

Through PB website

**PRASAR BHARTI**  
**(India's Public Service Broadcaster)**  
**Director General : Doordarshan**  
**Doordarshan Bhawan, Copernicus Marg**  
**New Delhi -110001.**

Dated: 02/12/2022

**Subject:** Draft Technical Specification for Supply, Installation, Testing and Commissioning of cloud hosted Media Asset Management (MAM) system at Prasar Bharati.

The Draft specification of the upcoming tender is enclosed herewith to offer comments, if any by prospective bidders/Firms/OEMs.

2. Bidders/OEMs are requested to provide information about available local content (Make in India) in respect of items listed in suggestive BOM along with budgetary quote.

3. Bidders may please submit the above details on or before due date by e-mail to ddpurchase401@yahoo.co.in or at following Address.

Assistant Engineer  
Room No. 403,  
Directorate General: Doordarshan,  
Doordarshan Bhawan, Copernicus Marg,  
New Delhi -110001 (India)  
Telephone: **011- 2311 4401/4403**

**Specification For:** Draft Technical Specification for Supply, Installation, Testing and Commissioning of cloud hosted Media Asset Management (MAM) system at Prasar Bharati.

**Due Date to offer Comments:** 16.12.2022

Encl.: As above (23 Pages)

Signed by Girish Kumar  
Date: 02-12-2022 16:54:17  
Reason: Approved

(Girish Kumar)  
Assistant Director (Engg)  
Doordarshan Directorate: Doordarshan

**SUBJECT: TECHNICAL SPECIFICATION FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CLOUD HOSTED MEDIA ASSET MANAGEMENT [MAM] SYSTEM AT PRASAR BHARATI**

**1. BACKGROUND AND OBJECTIVE**

Prasar Bharati (PB) is the Public Service Broadcaster of India, which fulfils the objectives of public service broadcasting through Doordarshan (DD) and All India Radio (AIR). The broadcast industry around the world has already been changed by digital revolution. Cloud based media solutions has become a norm. So far, there are numerous media libraries are operational at various AIR stations and Doordarshan Kendra's in order to cater the needs of radio and television broadcast operations. Prasar Bharati intends to consolidate these media assets/libraries by deploying a cloud-based Media Asset Management system, a digital content management solution that streamlines the processes of ingest, storage, archival and retrieval of digital assets. This system is going to optimize digital assets like video clips, audio clips, Photographs, related documents etc. and may result in efficient media production and management operations in Prasar Bharati network. The system will enable all the media data of channels and platforms on a single platform in order to allow content- sharing and cross-pollination across PB network.

**2. SCOPE OF WORK AND SERVICES**

The scope of this project shall be the hosting, testing and commissioning of the cloud based software solution viz. Media Assets Management System (MAM) for AIR and Doordarshan. The system shall be offered software as a service (SaaS) to Prasar Bharati. The scope includes broadly the following:-

- 2.1 Setting up of the customized enterprise grade Media Asset Management System in Prasar Bharati Network
- 2.2 The solution shall be hosted on a MeitY emplaned Cloud service provider (CSP) and shall provide adequate space and computing power in order to store the media assets and related operations.
- 2.3 Migration of data from existing MAM systems to the cloud-based system.

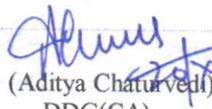
**3. GENERAL TERMS AND CONDITIONS**

3.1 Tenders are invited from the reputed bidders. The bidder shall offer the complete solution customized as per the requirement of Prasar Bharati on Software as a Service (SaaS) basis.

**3.2 Eligibility Criteria of Bidders :**

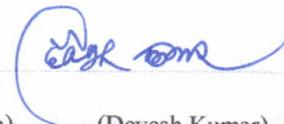
3.2.1 The bidder shall either be a Cloud Service Provider (CSP) or Media Service Provider (MSP) or their authorized representative. The bidder must pass the following minimum eligibility criterion:

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

- 3.2.1.1 CSP/MSP shall provide a self-declaration certificate in respect of their services. In case, an authorized representative of the solution/service provider is the bidder, authorization certificates from the original service providers must be enclosed with the bid.
- 3.2.1.2 The bidder shall have completed at least 5 similar projects related to cloud-based Media/Digital Asset Management systems. Work completion certificates for such projects to be furnished.
- 3.2.1.3 The cloud service provider in the offered MAM solution shall be MeitY empanelled. Necessary orders/certificate/proof towards the empanelment is required to be submitted.
- 3.2.1.4 The bidder shall be CMMI L-3/ ISO 9001 or higher certified company registered under company's act 1956. Certificates to this effect shall accompany the bid.
- 3.2.1.5 Bidder shall not have been blacklisted by any State / Central Government in India for corrupt, fraudulent or any other unethical business practices or for any other reason. Bidder shall submit affidavit along with Technical Bid.
- 3.2.1.6 Bidder must be able to present / demonstrate the Proof of Concept as per Client's requirements.
- 3.2.1.7 Toll free numbers shall be provided by the Bidder/OEM for Service Support. Details to be furnished along with the technical bid.
- 3.2.1.8 Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support. Details to be furnished along with the technical bid.
- 3.2.1.9 Malicious Code Certificate: The bidder should upload following certificate in the bid:

This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to:

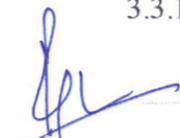
- Inhibit the desires and designed function of the equipment.
- Cause physical damage to the user or equipment during the exploitation.
- Tap information resident or transient in the equipment/network.

In case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software, the bidder/supplier will be considered to be in breach of the procurement contract.

### 3.3 SUBMISSION OF BIDS.

The bidders should submit their bids in two parts i.e. Technical Bid and Commercial Bid as per the notice inviting tender (NIT). The technical bid shall consist of following documents duly indexed:

- 3.3.1 Technical Compliance cum deviation statement as per **Annexure-A**

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

3.3.2 Unpriced price bid (**Annexure- B**) duly filled with all the details except the rates and prices quoted. Prices shall not be given with Technical Bid.

3.3.3 Certificates and documents enumerated under the Eligibility Criteria (3.2)

3.3.4 Solution document shall be the part of Technical bid, which would include following:-

- Proposed approach
- Technology and other details of in respect of hardware, middleware and application
- Data migration plan

3.3.5 The tenders are liable to be rejected if any of the above information/documents is found missing in the technical bid/proposal.

### 3.4 DEVIATIONS

The bidder should clearly read and understand all the terms and conditions, specifications, etc. mentioned in the tender documents. If the bidder has any deviation, the same may be indicated in the format specified in **Annexure-A** along with the Technical bid. Bidders are advised not to make corrections, additions or alterations in the original tender documents. If this condition is not complied with, tender is liable to be rejected.

### 3.5 DEMONSTRATION

The tenderer shall be required to demonstrate the functioning of the software solution tendered. This will be part of the technical evaluation. Non-compliance of demonstration may liable to disqualify the tender. The following items shall be demonstrated as per date and time to be published and communicated in due course:

3.5.1 Proof of Concepts (POC) presentation of Applications with all functional modules of the offered solution.

3.5.2 Demonstration of the application using authentication, workflows and user management.

3.5.3 Incomplete offers shall be liable for rejection.

3.5.4 Prasar Bharati reserves the right to accept or reject any or all tender(s) without assigning any reason whatsoever.

### 3.6 DELIVERY/IMPLEMENTATION SCHEDULE:

3.6.1 02 (Two) month from the date of placement of purchase order including customization and hosting of MAM on cloud.

3.6.2 03 (Three) months for Data Migration.

### 3.7 DELIVERABLES:

3.7.1 Customized Media Asset Management system hosted on a reputed cloud with user defined workflow, features and technical specification

3.7.2 Migration of existing data as per the specification

3.7.3 Comprehensive Documentation on functionality, features and user guide.

3.7.4 Training for using the system.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

### 3.8 PERIOD OF THE CONTRACT

Initially the service contract shall be for a period of 4 years. The contract could be extendable up to further 3 years on yearly basis on the same terms and conditions on mutual agreement. The extension of the service contract shall be executed on satisfactory performance of the service provided by the bidder. The review of the performance of the service shall be undertaken periodically.

### 3.9 TRAINING:

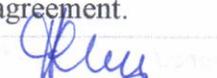
5 days comprehensive training at each location to the users at 5 locations as decided/nominated by Prasar Bharati on all the modules including user management and system administration. Feedback has to be submitted by the supplier on completion of the training.

