National Aviation Safety and Security Agency

GUIDE TO UAS FLIGHT REQUIREMENTS AND LIMITATIONS, DEPENDING ON THE PLACE OF OPERATIONS (UAS GEOGRAPHICAL ZONES)

Royal Decree 517/2024

Ed.02 (12/11/2024)

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REFERENCES	
CODE	**TITLE**
UAS-OPS-DT01-I	COORDINATION AGREEMENT BETWEEN RESTRICTED-USE AERODROMES AND HELIPORTS AND AN UNMANNED AIRCRAFT SYSTEM OPERATOR

LIST OF ABBREVIATIONS	
ABBREVIATION	**DESCRIPTION**
AESA	National Aviation Safety and Security Agency (*Agencia Estatal de Seguridad Aérea)*
AFIS	Aerodrome flight information service
AIP	Aeronautical Information Publication
AIS	Aeronautical information service
ATSP	Air traffic service provider
BVLOS	Beyond visual line of sight
CECAF	Cartographic and Photographic Centre of the Air Force (*Centro Cartográfico y Fotográfico del Ejército del Aire*)
CIDETRA	Interministerial Defence-Transport Committee (*Comisión Interministerial entre Defensa y Transportes*)
CNI	National Intelligence Centre (*Centro Nacional de Inteligencia)*
ConOps	Concept of operations
DAVA	Deputy Directorate for Customs Surveillance (*Dirección Adjunta de Vigilancia Aduanera*)
DGAC	Directorate-General for Civil Aviation (*Dirección General de Aviación Civil*)
DGT	Directorate-General for Traffic
EASA	European Aviation Safety Agency
FATO	Final approach and take-off area
FIZ	Flight information zone
FPL	Flight plan
LEA	Law enforcement agencies
MTOM	Maximum take-off mass
NOTAM	Notice to airmen
EARO	Evaluación y Atenuación del Riesgo Operacional
RD	Royal Decree
TRA	Temporary reserved area
TSA	Temporary segregated area
UAS	Unmanned aircraft system
VLOS	Visual line of sight
ZRVF	Zone with restrictions on aerial photography (*Zona Restringida al Vuelo Fotográfico*)

CONTENTS

1. INTRODUCTION

With the entry into force of Commission Implementing Regulation (EU) 2019/947 on 31 December 2020, in addition to the general flight limitations depending on the category of operations ("open", "specific", "certified"), the geographical zones for Unmanned Aircraft Systems (UAS) are also defined, corresponding to **volumes of airspace in which UAS operations may be permitted, restricted or excluded** for reasons of public safety, protection of infrastructure and other airspace users, or protection of privacy and the environment.

These geographical zones are defined by each State in its territories. States may:

- Prohibit certain or all UAS operations, request particular conditions for certain or all UAS operations or request a prior operational authorization for certain or all UAS operations
- Subject UAS operations to specified environmental standards
- Allow access to certain UAS classes only
- Allow access only to UAS equipped with certain technical features, in particular remote identification systems or geo-awareness systems
- Establish exemptions from one or more of the 'open' category requirements

Royal Decree 517/2024, as a national law, governs in its Chapter V the use of airspace by UAS and UAS geographical zones.

The purpose of this guide is to compile the **legal requirements for operations, and to provide a non-exhaustive list of notifications to be made or authorizations necessary in accordance with the place in which the air operations are to be conducted.** All of this without prejudice to the need to comply with other requirements and obtain whatever authorizations, permits or licences are mandatory pursuant to the applicable legislation, in particular on public safety, on the basis of the powers of other public administrations or the ownership of the land which will be used in the operation.

ENAIRE, Aeronautical Information Service (AIS) provider in Spain, offers UAS users the ENAIRE Drones web app (also available for Android devices through the Google Play Store and for Apple devices through the Apple App Store). This app shows, on a map of Spain, the airspace in which there are UAS flight prohibitions and limitations for aeronautical reasons. It also offers other useful information for UAS operators on places of operation.

1.1. Scope of application

Like Commission Implementing Regulation (EU) 2019/947, Royal Decree 517/2024 does not distinguish between flights according to their purpose, whether recreational or professional. In other words, the **general rules of flight and UAS geographical zones apply to all UAS operators,** regardless of whether the activity falls within or outside the remit of the European Aviation Safety Agency (EASA). For non-EASA activities, in some cases a number of exemptions apply.

1.2. Equipment inside UAS geographical zones

Pursuant to Article 35.1 of Royal Decree 517/2024, UAS must meet the equipment requirements for operation in the zone in question. These requirements relate specifically to the characteristics of

the operation, the classification of the airspace, and the conditions set forth for the operation in the zone or in the permits to operate in the zone issued by the relevant authority.

1.3. Types of UAS geographical zones

The types of UAS geographical zones are:

- General UAS geographical zones. These zones are established in applicable national legislation, which sets out the operational limitations and conditions for each zone. These zones include:
    - Prohibited and restricted zones and zones relating to flexible use of airspace, as defined in Royal Decree 1180/2018
    - Those classified as such for reasons of military security, national defence or State security
    - Those classified as such to protect facilities and infrastructure used to render basic services for the community
    - Those classified as such for public safety and to protect people and property in urban areas
    - Those classified as such for reasons of operational safety around civil and military aerodromes and heliports
    - Those classified as such for reasons of operational safety in controlled airspace and flight information zones (FIZ)
- Specific UAS geographical zones. These zones are approved by the Interministerial Defence-Transport Committee (Spanish acronym: CIDETRA) for general interest reasons and on a permanent basis, although they may also be activated temporarily, provided that the purpose for establishing such a zone is not served by a general UAS geographical zone.

Under Article 36 of Royal Decree 517/2024, in UAS geographical zones, whether general or specific, UAS operations shall be conducted, if permitted, pursuant to the operational limitations and conditions applicable to the zone and set out in this section, without prejudice to compliance with other provisions that may apply to the operation.

If various geographical zones coexist, the following criteria apply:

- If **two or more general UAS geographical zones coexist** in the same airspace volume, the UAS operator must comply with the operational conditions of all of the zones that apply to the place of operation.

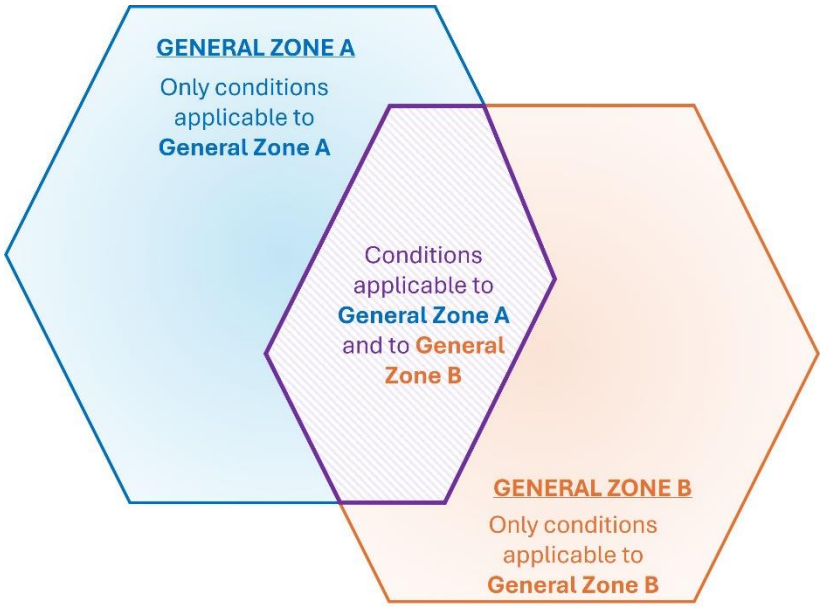

Illustration 1. Overlapping general geographical zones

- If **a specific UAS geographical zone is contained within or overlaps with one or several general UAS geographical zones**, the operational conditions for the specific zone shall complement those established for the general zones, unless the specifications of the specific zone establish otherwise. In the event of conflicting operational conditions, those of the specific zone shall prevail.

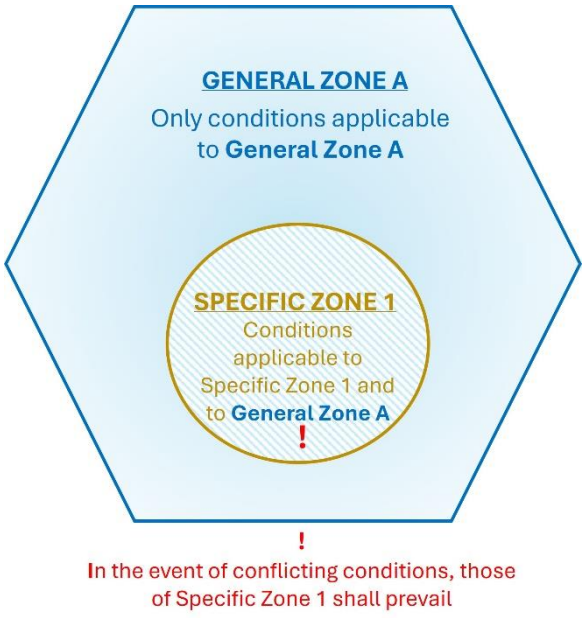

Illustration 2. Overlapping general and specific geographical zones

- If **a specific UAS geographical zone is contained within or overlaps with one or several specific UAS geographical zones**, the operational limitations and conditions for all of the zones shall apply. In the event of conflicting operational limitations or conditions, those of the most recently established specific UAS geographical zone shall apply.

