

High-risk commercial SPO – EASA Member States (26.03.2024)

Member State	Contact person for authorisation of high-risk commercial specialised operations under ARO.OPS.150, including for cross-border high-risk commercial specialised operation: <ul style="list-style-type: none"> - Position, e-mail and phone number; - Link to the SPO dedicated website 	List of activities of high-risk commercial specialised operations in accordance with AMC1 ARO.OPS.150. <div style="background-color: yellow; text-align: center; padding: 5px;">Please note that this is a non-official compilation.</div> <p style="text-align: center;">Up-to-date information can be obtained directly from the Member States.</p>
Austria	ops@austrocontrol.at	<p>The following types of operations are considered as high risk air operations for the entire territory of the country, notwithstanding air operations carried out over areas where the safety of third parties on the ground is likely to be endangered in the event of an emergency:</p> <ol style="list-style-type: none"> 1. External load transport 2. Transport of persons as an external load 3. Avalanche dispersion flights 4. Line-control-flights (e. g. flights to control power-lines, gas-lines, pipelines) 5. Every operation during which existing protection standards (such as minimum flight altitudes, flying beneath cables/structures, etc.) are not met, regardless of any special permits required <p>***end***</p>
Belgium	spo.ops@mobilit.fgov.be FR: https://mobilit.belgium.be/fr/aviation/licences-et-agreements-organismes/operations-organismes/specialised-operations-spo-0 NL: https://mobilit.belgium.be/nl/luchtvaart/vergunninge-n-en-erkenningen-organisaties/operaties-organisaties/specialised-operations-0	<p>The Belgian Civil Aviation Authority (BCAA) has reviewed its list of SPO high risk activities in Belgium.</p> <p>In Belgium, the following commercial specialised operations are considered to be “high risk”:</p> <p>1) the following operations <u>over the congested areas of cities, towns or settlements or over an open-air assembly of persons</u>;</p> <ol style="list-style-type: none"> a) helicopter external loads operations (HESLO); b) human external cargo operations (HEC) ;

- c) construction work flights, including (but not limited to) stringing power line operations, clearing saw operations;
 - d) dropping of objects or spraying of substances from aircraft;
 - e) any specialized operation performed with single-engine aircraft below the SERA minimum heights (SERA.3105);
 - f) any specialized operation performed with multi-engine aircraft, at a height less than 500 ft above the highest obstacle within a radius of 600m from the aircraft;
 - g) any VFR specialized operation performed at night with multi-engine aircraft, at a height less than 500 ft above the highest obstacle located within 8km of the estimated position of aircraft.
- 2) the following operations elsewhere than over the congested areas of cities, towns or settlements or elsewhere than over an open-air assembly of persons;
- a) helicopter external loads operations (HESLO);
 - b) human external cargo operations (HEC);
 - c) construction work flights, including (but not limited to) stringing power line operations, clearing saw operations;
 - d) dropping of objects or spraying of substances from aircraft, when these dropping or aerial spraying operations might endanger the safety of third parties (people or property), including by pollution of soil, water or atmosphere;
 - e) any specialized operation performed during sport competitions or sport events with single-engine aircraft, at a height less than 500 ft above the highest obstacle within a radius of 150m from the aircraft;
 - f) any specialized operation performed during sport competitions or sport events with multi-engine aircraft, at a height less than 150 ft above the highest obstacle within a radius of 150m from the aircraft;
 - g) any specialized operation with single-engine aircraft, at a height less than 150 ft above the highest obstacle within a radius of 150m from the aircraft (except HESLO, HEC and construction work flights – see point 2) a) to c)).

		<p>This list may be subject to amendment.</p> <p>***end***</p>
Bulgaria	Flight.Ops@caa.bg	<p>SPO 1 Helicopter external loads operations</p> <p>SPO 2 Human external cargo operations</p> <p>SPO 3 Parachute operations and skydiving</p> <p>SPO 4 Agricultural flights</p> <p>SPO 5 Glider towing</p> <p>SPO 6 Construction work flights, including stringing power line operations, clearing saw operations</p> <p>SPO 7 News media flights, television and movie flights</p> <p>SPO 8 Special events flights, including such as flying display and competition flights</p> <p>SPO 9 Aerobatic flights</p> <p>SPO 10 Animal herding, animal rescue flights and veterinary dropping flights</p> <p>***end***</p>
Croatia	<p>Vili VUKSIC</p> <p>Head of Flight Operations and Training Department</p> <p>vili.vuksic@ccaa.hr</p> <p>http://www.ccaa.hr/english/naslovnica_1/</p>	<p>Activities of high risk commercial specialised operations:</p> <ol style="list-style-type: none"> 1. Helicopter external sling loads operations (HESLO); 2. Human external cargo operations (HEC); 3. Dropping or spraying from an aircraft in flight; 4. Any commercial specialized operation below SERA minimum heights over the congested areas of cities, towns or settlements or over an open-air assembly of persons. <p>***end***</p>
Cyprus	(*) EASA does not have information on the high-risk SPO contact person or list of such activities)	

