



Northern
Lighthouse
Board



Commissioners of
IRISH LIGHTS | Navigation
and Maritime
Services

General Lighthouse Authorities Helicopter Services 2027

Specification of Requirement



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Amendment Record

Version	Issue Date	Changes
		History redacted
Draft V9.0	20/02/2024	Market Engagement Version

Abbreviations

Abbreviation	Description
AFDS	Automatic Float Deployment System
AIS	Automatic Identification System
APS	Aircraft Prepared for Service
BARSOHO	Basic Aviation Risk Standard Offshore Helicopter Operations
CAT	Commercial Air Transport
EFS	Emergency Flotation System
FDM	Flight Data Monitoring
FSF	Flight Safety Foundation
GLA	General Lighthouse Authority
HCA	Helideck Certification Agency
HESLO	Helicopter External Sling Load Operations
HISL	High Intensity Strobe Light
HLO	Helicopter Landing Officer
HOFO	Helicopter Offshore Operations
HTAWS	Helicopter Terrain Awareness and Warning System
ICAO	International Civil Aviation Organisation
IDE	Instrument Data Equipment
IELTS	International English Language Testing System
IFR	Instrument Flight Rules
IL	Irish Lights
ISA	International Standard Atmosphere
LAE	Licensed Aircraft Engineer
NLB	Northern Lighthouse Board
SMS	Safety Management System
SOPs	Standard Operating Procedures
TAP	Technical Acceptance Plan
TH	Trinity House
VFR	VFR

Requirements

The minimum requirement is for a primary helicopter to operate the GLA Helicopter Service and sufficient secondary aircraft to ensure all planned operational taskings are delivered.

A) Service Characteristics

Reference Code	Characteristics	Guidance on Tenderer Submissions
A1	Provide GLA Helicopters, Available (crewed and serviceable) for at least 8 hours per day for at least 98% of the year for the primary Helicopter and 95% of the year for secondary Helicopter(s).	Analysis to demonstrate availability can be achieved.
A2	There shall be no limitation of the concurrent Tasking and operation of Available GLA Helicopters.	Confirmation required.
A3	Have the ability to support the full range of GLA Helicopter operations from temporary operating locations as operational needs dictate.	Description of this capability to be provided.
A4	Collaboratively prepare and agree Tri-GLA Helicopter SOPs with the GLAs prior to flight operations commencing and collaboratively maintain this to set common procedures for operational aviation, safety and interface matters.	Description of the proposed approach to be provided with any evidence of similar interface SOPs.
A5	Actively encourage and promote a positive safety culture within their organisation through development of safety leadership skills, behaviours and authentic engagement of their entire workforce in a manner consistent with Flight Safety Foundation (FSF) Basic Aviation Risk Standard Offshore Helicopter Operations (BARSOHO) Control 1.1 (as amended).	Description of the proposed solution to be provided.
A6	Operate effective Safety Management System (SMS) with effective and timely liaison with the GLAs (including notification of occurrences within 24 hours and regular updates on investigations).	Description of the proposed solution to be provided.
A7	Operate an effective programme of Flight Data Monitoring (FDM) that supports the SMS and the flight training programme.	Description of the proposed solution to be provided.
A8	Have any documented procedures beyond those required by regulation necessary to deliver effective or compliant Services.	Description of the wider quality system required.

