



NAMIBIAN PORTS AUTHORITY

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Ref: G/OIB/NAMPORT-3679/2025
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15 October 2025

Head Office
Port of Walvis Bay
P.O. Box 361
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ALL BIDDERS

Dear Bidder,

Port of Lüderitz
P.O. Box 836
Lüderitz, Namibia

CLARIFICATION NOTICE NO. 04

Directors
Ms. N Hamunyeia
(Chairperson)
Mr. J Mouton
(Deputy Chairperson)
Mr. I Tjombonde
Mr. A Kathindi
Ms. V Cloete
Mr. S Ndeunyema

RE: NAMPORT BID G/OIB/NAMPORT/3679/2025-THE SUPPLY, INSTALLATION, IMPLEMENTATION, AND MAINTENANCE OF A VESSEL TRAFFIC SERVICES (VTS) SOLUTION, INCLUDING AUTOMATIC IDENTIFICATION SYSTEM (AIS) AND VHF RADIO SYSTEMS, FOR THE PORTS OF WALVIS BAY AND LÜDERITZ.

Chief Executive Officer
Mr. A Kanime

1. PREAMBLE

This Clarification Notice to Bidders forms an integral part of the above-mentioned bidding documents, and in the event of discrepancies, this Notice takes precedence over the bidding documents.

Chief Legal Advisor &
Company Secretary
Ms. EN Tomas

2. CLARIFICATION

This Notice to Bidders must also be signed and included in the Bid submission. NAMPORT retains the sole discretion to disqualify Bidders that do not comply with this requirement.

Yours sincerely,



KAVIN HARRY
CHAIRPERSON – PROCUREMENT COMMITTEE



The Namibian Ports Authority was established by the Namibian Ports Authority Act, No. 2 of 1994, and is recognised as a public enterprise in terms of the Public Enterprises Governance Act, No. 1 of 2019.

The Standard Conditions of Service of Namport shall apply to all services rendered by it and is available at www.namport.com

#	Item Description	Question	Purchaser's Response
1	Invitation for Bids (IFB) CLARIFICATION NOTICE NO. 02	<p>As you are aware, tenders of this nature require a high level of preparation involving extensive technical and administrative work, as well as close coordination with multiple stakeholders, including the Tendering Authority. In general, a preparation period of at least two months is required in order to submit a fully comprehensive and responsive proposal.</p> <p>The scope of this tender is particularly detailed and requires significant preparation time. In addition, the following activities and circumstances necessitate additional time:</p> <ul style="list-style-type: none"> • Arrangement of Site Visit: Organizing and conducting the mandatory site visit, as well as analyzing the site visit reports, will require additional time. As per our current plan We are able to make the site visit only in the dates of 10-16 October 2025. • Ongoing Internal Review: The internal review process of the tender, along with coordination with potential manufacturers, has not yet been fully completed. Additional clarification requests from manufacturers are expected in the coming days specifically after completion of site survey. This means the clarification process will require more time for all parties. Depending on NAMPORT's response times and the level of information provided, additional clarification rounds may be needed to ensure full understanding of the requirements. • Submission Method (Hard Copy): As the tender submission is required in hard copy, additional time (approximately 7-10 days) is needed for foreign bidders to deliver the original proposals from their country of origin to Namibia. <p>In view of the above, we respectfully request an extension of the bid submission deadline by mid-November 2025, to allow</p>	<p>Please note that all the reasons outlined were already considered by Namport when the previous extension was granted. That extension was provided specifically to accommodate these preparation, coordination, and submission requirements.</p> <p>Accordingly, no further extensions will be granted, and the bid submission deadline remains as stated in the last amendment issued by Namport.</p>
We 2	Section II. Bidding Data Sheet (BDS)	<p>The requested VTS system specifically the software requirements are highly advanced and some requested software functionalities may not be</p>	<p>Bidders should note that bids must meet the stated requirements. Any additional software enhancements may only be agreed upon at contract stage with the successful bidder.</p>