Czech Republic	<p>Mr. Aleš KUBA kuba@caa.cz</p> <p>https://www.caa.cz/provoz/neobchodni-a-zvlastni-provoz/zvlastni-provoz-spo-dle-pravidel-eu/</p>	<ul style="list-style-type: none"> • Flights over congested areas of cities, towns or settlements or over an open-air assembly of persons: <ul style="list-style-type: none"> a. where a safe forced landing cannot be made, or b. where multi-engine aircraft cannot safely continue the flight with one engine inoperative; c. at a heights less than specified in SERA.5005(f); d. including external load operations; e. including hoist operations. • Towing of aircraft and other objects, excluding sailplane and banner towing. <p>***end***</p>
Denmark	<p>Anders MADSEN Chief Inspector, Centre for Civil Aviation e-mail: anma@tbst.dk www.trafikstyrelsen.dk https://tbst.dk/da/Luftfart/Tilladelser-til-flyveoperationer/Specielle-operationer-med-hoej-ryisiko</p>	<ul style="list-style-type: none"> a) Flying lower than 1000ft GND over crowds b) Flying with dangerous goods on board c) Flying below minimum height (1000ft over cities and crowds, 500ft outside cities and over water) d) Aerobatic flights below 2000ft GND e) Dropping or spraying from aircraft f) Operations where persons, which is not part of the crew, are leaving or going on board the aircraft during flight g) Offshore operations and flights to/from ship decks. <p>***end***</p>
Estonia	<p>Risto ROOSVEE Senior Inspector of Flight Operations Department Risto.Roosve@ecaa.ee</p>	<ul style="list-style-type: none"> a) flights below minimum SERA heights; b) helicopter external sling load and human external cargo operations; c) flights during which substances are released from the aircraft, on the condition that these substances are considered to be harmful for third parties on the ground or for the aircraft itself according to the operator's assessment; d) aerobatic flights during flying displays;

		<p>e) aerobatic flights for the purpose of sensations to the persons on board;</p> <p>f) aerial photography, filming and survey operations over congested areas or open-air assembly of persons at such height from which safe forced landing cannot be made in the event of emergency;</p> <p>g) aerial advertising flights over congested areas or open-air assembly of persons;</p> <p>h) parachute dropping flights.</p> <p>***end***</p>
Finland	<p>Petri MIKKONEN</p> <p>Senior Inspector</p> <p>Flight Operations</p> <p>petri.mikkonen@trafi.fi</p>	<p>Finland CAA has defined “High Risk Commercial Special Operations” as part of National Regulation OPS M1-33 as follows:</p> <p>The following operations are considered as high-risk commercial specialised operations in Finland:</p> <p>a) flight operations that require flying below the minimum flight altitudes as specified in the Rules of the Air;</p> <p>b) flights over congested areas or over an open-air assembly of persons, where a safe forced landing cannot be made, or for multi-engine aircraft, the flight cannot be continued safely after failure of one engine;</p> <p>c) external load operations;</p> <p>d) hoist operations;</p> <p>e) towing of aircraft and other objects, excluding sailplane and glider towing; and</p> <p>f) offshore operations and flights to ship decks.</p> <p>***end***</p>
France	<p>Quitterie Henry-De-Villeneuve</p> <p>David Espert</p> <p>dsac-no-oh-bf@aviation-civile.gouv.fr</p>	<ul style="list-style-type: none"> • All operation performed, excluding public air shows subject to prefectoral authorisation by article R. 131-3 of the French civil aviation code, over a congested area, a “high-threshold” establishment, or in the vicinity of a gathering of people: <p>- at an altitude at which the performances of the aircraft do not allow the flight to continue or a forced landing to be made in the event of an engine failure, clear of the congested area, the gathering of persons or the “high threshold” establishment, and without any risk to the persons on the ground, who are not directly concerned by the activity; or</p>