A9	Participate in contract (typically 6 monthly), operations (at least weekly) and safety meetings and in workshops, as required by the GLAs.	Example(s) of any similar collaborative working required.
A10	Gain and maintain all regulatory approvals, exemptions, alleviations, permits and licences necessary to fully provide the service in UK, Crown Dependency and Irish airspace.	Description of the proposed solution to be provided.
A11	Cooperate with, and provide timely response to, audits conducted by and on behalf of the GLAs.	Example(s) of other external audits and the responses are to be provided.
A12	Provide sufficient personnel to fulfil all duties necessary to conduct the Services with due regard to the management of fatigue, without undue disruption due to illness, training, leave, reasonably anticipated operational demands, personnel turnover and other foreseeable events or the sudden unavailability of key individuals.	An analysis is to be provided of the proposed solution detailing the anticipated establishment, indicative rosters and approach to fatigue management to demonstrate sufficiency of resources.
A13	Establish a programme of personnel selection, training, qualification, medical assessment and competency assessment to ensure all personnel are fit and competent to discharge their duties effectively.	Description of the proposed solution to be provided.
A14	In addition to meeting regulatory requirements, Pilots are to either meet competency-based assessments acceptable to the GLAs or the following: <ol style="list-style-type: none"> 1. Total flying time (helicopters) >2000 hours. 2. Total time in command (helicopters) >1000 hours. 3. Total time in command (multi-engine helicopters) >500 hours. 4. Total time in command on Type >100 hours. 5. Total time Helicopter External Sling Load Operations (HESLO) > 200 hours 	Description of the proposed solution to be provided.
A15	Pilots are to complete their competence to the satisfaction of a Line Training Captain when new to the GLA service and (unless stated below) again when they have not conducted an activity within the previous 6 months:	Description of the proposed solution to be provided.

	<ol style="list-style-type: none"> 1. Take-offs and landings at a rock station where turbulence is expected. 2. Take-offs and landings at a lantern top lighthouse. 3. Take-offs and landings at tidal helipad (initial only). 4. Take-offs, landings and deck operations on a GLA vessel including positioning fore and aft to shut down when requested 5. HESLO to or from a rock station where air turbulence is expected. 6. HESLO to or from a lantern top lighthouse. 7. HESLO to or from a GLA vessel. 	
A16	<p>Task Specialists are to be Part-66 B1 Type Rated Licenced Aircraft Engineers (LAEs), trained to perform ground handling support duties.</p> <p>Any Task Specialist for whom English is not their first language must pass either the International English Language Testing System (IELTS) at a minimum level of 7.5 or pass an ICAO English Language Proficiency test at a minimum level of 4. Non-Part-66 Task Specialists may be accepted by the GLAs provided a Part-66 B1 Type Rated LAE is deployed with the aircraft or is in close proximity (at no extra cost to the GLAs).</p>	Description of the proposed solution to be provided.
A17	<p>Each Pilot and Task Specialist is to be proposed to the GLAs for acceptance before being deployed unsupervised on the Service.</p> <p>Where an individual Pilot or Task Specialist proves not to be compatible with the safe and efficient delivery of the Service the GLAs shall have the right to require their replacement at the Contractor's expense.</p>	Description of this capability to be provided.
A18	<p>Provide a passenger safety briefing video to cover helicopter safety, emergency drills and specific GLA ground handling issues. The video syllabus shall be defined in the Tri-GLA Helicopter SOPs. The video to be distributed in such a way as to be available for online and offline viewing.</p>	Description of this capability to be provided.

A19	Provide on request to any GLA helmets with Marine Band radios (compatible with the GLAs private channels) and integrated headsets.	Description of the proposed solution to be provided.
A20	Provide a secure web-based system, accessible to authorised GLA users, that promptly provides: <ol style="list-style-type: none"> 1. Current Availability / status information 2. Current or impending operational limitations or restrictions 3. Current or anticipated maintenance that may affect Availability 4. Usage information (including departure point and destination, flight time, passenger and cargo loads [internal and external] per sector) 5. Operational metrics arising from flight operations, with a means for the GLAs to request information status updates online and download data in a format acceptable to the GLAs (including by Planned Activity and GLA). 	Description of the approach to be provided.
A21	Provide reliable tracking data of GLA Helicopters electronically to the GLAs (with position updates at no longer than 2-minute intervals).	Description of the proposed solution to be provided.
A22	Maintain a directory of all helicopter landing sites in UK and Ireland necessary to deliver the Services, conducting site surveys or assuring other available survey data. The directory should be accessible to GLA personnel.	Description of the proposed solution to be provided.
A23	Deliver initial familiarisation training for existing GLA helicopter operations personnel prior to the commencement of the Services. Approximately 10 ship's crew on each of two watches on each ship and 30 shore-based NLB personnel, 20 shore-based IL personnel and 30 shore-based TH personnel will require this training.	Description of this capability to be provided.
A24	Provide initial and 3 yearly refresher training at GLA request for GLA helicopter operations personnel, including: <ul style="list-style-type: none"> • Helicopter Landing Officer Courses for up to 35 personnel in each GLA area every year, to enable them to undertake the duties of an HLO. The 	Description of this capability to be provided.