### 3.10 SUPPORT SERVICES:

The successful bidder shall have to provide comprehensive support during the period of contract for the offered cloud based MAM System. During this period, the supplier shall meet the target defined for various service level objectives. The key service level objectives that relate to the cloud services and the related aspects are indicated below:

- 3.10.1 The SLA parameters shall be monitored on a quarterly basis as per the individual SLA parameter requirements. However, if the performance of the system/services is degraded significantly at any given point in time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of Prasar Bharati, then Prasar Bharati will have the right to take appropriate disciplinary actions including termination of the contract.
- 3.10.2 The full set of service level reports should be available to Prasar Bharati on a quarterly basis or based on the project requirements.
- 3.10.3 The Monitoring Tools shall play a critical role in monitoring the SLA compliance and hence will have to be customized accordingly. The CSP shall make available the Monitoring tools for measuring and monitoring the SLAs. The CSP may deploy additional tools and develop additional scripts (if required) for capturing the required data for SLA report generation in automated way. The tools should generate the SLA Monitoring report in the end of every quarter which is to be shared with Prasar Bharati on a quarterly basis. Prasar Bharati shall have full access to the Monitoring Tools/portal and any other tools / solutions deployed for SLA measurement and monitoring) to extract data as required during the project.
- 3.10.4 The measurement methodology / criteria / logic will be reviewed by Prasar Bharati. In case of default on any of the service level metric, the CSP shall submit performance improvement plan along with the root cause analysis for Prasar Bharati approval.
- 3.10.5 In case these service levels cannot be achieved at service levels defined in the agreement, Prasar Bharati shall invoke the performance related penalties. Payments to the bidder will be linked to the compliance with the SLA metrics laid down in the agreement.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

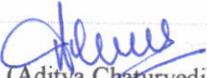
- 3.10.6 Penalty shall be levied on the service provider by PB on failure to meet the target defined for each of the service level objectives as per the **Annexure- C**.
- 3.10.7 The supplier will intimate the name, e-mail address and telephone no of technical expert to get rectified the fault in the system.
- 3.10.8 The supplier will ensure logging of complaint on 24X7 basis, tracking of the status of complaint and rectification of the fault/problem in the software or in the hosting platform within 24 hours after reporting of the problem by allocating adequate technical/human resources.
- 3.10.9 The supplier shall ensure that the Service Level Agreement (SLA) with the cloud service provider for the software services hosted shall be 99.9% (uptime).
- 3.10.10 SLA for prevention of data loss shall be 100%.
- 3.10.11 The supplier shall ensure that customization and configuration issues, if occurred/required in the system must be taken up with at most priority.
- 3.10.12 The supplier shall ensure the fixing of bugs in the hosted cloud based solution. The supplier shall also extend the software upgrades released during the warrantee period free of cost.
- 3.10.13 The supplier shall submit following performance and usage reports to Prasar Bharati within 7 days after each month:
- Monthly Uptime Summary/ Status Report
  - Monthly SLA Attainment Report
  - Monthly Incident & Problem Management Report
  - Monthly database Backup/ Recovery Report

### 3.11 EVALUATION CRITERIA

3.11.1 The bids to be finalized on QCBS basis. The proposals/bids will be assessed on the basis of the following criteria for technical score:-

S N	Evaluation Criteria	Sub Criteria	Scoring Marks	Max Marks
1	Experience	(a) Number of projects in the Cloud.	5 projects: 5	10
			More than 5 projects: 1 mark per additional project up to 5	
		(b) No of years of experience in the Cloud projects	5 years: 5	10
			More than years: <b>1 marks/year in addition up to 5</b>	
2	Presentation on offered Solution / Workflow	Ease of operation	5	30
		User interface for services	5	
		Approach/Methodology	5	
		Features/Functionality	5	
		DR Sites/facilities	5	
		Security and SLA	5	

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

3	Demonstration of the solution / MAM system	Demonstration of the software		30
4	Financial Standing	Annual turnover	An annual turnover of Rs. 10 Crores in each financial year of 2019-20 & 2020-21: 10 An annual turnover of more than Rs. 10 Crores in each financial year of 2019-20 & 2020-21: 1 additional mark for 5Cr	20
<b>Total</b>				<b>100</b>

\* **SIMILAR PROJECT:** provides Cloud based MAM solution in various Broadcasting media.