- at altitudes below the following values:

		Congested area with an average width of less than 1,200 m or a gathering of fewer than 10,000 persons, or a “high threshold” establishment	Congested area with an average width of between 1,200 m and 3,600 m or a gathering of between 10,000 and 100,000 persons	Congested area with an average width of more than 3,600 m or a gathering of more than 100,000 persons
Single-engine aircraft	Day	300 m	400 m	500 m
	Night	600 m		
Multi-engine aircraft	Day	150 m		
	Night	300 m		

- Transportation of external loads by helicopter (HESLO) flying over a congested area, a gathering of persons or a “high threshold” establishment;
- Helicopter human external cargo (HEC) operations, when the helicopter does not have the capacity to maintain hover flight outside ground effect in the event of an engine failure;
- Sensational flights with more than two persons, excluding crew members, or using a complex aircraft as defined in Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008;
- Taking pictures of sporting events from a height of less than 50 m;

end

Germany	<p>Luftfahrt-Bundesamt Referat Flugbetrieb Hr. Klaus-Dieter Jahn 38144 Braunschweig, Germany E-Mail: For any new enquiry please use our generic SPO- email-box: SPO@lba.de</p> <p>Please note that for high risk commercial SPO of nCMPA under VFR the local authorities of the federal states of Germany will be the responsible authorities. In such cases the Luftfahrt-Bundesamt will initially coordinate the inquiry.</p> <p>Further information and documents (including a courtesy translation of the "high risk commercial SPO activities") are available on our website: http://www.lba.de/DE/Betrieb/Flugbetrieb/SPO/Festlegung_Formblaetter/SPO_Formblatt_Festlegung_nod_e.html</p>	<p>a) Operations for which the results of the risk assessment, which has to be performed by the operator according to SPO.OP.230, have identified a high risk according to ORO.SPO.110(a).</p> <p>b) Commercial specialised operations according to Part-SPO of Reg. (EU) No. 965/2012 that are performed below the minimum flight altitudes as applicable in the territory of the Federal Republic of Germany over cities, congested areas or over an assembly of persons. Flights conducted with the purpose of performing an airborne inspection of navigational aids and to validate flight procedures (Flight Inspection/Flight Calibration) are exempt from this requirement.</p> <p>c) External sling load / external cargo operations over cities, congested areas or over an assembly of persons.</p> <p>d) Human external cargo operations (HEC) over cities, congested areas or over an assembly of persons.</p> <p>e) Avalanche mining operations.</p> <p>***end***</p>
Greece	<p>http://hcaa.gov.gr/en Contact person Cpt. Georgios Portozoudis Email : g.portozoudis@hcaa.gov.gr</p>	<p>In Greece, the following activities are considered as "high risk":</p> <ul style="list-style-type: none"> • HESLO; • HEC; • Fire fighting; • Power lines ; • Aerial photography and mapping flights over congested area and open-air assembly of persons and below 3000 AGL; • Aerial advertising flights over congested area and open-air assembly of persons and below 3000 AGL; • Construction work flights, including stringing power line operations, clearing saw operations over congested area and open-air assembly of persons; • Survey operations, including aerial mapping operations, pollution control activity over congested area and open-air assembly of persons and below 3000ft AGL;