	<p>syllabus shall be modified to include specific training for ship operations when given to marine personnel.</p> <ul style="list-style-type: none"> • A Helicopter Groundcrew/Lead Passenger Course for approximately 20 personnel in each GLA area per year. • A Helicopter Operational Planning Course (as required). <p>The course syllabus shall be defined in the Tri-GLA Helicopter SOPs.</p> <p>The HLO and Groundcrew/Lead Passenger training should allow every trainee to practice relevant exercises with a live helicopter.</p>	
A25	Provide competence assessment and recurrent training for GLA HLOs and groundcrew on a 2 yearly basis.	Description of this capability to be provided.
A26	Provide a HESLO ground crew briefing video to be used by the GLAs to refresh GLA HLO and Groundcrew personnel. The video syllabus shall be defined in the Tri-GLA Helicopter SOPs.	Description of this capability to be provided.
A27	Organise the replenishment of fuel for GLA fixed fuel installations, vessels and bowsers. Ensure that fixed-fuel installations are maintained at an agreed minimum stock level.	Description of this capability to be provided
A28	Organise the quality control of GLA fixed fuel installation, vessel and bowser fuel.	Description of this capability to be provided
A29	Train, authorise and audit GLA personnel in bulking, storage, testing and dispensing of the fuel in accordance with the Contractor's instructions which will be incorporated in the GLA Helicopter SOPs.	Description of this capability to be provided
A30	Provide suitable physical security at Contractor sites and implement suitable cyber security, personnel screening provisions and access control to protect the Service from external interference.	Description of the proposed solution to be provided.
A31	The GLA Helicopters are to be maintained in a clean and presentable state.	Description of the proposed solution to be provided.
A32	Establish a Business Continuity Plan to respond to and recover from reasonably foreseeable disruption to the Contractor's operations.	Description of the proposed solution to be provided.

A33	<p>Implement measures to reduce overall greenhouse gas emissions and environmental impact through the life of the Contract and provide an annual report on progress and performance.</p> <p>Attain ISO 14001 accreditation before a date agreed in the Transition Plan and then maintain this accreditation.</p>	<p>Tenderers should provide a description of the proposed approach to sustainability, including:</p> <ul style="list-style-type: none"> identifying sustainability features incorporated in the design of the service, the continuous improvement process, <p>the performance indicators that will be tracked</p>
A34	<p>Prepare Transition Plans acceptable to the GLAs for mobilisation, demobilisation and any major changes to the Services.</p>	<ul style="list-style-type: none"> Draft to be provided, with comprehensive detail on the mobilisation.
A35	<p>Prepare a Technical Acceptance Plan (TAP) acceptable to the GLAs to demonstrate readiness to commence operations.</p>	<p>Description of the proposed solution to be provided. Developed, this will form Schedule 3 of the Services Contract.</p>