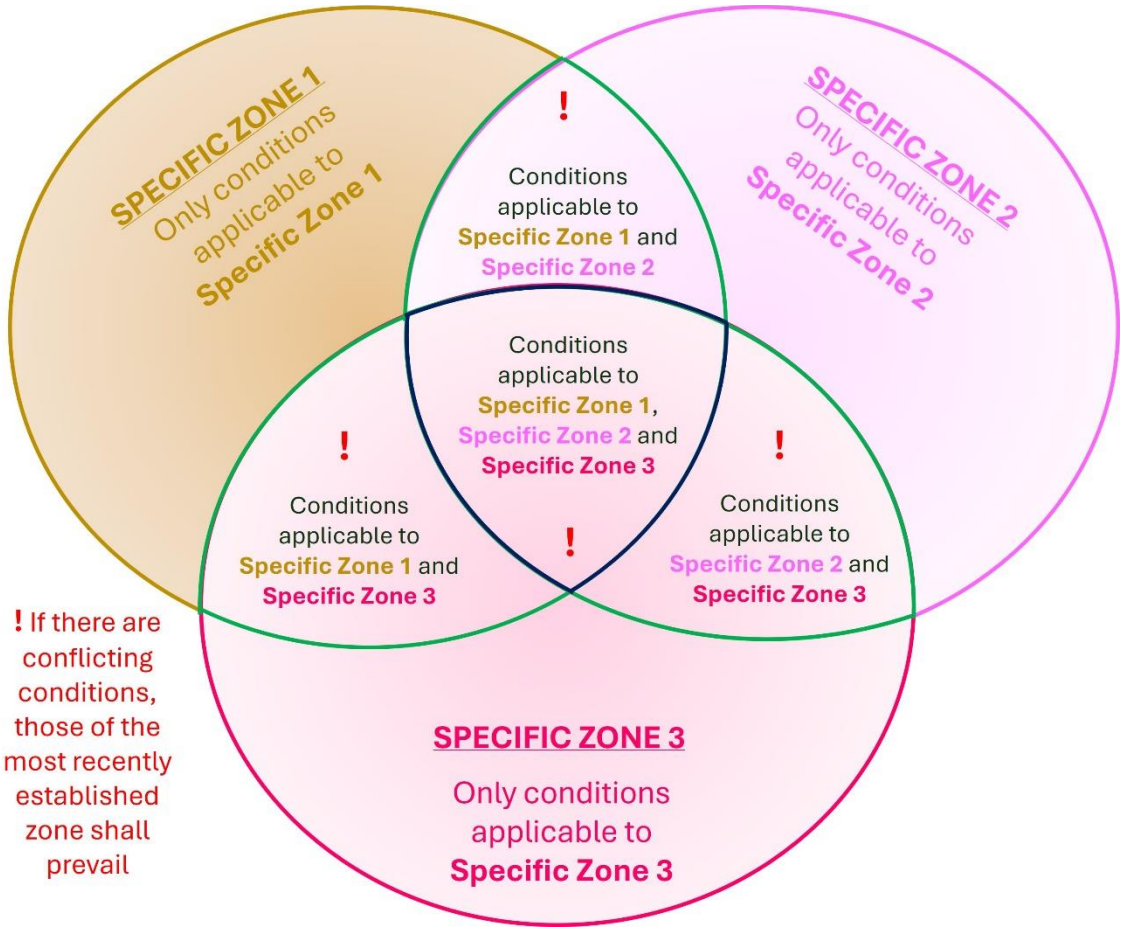

Illustration 3. Overlapping specific geographical zones

2. GENERAL UAS GEOGRAPHICAL ZONES

2.1. Prohibited and restricted zones and zones relating to flexible use of airspace

2.1.1. Specification of zones

Pursuant to Article 37 of Royal Decree 517/2024 general UAS geographical zones are those that are prohibited or restricted for reasons relating to defence, protection of national interests or public safety; zones that are restricted to protect the environment; zones with restrictions on aerial photography (Spanish acronym: ZRVF); and airspace structures related to management of flexible use of airspace, as defined, respectively, in Articles 18, 19, 20 and 17 of Royal Decree 1180/2018.

2.1.2. Prohibitions, conditions and limitations

The following operational prohibitions, limitations and conditions apply to UAS in such zones:

a) In zones that are prohibited or restricted for reasons relating to defence, protection of national interests or public safety, the prohibitions and restrictions applicable to use of UAS are those set out in Article 18, paragraphs 2 and 3, of Royal Decree 1180/2018.

To fly in prohibited or restricted zones, UAS operators must comply with the conditions and limitations set out in section 5.1 of the en-route section of the Spain Aeronautical Information Publication (ENR 5.1 of the Spain AIP) for each zone. In all other cases, they must have obtained prior authorization from the Spanish State to operate in prohibited zones (P) (in which case the UAS operator must contact the ministerial authority responsible for said zone), or from the designated competent authority for other restricted zones.

Notices to Airmen (NOTAM) may be consulted through the ENAIRE ICAROXXI portal (also available for Android devices through the Google Play Store and for Apple devices through the Apple App Store). Notices may also be consulted using the ENAIRE Drones or ENAIRE INSIGNIA apps.

b) In zones that are restricted to protect the environment, the prohibitions and restrictions on the use of UAS are those set out in Article 19, paragraphs 2 and 3, of Royal Decree 1180/2018.

In these zones, overflight must be coordinated in advance with the body managing the protected airspace.

Information on nature reserves can be consulted through the Natura 2000 network portal or the portals for viewing geographical data offered by the Ministry of the Ecological Transition and the Demographic Challenge, which indicate the form of protection and provide contact details for the competent authorities. These zones are also indicated in the ENAIRE Drones app in the layer labelled “ZG_Espacios naturales protegidos”.

c) In ZRVFs, the prohibitions and restrictions applicable to use of UAS are those set out in Article 20 of Royal Decree 1180/2018.

A list of ZRVFs is included in the Spain AIP, in section ENR 5.7. The ZRVFs are also indicated in the ENAIRE Drones app in the layer labelled “ZG_RVF (Restringido Vuelo Fotografico)”.

UAS operations involving the capture of images in ZRVFs are subject to the **provisions and safeguards determined by the Ministry of Defence**, following to a prior request to the Cartographic and Photographic Centre of the Air Force (Spanish acronym: CECAF) pursuant to the procedure for applying for technical constraints for obtainment of aerial photographs, aerial video recordings or capture of data with any type of sensor by civilian operators in accordance with the procedure established in the National Aeronautical Circular of 31 December 2020 (AIC NTL 05/20) in the Circulars section of the AIP website.

COMPETENT AUTHORITY	
MINISTRY OF DEFENCE	Cartographic and Photographic Centre of the Air Force (CECAF) Email: cecaf@ea.mde.es

d) In airspace structures related to management of flexible use of airspace, the prohibitions and restrictions are those set out in Article 17 of Royal Decree 1180/2018.

NOTAMs may be used to modify schedules and/or boundaries pertaining to Danger Areas, as well to establish temporary segregated areas (TSA) and temporary reserved areas (TRA).

- Temporary segregated areas (TSA): A defined volume of airspace, generally under the jurisdiction of an aeronautical authority, that is temporarily segregated by mutual agreement, for a specific aeronautical activity, through which other traffic may not be authorized by Air Traffic Control (ATC).
- Temporary reserved areas (TRA): A defined volume of airspace, generally under the jurisdiction of an aeronautical authority, that is temporarily reserved by mutual agreement, for a specific aeronautical activity, through which other traffic may be authorized by ATC.

By NOTAM, managers of Danger areas may modify the schedules and/or boundaries of danger areas and establish Temporary Segregated Airspace (TSA) and/or Temporary Reserved Airspace (TRA) associated with them. Additional information on Danger (D) and Restricted (R) areas that may be managed through the Airspace Management Cell (AMC) and TSAs is included in ENR 1.9.

NOTAM may be consulted through the ENAIRE ICAROXXI portal. Notices may also be consulted using the ENAIRE Drones or ENAIRE INSIGNIA app.

2.1.3. Temporary UAS geographical zones

Temporary UAS geographical zones are those that, because of the nature of the activity or owing to requirements, cannot be linked in advance to periods of activity with pre-established durations, frequencies or locations, and that are valid for six months or less.

Without prejudice to Article 37, paragraph 2, of Royal Decree 517/2024, such zones and their conditions of use and operation shall be established through the tactical and pre-tactical coordination instruments set out in applicable norms governing coordination of general air traffic and operational air traffic. Prior to its establishment, the applicant for the UAS geographical zone shall notify the Directorate-General for Civil Aviation (Spanish acronym: DGAC) of the zones whose use is intended to last for more than one month.

Information on temporary UAS geographical zones shall be published on the ENAIRE Drones portal and in NOTAMs or in an AIP supplement, as applicable.

2.2. General zones to protect military security, national defence or State security

2.2.1. Specification of zones

Under Article 38 of Royal Decree 517/2024, the following are considered general UAS geographical zones for reasons of military security, national defence or State security:

a) Areas that are of interest in terms of national defence, security of military facilities or civilian facilities that have been declared to be of military interest, and those where restrictions on property ownership by foreign nationals are in place, as well as their surrounding restricted activity areas, pursuant to Act 8/1975, on zones and facilities of interest for national defence, and its implementing regulation, approved through Royal Decree 689/1978 and secondary and implementing legislation;

b) Military facilities and other public-domain properties not included in the preceding section that relate to national defence;

c) Infrastructure and facilities relating to State security and related areas, and especially their surrounding restricted activity areas; and

d) Areas of operations or deployment of military units, whether of the army, navy or air force, when operating outside defined general UAS geographical zones.

2.2.2. Prohibitions, conditions and limitations

UAS activities may only be performed within these zones with prior express permission from the owner of the infrastructure, facility or land the UAS will fly over, or from the party responsible for its management, or, if applicable, the authority designated by the Ministry of Defence.

In the case of areas of operations or deployment of military units, whether of the army, navy or air force, when operating outside defined general UAS geographical zones, UAS operations may only be conducted with the authorization of the party responsible for the military operation.