		<ul style="list-style-type: none"> • News media flights, television and movie flights over congested area and open-air assembly of persons and below 3000 AGL; • Special events flights, including such as flying display and competition flights • Flights over congested area and open-air assembly of persons where the minimum flight altitude is not respected. <p>This list may be subject to amendment. ***end***</p>
Hungary	<p>Contact person: Dr. Buséter Gábor</p> <p>ops@itm.gov.hu; buseter.gabor@nkh.gov.hu</p> <p>https://www.nkh.gov.hu/web/legugyi-hivatal/egyedi-muveletek-spo-1</p>	<p>a) (Commercial) specialised operations according to Part-SPO of Reg. (EU) No. 965/2012 that is performed below the heights specified in SERA.5005(f),</p> <p>b) Helicopter external loads operations,</p> <p>c) Human external cargo operations (HEC),</p> <p>d) Other operations for which the results of the risk assessment, which has to be performed by the operator according to SPO.OP.230, have identified a high risk according to ORO.SPO.110 (a).</p> <p>***end***</p>
Iceland	<p>Head of Flight Operations and Licensing Section</p> <p>https://www.samgongustofa.is/</p>	<p>a) Operation over any congested area of a city, town, settlement or over any open assembly of persons at a height where:</p> <ol style="list-style-type: none"> 1. in the event of an engine failure performance is not available to enable the aircraft to safely continue the flight, nor to perform a forced landing out of the congested area; 2. at height below a height of 1000 ft over congested area or 500 ft in other areas. <p>b) Helicopter operations with external loads operations over congested areas with a combination of height and speed that does not enable to perform a safe forced landing in the event of an engine failure.</p> <p>c) Helicopter external loads operations over congested areas</p> <p>d) Helicopter external loads with any pollutants that might pollute soil, water or atmosphere</p> <p>e) Human external cargo operations where the helicopter is unable to perform one engine inoperative out-of-ground effect hover (including heliskiing where an helicopter does not land fully when skiers leave the helicopter)</p> <p>***end***</p>

Ireland	<p>Ian DUNN</p> <p>ian.dunn@iaa.ie</p> <p>https://www.iaa.ie/</p>	<ul style="list-style-type: none"> a) Certain helicopter operations when conducted within the height/velocity diagram; b) Aircraft operations conducted below minimum heights above the surface or closer than minimum lateral distance to any person, structure, vessel etc.; c) Aircraft operations below minimum heights in the vicinity of an assembly of persons; d) Helicopter external load operations including releasing of articles etc.; e) The use of any externally mounted equipment associated with the specialised operation; f) Aircraft towing including release of article(s); g) Helicopter human external cargo including rappelling; h) Any specialised aircraft operation conducted over an area where the safety of third parties on the surface is likely to be endangered in the event of an emergency; i) Certain Aerobatics Displays; j) Certain specialised operations which requires the carriage of Dangerous Goods. <p>***end***</p>
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Italy	<p>Cross-border high risk commercial specialised operations:</p> <p>MARIO TORTORICI ANTONIO FONTANA</p> <p>spo@enac.gov.it</p> <p>https://www.enac.gov.it/sicurezza-aerea/operazioni-di-volo/operazioni-specializzate-spo-con-velivoli-ed-elicotteri/operazioni-specializzate-spo-con-velivoli-ed-elicotteri</p>	<ul style="list-style-type: none"> a) Any helicopters specialized operation carried out over congested areas (ref. SPO.POL.146). b) Any specialized operation involving a flight at height and/or separations below Rules of the Air established minima. c) Human external cargo operations (HEC). d) Helicopter external sling load operations (HESLO). e) Dropping or spraying from an aircraft in flight (ref. art. 819 Navigation Code). f) Avalanche release operations. g) Sensational flights: flights involving extreme aerobatic manoeuvres carried out for the purpose of allowing the persons on board to experience zero gravity, high G-forces or similar sensations. h) Any other specialised operation that is carried out over an area where the safety of third parties on the ground is likely to be endangered in the event of an emergency. <p>***end***</p>
Latvia	<p>http://www.caa.lv/ *</p> <p>(*) EASA does not have information on the high-risk SPO contact person or list of such activities)</p>	