3.11.2 Minimum qualifying score shall be 60/100, as evaluated under 3.11.1. Firms securing marks below the qualifying score shall not be considered for ranking.

3.11.3 RFP evaluation shall be based on Quality cum Cost-based Selection (QCBS) – Evaluation based on the cost committed by the bidder and the technical qualification of the bidder. Under QCBS selection, the technical proposals will be allotted weightage of 50% (Fifty percent) while the financial proposals will be allotted weightages of 50% (Fifty percent).

3.11.4 The total Evaluated Bid score, both technical and financial, shall be obtained by weighing the quality and cost scores and adding them up. On the basis of the combined weighted score for quality and cost, the MSP/CSP shall be ranked in terms of the total score obtained. The proposal obtaining the highest total combined bid score (B) in evaluation of quality and cost will be ranked as H-1 followed by the proposals securing lesser marks as H-2, H-3 etc. The proposal securing the highest combined marks and ranked H-1 will be invited for negotiations and shall be recommended for award of contract. In the event two or more bids have the same score in final ranking, the bid with highest technical score will be H-1.

3.11.5 Combined Bid Score (B) will be calculated for each responsive Bid using the following formula:

$$B = [C_{low}/C]X + T/T_{high}[1-X]$$

Where,

C = Offered Bid Price

C<sub>low</sub> = the lowest of all offered Bid Prices among responsive Bids

T = the total Technical Score awarded to the Bid

T<sub>high</sub> = the Technical Score achieved by the Bid that was scored highest among all responsive Bids

X = weightage for the Price as specified 30%

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

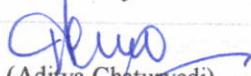
### 3.12 ACCEPTANCE TEST

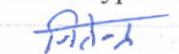
- 3.12.1 All the modules of the hosted solution must be installed, configured, customized and fully operational as specified in the tender.
- 3.12.2 The bidder shall demonstrate all the features/facilities mentioned in the bid.
- 3.12.3 Training part of the project shall be completed as specified in the tender.

### 3.13 PAYMENT TERMS:

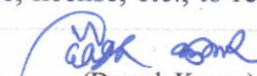
- 3.13.1 No advance payment shall be made. The payment will be made on post quarterly basis on submission of invoice with requisite details of payments being claimed.
- 3.13.2 All payments will be made on quarterly basis subject to the SLA terms.
- 3.13.3 Payment for cloud storage and egress charges will be based on the actual consumption only.
- 3.13.4 The bidder shall refer to the entire scope of this RFP for details on the functional and technical requirements and the benchmark specifications of the proposed solution for the items mentioned in the Financial Proposal and accordingly propose their respective cost.
- 3.13.5 The unit rates quoted for each individual line item shall be binding on the bidder for entire duration of the project.
- 3.13.6 Any bid which does not conform to the financial formats prescribed in the RFP will be disqualified.
- 3.13.7 Any conditional bid is liable for rejection.
- 3.13.8 Unless expressly indicated, bidder shall not include any technical information regarding the services in the financial proposal.
- 3.13.9 Prices shall be quoted entirely in Indian Rupees. All prices should be rounded off to the nearest Indian rupees (If the first decimal value is 5 (five) or above it should be rounded up and below 5 (five) should be rounded down). In cases of discrepancy between the prices quoted in words and in figures, lower of the two shall be considered.
- 3.13.10 No deviation in the contract price shall be made on account of any variations in unit rates or any cost component affecting the total cost in fulfilling the obligations under the contract. The contract price shall be the only payment payable to the successful bidder for completion of the contractual obligations by the successful bidder under the Contract, subject to the terms of payment specified in the contract. The price quoted would be excluding of GST. Prices quoted for the Solution shall be inclusive of license cost, installation, and commissioning. No extra payment on any account shall be admissible.
- 3.13.11 The prices, once offered, shall remain fixed and shall not be subject to escalation for any reason whatsoever within the period of project. A proposal submitted with an adjustable price quotation or conditional proposal may be treated as nonresponsive and rejected.
- 3.13.12 The amount stated in the Financial Proposal, adjusted in accordance with the above procedure, shall be considered as binding on the bidder for evaluation.
- 3.13.13 No Alternate Proposal: The bidders shall mention only one-unit price for each line item, only from single OEM/Type for hardware, software, license, etc., to reach at

  
(R.F. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

consolidated cost as part of Financial Proposal. Any bids, which propose multiple options in terms of OEM/Type and unit price for each line item shall be summarily rejected. For example, in case of licenses required, the bidder submitting two options of licenses for the same line item with different options for OEM/ Type or unit price shall be summarily rejected.