2.3. General zones to protect facilities and infrastructure used to render basic services for the community

2.3.1. Specification of zones

Under Article 39 of Royal Decree 517/2024 UAS geographical zones are classified as such to protect facilities and infrastructure used to render basic services for the community, when they contain facilities or infrastructure used to render basic services for the community pursuant to specific legislation. This includes the following:

a) Power plants, petrochemical and chemical industrial facilities, refineries, fuel supply and storage service facilities;

b) Port, rail and road infrastructure and other transport infrastructure, except aerodromes and heliports, which are governed by a general UAS geographical zone, in the interest of operational safety in the region of civil and military aerodromes and heliports;

c) Water, gas and electricity supply and distribution service infrastructure; and

d) Information and communication technology infrastructure.

The following are also considered to be facilities used to render basic services for the community, if they are not contained within general UAS geographical zones, in order to ensure public safety and protect people and property in urban areas:

1. Barracks, police stations and law enforcement agency premises

2. Public and private hospitals

3. Public health centres

The extent of general UAS geographical zones for protecting essential facilities or infrastructure used to render basic services for the community is described below.

2.3.1.1. Horizontal extent of the UAS geographical zone

a) **Linear infrastructure:** a **25-metre-wide** strip measured from the outermost edge of each side of the infrastructure. In the case of infrastructure comprising several lanes, this strip shall be measured from the outermost edge of the outermost lane.

In the case of linear railway infrastructure, the point of reference from which such strips shall be measured will be the midpoint between the rails of the outermost tracks, instead of the outermost edge of the outermost tracks.

Illustration 4. Linear infrastructure – Plan view

Illustration 5. Linear railway infrastructure – Plan view

b) **Non-linear infrastructure:** a **10-metre-wide** strip surrounding the surface area covered by the facility or infrastructure.

Illustration 6. Non-linear infrastructure. Oblique view

c) **Linear and non-linear infrastructure surrounded by fencing or a similar outdoor perimeter boundary:** Horizontal distances shall be measured at a right angle from the outer-facing side of the fencing or similar outdoor perimeter boundary.

2.3.1.2. Vertical extent of the UAS geographical zone

The UAS geographical zone extends up to a height of **50 metres** above the highest point of the infrastructure or facility concerned.

In the case of linear infrastructure, the highest point of the infrastructure or facility shall be determined considering, within the horizontal limits described in the paragraph above, a 100-metre-long strip of the linear infrastructure. At any given time, the centre of this 100-metre-long strip will be located at the point of the linear infrastructure over which the UAS is flying or at or the point of the linear infrastructure closest to the point over which the UAS is flying, as appropriate.

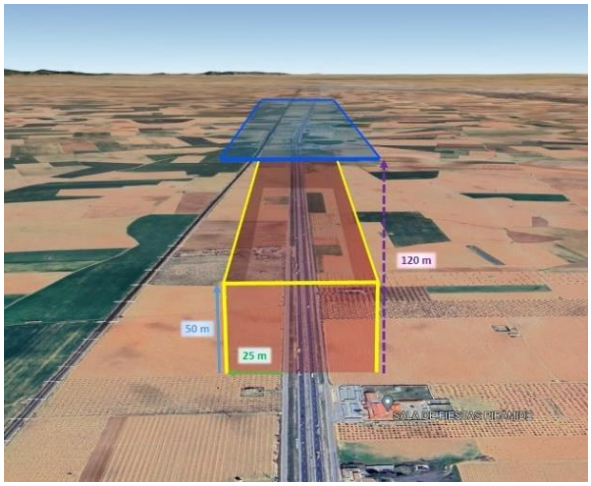

Illustration 7. Linear infrastructure - Oblique front view

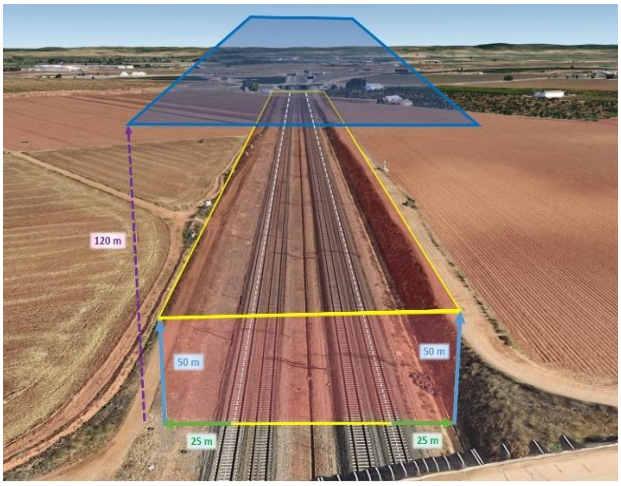

Illustration 8. Linear railway infrastructure – Oblique side view

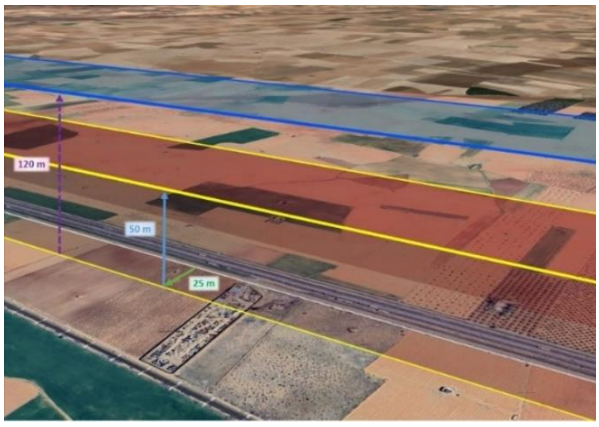

Illustration 9. Linear infrastructure – Oblique view

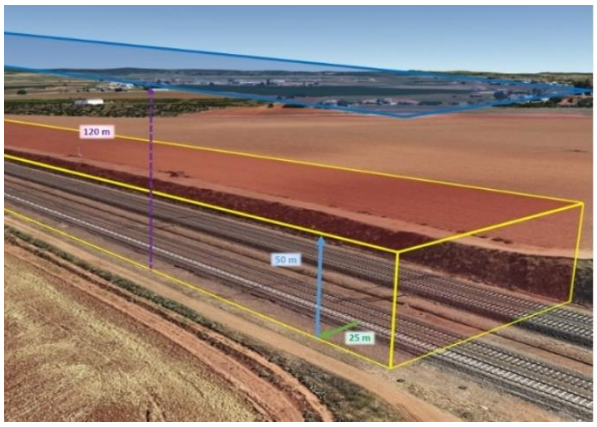

Illustration 10. Linear railway infrastructure – Oblique view

If the operation is to be carried out over linear infrastructure junctions or intersections where one horizontal limit overlaps with another (or several others), this 100-metre-long strip shall be taken into account for each linear infrastructure, with the highest point of the infrastructure ultimately

being considered to be the highest point –within the aforementioned 100-metre-long strip– of all the linear infrastructure meeting at this junction or intersection where horizontal limits overlap.

2.3.1.3. Horizontal and vertical extent in the case of bridges and other suspended structures

If the infrastructure or facilities, or parts of these, consist in bridges or suspended structures, the horizontal distances defined in the previous section shall be extended:

a) by **10 metres** beneath the base of the infrastructure (understood as the lowest part of the deck supporting the infrastructure or facility, excluding pillars, arches or supports); and

b) by **10 metres** in any direction with respect to any of its pillars, arches or supports.

Illustration 11. Linear infrastructure with bridge – Oblique view

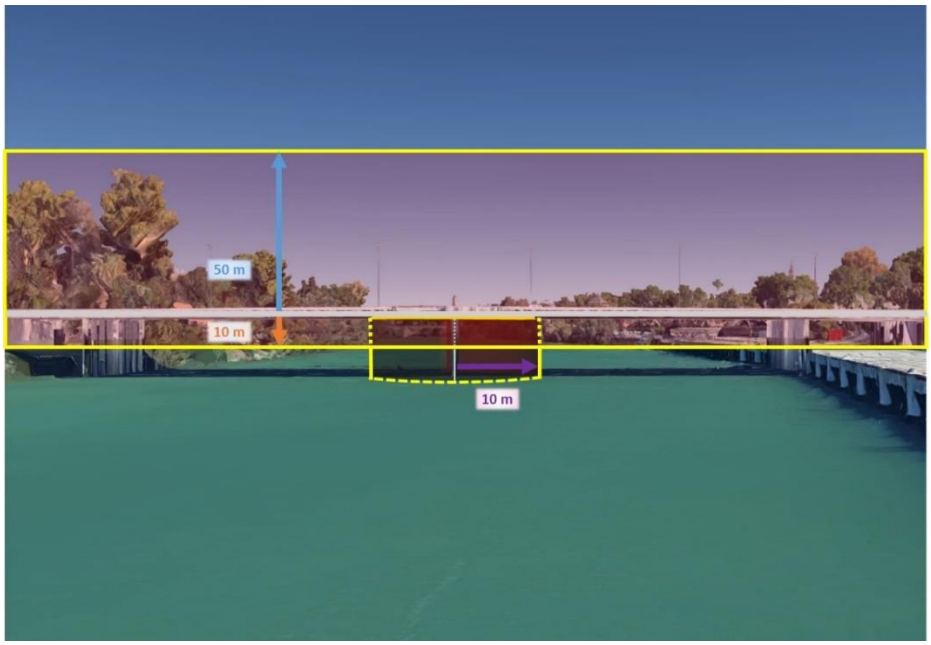

Illustration 12. Linear infrastructure with bridge – Elevation view

Illustration 13. Linear infrastructure with bridge – Plan view

2.3.2. Prohibitions, conditions and limitations

UAS may not be operated in these zones except with the prior, express permission of the owner or manager of the facility or infrastructure and, where applicable, under the conditions stipulated by them.