B) GLA Helicopter Characteristics

Reference Code	Characteristics	Guidance on Tenderer Submissions
B1	<p>The GLA Helicopters are to be twin turbine helicopters equipped, certified and capable of operating single pilot IFR operations and to operate under Sub-Part HOFO, capable of:</p> <ul style="list-style-type: none"> • operating from legacy helidecks of GLA vessels • operating from sub-1D elevated lantern top helipad • operating on rough and uneven ground (including ground with bird nesting holes and burrows) 	<p>Description to be provided of the helicopters they propose as equipped in accordance with all relevant Contract characteristics, supported by detailed calculations and the Flight Manual and relevant Supplements, including:</p> <ul style="list-style-type: none"> • A justification of aircraft type reliability, supportability through the life of the contract and prior in-service experience. • A full equipment specification and checklist vs IDE and HOFO • Aircraft Prepared for Service (APS) Mass calculation • Calculation of cruise speed and fuel burn at maximum continuous power, at 1000 ft nil wind, ISA conditions, at 90% of Maximum All Up Mass • Calculation of maximum range and resultant payload in nil wind, ISA conditions, with cruise at 1000 ft and VFR Reserves. • Calculation of maximum radius of action with a Task Specialist, and with 4 passengers and 100 kg of cargo on the outbound leg, in nil wind, ISA conditions, with cruise at 1000 ft and VFR Reserves. • Calculation of maximum range and resultant payload, in nil wind, ISA conditions with IFR Reserves. • Calculation of maximum underslung load that can be carried 50 nm in nil wind, ISA conditions, depositing it and returning to its original departure point with VFR reserve carrying Pilot only. <p>Assume:</p> <ul style="list-style-type: none"> • Passenger average mass 95 kg each • Pilot / Task Specialist mass 85 kg each.

B2	The GLA Helicopters are to be capable of taking off, lifting a stable 500 kg underslung load, carrying that load at least 50 nm in nil wind ISA conditions, depositing it and returning to the original departure point with Visual Flight Rules (VFR) reserves.	Provide a mass breakdown and detailed performance calculations to demonstrate the helicopter's capability.
B3	GLA Helicopters are to be crewed by one Pilot and one Task Specialist. The Task Specialist need not be onboard for all flights (with GLA agreement) but should be on-site during deployments. A GLA may agree for a deployment with only a Pilot or with a Part-66 B1 Type Rated LAE in place of the Task Specialist.	Description of the proposed solution to be provided.
B4	When requested by a GLA (with 2 months' notice) the Contractor is to be able to operate a GLA helicopter with two Pilots onboard.	Confirmation required.
B5	The GLA Helicopters are to have removable dual controls in the left-hand cockpit seat.	Description to be provided.
B6	The GLA Helicopters are to have instrumentation suitable for operation single pilot Instrument Flight Rules (IFR) and conducting IFR training with an instructor.	Description of the proposed solution to be provided.
B7	The GLA Helicopters are to have a crashworthy fuel system compatible with an installed cargo hook.	Description to be provided.
B8	The GLA Helicopters are to be capable of carrying at least 4 passengers in the cabin in crashworthy seats with upper torso restraints.	Provide layout drawings and illustrate any alternative layouts that are possible.
B9	The GLA Helicopters are to have a cargo area that can be readily loaded of at least a 1 cubic metre volume when 4 passengers are carried.	Provide layout drawings and Flight Manual mass limitations and loading instructions.
B10	The GLA Helicopters are to be capable of being reconfigured while deployed so that passenger seats can be temporarily removed and or folded to provide extra space for cargo.	Provide layout drawings, illustrate any alternative layouts that are possible and Flight Manual limitations and loading instructions
B11	The GLA Helicopters are to have suitable means to secure open cockpit, cabin and baggage bay doors.	Description to be provided.
B12	The GLA Helicopters are to have a belly cargo hook system and a means for the pilot to visually monitor the load in flight.	Description to be provided.