- 3.13.14 Bidder shall ensure that the future products supplied are of latest specifications as per the OEM roadmap.
- 3.13.15 Prasar Bharati will not be liable to pay any additional expenses or cost apart from the total cost mentioned in the Financial Proposal. Bidder needs to account for all Out-of-Pocket Expenses (OPE) due to Boarding, Lodging and other related items in the bid.
- 3.13.16 Any misrepresentation or omission of any kind of applicable tax would be the sole responsibility of the bidder and Prasar Bharati would not be accountable or liable to pay for the same.
- 3.13.17 Deployment of storage will be effective as per actual requirement communicated and payment shall be made actual deployment of storage or actual usage as per pro rata basis.
- 3.13.18 Payment for the service availed shall be calculated on pro rata basis as applicable or as per actual basis.

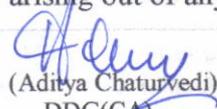
### 3.14 LIQUIDATED DAMAGE:

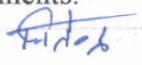
- 3.14.1 Time and date of delivery shall be essence of the contract. If the contractor fails to deliver the services or any installment thereof within the period fixed for such delivery in the schedule or at any time repudiates the contract before the expiry of such periods; the purchaser may without prejudice to any other right or remedy available to him to recover damages for breach of the contract.
- 3.14.2 Recover from the Supplier/Contractor as agreed, liquidated damages including administrative expenses and not by way of penalty, a sum equivalent to 2% (two percent) of the price of the any SITC which the supplier /contractor has failed to deliver within the period fixed for delivery in the schedule for each month or part of a month during which delivery of such stores may be in arrears where delivery thereof is accepted after expiry of the aforesaid period, provided that the total damages so claimed shall not exceed 10% of the contract price. After full period of extension, termination of the contract will be considered by the Organization.

### 3.15 PATENTS, SUPPLIER'S LIABILITY & COMPLIANCE OF REGULATIONS:

- 3.15.1 Successful Bidder shall protect and fully indemnify Tenderer from any claims for infringement of patents, copyright, trademark or industrial design rights arising from the use of the Goods or any part thereof.
- 3.15.2 Successful Bidder shall also protect and fully indemnify Tenderer from any claims from successful Bidder's workmen/employees, their heirs, dependents, representatives etc. or from any other person(s) or bodies/companies etc. for any act of commission or omission while executing the order.
- 3.15.3 Successful Bidder shall be responsible for compliance with requirements under the laws and shall protect and indemnify completely tenderer from any claims/penalties arising out of any infringements.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

3.15.4 Bidder shall be responsible for conduct of his staff and shall follow security norms. The entire bidder's staff should be provided with suitable identifiable apron with ID card.

### 3.16 PRICE APPLICABILITY

Prices in the Purchase Order shall remain firm and fixed for the period of delivery schedule or extended delivery schedule. In case of delayed supplies, after the delivery period or the extended delivery period, the advantage of reduction of taxes/duties shall be passed onto the Purchaser and no benefit of increase will be permitted to the Supplier.

### 3.17 STANDARDS

The goods supplied under the contract shall conform to the standards mentioned in the Technical Specifications (Tender). In case no standards are mentioned, industry standards ensuring quality shall be followed