2.3.3. Exemptions

Prohibitions and limitations **regarding railway infrastructure** shall not be applicable to UAS operations:

a) carried out directly or indirectly by the owner or manager of the facility or infrastructure in the exercise of their authority;

b) when the nature of the mission so requires, for operations carried out by:

1. Law Enforcement Agencies (LEA) operating under the authority of the National Government or police forces operating under the authority of any of Spain's regional administrations;

2. The Deputy Directorate for Customs Surveillance (DAVA);

3. The National Intelligence Centre (CNI); and

4. The Directorate-General for Traffic (DGT) or agencies operating under the authority of any of Spain's regional administrations responsible for traffic surveillance and for imposing penalties for traffic offences.

The prohibitions and limitations **regarding other infrastructure** detailed in this section shall not be applicable to UAS operations:

a) carried out directly or indirectly by the owner or manager of the facility or infrastructure in the exercise of their authority; and

b) carried out during the performance of non-EASA activities or services.

In all the scenarios described in this section, the appropriate mitigation measures must be taken.

2.3.4. Summary table

	FACILITIES AND INFRASTRUCTURE PROVIDING ESSENTIAL SERVICES	
TYPE OF ACTIVITY 1	**Railway infrastructure**	**Other infrastructure**
EASA activities (all operators)	Not permitted* (Art. 39.3 RD UAS 517/2024)	Not permitted* (Art. 39.3 RD UAS 517/2024)
Non-EASA activities (LEA, DAVA, CNI and DGT)	Permitted (Art. 39.4.a RD UAS 517/2024)	Permitted (Art. 39.4.b RD UAS 517/2024)
Non-EASA activities (other operators)	Not permitted* (Art. 39.4.a RD UAS 517/2024)	Permitted (Art. 39.4.b RD UAS 517/2024)

* Except for: operations carried out with the prior, express permission of the owner or manager of the facility or infrastructure and, where applicable, under the conditions stipulated by them; operations carried out directly or indirectly by the owner or manager of the facility or infrastructure; and operations carried out above the specified protection volumes provided that the operational category requirements are met.

2.4. General zones to ensure public safety and protect people and property in urban environments

2.4.1. Specification of zones

Pursuant to Article 40 of Royal Decree 517/2024, geographical zones containing urban environments are considered general UAS geographical zones to ensure public safety and protect people and property in urban environments. In this regard, "urban environments" are defined as:

a) Population hubs including **built-up areas**;

b) **Residential, commercial or industrial** areas whose total grounds include road access points, paved walkways for pedestrian access, and water drainage and public lighting; and

c) **Recreational areas accessible to the public** that contain permanent or temporary constructions or facilities for leisure, recreation or sport, including, in all cases, any beaches meeting both these criteria, as well as parks or gardens managed by local authorities.

These zones extend horizontally over the surface area of the urban environments defined above and vertically up to a height of **300 metres** over the highest obstacle located within a 600-metre radius of the unmanned aircraft.

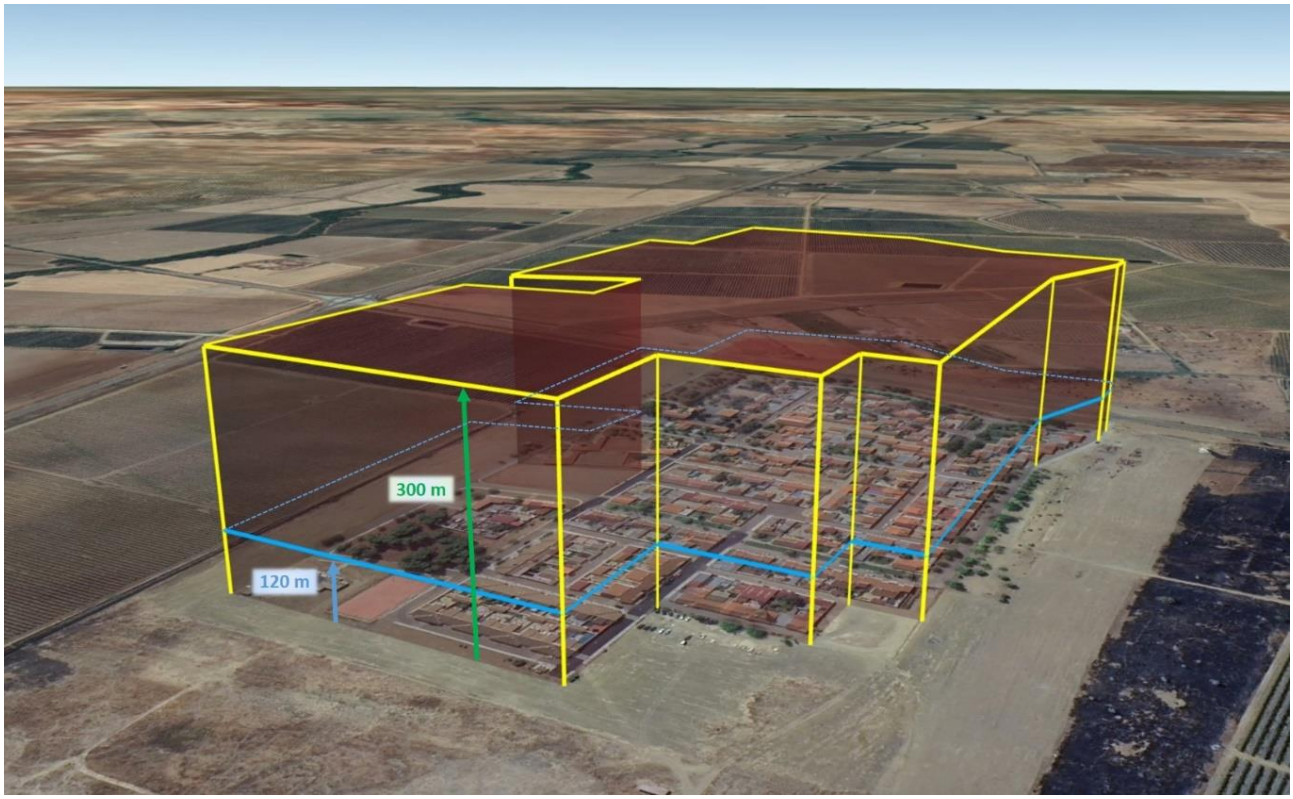

Illustration 14. Example of an urban environment – Oblique view

2.4.2. Prohibitions, conditions and limitations

In these zones, UAS operations are cumulatively subject, depending on the circumstances of the specific operation, to the limitations below.

2.4.2.1. Obligation to give prior notice to the Ministry of the Interior

UAS operators required to register as such that wish to carry out UAS operations in urban environments or over assemblies of people must give prior notice thereof to the Ministry of the Interior at least five calendar days before commencing said operations. A single form (available on the website of the Ministry of the Interior) must be filled in and submitted for all the operations the UAS operator intends to carry out during the five calendar days beginning on the scheduled date of commencement of operations specified therein. In this regard, the UAS operator is required to state the date and specific time slot as well as the area in which each operation will be carried out, with the required specificity.

The competent authorities, in the exercise of their duty to protect public safety, may restrict or prohibit operations when they entail serious risks for the protection of people and/or property.

2.4.2.2. Prohibition against flying over buildings

To carry out "open" category operations in urban environments, remote pilots must offer assurance that the unmanned aircraft will not fly over buildings or stable, building-like constructions, houses, or any other places of residence, including, in all cases, their recreational areas, patios and similar areas, whether publicly or privately owned (hereinafter, “buildings or similar”).

2.4.2.3. Safety distances

- For subcategory A1 "open" category operations, **no horizontal safety distance** from buildings or similar **is established** for **UAS marked as class C0, C1, legacy or privately built with an MTOM, including payload, of less than 250 g**.
- For subcategory A1 "open" category operations, a **horizontal safety distance of 5 metres** from buildings or similar is established for **UAS marked as class C1 with an MTOM, including payload, equal to or exceeding 250 g**.
- For subcategory A2 "open" category operations, a **horizontal safety distance of 30 metres** from buildings or similar is established for **UAS marked as class C2 with an MTOM, including payload, of less than 4 kg**, except in the case of UAS **with an active low-speed mode function, for which this distance may be reduced to 5 metres**.
- For subcategory A3 "open" category operations, a **horizontal safety distance of 150 metres** from residential, commercial, industrial and recreational areas **is established**.
- For "specific" category operations, the **horizontal safety distance from buildings or similar shall be determined in the conditions of the operational declaration, operational authorization or Light UAS Operator Certificate (LUC).**

The above notwithstanding, the competent body, the owner or administrator of the buildings or similar, subject to the prior request of the UAS operator concerned, may exempt them, prior to the operation, from the prohibition against flying over said buildings or similar, as well as from the established safety distances, or reduce said distances, provided that all other operational conditions and any other conditions relating to UAS geographical zones which may apply to the place of operation are met.

2.4.3. Exemptions for non-EASA activities

The limitations and prohibitions applicable to these zones are not applicable to operations carried out during the performance of non-EASA activities or services.