Lithuania	<p>Jurgita JAZDAUSKIENE</p> <p>Chief specialist, Flight Operations Division</p> <p>Civil Aviation Administration Republic of Lithuania</p> <p>Fax: +370 5 2739248</p> <p>Email: jurgita.jazdauskiene@caa.lt</p> <p>www.caa.lt</p>	<p>Flights over congested areas, open-air assembly of persons and industry objects when:</p> <ol style="list-style-type: none"> 1. aircraft is flown below minimum height; 2. Persons enter or leave the aircraft during flight, human external cargo operations (except parachute dropping); 3. External loads operations, construction work flights, cable stringing operations, banner towing are performed; 4. Articles are dropped, spraying is performed, and these operations may endanger the safety of third parties on the ground (people or property) or affect the manoeuvrability of the aircraft; 5. Special equipment is used, which significantly affects the manoeuvrability of the aircraft. <p>***end***</p>
Luxembourg	<p>Gregory DELBEKE</p> <p>Inspecteur en Chef Opérations Aériennes</p> <p>Head of Operations Department</p> <p>E-mail: gregory.delbeke@av.etat.lu</p> <p>www.mddi.lu; www.dac.lu</p> <p>LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG</p> <p>Ministère du Développement durable et des Infrastructures</p> <p>Direction de l'Aviation Civile</p> <p>4, rue Lou Hemmer, L-1748 Luxembourg</p> <p>Fax: (+ 352) 467790</p> <p>The list is published on the following webpage: https://dac.gouvernement.lu/en/administration/departements/operations-aeriennes/spo.html</p>	<p>In Luxembourg, the following activities are considered as “high risk”:</p> <ul style="list-style-type: none"> • helicopter external loads operations over congested area and open-air assembly of persons; • human external cargo operations over congested area and open-air assembly of persons; • aerial photography flights over congested area and open-air assembly of persons and below 3200ft AMSL; • aerial advertising flights over congested area and open-air assembly of persons and below 3200ft AMSL; • construction work flights, including stringing power line operations, clearing saw operations over congested area and open-air assembly of persons; • survey operations, including aerial mapping operations, pollution control activity over congested area and open-air assembly of persons and below 3200ft AMSL; • news media flights, television and movie flights over congested area and open-air assembly of persons and below 3200ft AMSL; • special events flights, including such as flying display and competition flights • flights over congested area and open-air assembly of persons where the minimum flight altitude is not respected. <p>This list may be subject to amendment.</p> <p>***end***</p>

Malta

Clint Taliana (Senior Inspecting Officer):

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Ruth Stafrace (Inspecting Officer):

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- a) Operations where special equipment is necessary to fulfil the mission and which affects the manoeuvrability of the aircraft;
- b) Operations where substances are released from the aircraft during the flight where these substances are either harmful or affect the manoeuvrability of the aircraft;
- c) Operations where external loads or goods are lifted or towed, including but not limited to:
 - Towing of objects
 - Sling load operations
 - Wing walking;
- d) Operations where persons enter or leave the aircraft during flight, including but not limited to:
 - Parachute operations and skydiving;
- e) Human external cargo operations including but not limited to:
 - Winching, rappelling, fast roping and suspended extraction operations.
- f) Survey operations, including aerial mapping operations;
- g) Movie filming flights over congested areas, including aerial photography flights, and air to air or air to ground filming (A map defining congested areas will be made available with application for such operations);
- h) Special events flights, including aerobatic flying displays and competition flights;
- i) Sensational flights: flights involving extreme aerobatic manoeuvres carried out for the purpose of allowing the persons on board to experience zero gravity, high G-forces or similar sensations.
- j) Flight requiring close proximity operations, including but not limited to:
 - Formation flying.

end

The Netherlands	SPO-HRA@ilent.nl http://www.ilent.nl	<p>No high risk operations are defined by the competent authority of Netherlands.</p> <p>***end***</p>
Norway	postmottak@caa.no http://luftfartstilsynet.no/regelverk/aic-i/High_Risk_Commercial_Specialised_Operations_in_Norway %E2%80%93 Non-exhaustive list	<p>The Norwegian aviation authorities (CAA-N) has defined the following operations as HR. The list is non-exhaustive. CAA-N therefore reserve the right to define operations not mentioned in the list as HR.</p> <p>CAA-N may be consulted for further guidance on issues relating to specialized operations (SPO) in Norway.</p> <p>HR SPO in Norway</p> <ul style="list-style-type: none"> a) Helicopter operations outside the Height Velocity (HV) diagram (operations inside «dead man's curve») b) Extended operations below 200 ft. AGL (i.e. animal herding, marking, tranquilizing or shooting animals, photo missions, power line inspections etc.) c) Operations with single engine aircraft below 1000 ft. AGL over congested areas d) Operations over congested areas with underslung load or externally mounted special equipment e) HEC operations, including SPO hoist operations f) Aerobatics, flying displays, competition flights etc. g) Parachute drop h) Winter operations in areas with degraded visual conditions/references (especially «white out» conditions etc.) i) Landings on ships or other vessels in open seas (moving landing platform) <p>***end***</p>