## 4. TECHNICAL FEATURES AND SPECIFICATIONS

### 4.1 MEDIA ASSETS MANAGEMENT SYSTEM (MAM)

#### 4.1.1 ARCHITECTURE

- 4.1.1.1 The required MAM solution shall be poly-cloud, must support all major cloud platforms.
- 4.1.1.2 The proposed MAM system shall be based on client-server architecture capable of scaling up without any system restart.
- 4.1.1.3 The proposed MAM system shall be based on micro services cloud native model.
- 4.1.1.4 The proposed MAM system shall be redundant in order to achieve high availability; the bidder shall submit supporting documents under technical bid explaining how their system will achieve redundancy on all levels of the solution starting from storage, database, servers to infrastructure.
- 4.1.1.5 The proposed MAM solution must have a way to configure collaborative workflow between multiple user accounts when configured in multitenant environment.
- 4.1.1.6 The Proposed MAM solution shall rely on 'Generic storage' technology (native CIFS)
- 4.1.1.7 The proposed MAM solution shall provide comprehensive web based administration module.
- 4.1.1.8 API-based integrations with media applications like:-
- NL Editing suits,
  - Audio watermarking
  - Video Watermarking
  - Video Restoration applications
  - Scheduling & Payout applications

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

- 4.1.1.9 The proposed MAM system shall integrate with directory services like Active Directory, LDAP etc. for users and group management.
- 4.1.1.10 Virtualization of video and audio editing applications and integration with the MAM for seamless collaboration across locations.
- 4.1.1.11 Proposed MAM system shall have a dedicated search engine based on elastic search.
- 4.1.1.12 The solution shall be cluster based to scale the performance dynamically based on the load. Solution must be based on big data platform
- 4.1.1.13 The solution shall support dynamic workflow creation based on various criteria
- 4.1.1.14 Create an asset repository that can automate the delivery of approved, brand compliant content, allowing brands to create an extensive catalogue for digital assets, consisting of video, images, text and metadata
- 4.1.1.15 Multiple storages configurable along with archival mechanisms in place to shift data to lower storage tiers.
- 4.1.1.16 Support for high availability streaming and playback; with ability to support multiple audio tracks, captions, or subtitles during playback.
- 4.1.1.17 The system shall support multiple broadcast quality codecs and MXF wrappers.

#### 4.1.2 USERS/WORKFLOW MANAGEMENT

- 4.1.2.1 There shall be a dedicated module for user management in the MAM System. The system shall support multiple users, user groups as per their rights, categories, libraries, etc.
- 4.1.2.2 The administrator shall be able to define various categories, user groups as per the requirement. The rights/roles on media assets in respect of various users, groups shall be administered by the system administrator.
- 4.1.2.3 Initially 50 nos. of users shall be created. The user management console shall be able to provide information like, User Profile, Access right, on media/group of media in respect of users. The offered system should be capable of adding more users as per instant requirement of Prasar Bharati.
- 4.1.2.4 The MAM solution shall have provision to allocate the specific Application Modules rights Management.
- 4.1.2.5 Users at different locations shall able to share assets with others who cannot access the workspaces.
- 4.1.2.6 The solution shall be able to deploy and configure password policy as decided by PB.
- 4.1.2.7 The solution shall have the option of blocking multiple sessions for the user.
- 4.1.2.8 The application shall support role-based access control to enforce separation of duties.
- 4.1.2.9 The application shall not store authentication credentials on client computers after a session terminates.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

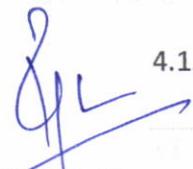
e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

- 4.1.2.10 Users activities shall be recorded as logs and shall be available as users wise report.
- 4.1.2.11 Any information stored within cookies must not be disseminated to third parties without the users' consent.
- 4.1.2.12 User management, workflow management with priorities set against each folder / user combination.
- 4.1.2.13 Users can search assets via a multitude of options as well as product codes and smart search capabilities, which allow for easy identification of assets through extensive metadata cataloguing.
- 4.1.2.14 Users can gain precision access to video, images and supporting data and documentation.
- 4.1.2.15 The system shall be able to define the workflows for library management and content management as per the requirement through web based interface.
- 4.1.2.16 The system shall be able to define IT tasks and Broadcast tasks (transcode, quality control, email notification, etc.)
- 4.1.2.17 The solution shall have user authentication mechanism to ensure only users with appropriate rights can access the work flow manager.
- 4.1.2.18 The solution shall have the option to manage workflows that have already been triggered (stop, start, retry, cancel, etc.) and monitor the progress.
- 4.1.2.19 The system shall have the ability to troubleshoot a workflow.
- 4.1.2.20 The system shall be able to send email and text messages notifications.