2.4.4. *Table of requirements*

	PUBLIC SAFETY AND THE PROTECTION OF PEOPLE AND PROPERTY IN URBAN ENVIRONMENTS		
	Notice given to the Ministry of the Interior	**Horizontal safety distance**	**Flying over prohibited**
A1 Open Category UAS Class C0, UAS Class C1 MTOM < 250 g UAS Legacy MTOM < 250 g Privately built UAS < 250 g *(If required to register as a UAS operator)*	Yes (Art. 40.3.a RD UAS 517/2024)	No (Art. 40.3.b RD UAS 517/2024)	Yes** (Art. 40.3.b RD UAS 517/2024)
A1 Open Category UAS Class C1 MTOM > 250 g	Yes (Art. 40.3.a RD UAS 517/2024)	5 metres (Art. 40.3.b RD UAS 517/2024)	Yes** (Art. 40.3.b RD UAS 517/2024)
A2 Open Category UAS class C2 MTOM < 4 kg	Yes (Art. 40.3.a RD UAS 517/2024)	30 metres or 5 metres* (Art. 40.3.b RD UAS 517/2024)	Yes** (Art. 40.3.b RD UAS 517/2024)
A3 Open Category	No	150 metres*** (UAS.OPEN.040 RE (EU) 2019/947)	Yes (UAS.OPEN.040 RE (EU) 2019/947)
Specific Category Standard scenarios, Operational authorization, LUC	Yes (Art.40.3.a RD UAS 517/2024)	In accordance with the standard scenario, operational authorization and/or LUC	In accordance with the standard scenario, operational authorization and/or LUC
Non-EASA activities Any operational category	No (Art. 40.5 RD UAS 517/2024)	No (Art. 40.5 RD UAS 517/2024)	No (Art. 40.5 RD UAS 517/2024)

* UAS with an active low-speed mode function

** Except when prior authorization has been given by the individual or organization responsible for the building or construction exempting them from the prohibition against flying over said building or construction or reducing the horizontal safety distances (Art. 40.4 RD UAS 517/2024)

*** UAS shall be operated at a distance of 150 metres from residential, commercial, industrial or recreational areas.

2.5. General zones to ensure operational safety in the vicinity of civil or military aerodromes or heliports

2.5.1. *Specification of zones*

Pursuant to Article 41 of Royal Decree 517/2024, the UAS geographical zones to ensure operational safety in the vicinity of civil or military aerodromes or heliports are defined as follows:

a) At public-use civil aerodromes and military aerodromes of any kind other than heliports:

1) **Up to a height of 45 metres,** measured from the Aerodrome Reference Point (hereinafter, ARP): an area with a length of **6 kilometres** measured from the ends of the runway running outwards as though in extension of the runway axis and a width of **5 kilometres** on both sides measured from the runway axis. In all cases, the lower limit of this volume will be ground level.

2) **At a height of more than 45 metres and up to 900 metres**, both measured from the ARP: an area with a length of **10 kilometres** measured from the ends of the runway running outwards as though in extension of the runway axis and a width of **7.5 kilometres** on both sides measured from the runway axis.

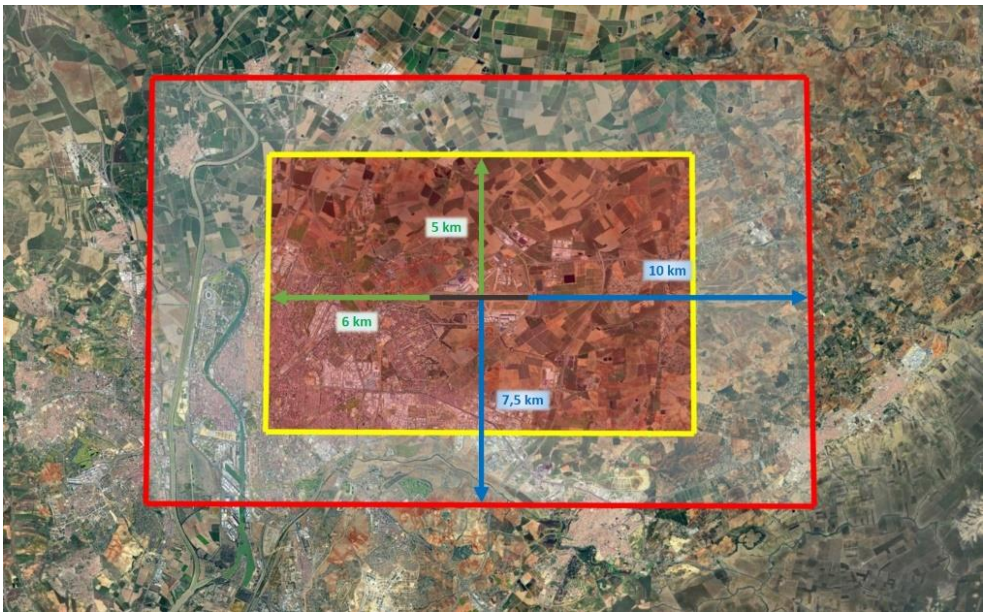

Illustration 15. Plan view of safety distances. Public-use civil aerodromes and military aerodromes other than heliports.

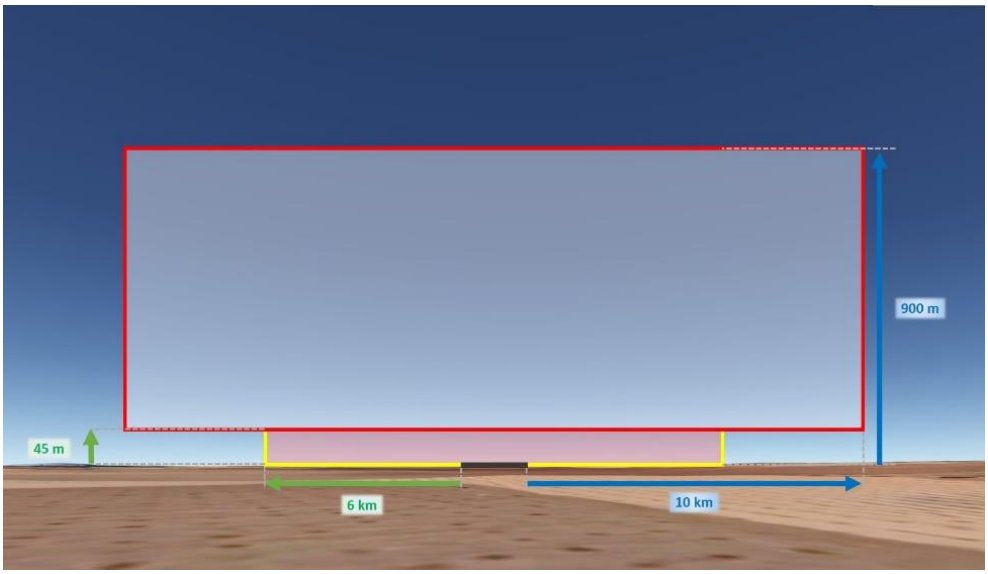

Illustration 16. Elevation view of safety distances. Public-use civil aerodromes and military aerodromes other than heliports.

b) At public-use civil heliports and military heliports of any kind:

1) **Up to a height of 90 metres**, measured from the Heliport Reference Point (hereinafter, HRP): an area with a length of **2.5 kilometres** measured from the ends of the Final Approach and Takeoff Area (hereinafter, FATO) running outwards as though in extension of the FATO axis and a width of **2.5 kilometres** on both sides measured from the FATO axis. In all cases, the lower limit of this volume will be ground level.

2) **At a height of between 90 metres and 900 metres**, both measured from the HRP: an area, measured from the FATO, of a length of **3.3 kilometres**, running outwards as though in extension of the FATO axis and a width of **3.3 kilometres** from each side of the FATO axis.

Illustration 17. Plan view of safety distances. Public-use civil heliports and military heliports.

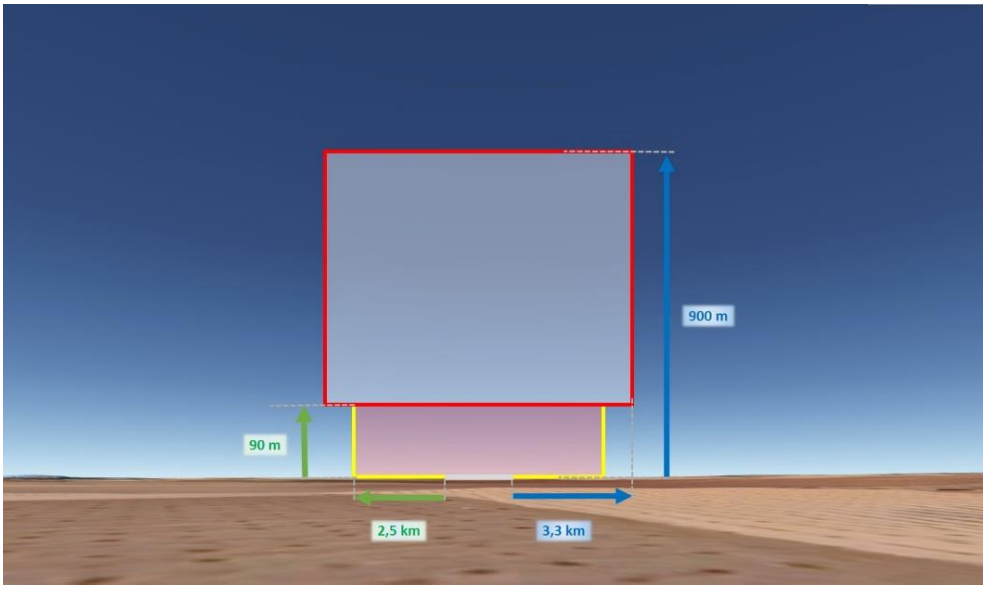

Illustration 18. Elevation view of safety distances. Public-use civil heliports and military heliports.

c) At restricted-use civil aerodromes other than heliports:

1) **Up to a height of 45 metres**, measured from the ARP: an area with a length of **3 kilometres** measured from the ends of the runway running outwards as though in extension of the runway axis and a width of **3 kilometres** on both sides measured from the runway axis. In all cases, the lower limit of this volume will be ground level.

2) **At a height of more than 45 metres and up to 900 metres**, measured from the ARP: an area, measured from the ends of the runway, of a length of **5 kilometres** running outwards as though in extension of the runway axis and a width of **4.5 kilometres** on both sides measured from the runway axis.