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		available in the bidder's software at the time of the bid submission. Can bidders commit to develop some missing functions during the contract period?	
3	(BDS) ITB 12.1 (h) The	<p>1.confirm whether any of the following documents will be acceptable as evidence of completed projects, as applicable/available with the Bidder:</p> <ul style="list-style-type: none"> • A copy of the signed Contract/Purchase Order (with commercial information disclosed if required), • Factory Acceptance Test (FAT) / Site Acceptance Test (SAT) reports signed by the Customer and/or End User, • Letters of confirmation/reference issued by the Customer and/or End User <p>2.We understand that the reference to Annexure-5 is intended to mean Annexure-2 Project Completion Certificate as provided in the tender package. Please confirm. Secondly please clarify if we can amend some parts of Project Completion Certificate as needed.</p> <p>3.Finally, please confirm whether bidders may also provide lists of ongoing VTS contracts/projects together with relevant supporting proof.</p>	<p>Bidders should note that all points raised are acceptable to Namport, with the following clarifications:</p> <ol style="list-style-type: none"> 1. Acceptable Evidence of Completed Projects: The listed documents (signed Contract/Purchase Order, FAT/SAT reports, and Customer/End User reference letters) will be acceptable as evidence of completed projects, where applicable and available. 2. Annexure Reference and Amendments: Namport confirms that the reference to Annexure-5 refers to Annexure-2 (Project Completion Certificate) as provided in the tender package. However, bidders are requested to clarify what specific amendments are being proposed to the Project Completion Certificate for Namport's consideration. 3. Ongoing Projects: Bidders may provide lists of ongoing VTS contracts/projects, supported by relevant documentary proof.
4	Section VII. Special Conditions of Contract GCC 16.4 (b)	With reference to the term "a combination of the two currencies" for the payment of goods and services supplied from overseas suppliers, can you please confirm whether USD or EUR will be acceptable?	<p>Bidders are reminded that the fixed bid price must be submitted in the local Namibian currency (NAD).</p> <p>Payment may be made in the currency in which the bidders is allowed to receive payment but will be based on the exchange rate as date of payment at NAD equivalent milestone amount. Payment may be made in tradeable currencies only.</p>
5	Section IV. Bidding Forms I.Price Schedule Forms	Kindly clarify whether bidders are permitted to amend the lines of the pricing schedules in accordance with the final proposed scope of works/Bill of Materials of the VTS system.	Yes, bidders may add whatever they need in the price proposal to ensure an all-inclusive price is submitted.
6	List of Related Services and Completion Schedule -Walvis Bay	<p>We respectfully request NAMPORT's clarification on the stated requirement for integration of the VTS with third-party systems, as outlined below:</p> <ul style="list-style-type: none"> • DGPS/DGNSS Integration: With reference to the term "Differential Global Positioning 	Namport confirms that the requirement refers to integration with Differential GNSS (DGNSS) , not traditional DGPS. The VTS must support data exchange with pilotage systems (e.g., ChannelPilot RTK) via AIS/DGNSS messages for positional accuracy and interoperability. Full software-level integration with MPUs is not

System (DGPS) sensors", we assume this may in fact refer to integration with "meteorological systems such as EGC". Based on this, we understand NAMPORT requires integration of the VTS with the Navicom Dynamics ChannelPilot RTK.

required, only **interface compatibility** in line with IALA standards.

1. Kindly confirm if this interpretation is correct and consider the following points:

- DGPS vs. DGNSS: DGPS is not a standard service typically integrated into VTS. IALA documentation instead refers to Differential GNSS (DGNSS), which can be transmitted by AIS Base Stations via AIS Message 17 (GNSS Broadcast Binary Message). AIS Base Stations already have internal GNSS receivers (GPS, BeiDou, Galileo, GLONASS); however, this is not related to coastal DGPS services.
- ChannelPilot RTK specifications: According to product specifications, the position sources are GPS/GLONASS/Galileo/QZSS/BeiDou (L1/L5 mGNSS). These represent DGNSS services, not DGPS.
- Role of Mobile Pilot Units (MPUs): The ChannelPilot RTK is an MPU, essentially an AIS Pilot Plug device used by pilots during pilotage operations. It is generally used as a stand-alone system with third-party software (commonly tablet-based) to assist pilots in safe and efficient navigation and onboard operations.

In this case, we assume the required integration is the broadcast of DGNSS messages (AIS Message 17) from the AIS Base Station, which the ChannelPilot RTK could receive through the vessel's onboard AIS (if capable).

2. Kindly confirm if this interpretation reflects NAMPORT's expectation. Otherwise, please clarify the intended integration between the VTS system and MPUs, including specific integration scenarios.

Meteorological Systems (EGC) Integration:
With reference to "meteorological systems such as EGC", we assume this refers to integration with the Cobham Sailor 6018 EGC (Enhanced Group Call) GMDSS Console.

Namport confirms that "meteorological systems such as EGC" refers to the **Cobham Sailor 6018 EGC GMDSS Console**. The VTS should be capable of **receiving and displaying EGC messages** for situational awareness, with **interface compatibility** (not full control integration) in line with IALA and GMDSS standards.