#### 4.1.3 INGEST

- 4.1.3.1 The system shall support file based ingest. It shall support natively (without re-digitizing/ trans-coding) XDCAM HD422, 50Mbps with 8 bit quantization data in MXF OP1a file format and for SD: DVCPRO 50 (8-bit, 4:2:2) in MXF Op1a or IMX 50 (8-bit, 4:2:2), in MXF Open file format.
- 4.1.3.2 The system shall be capable of automatic ingest from user defined on premise the storage.
- 4.1.3.3 The ingest workflow consists of a content accelerator software inte-grated with LAN setup to push content to the cloud-based archival platform.
- 4.1.3.4 The system shall facilitate .MOV/MXF File format for video and .WAV/.MP3 for audio files. Necessary hardware and software shall be proposed with the system.
- 4.1.3.5 Users on premise will put the content in this hot folder which will be picked up by the content accelerator agent to send to cloud based archival platform.
- 4.1.3.6 Content ingest and restore will be achieved by the redundant WAN connectivity
- 4.1.3.7 The proposed solution must provide a web based interface to upload asset (Video/Audio/ Images) along with metadata , the metadata on upload interface must be configured based on requirements
- 4.1.3.8 Ingested material shall be automatically transcoded to low resolution browse quality files which is available to the users.
- 4.1.3.9 Ability to notify the users for a new file base Ingest.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

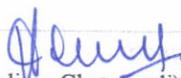
  
(Devesh Kumar)  
DE

- 4.1.3.10 All ingested material (high resolution, browse quality etc) is stored in a centralized production storage that is directly available to all users simultaneously.
- 4.1.3.11 Movement of data between high performance storage and cold archive shall be seamless
- 4.1.3.12 In order to avoid multiplicity of the assets on the system, it must have some inherent features/notification/alert system. The alerts may be based on file size, duration and other metadata.

#### 4.1.4 METADATA

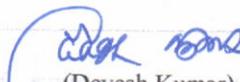
- 4.1.4.1 The system shall support flexible metadata schemas. Additional metadata field's creation shall be possible and there shall be no restrictions on the number of metadata fields. The system shall support addition of the following metadata field types dynamically: Date field, Text-field, text area, Select list.
- 4.1.4.2 The metadata schema for the MAM system has to be approved by Prasar Bharati before implementing on the cloud hosted system.
- 4.1.4.3 Shall be able to generate unique accession no for each of the ingested assets. The accession number shall be based on user defined basic metadata in the standard format like IBTNS.
- 4.1.4.4 The update of metadata shall be transparent to the users and shall not mandate system restart.
- 4.1.4.5 Metadata can be exported and imported to and from external system using open formats like XML/JSON in configurable schemas.
- 4.1.4.6 Users shall be able to add metadata to an asset regardless of the status of the asset (pre ingest, while ingest, post ingest etc). The Proposed MAM system shall allow for metadata tagging for Video, Audio, documents, Office documents, stills, subtitling files, PDF, Image and graphics etc.
- 4.1.4.7 The system shall be capable of storing not only media files (such as Video and Audio) but also other kinds of documents as standard assets; these documents shall include at least office documents, stills, subtitling files, PDF, Image and graphics etc.
- 4.1.4.8 The system shall allow documents in formats like PDF, JPG, PNG etc. as one /more metadata fields.
- 4.1.4.9 Time code based metadata tagging shall be possible and option to retrieve a region of interest from a audio and video file shall be possible.
- 4.1.4.10 Ability to make metadata fields mandatory to ensure data integrity of each ingested file.
- 4.1.4.11 Control the media to ingest as well as the metadata to import, schemas can be customized on the basis of different types of content which can be generated manually, automatically or imported via API or sidecar .XML.
- 4.1.4.12 Extensive metadata generation comprising of ingest, technical and descriptive metadata – allowing for easy cataloguing and retrieval of media.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

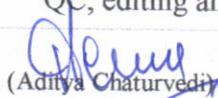
#### 4.1.5 BROWSING AND SEARCH

- 4.1.5.1 Users of a library shall be able to browse and search all the media assets of global library.
- 4.1.5.2 The MAM system shall provide web access tool to use interface for retrieve, preview, annotate, edit and select shots of media assets and metadata.
- 4.1.5.3 The MAM system shall ability to search metadata at the time-code Level.
- 4.1.5.4 The Proposed MAM shall have ability to run a full-text search over all the metadata fields thus supporting global search.
- 4.1.5.5 The MAM system shall have ability to run an advanced search query combining queries on some specific metadata fields
- 4.1.5.6 The MAM system shall have ability to sort the content as per the metadata field.
- 4.1.5.7 The MAM system shall have ability to configure search results views (specific columns based on any metadata fields).
- 4.1.5.8 User shall be able to indent the media from local /global library space in order to download the same.

