spanish airspace, we can help everyone understand it and promote the proper use of all the tools available.

This image shows the volume of a CTR and an ATZ. As we can easily see, the CTR (larger volume) encompasses the ATZ, but the two airspaces have their own unique operational conditions. While the ATZ will always be controlled by the tower (TWR), the CTR may be the responsibility of another control centre or the TWR itself.

When coordinating operational areas within the ATZ volume, the responsibilities of the ATZ will always be prioritised over those of the CTR.

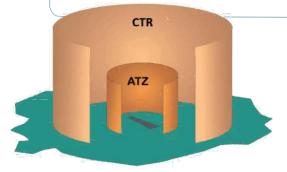


Illustration 1: Airspace volumes

Thus, while the CTR can be under ENAIRE and occupy the entire area around and above the ATZ, the airspace in orange does not have the same conditions as the CTR. This indicates a division of different airspaces, with possibly different providers in charge of managing them.





In the case of Valencia and Lanzarote, the CTR is run by ENAIRE, while the ATZ (orange volume surrounded by the CTR) is the responsibility of a private air navigation service provider (Skyway). Each one must coordinate the airspace under its responsibility, and operators must address their requests to the relevant providers.

REQUESTS SUBJECT TO IMPROVEMENTS IN TERMS OF GEOGRAPHIC AND TIME COVERAGE.

The specifics of each operator and activity make each request unique in terms of the external factors. We will thus consider several cases in which activities are proposed without knowledge of specific dates, or where the operator learns of the operational area with only a few days' notice.

As a result of this operational uncertainty, several requests involve extensive operational areas and span a **very** long time period. We must all use airspace correctly and enjoy access to it.

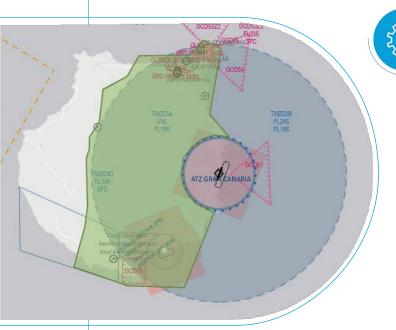


Illustration 2: Example of overly broad request.

Based on these types of cases, we propose the following suggestions:

As the side image shows, "Operator A" is requesting a large operational area that takes up almost the entire CTR of Las Palmas de Gran Canaria for a period of 90 days.

This type of request creates uncertainty by not providing actual information on the operation in question, which is counterproductive for both users and other airspace managers.

This would mean that operations at the Las Palmas de Gran Canaria airport itself would be contingent upon an activity that is not guaranteed to happen on all the days requested; going against the purpose and objective of the COOP.





In an attempt to avoid this situation,
"Operator A" may make a well-intentioned
effort to narrow down their requests, and
in so doing, fall into the trap of excessive
compartmentalisation of activities. This
results in multiple requests being filed,
considerably increasing the workload.



Illustration 3: Example of excessive compartmentalisation.

Instead, we suggest clustering the areas of activity into small groups that encompass different zones that meet similar location and classification conditions. This way, requests within the safety distance of an

aerodrome would be grouped in the same area, since their applicable conditions and procedures would be practically identical. Similarly, those operational areas within the CTR, ATZ or very close to the airport's facilities, and therefore subject to similar requirements, can be coordinated jointly in the same request.

This way, we will comply with the best practices. On the one hand, the division of an operational area that covers almost the entire CTR; and on the other, we will avoid an excessive number of very similar requests.

Thus yielding the following example:



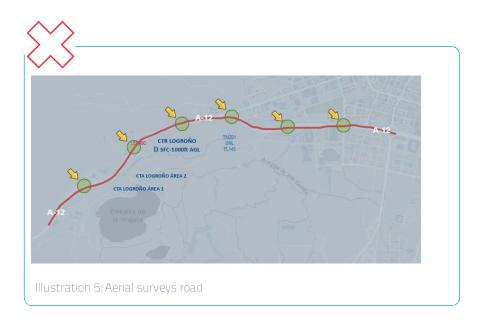
Illustration 4: Grouping of requests.



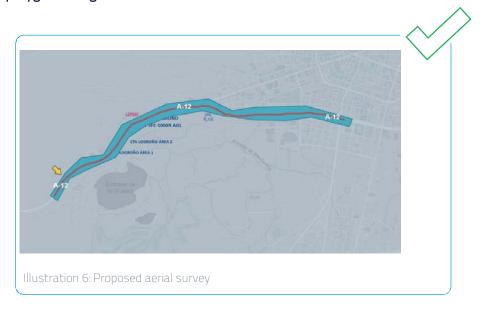


Another example that can be improved in terms of optimising the number of requests is those involving linear infrastructure, such as aerial surveys over roads or inspections of power lines.

The result is numerous circles throughout the operational area, as shown in the image.



