

Y AGENDA URBANA



AGENCIA ESTATAL DE SEGURIDAD AÉREA



SENASA

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VERTIPORTS

Certification/licensing by NAA



Vertiports for VTOL operations

- Large number of vertiports network
- Public use, commercial operations
- Mostly domestic, some international
- Urban environments: passenger and urban protection
- Will require certification/license from NAAs
- Vertistops?
- Initial operations: visual 2024/2025
- Evolution: remotely piloted/autonomous

Enablers of certification/license by NAAs

- Comprehensive set of regulations
- Need for development of AAM/UAM concepts
 - NAA's vertiport team: license + oversight
 - Resources + organisation + training
 - Part of aerodromes/heliports team



VERTIPORTS

Steps of the licencing process

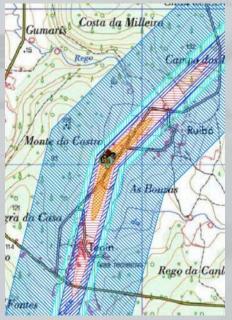


1. Airspace compatibility

- Complex airspace in urban environments -- Vertiports near or in controlled airspace
- Initially: conventional airspace / Evolution: AAM / UAM space
- 2. Need of support of local authorities
- Compatible land use regulation
- Commercial licences
- 3. Environmental impact assessment
- Noise from VTOL aircraft
- Limitation of arrival/departure paths
- Social acceptance: perceived risk / privacy issues







VERTIPORTS

Steps of the licencing process



4. Air Transit Services and Advanced Air Mobility

- Initial ops: visual and slow tempo. Tempo accelerando.
- Initial ATS services: ATC, AFIS, A/A G/A comms.
- Evolution: complex AAM space and AAM services
 - Remotely piloted / autonomous aircraft
 - Density of helicopters, drones, VTOL aircraft
- 5. Certification/license process NAA
- Compliance with Vertiport SARPs
- Vertiport Manual / SMS
- 6. Continuous oversight NAA