B13	The GLA Helicopters are to be capable of being fitted with Contractor provided strops of suitable lengths which can be safely flown without a load and which has a bottom hook which can be operated from the cockpit in such way that the strop remains attached to the helicopter when the load is released. The system must also reliably indicate to the pilot the mass of the load on the hook.	Description to be provided.
B14	The GLA Helicopters are to be capable of being rapidly configured for HESLO operations on demand.	Description to be provided.
B15	The GLA Helicopters are to be fitted with an Emergency Flotation System (EFS), certified to Sea State 6, with an Automatic Float Deployment System and cockpit manual activation.	Description to be provided.
B16	All crew and passengers are to be provided by the Contractor with a suitable and serviceable headset, Life Jacket, Compressed Air – Emergency Breathing System and Personal Locator Beacon for every flight over water. A headset is to be provide to passengers for all other flights.	Description to be provided.
B17	The GLA Helicopters are to have a discrete intercom channel for passengers, accessible to the Pilot.	Description to be provided.
B18	The GLA Helicopters are to be fitted with two external aircraft life rafts suitable for a hostile environment, deployable from the cockpit and externally by survivors, even after a capsized.	Description to be provided.
B19	The GLA Helicopters are to be fitted with Helicopter Terrain Awareness and Warning System (HTAWS) with any appropriate enhanced offshore or onshore modes implemented as they become available.	Description to be provided, along with the intent for future enhancement.
B20	The GLA Helicopters are to be fitted with a means to display as a moving map, multiple digital chart formats.	Description to be provided.
B21	The GLA Helicopters are to be fitted with a weather radar.	Description of the proposed solution to be provided.
B22	The GLA Helicopters are to be fitted with an Automatic Identification System (AIS) transponder and AIS receiver with data displayed to the Pilot.	Description of the proposed solution to be provided.
B23	The GLA Helicopters are to be fitted with Marine Band radio capability (compatible	Description to be provided.

	with the GLAs private channels) integrated into the cockpit intercom system.	
B24	The GLA Helicopters are to be fitted with a Mode S transponder and means to displaying transponder data from near-by aircraft.	Description to be provided.
B25	The GLA Helicopters are to be fitted with an image recorder capable of recording a general cockpit view, with appropriate procedures to protect the recorded data for use only in safety investigations and associated purposes.	Description to be provided.
B26	The GLA Helicopters are to have a rotor brake.	Description to be provided.
B27	The GLA Helicopters are to be capable of being secured on a helideck to withstand wind speeds of up to 60 knots with vessel motion 50% greater that Helideck Certification Agency (HCA) Helideck Limitation List Part C daytime limits.	Description to be provided.
B28	The GLA Helicopters are to deploy with suitable tie downs and covers for parking outdoors, onshore and offshore.	Description to be provided.
B29	The GLA Helicopters are to be fitted with High Intensity Strobe Lights (HISL).	Description to be provided.
B30	The GLA Helicopters are to be in a high visibility colour scheme acceptable to the GLAs.	Description of how agreement is to be achieved.
B31	The GLA Helicopters are to carry a laptop or tablet device able to access the internet, for use by Contractor staff when on the ground to access applicable applications and data sources.	Description of the proposed solution to be provided.
B32	Other equipment and features necessary to meet applicable regulations and deliver the service.	Description of additional design features/equipment choices considered noteworthy.

C) Additional Services

Reference Code	Characteristics	Guidance on Tenderer Submissions
C1	<p>The GLAs may request from the Contractor (or a GLA accepted sub-contractor) additional ad hoc capacity to supplement the core contracted GLA Helicopter capacity for the following activities:</p> <ul style="list-style-type: none"> • Offshore HESLO with a lift capacity of at least 1000 kg. 	<p>Tenderer to detail availability and type of aircraft available (either under contractor control or subcontract) to the GLAs on a pay by the hour basis. Tenderer to set out regulatory environment that supports such operations, detail aircraft equipment fit and performance and provide adequate detail on any sub-contracted air operators.</p>
C2	<p>Where available from the Contractor (or a GLA accepted sub-contractor) GLAs may request additional ad hoc capacity to supplement the core contracted GLA Helicopter capacity for the following activities:</p> <ul style="list-style-type: none"> • Onshore passenger or cargo Commercial Air Transport (CAT) • Onshore HESLO utilising Contractor ground crew and (if necessary) Contractor mobile fuelling systems 	<p>Tenderer to detail availability and type of aircraft available (either under contractor control or subcontract) to the GLAs on a pay by the hour basis. Tenderer to set out regulatory environment that supports such operations, detail aircraft equipment fit and performance and provide adequate detail on any sub-contracted air operators.</p>
C3	<p>The contractor may utilise any spare GLA Helicopter capacity, at GLA discretion, with agreed gainshare.</p>	<p>Tenderer to set out how spare capacity would be utilised to minimise overall GLA expenditure.</p>