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	<p>Kindly confirm if this understanding is correct.</p> <p>In this case, we assume the VTS Radio Dispatch Software shall be integrated with the Thrane & Thrane / Cobham Sailor 6018, supporting the receipt and display of EGC messages. Please confirm if this is NAMPORT's expectation. Otherwise, kindly clarify the intended integration between the VTS system and the Cobham Sailor 6018, including specific integration scenarios.</p>	
8	<p>We kindly request NAMPORT to review and comment on our explanations above for certain integration requirements. Additionally, in order to ensure accurate cost and effort estimation, we ask NAMPORT to define clear integration scenarios for each system including Port Management Systems Integration Scenarios: Integration feasibility depends on well-defined use cases, including:</p> <ul style="list-style-type: none"> • Data types and formats to be exchanged, • Communication protocols (e.g., REST API, SOAP, OPC), • Data update frequency (real-time, periodic, on-demand), • Direction of data flow (unidirectional or bidirectional). <p>We request NAMPORT to clarify these requirements at the tender stage to be able to confirm the feasibility of the integration and estimate cost/time implications.</p>	<p>Bidders should note that Namport has reviewed the explanations provided regarding integration requirements. Namport confirms that all required integrations are to be proposed in alignment with the functional and technical requirements stated in the tender documents.</p> <p>At this stage, specific integration scenarios, protocols, and data exchange configurations (including data types, formats, communication methods, and update frequency) will be defined and finalized during the contract implementation phase in consultation with the successful bidder.</p> <p>Accordingly, bidders are expected to allow for integration capability and flexibility in their proposed VTS solution architecture and to make reasonable cost and effort assumptions based on standard IALA and port system integration practices.</p>
9	<p>Dependency on Third-Party Systems: Successful integration requires compatible interfaces and technical support from the existing port/third-party systems. These aspects are outside the VTS supplier's responsibility. Without confirmed availability of APIs or middleware from those vendors, integration cannot be guaranteed. We kindly request NAMPORT to confirm that any required interfaces with the cost for 3rd party systems shall be under NAMPORT's responsibility.</p> <p>Recommendations In view of the above requested clarification requests, we propose two possible approaches for NAMPORT's consideration: Option 1: Define Integration Requirements at Tender Stage</p>	<p>Bidders should note that Namport acknowledges the dependency on third-party systems for successful integration. Namport confirms that, as per global best practices, most modern port and maritime systems are designed with open architecture and interface compatibility, allowing for integration through standard APIs, middleware, or data exchange protocols.</p> <p>Accordingly:</p> <ul style="list-style-type: none"> • Integration with existing third-party systems shall be based on standard, open, and widely supported communication protocols (e.g., REST API, SOAP, OPC, NMEA, TCP/IP). • The cost and provision of third-party system interfaces, licenses, or middleware—where required—will remain Namport's responsibility, provided these systems are part of the existing Namport infrastructure. • Bidders are required to ensure that their proposed VTS system design

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- Clearly specify integration requirements, protocols, and scenarios for each system.

Confirm that provision of required interfaces and licenses from third-party systems will be NAMPORT's responsibility and cost.

- Option 2: Defer Integration Scope to Execution Phase

- Exclude integrations from the current contract scope which might be challenging to specify in short time specifically the ones with Port Operations Systems.

- Allow the selected VTS contractor to work with NAMPORT and third-party vendors during contract execution to assess feasibility.

- Formalize any agreed integration work later via a contract amendment, with mutually agreed scope, timeline, and commercial terms.

We respectfully request NAMPORT's guidance and confirmation on the above points, so that bidders may align their proposals accurately with NAMPORT's expectations.

allows for interface compatibility and integration readiness in line with IALA V-128 and related standards.

Namport further confirms that **detailed integration requirements, scenarios, and protocols will be finalized during the contract execution phase** in collaboration with the successful bidder and relevant third-party vendors to ensure full interoperability and system performance optimization.

10 Section V. Schedule of Requirements

The required VTS system involves two ports and multiple critical milestones that must be achieved before final acceptance. Based on industry best practice and our project experience, we respectfully recommend that the following activities be included in the project milestones and properly sequenced in the project plan:

1. Key Project Milestones (Recommended)

- Project Kick-Off Meeting & Detailed Site Survey: To be conducted immediately after contract efficient date.

- System Design (Preparation & Approval): (Although not currently included in the tender activities, we strongly recommend this stage to ensure proper planning and alignment with NAMPORT requirements.)

- Procurement of Equipment as per final approved design by NAMPORT.

- Customisation & Development of Software as per design including finalised integration plan with 3rd party systems.

- Factory Acceptance Tests (FATs) shall be performed at the OEM facilities in different locations. As a general practice, the Radar FAT may be conducted at the Radar OEM's facility, while the FAT for the remaining

Bidders should note that while Namport acknowledges the proposed project milestones and sequencing as aligned with industry best practice, the **final project plan, milestone definitions, and sequencing will be confirmed during the contract execution phase** in consultation with the successful bidder.

For the purpose of bid submission, bidders are **required to submit a reasonable and realistic project implementation plan** that reflects their proposed methodology, indicative timelines, and key milestones necessary to achieve full system delivery, testing, and commissioning within the required contract period.

This will allow Namport to evaluate each bidder's understanding of the scope, integration requirements, and project execution strategy, while final details and dependencies (including logistics, FATs, and 3rd-party integrations) will be agreed upon at contract execution.