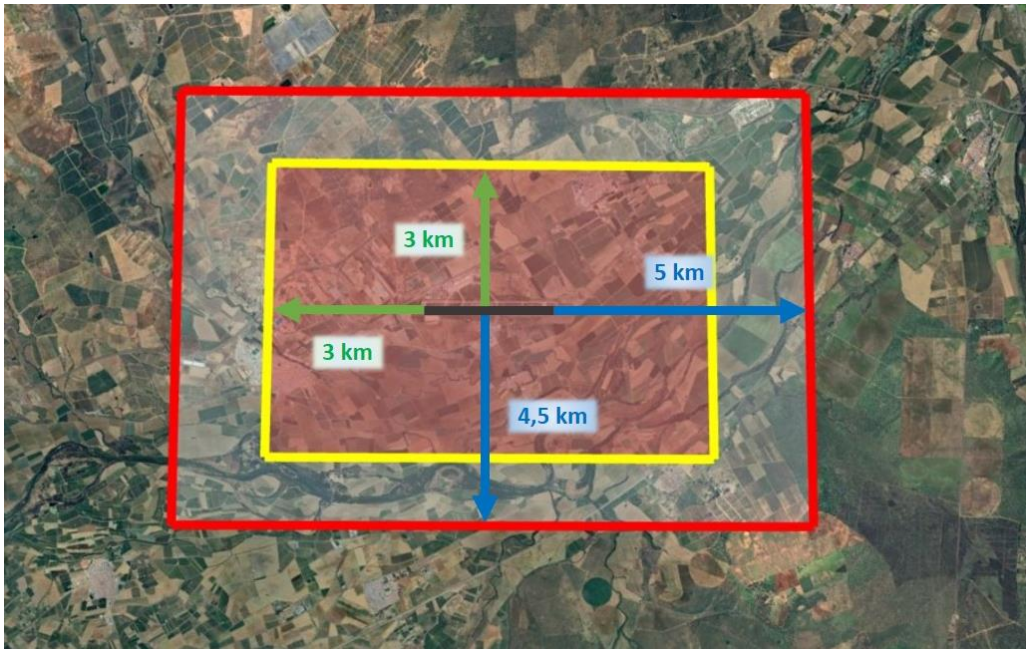

Illustration 19. Plan view of safety distances. Restricted-use civil aerodromes other than heliports.

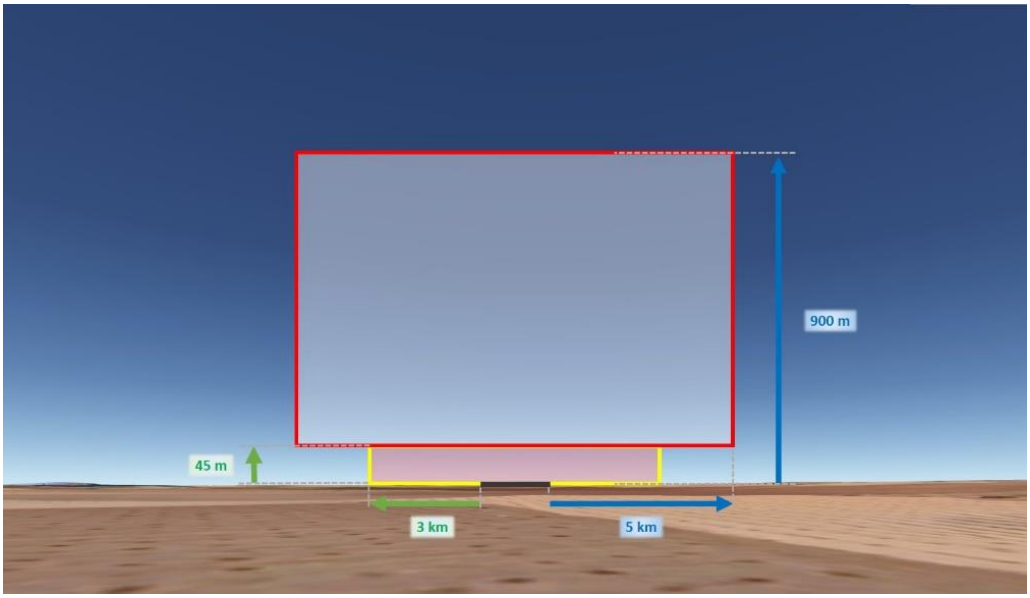

Illustration 20. Elevation view of safety distances. Restricted-use civil aerodromes other than heliports.

d) At restricted-use civil heliports:

1) **Up to a height of 90 metres**, measured from the HRP: a circular area with a radius of **2.5 kilometres** from the centre of the FATO. At restricted-use heliports with runway-type FATOs of more than 100 metres long, said distance shall be measured from each end of the FATO. In all cases, the lower limit of this volume will be ground level.

2) **At a height of more than 90 metres and up to 450 metres**, both measured from the HRP: a circular area with a radius of **3.3 kilometres** from the centre of the FATO. At those restricted-use heliports with a runway-type FATO of more than 100 metres long, said distance shall be measured from each end of the FATO.

Illustration 21. Plan view of safety distances. Restricted-use civil heliports.

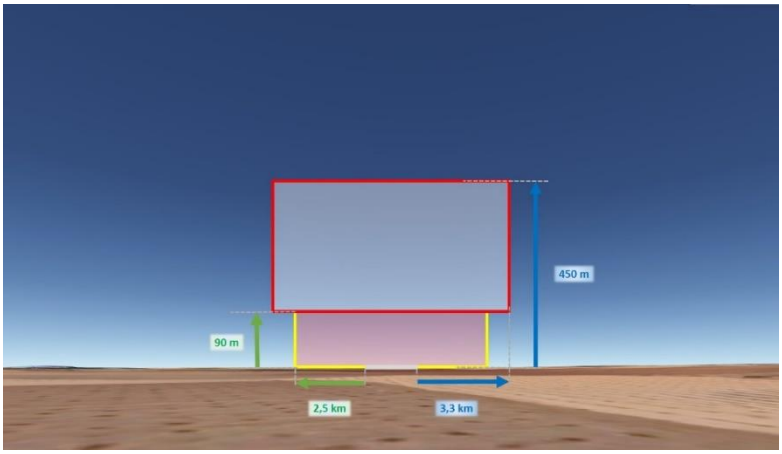

Illustration 22. Elevation view of safety distances. Restricted-use civil heliports.

At aerodromes and heliports operating alternately as public-use and as restricted-use, geographical zones for public-use aerodromes and heliports shall be established. Prohibitions and conditions shall apply during the periods in which said aerodromes are operational.

On the AIP AD 1.3. you can find the list of civil and military aerodromes and heliports, as well as the list of restricted aerodromes and heliports.

2.5.2. Prohibitions, conditions and limitations

Operating a UAS is prohibited in these zones, except when, through the operational procedures for coordination between the UAS operator and the aerodrome or heliport manager and, if such a figure exists, the corresponding ATSP, UAS operations are permitted in these zones, subject to the stipulations set forth in the coordination procedures.

Article 43.6.b of Royal Decree 517/2024 entitles aerodrome or heliport manager to require a suitable communications equipment capable of maintaining two-way communications with aeronautical stations. When use of the air band is required, pilots must be in possession of a radio operator certificate (covering both practice and theory) and substantiate that they have sufficient knowledge of the language or languages used in aviation communications, pursuant to Article 34.b of Royal Decree 517/2024.

Pursuant to First Transitional Provision of Royal Decree 517/2024, radio operator certificates issued by an approved training organization (ATO) or ultralight aircraft academy in accordance with article 33 of Royal Decree 1036/2017 will be valid until 25th June 2026

2.5.3. Exemptions for non-EASA activities

Pursuant to Article 44 of Royal Decree 517/2024, two exceptions have been established:

a) The conditions for operating UAS in these zones shall not apply in the case of non-EASA activities or services aimed at countering organized crime, terrorism or very serious threats to public safety, or at preventing and avoiding dangers, threats or acts of aggression against the independence or territorial integrity of Spain, its national interests and the stability of the rule of law or of its institutions, in those cases where unforeseen circumstances arise that make compliance with the requirements applicable to said zones incompatible with the purpose of the UAS operations. This exemption will only apply to operations carried out directly by the following public authorities:

   1. **LEA** operating under the authority of the National Government or police forces operating under the authority of any of Spain's regional administrations;

   2. **DAVA**; and

   3. **CNI**.

   In these cases, the UAS operator must coordinate in real time in order to adopt the necessary measures to guarantee the safety of other air operations. The duration of said UAS operations shall always be limited to the minimum time necessary.

b) UAS may be operated in the framework of non-EASA activities or services without any requirement to apply the operational coordination procedures, provided that the following conditions **simultaneously** apply:

   1. **The UAS will not be operated in civil aerodromes or heliports for public use or in military aerodromes or heliports**;

   2. The **operations are urgent** and as such, and due to their nature, cannot be delayed and therefore cannot be planned or coordinated with the required notice; and

3. The UAS operator has an **operational risk assessment document** covering this type of UAS operation and takes the complementary mitigation measures to guarantee levels of safety equivalent to those established for said zones.

2.5.4. Table of requirements

	VICINITY OF CIVIL OR MILITARY AERODROMES OR HELIPORTS	
TYPE OF ACTIVITY	Military and public-use civil aerodromes and heliports	Restricted-use aerodromes and heliports
EASA activities (All operators)	Not permitted* (Art. 41.2 RD UAS 517/2024)	Not permitted* (Art.41.2 RD UAS 517/2024)
Non-EASA activities (LEA, DAVA and CNI)	Permitted** (Art. 44.1 RD UAS 517/2024)	Permitted** (Art. 44.1 RD UAS 517/2024)
Non-EASA activities (Other operators)	Not permitted* (Art.41.2 RD UAS 517/2024)	Permitted*** (Art.44.2. RD UAS 517/2024)

*Except through operational procedures for coordination between the UAS operator and the aerodrome or heliport manager and, if such a figure exists, the corresponding ATSP.

** In the case of activities included in section 2.5.3.a of this Guide, the UAS operator must coordinate in real time with the ATSPs concerned. The duration of said UAS operations shall always be limited to the minimum time necessary.

***Urgent operations for which the UAS operator has an operational risk assessment document covering this type of UAS operation and takes the complementary mitigation measures to guarantee levels of safety equivalent to those established for said zones.

2.6. General zones to ensure operational safety in controlled airspace and flight information zones

2.6.1. Specification of zones

Pursuant to Section 42 of Royal Decree 517/2024, controlled airspace volumes and flight information zones (FIZ) are designated as general UAS geographical zones for safety purposes.