Poland	<p>Tomasz KUCHCIŃSKI tkuchcinski@ulc.gov.pl, lol@ulc.gov.pl http://www.ulc.gov.pl</p>	<ul style="list-style-type: none"> a) Operations below the minimum safe altitudes below minimum SERA 5005 f. heights; b) Operations at a height where, in the event of an engine failure performance is not available to enable the aircraft to safely continue the flight, nor to perform a forced landing; c) Helicopter external sling load operations (HESLO); d) Helicopter human external cargo operations (HEC); e) Human external transport operations; f) Operations that required external equipment which significantly impact on difficulty in manoeuvring of an aircraft. <p>***end***</p>
Portugal	<p>https://www.anac.pt/vPT/OrganizacoeseEmpresas/OperadoresTransporteAereo/operacoesespecializadas/Paginas/OperacoesComerciaisEspecializadas.aspx</p>	<p>List of high-risk commercial specialized operations:</p> <ul style="list-style-type: none"> a) Helicopter external load operations (HESLO) b) Human external cargo, including rapelle (HEC) c) Aerobatic flights (ABF) or for the purpose of sensations to the persons on board d) Flights operated below SERA standards e) Specialised operation transporting dangerous goods f) Aircraft used for towing or release of any object; g) Specialised operation requiring usage of externally mounted equipment h) Agricultural air spraying i) Any other operation classified as high risk by the operator <p>Aeronautical Information Circular:</p> <p>https://www.anac.pt/vPT/Generico/InformacaoAeronautica/CircularesInformacaoAeronautica/Documents/CIA_14_2020.pdf</p> <p>***end***</p>

Romania	<p>1. Cornelia PETCOVICI Air Operations Department, Romanian CAA, cornelia.petcovici@caa.ro</p> <p>2. Mircea Justin CHIREA Air Operations Department, Romanian CAA, justin.chirea@caa.ro</p> <p>https://www.caa.ro/en/pages/opera%C5%A3iuni-specializate-comerciale---spo (EN) https://www.caa.ro/ro/pages/opera%C5%A3iuni-specializate-comerciale---spo (RO)</p>	<p>j) operations below minimum safe altitudes established by SERA and RACR RA and HG no. 912/2010;</p> <p>k) helicopter sling load operations;</p> <p>l) helicopter external load operations carried out over an area where the safety of third parties on the ground is likely to be endangered;</p> <p>m) human external cargo operations where the helicopter is unable to perform one engine inoperative out-of-ground effect hover;</p> <p>n) flights carried out for the purpose of allowing the persons on board (except for the flight crew) to experience aerobatic flights;</p> <p>o) calibration flights;</p> <p>p) cloud seeding.</p> <p>***end***</p>
Slovakia	<p>Igor JANDURA Flight Operations Inspector igor.jandura@nsat.sk</p>	<p>The Slovak Transport Authority/Division of Civil Aviation has defined “High Risk Commercial Special Operations” in Slovakia as follows:</p> <p>Any operations of airplanes and helicopters which is being conducted below the minimum flight altitudes as specifies in the Commission Regulation (EU) No 923/2012, provision SERA.5005, over congested areas or over an open-air assembly of persons or in hostile environments where they cannot be made safe forced landing, or for multi-engine aircraft, where the flight cannot continue safely after the failure of one engine.</p> <p>***end***</p>

Slovenia	<p>Contact details for authorisation of high risk commercial specialised operations under ARO.OPS.150, including for a cross-border high risk commercial specialised operation is</p> <p>ops@caa.si.</p>	<ul style="list-style-type: none"> a) helicopter sling load operations; b) human external cargo operations; c) avalanche mining operations; d) construction work operations; e) aerobatic manoeuvres carried out for the purpose of allowing the persons on board to experience zero gravity, high G-forces or similar sensations; f) SPO flights where dangerous goods are carried; g) operations over congested areas of cities, towns or settlements or over an open-air assembly of person: <ul style="list-style-type: none"> - in the event of an engine failure performance is not available to enable the aircraft to safely continue the flight, nor to perform a forced landing out of the congested area; - at height below a height of 1000 ft over congested area or 500 ft in other areas. <p>***end***</p>
Spain	<p>Silvia Troncoso Coordinator of Air Operations.</p> <p>Fernando Bernal Head of the Helicopter and Aerial Work Service.</p> <p>spo-crossborder.aesa@seguridadaerea.es</p>	<p>Spain has defined as High Risk Commercial Specialised Operations according to the Resolution of February 16th 2016 the following operations:</p> <ul style="list-style-type: none"> a) Parachuting and Skydiving Operations b) Human External Cargo (HEC) c) Sensational Flights as defined in GM1 SPO.GEN.005 <p>For operations carried out below limits established in SERA.5005 f) it is required a specific authorisation according to Royal Decree 1180/2018.</p> <p>***end***</p>