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equipment and the VTS software can be carried out at the VTS OEM's facility. (Although this activity is not included in the tender, it is strongly recommended to minimize risks for both NAMPORT and the Contractor prior to shipment.

- Shipment & Delivery of Equipment (CIP/CIF Incoterms 2020): Please note that from our experience implementing another project in Africa including Namibia, no air freight option is available from certain countries like UAE for oversized/overweight cargo. Airlines impose restrictions for cargo weight/dimensions. (e.g., maximum 300 kg @ 120 x 80 x 100 cm). As such, large equipment (e.g., 12 ft radar antennas) cannot be shipped by air due to dimensional limits. Consequently, delivery timelines for sea freight (2 months) vs. air freight (1 week) differ significantly. The most suitable mode of transport can be confirmed at contract stage, but sea freight is most likely which extend project timeline.
- Customs Clearance: To be performed under NAMPORT's responsibility. Please note that clearance timelines cannot be estimated by the Contractor.
- On-Site Installation & Integration Works
- On-Site Trainings
- Site Acceptance Tests (SATs) / System Tests & Trials
- Commencement of the Warranty period.

11 Lead Times and Dependencies

2. Lead Times and Dependencies

- Coastal Radars (IALA-compliant): Lead times of approximately 6–8 months.
- Other Critical Systems (Radar, Electro-Optical Systems, AIS, Radio Systems): May require export licenses, depending on the OEM selected by the Contractor. Export license approvals are external dependencies and may introduce additional delays outside the Contractor's control.
- Transport Mode: depending on the availability of sea or air freight, the selected mode will directly impact the overall project timeline.

3. Realistic Project Duration
 Considering the complexity, scope, and interdependent nature of activities—along with the fact that the project covers two ports requiring certain activities to be carried out separately—the industry average completion period for such projects is approximately 16–18 months.

4. Observations on Current Tender Activity Sequence

Bidders should note that Namport acknowledges the indicative lead times, dependencies, and project sequencing considerations presented, which are consistent with general industry practice for VTS system implementation projects. However, the final project schedule, **milestone sequencing, and delivery timelines** will be reviewed and confirmed during the **contract execution phase** in consultation with the successful bidder, once equipment sources, export license requirements, and logistics arrangements are verified. For the purpose of bid submission, bidders are **required to propose a reasonable, realistic, and internally validated project plan**, including key milestones and estimated completion dates, demonstrating a clear understanding of the project scope, interdependencies, and risk management approach. Namport therefore **will not amend the total implementation period at this stage**, but will assess the proposed timelines and plans submitted by each bidder to ensure feasibility and alignment with Namport's

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	<p>The activity sequence currently defined in the tender does not fully align with best practices for VTS system deployment. For example, the recommended milestones such as Kick-off meeting, detailed site survey, system design, and FATs should be conducted before equipment delivery. This ensures correct planning, system customization, and proper installation/integration, while minimizing risks for both NAMPORT and the Contractor. We respectfully propose that the project schedule and contractual requirements be revised to reflect these industry-standard practices, to ensure a smooth, risk-mitigated, and efficient deployment of the VTS system.</p> <p>In light of the above, we kindly request NAMPORT to:</p> <ul style="list-style-type: none"> • Extend the total project implementation timeline to a minimum of 16 months including all project milestones for 2 ports from the effective date of the contract; • Request bidders to submit a project plan, including key milestones and estimated completion dates, as part of their proposals. 	<p>operational requirements and risk framework.</p>
<p>12 Technical Specifications</p>	<p>Clarification on "Minimum Coverage Range of 72 NM": In light of the above, we interpret the tender requirement for a "minimum coverage range of 72 nautical miles" as referring to the radar's instrumented range (i.e., display/processing range scale), rather than a guaranteed detection range for standard maritime targets under operational conditions. We kindly request confirmation of this interpretation.</p> <p>2. Secondly, as bidders are required to submit coverage calculations for the proposed radar, we respectfully request NAMPORT to provide the antenna heights of each radar tower location</p> <p>3. Finally, we strongly recommend that bidders propose Radars in a redundant transceiver configuration (similar to AIS Base Stations) to enhance system availability, subject to NAMPORT's final decision. Accordingly, we strongly recommend that NAMPORT allow bidders to supply a dedicated VHF DSC receiver with a separate antenna, so that GMDSS DSC emergency calls can</p>	<p>The bidder to refer to Clarification Notice 3 regarding bid requirement.</p> <p>This an option that will be explored with winning bidder</p>