2.6.2. Prohibitions, conditions and limitations

The operation of UAS is banned in said zones, except in the following cases:

a) The UAS operation is carried out within the pilot's Visual Line of Sight (**VLOS**) **at a maximum height of 60 metres** and **outside general or specific UAS geographical zones to ensure operational safety in the vicinity of civil or military aerodromes and heliports**;

These operations are exempt from the requirements concerning coordination with the ATSP, the submission of a flight plan (FPL) and prior authorization from traffic control or communication to Aerodrome Flight Information Service (AFIS) staff.

b) The UAS operator guarantees the safety of the operation by means of an **Evaluación y Atenuación del Riesgo Operacional (EARO)** or similar document, completed in coordination with the corresponding **ATSP,** and the operation is carried out as established in said operational procedure.

These operations require the submission of a flight plan except when this is not stipulated in the ATSP's coordination procedure.

Further information is available on the ENAIRE website, as are specific instructions for the online completion and submission of a UAS FPL through the ICARO XXI app.

On first contact with air traffic services, the UAS call sign must include the words "*No tripulado*" or "Unmanned". If a flight plan is required, it must clearly state it is an "Unmanned Aircraft System (UAS)".

2.6.2.1. Operational Risk Assessment and Mitigation and coordination of operations with Air Traffic Service Providers

The ATSP provides the UAS operator with an EARO (Evaluación y Atenuación del Riesgo Operacional) form, whether through their website or upon request.

An ATSP-validated EARO form constitutes proof that an air safety study has been coordinated, in accordance with Article 43 of Royal Decree 517/2024 and with the procedure for coordination with the ATSP, pursuant to UAS.SPEC.040.1.b of Commission Implementing Regulation (EU) 2019/947.

In the case of UAS operations belonging to a specific category, the concept of operations (ConOps) and mitigation measures stated in the EARO document shall be those set out in the Risk Assessment or Standard Scenario (STS).

The ATSP contact details for the purposes of obtaining the EARO forms and/or templates and of conducting the coordination activities are as follows:

ATSPs		
ORGANIZATION	WHERE TO OBTAIN THE FORM	CONTACT DETAILS
ENAIRE	On its website	ENAIRE PLANEA app
SKYWAY	Email request sent to the central technical office	Technical office e-mail: uas@skyway-ans.com
SAERCO	On its website or by email request sent to central services	Operations management e-mail: uas@saerco.com
MINISTRY OF DEFENCE	Email request sent to the specific unit (military base)	Affected ATS unit, pursuant to Appendix I of the National Aeronautical Circular of 11 July 2024 (AIC NTL 01/24) of section AIP "Circulars"

ATSPs and the premises where they undertake these services can be found in the AIP GEN 3.3, as well as in the ENAIRE Drones app by selecting a controlled airspace or FIZ.

2.6.2.2. Communications equipment

Article 43.6.a of Royal Decree 517/2024 entitles ATSPs to require a voice communication system between the control station and the ATSP and/or suitable communications equipment capable of sustaining two-way communications with aeronautical stations. When use of the air band is required, pilots must be in possession of a radio operator certificate (covering both practice and theory) and substantiate that they have sufficient knowledge of the language or languages used in aviation communications, pursuant to Article 34.b of Royal Decree 517/2024.

Pursuant to First Transitional Provision of Royal Decree 517/2024, radio operator certificates issued by an approved training organization (ATO) or ultralight aircraft academy in accordance with article 33 of Royal Decree 1036/2017 will be valid until 25th June 2026

2.6.3. Exemptions for non-EASA activities

Pursuant to Article 44 of Royal Decree 517/2024, the conditions for operating UAS in these zones do not apply in the case of non-EASA activities or services aimed at countering organized crime, terrorism or very serious threats to public safety, or at preventing and avoiding dangers, threats or acts of aggression against the independence or territorial integrity of Spain, its national interests and the stability of the rule of law or of its institutions, in those cases where unforeseen circumstances arise that make compliance with the requirements applicable to said zones incompatible with the purpose of the UAS operations. This exemption shall only apply to operations carried out directly by the following public authorities:

1. **LEA** operating under the authority of the National Government or police forces operating under the authority of any of Spain's regional administrations**;**
2. **DAVA**; and
3. **CNI**.

In these cases, the UAS operator must coordinate in real time with the ATSPs concerned through general action protocols in order to adopt the necessary measures to guarantee the safety of other air operations. The duration of said UAS operations shall always be limited to the minimum time necessary.

2.6.4. Table of requirements

The table and figure below summarize the different possible cases and applicable requirements.

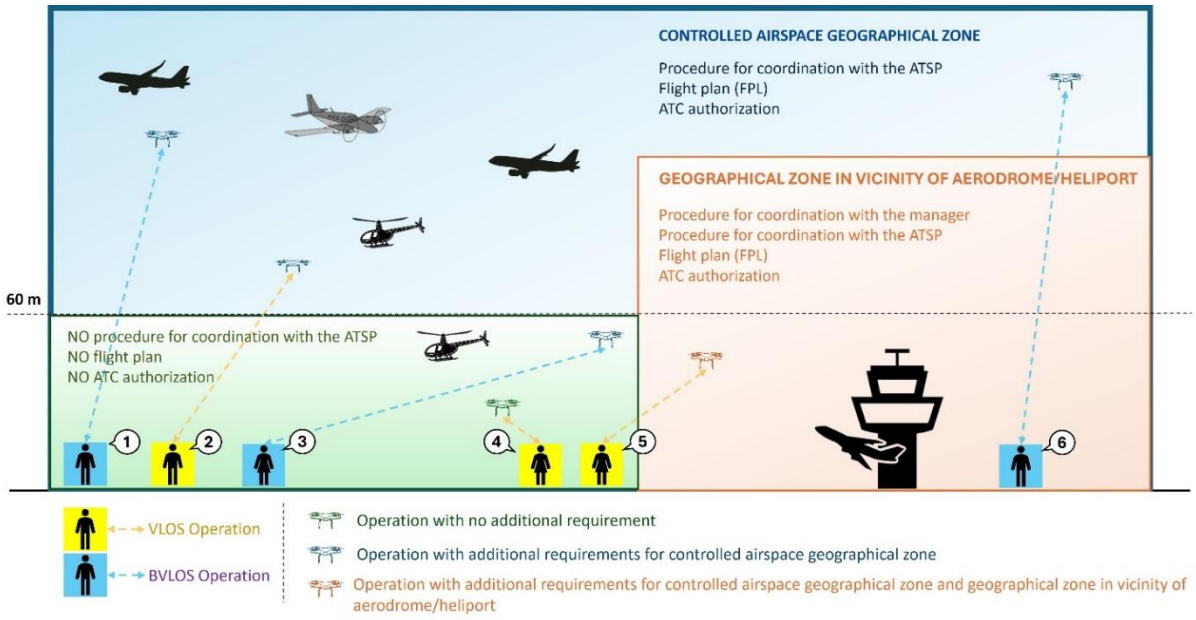

Figure 23. Analysis of different cases in a controlled airspace geographical zone.

		VLOS	H<60 metres	Outside aerodrome or heliport distances	Additional limitations
Non-EASA activities (LEA, DAVA and CNI)		YES/NO	YES/NO	YES/NO	**NO*** (Art. 44.1 RD UAS 517/2024)
EASA & NON-EASA ACTIVITIES (Other operators)	CASE 1	NO	NO	YES	**YES** Controlled airspace geographical zone
	CASE 2	YES	NO	YES	**YES** Controlled airspace geographical zone
	CASE 3	NO	YES	YES	**YES** Controlled airspace geographical zone
	CASE 4	YES	YES	YES	**NO**
	CASE 5	YES	YES	NO	**YES** Controlled airspace geographical zone Geographical zone in vicinity of aerodrome/heliport
	CASE 6	NO	NO	YES	**YES** Controlled airspace geographical zone

*The UAS operator must coordinate with the ATSPs concerned in real time and (where required) through general action protocols.

3. SPECIFIC UAS GEOGRAPHICAL ZONES

In addition to the general geographical zones described in Section 2 hereof, CIDETRA may approve specific UAS geographical zones for reasons of general interest and on a permanent basis, although they may also be activated temporarily, provided that the purpose for establishing such a zone is not served by a general UAS geographical zone.

Moreover, Commission Implementing Regulation (EU) 2021/664, on a regulatory framework for the U-space, defines **"U-space airspace"** as a UAS geographical zone, designated by Member States, where UAS operations are only allowed to take place with the support of U-space services. The aim is to provide protected, efficient and safe access to U-space airspace to a large number of UAS.

Pursuant to Commission Implementing Regulation (EU) 2019/947 and Commission Implementing Regulation (EU) 2021/664, for reasons of geo-awareness, information on UAS geographical zones defined and established in national airspace, as well as all designated U-space airspace, shall be made publicly available in a common unique digital format (Enaire Drones).

For more information regarding the procedure establishing specific UAS geographical zones, see the UAS geographical zones website.

APPENDIX A
OPERATIONAL PROCEDURE FOR COORDINATION BETWEEN UAS OPERATORS AND AERODROME AND HELIPORT MANAGERS AND AIR TRAFFIC SERVICE PROVIDERS

Pursuant to Article 43 of Royal Decree 517/2024, if a general or specific UAS geographical zone requires prior coordination between UAS operators and the aerodrome and heliport managers and ATSPs concerned, the operation may not be carried out unless coordination or an express affirmative response has been obtained from all the managers and ATSPs concerned. Applicants must follow the procedure below.

A.1. Submission of application for coordination

The UAS operator shall apply for coordination, supplying sufficient information on the purpose, type and characteristics of the operations it intends to carry out.

In the application, the UAS operator must substantiate the reasons why the operations need to be carried out at the requested location.

