


TNPA/2023/02/0017/22363/RFP FOR THE DESIGN, SUPPLY, COMMISSIONING, TESTING AND DELIVERY OF THE THREE (3) MARINE PILOT HELICOPTERS FOR THE PORTS OF DURBAN, RICHARDS BAY AND CAPE TOWN OVER A STAGGERED PERIOD OF EIGHTEEN (18) MONTHS

CLARIFICATION REGISTER 3

No	Tenderer Query	Transnet Response
1	Can bidders submit a Fenestron such as the H160 helicopter the RFP only requires a conventional type tail rotor.	<p>The reason for the requirement for a Conventional Type Tail Rotor vs Fenestron is as follows; Fenestron type tail rotors are less efficient in the hover and larger vertical fins results in the helicopter becoming twitchy and unstable in crosswinds. The 'feeling' of controlling yaw is less responsive and requires more pedal input to achieve the same result as compared to a conventional type tail rotor, this in turn limits crosswind capability and reduces engine performance. There is a loss in performance in hover operations especially in crosswinds, where TNPA helicopters spend majority of their operational time. TNPA helicopter Captains are extremely experienced pilots and were consulted extensively in determining the best suited tail rotor system for HMPT and the consensus is that the conventional type tail rotor provides the Captains with the highest confidence in the aircraft's performance and controllability especially in crosswind hovering, allowing them to perform a very high risk flying operation without comprising safety for TNPA personnel and its customers</p> <p>Pilots who have flown with Fenestron tail rotor systems often find that the 'feeling' of controlling yaw is less responsive or takes more input to achieve the same result as compared to a conventional type tail rotor. Hence the RFP requires a Conventional Tail Rotor. The supplier can customize this to meet TNPA requirements as the RFP specifically requests bidders to "Design, manufacture and supply". For ease of reference, a comparison is attached hereto as Annexure "B".</p>
2	The RFP requires that the helicopter should be equipped with an Obstacle Proximity System and this solution is only offered by one helicopter manufacturer	<p>The analogy for this request can be compared to the system that is provided in vehicles i.e. Park Distance Control (PDC's) which will advise/alert the driver of the distance of the nearest obstacle to prevent damage or collision with the obstacle.</p> <p>The RFP is requesting for a similar system to allow for the pilot to be advised/alerted of the distance between the main rotor blade tips and nearest obstacles. This will allow the pilot to have a visual representation or audio indication of the distance between the main rotor blade tips, which are not visible during operations to avoid contact with any part of the vessel. This is very important as this is intended to improve and enhance safety in a very high risk operation. The RFP requires the bidders to "Design, manufacture and supply".</p>
3	The end user should provide evidence that the wheeled tricycle landing gear can be found on helicopters from other OEM and not just Leonardo, If evidence cannot be obtained then consider using wording that is inclusive (i.e., or similar)	<p>The following are some of the helicopters within the market that have wheeled landing gear;</p> <ol style="list-style-type: none"> 1. Airbus H160 2. Airbus H175 3. Airbus EC155 4. Sikorsky S-76 5. Sikorsky S-92 6. Bell 429 7. Bell 222 8. Bell 430 9. Bell 525 10. Leonardo AW189 <p>The original development of skids was because of the limited power available from piston/turbine engines used in helicopters during their development stages. Skids were light and simple structures that allowed the weight saved to be converted into internal disposable load. Modern powerful turbine engines have done away with this weight saving requirement.</p> <p>Skids are now fitted to very few helicopters in the commercial and military market. In fact, the only helicopters still fitted with skids are found in the light helicopter range and a few exceptions in the medium helicopter range. They are light, cheap and require little maintenance. Those in the medium range are usually twenty or more years old designs.</p> <p>There are very few maritime applications, (if any) either civil or military, where skids are called for in preference to wheels. All offshore helicopters are fitted with wheels, and these are specifically called for in the tender and technical processes. Some operators do use helicopters on skids for offshore ship service operations, maybe they are compelled, or patriotically influenced. Helicopter operators must make special arrangements to accommodate the limitations imposed. There are some onshore applications where a high ground clearance is of benefit and high skids are specified. However, these high skids cannot be used offshore as they make hoisting difficult or severely limit the hoist load with center of gravity limitations. A medium size old Bell 212 (fitted with skids) was originally used in the early days of Helicopter Marine Pilot Transfer (HMPT) ship service activity. Whilst an excellent and robust machine, this