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		<p>be reliably received and managed through a DSC interface. We kindly request confirmation of this approach.</p>	
	<p>Technical/Functional Specifications: Electronic nautical charts</p>	<p>We assume that the supply of Electronic Navigational Charts (ENCs) shall be the responsibility of the Contractor and provided at the Contractor's own cost. Kindly clarify or confirm.</p>	<p>This is correct. Namport will provide ENCs</p>
13	<p>Technical/Functional Specifications: Electronic nautical charts</p>	<p>Kindly find below our comments and clarification requests regarding the requested backgrounds:</p> <ul style="list-style-type: none"> • OSM (OpenStreetMap) vs Google Maps: Both types of maps provide a very similar layout in VTS applications. However, the use of Google Maps services requires a license at additional cost. Please confirm whether supporting OSM alone will be sufficient to meet the requirement, or if any license costs for Google Maps need to be covered by Namport. <p>DWG Format: Importing DWG files requires conversion into a supported format. Since DWG is a CAD format and not GIS-oriented, manual correction/clean-up of the converted output may be necessary, depending on the DWG content. If NAMPORT provides DWG drawings in AutoCAD specifically for use as chart layers, we may import them into our VTS after converting them into ESRI Shapefiles.</p> <p>Kindly clarify/confirm this point. Otherwise, we recommend excluding DWG from the scope to avoid potential complications.</p> <ul style="list-style-type: none"> • Shapefiles: Please clarify/confirm if ESRI Shapefiles are being referred to here. 	<p>Bidder is required to provide a solution capable of supporting various mapping sources, including Google Maps as specified in the bid. Any associated license costs must be included under Section IV – Bidding Forms: Price Schedule.</p> <p>Bidder is required to provide a solution capable of supporting various mapping sources, including DWG formats as specified in the bid.</p> <p>Namport refers to the ESRI Shapefile format.</p>
14	<p>Technical Specifications</p>	<p>In summary, virtualization does not bring measurable benefits to system performance in the context of VTS operations. We therefore respectfully recommend that this requirement be reconsidered, and that bidders be allowed to propose server architectures based on proven, reliable designs successfully deployed in previous VTS projects.</p> <p>As conclusion, kindly clarify/confirm if the bidders may propose non-virtualized Server Architecture?</p>	<p>Bidders are encouraged to review the bid requirements carefully as they pertain to the provision of physical and/or virtual servers for the proposed VTS solution.</p>
15	<p>Section V. Schedule of Requirements</p>	<p>Kindly clarify below points:</p> <ol style="list-style-type: none"> 1. Recording Period: What is the required period of time for recording VTS data at the server? As per IALA recommendations: "It is recommended that the VTS 	<p>Namport requires that the proposed VTS system be capable of recording a minimum of 30 days of activity. Bidders should size the server storage to accommodate all relevant data sources, including radar, AIS, video feeds and other operational information.</p>

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		<p>system recording capacity covers, at least, 30 days of activity." Accordingly, bidders may size the server storage capacity to meet this requirement.</p> <p>2. External Storage/ Backup: Should bidders propose an external storage solution (e.g., Network Attached Storage) for longer-term data backup, or will NAMPORT provide such media? If bidders are required to propose external storage, kindly confirm the required storage period for archived data.</p>	<p>Namport will provide the external storage solution or media required for long term data backup.</p>
16	Technical Specifications	<p>Please clarify whether bidders may propose the servers (including hardware configurations) in line with their own software architecture and system design requirements.</p>	<p>Bidders are encouraged to review the bid requirements carefully regarding the provision of servers.</p> <p>Bidders may propose server hardware and configurations based on their software architecture and system design all ICT equipment must be from an internationally reputed brand (e.g., HP, DELL, etc.) and comply with the performance and reliability standards outlined in the tender document.</p>
17	Schedule of Requirements	<p>Kindly confirm that, in the event NAMPORT decides to conduct a site visit to a reference port of the VTS OEM, the travel costs of the NAMPORT team shall be covered by NAMPORT. Otherwise, recommend to maximum number of people to attend such a visit to estimate the costs.</p>	<p>Yes, this is typically the case with Namport. The winning bidder should solely organise access to such facilities and visa applications where applicable, will be borne by Namport</p>
18	Section V. Schedule of Requirements	<p>We strongly recommend that Factory Acceptance Tests (FAT) be included within the scope of Inspections and Tests, as they provide proof of system compliance and minimize risks prior to shipment and installation of the system.</p> <p>For reference, in our project with Telecom Namibia Limited (Design, Supply, Installation, and Commissioning of the Coastal GMDSS and Radio System in Namibia), FAT was defined as a project milestone. this approach is acceptable—subject to the overall project delivery schedule allowing sufficient time for the process.</p> <p>We kindly request NAMPORT to clarify the following:</p> <p>1. Whether the travel costs of NAMPORT personnel attending FAT will be borne by NAMPORT or by the Contractor.</p>	<p>Same as Clarification #17</p>