Sweden	<p>Ola Johansson: ola.johansson@transportstyrelsen.se for SPO aeroplane.</p> <p>Karl-Axel Edén: karl-axel.eden@transportstyrelsen.se for SPO helicopter.</p> <p>http://www.transportstyrelsen.se/sv/luftfart/Flygbolag/bruksflyg/spo---nya-regler-for-bruksflyg/</p>	<ul style="list-style-type: none"> a) Helicopter operations where risks for failure are elevated, among others; due to the height/speed ratio (ref H/V diagram); b) Operation requires extended flight below 200ft AGL (for example: reindeer herding/mustering, tagging/stunning/killing of animals, certain aerial photography, power line inspection); c) Sling load operation/externally mounted equipment over congested area or where larger crowd may be expected; d) Landing on offshore installations, ships, etc.; e) Activities with people outside the aircraft (Human External Cargo) including hoist operations; f) Activity with single-engine airplanes below 1000ft AGL over congested areas; g) Aerobatic flight at low altitudes AGL; h) Target towing; i) Experience flights; <p>Explanation</p> <p>1. Activities should follow the recommendations in the Aircraft Flight Manual (AFM). For helicopters there are areas specified where the likelihood of a successful autorotation in case of engine failure is low, e.g. sling load operations, in which case the helicopter for a time period hover at low altitude and thus penetrate the H/V diagram. The flight manual's H/V chart gives guidance on the probability of successfully auto rotate at low heights, and describes the influence of higher or lower speed. If the H/V diagram is penetrated the activity is considered to be high risk. Even though the helicopter's total weight may be less than the specified in such a diagram, the limitations in the chart should be followed. Sling load operations are performed near obstacles and ground which cause increased risk of collisions with objects but also risk of settling with power.</p> <p>2. Activities over terrain where safe forced landing cannot be expected since the flight takes place at heights below 200 feet, and it is not limited to short intervals, or intervals are repeated frequently during a single mission. The examples are not exhaustive but listed in order to clarify the application. (Low aerial photography above 200 feet is not considered activity requiring authorization as long as an emergency situation does not constitute risk for third party). The activity takes place in the proximity of obstacles that may cause accidental contact or turbulence and affects/complicates the operation.</p>
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3. Over congested area when it is unlikely that SERA.3105 can be fulfilled and flight occurs with sling load, or for example mounted equipment that means that the flight is considered to be specialized. Such equipment may be advertising sign, fitted camera, etc. The elevated risk may be probability of inadvertent contact with obstacles, slow flying, out of ground effect hovering, turbulence around buildings/constructions. Also the effect of light phenomena may interfere. There is always a risk of inadvertent loss of external cargo, unlike internal load.
4. Landing or take-off to/from vessels, platforms or similar where the activity takes place in varying conditions, such as (but not limited to) water surface temperature, swells, heeling deck, structures that obscure visibility and affect manoeuvring.
5. All specialized activities involving people leaving or embarking during flight, but even when people are outside the cabin during flight, for example so-called wingstanding. Due to the purpose of the flight the aircraft is often close to obstacles that may present a risk of collision.
6. Over urban areas (definition congested) where it is difficult or unlikely that SERA.3105 can be met, and flight is performed with advertising banners or for example equipment that means that the flight is considered to be specialized. Specialized activities may involve special manoeuvres which are close to the performance envelope's boundary. Also high obstacles may pose special threats during activities above cities.
7. Exhibition activities and training for such events with both airplane and helicopter at heights where the likelihood of recovering an abnormal situation is low. Risk of collision with ground obstacles or the ground is elevated compared to other activities.
8. Towing of targets where there is risk of damage due to shooting, but also when the object towed may create problems in flight, or is lost. The activities are generally carried out in areas where shooting with live ammunition is in progress.
9. Flight where the primary purpose is the passenger's special experience during the flight, such as zero-G flight, aerobatics, etc.
- ***end***

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Definition of high risk commercial specialised operations:

- a) helicopter sling load operations;
- b) human external cargo operations;
- c) avalanche mining operations;
- d) SPO flights where dangerous goods are carried;
- e) operations for which protective standards (such as e.g. minimum flight altitudes, underflying of riggings, lines or constructions etcetera) – irrespective of the associated necessary approvals - are either exceeded or undershot.

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