helicopter was fitted with pieces of rubber strapped to the skid bottoms in an attempt to offer better adhesion and reduce deck damage. A set of skids hanging out in the air stream all the time causes drag. This both slows the helicopter down and increases fuel consumption. A helicopter with retractable wheels offers a 'clean' profile. Because the skids protrude some distance from the side of the helicopter this means anybody being hoisted must be hoisted outside of the skids. This is some distance from the centerline of the helicopter. This in turn causes a large lateral center of gravity moment tending to reduce the disposable load on the hoist. Some light helicopters overcome this problem of lateral moment and direction of rotation of the main rotor system by fitting the hoist on the opposite side of the helicopter to the helicopter pilot. (A most unsatisfactory arrangement for ship service activity). No obstructions are offered by wheels. The marine pilot is hoisted up/down close to the door. Does not have to be pulled in. There are few centre of gravity limitations and the hoist is fitted on the same side as the helicopter pilot. Twin engine helicopters fitted with skids, will require the helicopter to be skidded onto the runway during single engine emergency training damaging both the skid strips and the runway. Twin engine helicopters fitted with wheeled landing gear is run onto the runway during single engine emergency training and brought to a stop gently with brakes. Skids offer very little traction on ships sloping decks. The possibility of slipping is always very real. The possibility of landing on small deck protrusions is always there, especially at night. This does cause expensive damage to the skids. Slipping on deck causes scratching of the deck paint. This has to be repaired before rust starts and a nuisance for the ship. Wheeled landing gear offer very good adhesion, small protrusions offer no hazard and no scratching of deck paint. No sea-saw effect sometimes encountered with skids on an uneven deck welds.</p> <p>(Note. This is a very important consideration). TNPA resolved that there is 'no contest' as wheels are far better than skids in all maritime environments. For ease of reference, detailed comparison is attached hereto as Annexure "A".</p>
4	Failing to consider cost-effective solutions like leasing, as well as used / refurbished platforms;	The business wants to purchase an asset which they want to own and a brand new helicopter offers a wide range of support systems, warranties, advanced technologies and improved safety systems that the business will benefit from that will not be available with leasing or refurbished platforms. Brand new helicopters will require less maintenance which provide a longer operating life span.
5	Must be in a Marine Pilot Transfer Configuration to include Rescue Hoist Dual type mounted on the starboard side with Hoist Camera installation, Hoist Operator crashworthy adjustable seat (with inertial reel and separate 5-point safety belt), (swivel type) Proof to be provided in the form of existing designs and installations.	The requirement for a fixed hoist on the starboard (right side) side of the helicopter is to reduce centre of gravity limitations. This provides a better field of vision for both the helicopter captain and hoist operator who are both situated on the starboard side of the helicopter when assessing a vessel. Therefore enhancing the safety for HMPT ship service and rescues. This allows the marine pilot to be hoisted up/down close to the door and he/she does not have to be pulled in. (Note. This is a very important consideration)
6	The passenger cabin must be able to accommodate between 12 to 15 passengers (Proof to be provided in the form of a TCDS) The passenger cabin must be able to accommodate between 8 to 10 passengers (Proof to be provided in the form of a TCDS)	These are business requirements for current and future operations
7	The passenger cabin must be able to accommodate at least 3 stretchers at the same time with doors closed (Proof to be provided in the form of approved configuration installations) The passenger cabin must be able to accommodate at least 2 stretchers at the same time with doors closed (Proof to be provided in the form of approved configuration installations)	These are business requirements for current and future operations

8	The helicopter Main Transmission Gearbox must have a run dry capability of a minimum of 30 minutes. Proof to be provided in the form of approved test results / simulations or equivalent.	As per FAR 29.927 for Category A helicopters, unless such failures are extremely remote, it must be shown by test that any failure which results in loss of lubricant in any normal use lubrication system will not prevent continued safe operation, although not necessarily without damage, at a torque and rotational speed prescribed by the applicant for continued flight, for at least 30 minutes after perception by the flightcrew of the lubrication system failure or loss of lubrication. This will allow the helicopter to return to the nearest point of land.