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		2. In the event that the Contractor is responsible for travel costs, please confirm the maximum number of NAMPORT participants to be considered for cost estimation purposes.	
19	Section V. Schedule of Requirements	<p>Upon review, the coordinates provided by NAMPORT for Luderitz Port appear to be incorrect.</p> <ul style="list-style-type: none"> Luderitz Port Control Tower (22°56'58.00"S, 14°29'57.22"E): These coordinates point to Walvis Bay, not Luderitz. Kindly provide the correct coordinates for the Port Control Tower. Shark Island Tower (26°38'7.69"S, 15°9'11.34"E) and Radar Equipment Room (26°38'8.18"S, 15°9'11.39"E): These locations appear to be near a lighthouse. Please confirm whether the Shark Island Tower and Radar Equipment Room are located at the same site as the lighthouse. If not, kindly confirm whether the provided coordinates are correct. 	<p>Bidders should note that Namport confirms the coordinates previously provided for the Lüderitz Port Control Tower contained an error. The correct ones are; Latitude: 26.6385° S Longitude: 15.1570° E</p> <p>Regarding Shark Island, Namport confirms that the Radar Equipment Room and Tower are located in proximity to the existing lighthouse site, Shark Island Tower and Radar Equipment Room are located at the same site as the lighthouse. The coordinates provided in the tender are generally accurate for this site and can be used for bid preparation purposes.</p>
20	Technical Specifications	Could you please clarify whether the Contractor will be allowed remote access to the system via VPN for support during the installation, warranty, and SLA periods, as this would significantly reduce the overall cost of support.	Namport will provide remote access to the system via VPN.
21	Technical Specifications	Please clarify whether NAMPORT technical personnel to be trained by the Contractor will act as First Line Support, so that we can propose the appropriate service organisation chart in the SLA as requested.	Yes, the contractor or bidder shall be obliged to provide appropriate training as First Line Support.
22	Section V. Schedule of Requirements	<p>There appear to be inconsistencies in the stated number of trainees, as the figures given in writing and those shown in brackets do not match. Kindly confirm the correct number of trainees.</p> <p>Secondly, the tender specifies an eight (8) day training period for up to [xx – to be confirmed by NAMPORT] participants at each port. We would like to propose an alternative approach: conducting four (4) days of classroom-based operator training by dividing the total number of trainees into two separate groups. This would ensure more efficient and effective training in smaller groups. Please clarify/confirm if this approach would be acceptable.</p>	<p>Please find below the required number of trainee for each port.:</p> <p>Walvis Bay</p> <ul style="list-style-type: none"> Operator training trainees is 12 Technical training trainees is 3 <p>Luderitz</p> <ul style="list-style-type: none"> Operator training trainees is 8 Technical training trainees is 1
23	Strategic Vision & Future Outlook	<p>Strategic Vision & Future Outlook</p> <ul style="list-style-type: none"> What is NAMPORT's long-term vision for this VTS system (3–5–10 years)? Is this project intended as a standalone upgrade for Walvis Bay and Luderitz, or as part of a national coastal monitoring strategy? 	Bidders should note that Namport's long-term vision for the VTS project is to establish a modern, scalable, and interoperable Vessel Traffic Management capability that enhances safety, efficiency, and environmental protection within Namibia's ports and approaches.

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	<ul style="list-style-type: none"> o Will it be integrated with the MRCC, Navy, or fisheries monitoring systems? • With the growing role of the oil & gas industry offshore Namibia, does NAMPORT expect: <ul style="list-style-type: none"> o To expand monitoring beyond port approaches (e.g. offshore platforms, supply vessel traffic, oil export terminals)? o Requirements for long-range radar coverage (>72 NM) and/or satellite AIS integration? • Should we anticipate that NAMPORT will seek future scalability (e.g. additional ports, coastal surveillance, UAV/drone integration, big data analytics)? • Would NAMPORT prefer a solution that optimizes lifecycle costs (CAPEX vs OPEX) — e.g. modular upgrades, scalable software, consolidated service contracts? 	<p>The current VTS implementation at Walvis Bay and Lüderitz is being undertaken as a standalone project phase, but forms part of Namport's broader strategic goal to support national maritime domain awareness in collaboration with the Directorate of Maritime Affairs (DMA), MRCC, and other relevant national agencies.</p> <p>While this project's immediate focus is on port approach monitoring and vessel traffic management, Namport envisions future scalability to enable integration with offshore monitoring, oil and gas operations, long-range radar coverage, and satellite AIS, subject to future national coordination and funding.</p> <p>Bidders are encouraged to propose a modular and scalable solution architecture that supports cost-efficient lifecycle management (CAPEX and OPEX optimization) and can accommodate future expansion, data analytics, and technological enhancements in line with global smart port and coastal surveillance trends.</p>
24	<p>Radar & Sensors</p> <ul style="list-style-type: none"> • For the shore-based radar (12 ft slotted waveguide, horizontal polarization): <ul style="list-style-type: none"> o Is the 72 NM detection range a strict requirement for 1 radar, or is effective coverage of approaches and traffic separation zones sufficient? Remind that this would require a very high radar tower is this to be achieved with 1 radar. o Are there constraints on tower height or installation locations that may impact line-of-sight? Are the towers already constructed (if so, please give us the height of the tower)? o Does NAMPORT expect some form of redundancy for the radars? <ul style="list-style-type: none"> • Should the radars support advanced target tracking (small craft, high-speed boats), considering offshore oil & gas security? o Which IALA type of vessel at which range should be detected? 	<p>Bidders should note that the stated 72 NM instrumented radar range represents the required system capability, not a requirement for full coverage by a single radar. The key objective is to ensure effective detection and tracking coverage of port approaches, anchorage zones, and traffic separation areas for both Walvis Bay and Lüderitz.</p> <p>Namport confirms that tower height is not considered a limiting factor, as modern solid-state and long-range radar technologies are capable of achieving the required performance using optimized antenna configurations and signal processing techniques. Bidders are encouraged to propose solutions consistent with current IALA standards and global best practice for coastal and port surveillance systems.</p> <p>Namport expects appropriate redundancy provisions (e.g., overlapping radar coverage or failover capability) to ensure uninterrupted VTS operations.</p> <p>Furthermore, the system should support advanced target tracking for small craft and high-speed vessels, including those linked to offshore oil and gas activities, and comply with IALA Recommendation V-128 for</p>