In this type of situation, the best practice involves turning the numerous circles into a single polygon along the road/river. As shown here:







REQUESTS THAT PENETRATE THE SAFETY DISTANCES OF AERODROMES.

4.

After the latest updates of ENAIRE Planea, operators can request an operational area using the app that is within the safety distance of an airport. This update is included in an agreement with Aena, which, although it is being phased in, is still pending its final signature.



As you know, there are two minimum notification requirements for applying to conduct UAS activities in general:

- If it is carried out using Planea and it is outside the aerodrome's safety distances, the minimum advance notice is **10 days**.
- If processed through Aena because it is within these distances, the minimum period is **20 days**.

As the Planea maps show, we strongly recommend that this type of request **ONLY** be processed through the channels mentioned in this example.

This message is generated automatically when the operational area is within the aerodrome's safety distances.





ALERT: You are in the safety area of an aerodrome: MADRID/Adolfo Suárez Madrid-Barajas , LEMD. Drones are NOT allowed except in coordination with the aerodrome. Make your request ONLY via the contact details indicated, at least 20 working days before the date of your activity. AENA will coordinate with the ATS service provider (ENAIRE, SAERCO o SKYWAY) your operation. mad.ops.solicituddron@aena.es

Illustration 7: Example of Planea message

If the operator is going to file a request within the safety distances through Planea, we urge that the minimum advance notice of 20 days be observed.

This is because Aena will ultimately coordinate the activity based on the response we send them.

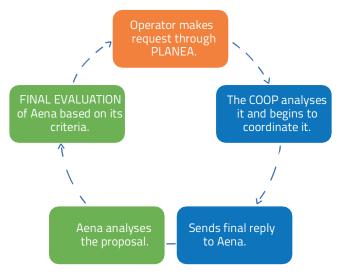


Illustration 8: Work process with Aena.





<u>If the advance notice given to them is insufficient</u> in accordance with their operational requirements, they will not be able to coordinate the activity with the operator in time.

The goal with these recommendations is to <u>AVOID DUPLICATE REQUESTS</u>, meaning those processed through Planea and also sent to Aena units. This hinders the work of the whole team and of Aena, causing duplicate work and confusion among colleagues.

Therefore, we ask that **ONLY** one of the two channels be used:

- Through Planea.
- Through Aena.



#COOPCONSEJO- OPERATOR CONTRACTS WITH THIRD PARTIES

We are aware of the variety of contracts that operators can enter into with various companies to provide their services. From event recordings or assistance with news coverage, to creating digital files of cultural importance.

Since the contracting companies often do not know the regulations that apply to UAS flights, we recommend that operators include a number of key points in contracts for the company to consider:

- 1. The minimum 10-day advance notice required to request coordination of a UAS activity through Planea.
- 2. The minimum 20-day advance notice required to request coordination of a UAS activity within the safety distance of an aerodrome.
- 3. Specify that the final coordination will always be subject to operational conditions determined by ATC units, as well as to meteorological factors: with the operator not being responsible for this.



With all this, the COOP aims to show third parties that any other option or proposal that they receive and that does not conform with the foregoing is outside the regulations, and thus could be in breach of the legal framework; with both the operator contracted and the contracting company being responsible.







#COOPCONSEJO - MARGIN OF DAYS REQUESTED

The number of days of advance notice requested notwithstanding, we feel it necessary to provide a recommendation. UAS operations are always affected by multiple external factors that are beyond the operator's control.

Adverse weather, logistical problems or personnel/equipment shortages are often some of the problems faced by companies in the sector, most of them SMEs.

In light of this, we recommend adding a margin of 3 or 4 days to deal with unforeseen events, and thus avoid having to request a last-minute extension or change of dates.

Once the final response is submitted, any change would entail processing a new request with the corresponding 10/20-days' notice.

7.

MILITARY AIRSPACE AND OTHER AIR NAVIGATION PROVIDERS.

Throughout Spain, there are control units that are not operated by ENAIRE. These can be **military units** responsible for a volume of military airspace, or **other private providers** that are members of our air navigation system.

ALERT: controled airspace: ATZ VALENCIA .

Skyway: uas@skyway-ans.com Open category:
The flight of RPAS does not require
authorization from AESA. Specific category:
The flight of RPAS requires authorization from AESA.

Name: Turia .

NO AIP Data. Source: MITECO.



Illustration 9: ATZ operated by another provider.





When the operator files the request in Planea and opens the map, they must check which authority is responsible for the zone where their operational zone is located. At airports such as Valencia, the ATZ is the responsibility of the company SKYWAY. In this case, the coordination of the activity within the ATZ is the responsibility of the company SKYWAY, meaning we must reject the request in Planea.

Other examples of locations where the air navigation provider is not ENAIRE include: Alicante, Lanzarote and Ibiza, among others.

The same procedure will be used with airports and military airspace, where operators can also check the contact information in the AIC "Procedure for coordinating specialised civil operation activities (aerial works) in controlled airspace and reserved or restricted airspace managed by agencies of the Ministry of Defence", which can be found in the AIP section on Circulars.

