SN	Page No	Reference	Title	Description	Clarifications	ISRO/NSIL Comments
				Response to RFP Queries RFP No: NSIL/RFP/VCS-MCS/ 2024/01 dated 20 April 2024 for Supply, Installation & Commissioning of IT infrastructure and Software development for establishing Vessel Communication and Support System (VCS) for Monitoring, Control and Surveillance (MCS)		
1	Pag 117 & 88	4.4. Data Backup and Recovery Site (Mandatory) at Delhi 2.1. Network Details	Data Backup and Recovery site	Data Backup and Recovery site: All the data from Centralized Data Centre (CDC), INCOIS will be archived at this location for backup and recovery. The vendor should provide robust application and data replication/synchronization mechanism implementation to maintain consistency between the CDC and backup site. The backup should preferably be done in real time and should resume from last backup point in case of network failure. A copy of all the operating environment and executables shall also be maintained at this site for recovery purpose. The proposed site is at DoF, New Delhi.	1. As per the note the data will be archived and the rela time data will be backed up. Does the system wholud have a backup offline also? If so the required hardware specifications and the backup schedule need to be defined like Monthly/weekly/incremental/yearly etc.. 2. Any defined RPO/RTO? 3. Peridocity of the Back up Need to be defined?	**Backup Schedule will be decided during design review. PLs refer section 1.16. Warranty & Comprehensive AMC for typical downtime**
2	Page 111	3.1 Detailed Scope of Work Hub baseband Software Table 1: Scope of work of Hub baseband Software (NCP & NMS)	Operations and Maintenance Activities:	Regular backups of operational environment and database shall be taken to ensure quick recovery from failure	Does the system wholud have a backup offline also? If so the required hardware /software specifications for backing up of the data and the backup schedule need to be defined like Monthly / weekly /incremental /yearly etc..	**Feature Should be supported. Schedule Will be finalised during design review**
3	Page 105	2.3.3 DBMS & Data Archival	DBMS & Data Archival	Database should have capability to define automatic database backup for online backup as well as offline backups. Database should ensure data synchronization between database servers in near real-time.	DBMS data need to backedup offline. The required hardware /software specifications for backing up of the data and the backup schedule need to be defined like Monthly/weekly/incremental/yearly etc..	**Feature Should be supported. Will be finalised during design review**
4	Page No 93	2.3.1 (II) Application tier Modules	GIS Map Server Module:	Free open-source GIS software shall be used to carry out the enhanced processing and display of spatial data like managing and sharing geographic information and displaying maps or other geographic information within the web application. It shall provide access to particular GIS resources and functionality, such as managing base maps, displaying map layers, creating and managing areas on map, measuring distances and areas and other related GIS map based operations.	The GIS Modules available for the integration is provided by Bidder? Or it will be provided by the Purchaser?	**GIS module for supporting all GIS functionality should be developed and provided by Bidder**
5	Page 106	2.3.5 NMS Website Security Requirements	NMS Website Security Requirements	The NMS website & smartphone application shall undergo VAPT security audit (CERT-IN security audit) by authorized / CERT-In empaneled external agency to ensure that it is not vulnerable to security threats when hosted over Internet/Intranet. Vendors are advised to follow standard coding practices and to incorporate security features like hosting the website over SSL (HTTPS), etc. Vendor has to support any software changes to meet the certification requirement within warranty period.	1. Cert-In Cerficaition has to be done by the external agency itself or the Bidder if Cert-In empanelled then audit can be done by the same agency? 2. What is the periodicity for the Audit and Number Iterations Before applciation is go Live ? 3. What is the periodocity for the audit at the time of Operations and Management?i.e During the warranty Period . 4. Does the applciation is hosted on internet or intranet? 5. Does the application to be offline or online?	**1. Bidder has to get CERT-IN certification done by external 3rd party that is empanelled with CERT-IN 2 & 3. Number of Iterations per VAPT depend on whether all the vulnerabilities reported by the auditor are resolved or not. After each round of VAPT, vulnerabilities reported should be resolved and the software should be offered again for testing. If still auditor finds that reported vulnerabilities are not resolved, another iteration of resolution is done and software is offered for re-testing. This is done till all vulnerabilities are resolved. VAPT clearance certificate is valid for certain duration specified by auditor. Re-certification is to be performed everytime before validity expires. 4. Internet 5. VAPT can be done online or offline depending on auditor/auditee**

6	Page 109	3.1 Detailed Scope of Work Hub baseband Software	Detailed Scope of Work Hub baseband Software	Submit a comprehensive list of deliverables along with the offer with price masked for the proposed configuration. **Provide requirement of space for equipment, electricity and thermal load, air-conditioning etc.** Vendor shall provide a list of inventory of critical spares, which the vendor will maintain for maintenance of services, along with offer. The selection of the hardware and software sub-systems should be done in a manner to ensure the continuity of service for at least 10 years.	and thermal load, air-conditioning etc. for hosting the server /storages/any equipments as per the RFP will be provided by the pruchaser ? 2. What should be the replacement policy for the Crtitical hardware in case of Failure? Should be within the Next Business day / within 24 Hours / 4 Hours etc.. 3. All the critial spares should be maintained for both the default warranty and addioanl warranty 4th and 5th year? Retention of the critical spares is also applicable for 6th and 7th year alos?	**1. Yes 2.Refer section 1.16. Warranty & Comprehensive AMC 3.Yes**
7		Development of Mobile Application			Mobile applciation to be devceloped by the bidder?	**Yes**
8	Page 87	1.2 Scope of Tender		CAMC for 2 years (6th & 7th year) after successful completion of 3 years std warranty and 2 years extended warranty for IT Infrastructure & Software maintenance support as specified in RFP. Based on need AMC contract will be finalized and executed by user with separate PO. CAMC will be paid on per half yearly basis, based on user certification or nominated Authority.	Cost has to be separately proposed for the 6th and 7th year for CAMC?	**Yes. Refer section 7.11. Format for Financial Bid**