9	The floatation gear on the helicopter must be compliant to function properly under sea state 6 conditions. Proof to be provided in the form certification documents	Sea state 6 is a sea state condition where waves are between 4 to 6 metres and sea conditions are very rough, which are a common occurrence at TNPA Ports of operation. This will allow will helicopter to remain afloat in the event of the helicopter ditching therefore allowing the TNPA aircrew, marine pilots and all other passengers to safely evacuate the helicopter.
10	Based on the above, and without inferring who the particular oem is, a review of the specification is that is it not capability specific / a generic user requirement statement. Rather, it is aligned with a specific oem offering and tnpa is requested to have this independently reviewed and revert with findings prior to the closing date	The specification is for "fit-for-purpose" helicopters in terms of business and safety requirements for TNPA's Marine Pilot Service. TNPA has internal control structures (enhance on business and safety requirements)
11	The current bid is limited to the preferential procurement act and makes no effort to enforce compliance with the new bbbee codes – why is this the case? Is tnpa exempt from national imperatives for empowerment, transformation and localisation? The bid document is also silent about technology transfer, enterprise development and local subcontracting. A review of similar bids especially those overseen by armscor indicates this objectives can be attainable if the client is committed and wants to advance national interest and imperative.	The specific goals applicable to this project were allocated in terms of the Transnet Preferential Procurement Policy. The Specific goals included points allocated for B-BBEE and not only that as NIPP programme was also a requirement so that the DTIC can oblige the winning bidder to sign an obligation contract where a project will be identified by DTIC in South Africa to be funded by the 30% of the offshore content which exceeded or equaled US Dollar 5. The new B-BBEE sector codes are not yet implemented the projected implementation is May 2024, hence they were not enforced in this project.
12	I would like to bring to your attention the unique airworthiness specifications for the Mi-8 range of helicopters, as outlined in the Civil Aviation Authority of the Czech Republic Document No. 2732-18-433, valid since 01.08.2018. According to the documentation (attached which is traceable with the EASA as well), the Mi-8 range helicopters are issued with a Special Airworthiness Certificate (SAC) based on the Special Airworthiness Specification (SAS). This deviation from the conventional type certificate is grounded in the Mi-8MSB helicopter being recognized by the European Union Aviation Safety Agency (EASA) as corresponding to Annex II, instead of The Standard Type Certificate as per ICAO. To simplify, EASA regards and recognizes the Mi-8MSB helicopter as falling under Annex II, and this determination was solidified after negotiations between the Civil Aviation Authority of the Czech Republic and EASA. In a written confirmation dated January 24, 2017, EASA reaffirmed the Mi-8 helicopter's status as an air vehicle corresponding to Annex II, even considering the possibility of applying for a Special Type Certificate (STC). The decision to issue a Special Airworthiness Specification (SAS) instead of a Type Certificate is in accordance with Instructions L8/A, Chapter 1, item 1.6. This SAS outlines the conditions for the operation and maintenance of Mi-8, Mi-8T, Mi-8P, Mi-8S, Mi-8MT, and Mi-8MSB helicopters. Specifically, it provides the authority for the issuance of a Special Airworthiness Certificate (SAC) under the category "RESTRICTED," as per Instructions L8/A, Chapter 6, item 6.3, which pertains to the special category of aircraft. In essence, the SAS serves as the regulatory framework that authorizes the issuance of the SAC, ensuring compliance with the specified conditions for airworthiness and operation. I have attached all the documents relating to this and which proves that it is EASA approved. (Original document signed and translated version unsigned in English) Can we go ahead with the tender or we at risk of being disqualified?	The RFP is intended for any bidders who are able to design, manufacture and supply helicopters as per the scope of work that comply to Transnet safety standards as well as aviation safety standards. The EASA/FAA certification refer to aircrafts that are manufactured anywhere in the world that comply to these certifications. Any bidder that manufactures an aircraft with an EASA/FAA certification, means that that particular aircraft meets the highest safety standards that are recognised in the aviation space. Any bidder may bid however the requirements of the Scope of Work must be complied with.
<p>Signed</p>  <p>Bonggi Machi</p> <p>Regional Procurement Manager</p> <p>Date: 12/04/2024</p>		