BVLOS REQUESTS IN UNCONTROLLED AIRSPACE.

UAS activities in BVLOS flight mode involve a type of coordination that requires specific conditions that are separate from those for VLOS. In order to carry out this type of operation, the operator must have previously submitted to AESA:



- an operational declaration in order to operate in the national standard scenario STS-ES-02¹;
- or have processed an operational authorisation for a specific category (EU Regulation 2019/947).

When making the flight request, the name shown on their operational authorisation/declaration must be reflected in the request.

BVLOS operations in uncontrolled airspace have a NOTAM publication associated with them. This NOTAM is processed through the competent agency responsible for its publication 10 days in advance. As a result, we recommend that the request be filed in Planea at least 15 days in advance, to ensure that the NOTAM that is needed to carry out the operation can be published.

Those operational areas that are located both in **controlled airspace** and **uncontrolled airspace** must be processed in two separate requests. This is because the coordination process differs considerably. It is also important that documents not be attached to requests in uncontrolled airspace.

In general, a BVLOS request in uncontrolled airspace for a STANDARD operator **will not require** coordination below an altitude of 60 metres.

¹"AESA has established a transitional period that is valid until 30 August 2024 to make operational declarations based on national standard scenarios. From then on, all operators will have to conform to European standard scenarios."







MOST RELEVANT ASPECTS OF THE EARO

In many cases, operators submit requests that, despite being correctly filled in, we are forced to reject due to simple errors in the EARO (Evaluación y Atenuación de Riesgo Operacional - Operational Risk Assessment and Attenuation).

As a result, we propose a series of key aspects for applicants to pay special attention to. These recommendations are issued in response to the most typical errors we have identified:

- 1. EARO correctly signed and referenced. This refers to the existence of a code at the top, and the ENAIRE signature and stamp at the end of the document. All of this provided and coordinated by the drones.safety@enaire.es department.
- 2. In keeping with point 1, DO NOT CREATE THE REQUEST OR ATTACH THE EARO until it is duly signed.



3. Pay particular attention to whether the operational area is inside or outside safety distances. These safety distances are NOT the same as the ones for Aena, but those known as EARO DISTANCES.

All the operational area inside the volume represented above must be specified as INSIDE the distances in the ATTACHED EARO. The opposite will apply if it is OUTSIDE the volume in question.

So as not to have to coordinate an EARO for each type of activity, the specification INSIDE/OUTSIDE THE DISTANCES should be added. In this case, it will be valid for both types of situations.

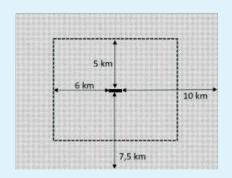
FLIGHT INFORMATION

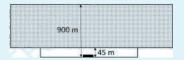
ZONE (FIZ) INSIDE/OUTSIDE

AERODROME SAFETY

DISTANCES¹

With UAS MTOM < 10 kg MAXIMUM ALTITUDE 120 m, except obstacles











- 4. When the EARO coordination request is filed through ENAIRE Planea, it must be in PDF format, signed by the operator and accompanied by their current operator certificate and a **letter of authorisation**¹ if applicable (as in the case of legal persons).
- 5. The operator must make sure that the EARO attached corresponds to all the conditions shown in the Planea request. Aspects such as the flight mode (VLOS, BVLOS, etc.), drones to be used, maximum height enabled, etc., will be taken into account.
- 6. Any modification with respect to an already approved EARO involving its operational conditions (CONOPS), UAS models used, call-sign, etc., will require a new coordination of the study.



POSSIBLE REASONS FOR REJECTION OR NON-COORDINATION

In accordance with all the above, a request may be rejected/not coordinated for any of the following reasons:

- 1. The operational conditions reflected in the EAS/EARO CONOPS are incompatible with the requested operation; as well as the absence of an EAS/EARO signed and coordinated by ENAIRE (see point 9).
- 2. VLOS operation located in Uncontrolled Airspace, as it does not require any type of approval from ENAIRE.
- 3. Requests spanning long times and large spaces (see point 3).
- 4. The operational area requested is located in airspace that is the responsibility of another air navigation service provider (ANSP) (see point <u>7</u>).
- 5. The operational area requested is in military airspace or in a prohibited zone (LEP).
- 6. At the discretion of the corresponding civil unit.
- 7. The request in question has been filed through multiple channels (airport/Planea), and is thus duplicated (see point 4).
- 8. Non-compliance with some of the requirements for BVLOS operations in uncontrolled airspace (see point 8).

¹ Letter of authorisation: If the request is made through a representative, he/she MUST attach a document accepted by law that certifies their power of representation or authorisation. This authorisation must be signed by the appointing party and the authorised representative. (e.g. Apodera application https://sede.administracion.gob.es/apodera/clave.htm).