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			<p>detection and tracking of at least IALA Type 1 and Type 2 vessels.</p> <p>Namport requires that the dual AIS base stations be configured as fully redundant (hot standby) to ensure uninterrupted monitoring in the event of a failure.</p>
25	AIS Systems	<ul style="list-style-type: none"> • For the dual AIS base stations: <ul style="list-style-type: none"> o Should these be fully redundant (hot standby) or independent to cover different sectors? o Is there an expectation for VDES readiness (future-proofing)? o Will there be integration with satellite AIS feeds for offshore traffic awareness? 	
26	VHF / Communications	<ul style="list-style-type: none"> • Should the VHF/DSC radios be integrated into the VTS VoIP platform for operator control, or kept as standalone transceivers? • For the 4 antennas per site: should these be sectorized or purely omnidirectional? • Should we include recording and playback of all voice communications as part of the VTS system compliance? 	<p>VHF/DSC integration: Bidders should note that VHF and DSC radios are to be integrated into the VTS VoIP/dispatch platform for full operator control from the VTS consoles (PTT, channel select, scanning, cross-patch, alarms) via IP/RoIP gateways. Radios must also be capable of local standalone/fallback operation for resilience.</p> <p>Antennas (4 per site): Unless a superior engineered alternative is justified, use omnidirectional antennas to provide uniform harbor/approach coverage and simplify frequency planning. The typical allocation is: CH16 guard, Port Working 1, Port Working 2, and DSC CH70. If proposing sectorized antennas, the bidder must demonstrate clear benefits (coverage shaping/interference mitigation) and ensure proper isolation, filtering, intermod suppression, lightning protection, and tower loading compliance.</p> <p>Recording & playback: Yes, include recording and playback of all VTS voice communications (VHF/DSC, intercom, telephony) and DSC message logs within the VTS system, with GNSS/NTP time-sync, searchable/replay/export functions, audit trails, and data retention in line with Namport policy and applicable regulations (to be confirmed at contract stage).</p>
27	VHF / Communications	<ul style="list-style-type: none"> • Should the VHF/DSC radios be integrated into the VTS VoIP platform for operator control, or kept as standalone transceivers? • For the 4 antennas per site: should these be sectorized or purely omnidirectional? • Should we include recording and playback of all voice communications as part of the VTS system compliance? 	<p>Same as #26</p>
28	Weather & Metocean Systems	<ul style="list-style-type: none"> • Should weather station data be fully integrated into the VTS software with alarms, thresholds, and overlays? • Should we plan for future metocean expansion (wave buoys, tide 	<p>Weather station integration: Yes. Weather station data shall be fully integrated into the VTS software, including: real-time display, configurable alarms/thresholds (e.g., wind speed/direction, visibility, pressure,</p>

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gauges, current profilers), especially considering oil & gas activities?

temperature, rainfall), map/chart overlays (wind barbs, visibility zones), trend graphs, time-synced logging, and operator acknowledgements. The solution must support redundant sensors/feeds, health/status monitoring, and data export (e.g., REST/NMEA/TCP) for port users/PCS.

Future metocean expansion:

Plan for scalable/metocean-ready architecture. The VTS shall provide native or gateway integration for wave buoys, tide gauges, and current profilers, with:

- Open interfaces (NMEA 0183/2000, Modbus-TCP, TCP/IP, REST),
- Configurable polling rates and high-frequency burst support,
- Geospatial overlays (tide levels, currents, wave height/period), dashboards and alarms,
- Central data storage/retention for analysis and MSI,
- Capacity for additional sensors/sites tied to offshore oil & gas operations.