A.2. Receipt of application for coordination

Once the application for coordination has been received, if the type and characteristics of the proposed operation are in line with the standard coordination procedures for UAS operators, the managers and ATSPs concerned shall be obliged to provide the UAS operator with an affirmative response within one month.

If the operation is not in line with the standard coordination procedures, the managers and ATSPs concerned shall be obliged to, within a month, provide the UAS operator with:

a) the necessary information to enable them to plan their operations; or

b) an explanation as to why coordination is impossible. This may be because:

   1. the UAS operator has not duly substantiated the need for the proposed UAS operations to be carried out in the requested location within a UAS geographical zone; or

   2. the application was previously rejected, and no changes have been made to the aspects of the application that led to the rejection.

A.3. Supply of information by the UAS operator

Once the UAS operator has received the necessary information to plan their UAS operations, they must send to the managers and ATSPs concerned the plan for their operations based on the information received. They must also submit mitigation measures, where appropriate, as well as the following information about the UAS operator:

a) Name and surname(s) if a natural person; company name and name and surname(s) of legal representative if a legal person;

b) Spanish ID number, Spanish ID number for foreigners or, in the case of non-resident foreigners, passport number; in the case of legal persons, tax identification number;

c) Telephone number and contact email;

d) UAS operator registration number, in those cases where registration is compulsory pursuant to Commission Implementing Regulation (EU) 2019/947; and

e) A serial number identifying the UAS to be used, unless this number is not required by European Union Law, as well as information on whether or not the UAS is equipped with a remote identification system or accessory.

A.4. Review of information received

If information received from the UAS operator is incomplete or insufficient to assess the impact of the planned operations, the managers and ATSPs may request further information. They must specify which additional information they require to assess the impact on operations and establish coordination.

A.5. Additional requests for operation

To grant a coordination procedure, managers and ATSPs may request that the UAS operator make changes to the planned operation(s), including the application of additional mitigation measures and the change of date or time of the operation(s), in order to guarantee that the operation is coordinated properly and conducted safely.

In addition:

a) ASTPs may request that the UAS be equipped with one or several of the following:

   1. A voice communication system between the control station and the ASTP and/or appropriate communications equipment capable of supporting bidirectional communication with aviation stations;
   2. Anti-collision or navigation lights, as long as they do not create confusion for other users;
   3. Transponder or other identification system for ATS.

b) Aerodrome and heliport managers may require that UAS be equipped with a communications system capable of supporting bidirectional communication with aviation stations.

A.6. Acceptance of coordination procedure

Once the applicant has received the request described in the previous section, they must either:

a) Inform the aerodrome or heliport manager or ATSP to which the application is addressed of their acceptance of the changes requested to the planned operation(s); or

b) Propose other changes to the planned operation(s), including additional or different mitigation measures, as well as changes to the date and time of the operation(s). The UAS operator and aerodrome and heliport managers and ATSPs may exchange several proposals until they reach an agreement on the operation plan.

A.7. Deadlines for coordination

The managers and ATSPs concerned must coordinate with the UAS operator within a maximum period of one month after:

a) The UAS operator submits an operation plan including the information set out in section A.3, as long as the information listed in section A.4 was not requested nor was there a request to make changes to the operations, as set out in section A.5; or

b) The managers and ATSPs receive a response from the UAS operator regarding the request for further information issued in line with section A.4 hereof and do not deem it necessary to request further changes in the planned operation(s), in line with section A.5; or

c) The managers and ATSPs receive a response from the UAS operator accepting the changes requested in line with section A.6, letter a); or

d) An agreement is reached between the managers, ATSPS and the UAS operator regarding changes to planned operations, in line with section A.6, letter b).

Coordination of requested operations shall be carried out at the earliest possible date. The UAS operator shall be informed at least 72 hours in advance of the UAS operation(s), unless agreed otherwise.

A.8. Refusal of coordination

Once the necessary information to plan operations has been supplied to the UAS operator, and provided that the UAS operator has complied with requests for information and responded to requests for changes to operation(s), coordination may only be refused in writing. Refusals, the grounds for which must be provided, are only permissible in those cases where the aerodrome or heliport manager or ATSP can prove that, in spite of the proposed or agreed mitigation measures and changes to the date and time of the UAS operation(s), the impact remains unacceptable for the operational safety, regularity or continuity of other aircraft operations.

The application for coordination shall be understood to have been tacitly rejected when no agreement has been reached on the coordination of the operation and one month has elapsed since the UAS operator:

a) submitted the initial requested information;

b) submitted additional requested information; or

c) submitted their latest proposal for changes to the operation.

However, coordination between the aerodrome manager or ATSP and the UAS operator may be agreed at a later stage, after the deadline has expired.

A.9. Documentation

All parties involved must document the coordination procedure. Its content shall be adapted to each case, taking into account the type of operation, its characteristics and the volume of traffic, among other factors, as well as usual operations in the UAS geographical zone in which coordination is required.

UAS operators and the aerodrome and heliport managers and ATSPs concerned must keep all coordination procedure documents available to the Spanish National Aviation Safety and Security Agency for three years after the operation is carried out or coordination is rejected.

A.10. Standard coordination procedure

In order to coordinate with UAS operators, managers and ATSPs may create standard coordination procedures for each aerodrome, heliport or airspace volume in which they provide ATS, respectively. Standard operations which should always be granted coordination may be described in said documents.

Nevertheless, applications managed using a standard coordination procedure shall be understood to have been tacitly rejected when one month has elapsed since the application was submitted to the aerodrome or heliport manager or ATSP without any response having been sent to the UAS operator.

A.11. Coordination procedure flow chart

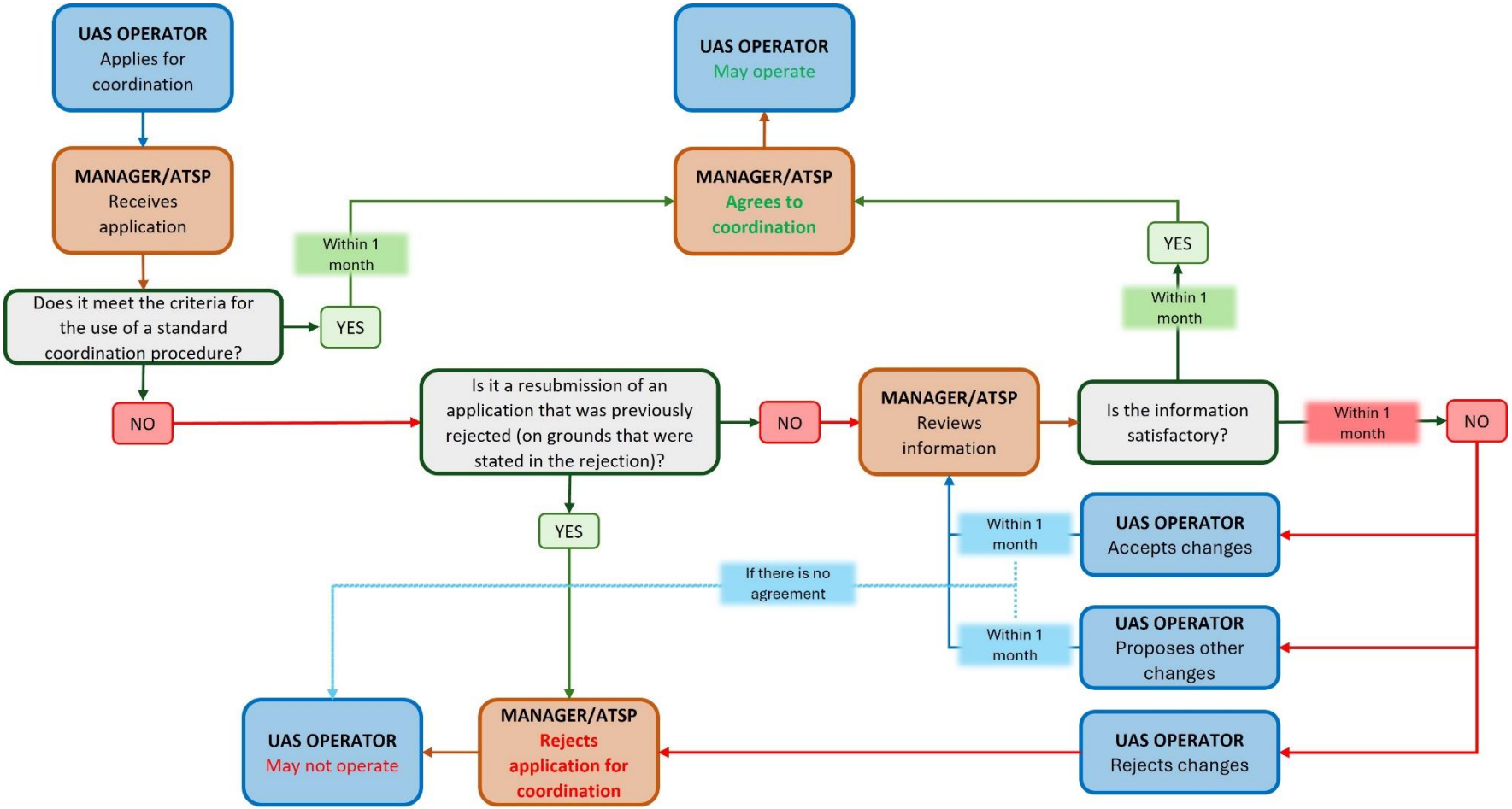

Figure 24. Coordination procedure flow chart.

APPENDIX I
COORDINATION AGREEMENT BETWEEN RESTRICTED-USE AERODROMES AND HELIPORTS AND AN UNMANNED AIRCRAFT SYSTEM OPERATOR

You can download APPENDIX I - COORDINATION AGREEMENT BETWEEN RESTRICTED-USE AERODROMES AND HELIPORTS AND AN UNMANNED AIRCRAFT SYSTEM OPERATOR under section "Vuelos con UAS/Drones (Zonificación)" of our website.