Bidders should include integration readiness now (interfaces, licensing, configuration), with device procurement/installation of additional metocean instruments to be finalized at contract stage or via future phases, as directed by Namport.

29 VTS Software

- Should the software include:
 - Full traffic image fusion (radar + AIS + weather)?
 - Alarm management, recording & playback, decision support tools?
 - Multi-language user interface (English/local)?
- For web and mobile users:
 - Is this meant for full operational control or monitoring-only access (traffic image & alerts)?
- Are there expectations for integration with external systems (port community system, customs, oil terminal management)?

Bidders are encouraged to review the bid requirements carefully.

Namport's technical requirement specifies the fusion of tracks from multiple sources (radar and AIS) into a single target. While the system must support radar and AIS track fusion, integration of additional sources such as weather is not mandatory at this stage but may be considered for future enhancements. The core requirement remains the fusion of radar and AIS data.

Namport requires the bidder to include alarm management, recording & playback and decision support tools as core components of the VTS system to ensure safety, situational awareness and effective operational decision making.

Namport considers a multi-language user interface optional. Bidders may propose additional languages, but the system must at minimum support English as the primary language.

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			<p>Web and mobile access to the VTS system is intended to provide both monitoring and full/limited operational control for authorized users where appropriate.</p> <p>The proposed VTS solution must be capable of integrating with future external systems such as the port community system, customs, oil terminal management and any other relevant maritime or port operational systems that may be introduced</p>
30	Infrastructure & Cybersecurity	<ul style="list-style-type: none"> • For servers and IT backbone: <ul style="list-style-type: none"> ○ Should we deliver a virtualized, redundant cluster (high availability), or is a simpler primary/backup acceptable? ○ How many years of radar & AIS data storage are required? • Cybersecurity: <ul style="list-style-type: none"> ○ Are there any cyber guidelines? ○ Is there a NAMPORT cybersecurity policy we must comply with? 	<p>While the proposed VTS solution may be implemented on either physical or virtual servers, Namport requires a redundant (high availability) cluster to ensure continuous operation and maximum reliability.</p> <p>Namport requires that the proposed VTS system retain a minimum of 30 days of radar and AIS data for operational use, in accordance with IALA recommendations. For long-term storage, Namport will provide the external storage solution or media necessary for data backup.</p> <p>The proposed VTS solution must comply with applicable Namibian ICT security policies and follow recognized international standards, including ISO/IEC 27001 and IALA cybersecurity guidelines.</p>
31	Training & O&M	<ul style="list-style-type: none"> • Should operator training include emergency response simulation, or just navigational safety? • Will NAMPORT require a multi-year O&M (or SLA) contract bundled into the bid, or separate agreements later? • Should technical training include software maintenance and updates so NAMPORT reduces dependency and long-term costs? 	<p>Bidders are encouraged to review the bid requirements carefully.</p> <p>Bidders are required to include a draft SLA covering maintenance and support for the installed VTS systems at the Ports of Walvis Bay and Luderitz for the offered five-year warranty period following project acceptance by NAMPORT.</p> <p>Namport requires that the technical training provided by the bidder includes software maintenance and updates and ensure that Namport ICT staff are fully capable of operating, managing and troubleshooting the VTS system independently</p>

32	Licensing & Commercials	<ul style="list-style-type: none"> • For the VTS software licensing model: <ul style="list-style-type: none"> o IS NAMPORT open for a subscription model (annual licensing) that ensures continuous updates and cybersecurity compliance? □ should annual fees be included as part of the O&M contract, or as a separate line item? o How many years of license and support should be guaranteed under the tender (e.g. 3 years, 5 years)? o Will NAMPORT require an option to extend licenses/O&M services beyond the initial period at predefined rates? • Are there local content requirements (minimum Namibian suppliers/services/workforce)? 	<p>Namport is open to both licensing options for the proposed VTS system:</p> <ul style="list-style-type: none"> • Subscription/Annual Licensing • Perpetual License <p>Bidder is required to clearly indicate how these O&M fees are structured in their proposal to allow Namport to evaluate the total cost of ownership and budgeting.</p> <p>Bidders are required to include a draft SLA covering maintenance and support for the installed VTS systems at the Ports of Walvis Bay and Luderitz for the offered five-year warranty period following project acceptance by NAMPORT.</p> <p>The bidder to refer to Clarification Notice 1 regarding local presence.</p>
33	Extension	<p>Also, we want to find out if a 2 weeks extension will be a possibility taking into account that a physical site meeting may be scheduled for both sites. The request is made to allow sufficient time to incorporate findings from the mandatory site visits and to ensure a high-quality, fully compliant submission.</p>	<p>The bidder to refer to Clarification Notice 2 regarding the extension.</p>

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