#### 4.1.6 EDITING

- 4.1.6.1 The MAM system shall provide web-based editing tools that allows editing of media files and transcoding to all desired broadcast formats.
- 4.1.6.2 User/administrator shall be able to configure/define the formats and technical parameters for the rendering the media.
- 4.1.6.3 The MAM system shall provide back-office rendering, allowing the users to execute other operations, while the system is rendering the EDL.
- 4.1.6.4 The MAM system shall provide ability to associate a dedicated metadata schema for a rendered asset.
- 4.1.6.5 The MAM system shall provide a smart integrated plugins with editing software's in order to exchange media files and projects with the MAM.
- 4.1.6.6 The MAM system shall provide collaborative media access for storyboarding, rough cut editing, and collaborative clip gathering.
- 4.1.6.7 The MAM system shall provide a 'panel' within the editing software to integrate with the MAM. This MAM panel shall let users:
  - ◆ Authenticate, so that the panel respects user rights
  - ◆ Browser/ Search the MAM database
  - ◆ Preview assets (streaming)
  - ◆ MAM asset comments available as Premiere markers
  - ◆ Import assets into the current project
  - ◆ Export the project into the MAM as a new assets
  - ◆ Apply a dedicated metadata schema to the export
  - ◆ Trigger a workflow while exporting
  - ◆ Upload the rendered sequence in a cloud platform
- 4.1.6.8 Integration with Adobe Premier Pro/FCP/ Adobe Audition with all aspects of QC, editing and search.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

4.1.6.9 Virtualization of video and audio editing applications and integration with the MAM for seamless collaboration across locations

#### 4.1.7 SOCIAL MEDIA INTEGRATION

4.1.7.1 The System shall be able to publish (export/transcode) the desired media available on MAM on directly to OTT services including social media platforms like YouTube, Facebook, Twitter, Instagram, Koo, etc.

4.1.7.2 There has to be necessary editing tools available in the System for publishing the content on Social media/ OTT platforms. These tools shall include:

- Thumbnail making
- Graphics Editor
- Watermarking

#### 4.1.8 STORAGE MANAGEMENT

4.1.8.1 The storage for media assets shall be a multi-tier storage system. Some of the assets/may be stored on on-line storage for quick retrieval and some of the assets shall be stored on near line storage (deep storage) for delayed retrieval. The tiers of the storage shall be implemented in order to make the system cost effective to Prasar Bharati.

4.1.8.2 All the ingested media assets shall be available in two formats viz

- 1) In Original/High Resolution,
- 2) in lower resolution (Proxy) on the cloud hosted MAM System.

4.1.8.3 The media in high (original) resolution shall be moved to Archival/deep storage. This media shall be made available for access/download to the authorized users.

4.1.8.4 The media in low resolution or in proxy format shall be available to the users for browsing, for making request to download.

4.1.8.5 Retrieval time from deep storage to online storage shall be maximum 2 hours.

4.1.8.6 All the Low resolution (proxy) content will be available on hot storage (online) of the cloud. The resolution of proxy shall be configurable by the Prasar Bharati user/system administrator. The configurable bit rate of low-resolution content will as under:

For Video Content: 512 kbps to 1 Mbps

For Audio Content: 4 kbps to 128 kbps

4.1.8.7 Estimated tentative storage requirement on cloud is as under:-

SN	Time frame	Online Storage (Hot)	Deep Storage (Cold/Archival)
1	Up to 6 months	10 TB	1 PB
2	Next 6 month ( 20% increase)	12 TB	1.2 PB
3	Next 1 year ( 20% increase)	14 TB	2.4 PB

(R.P.Joshi)  
DDG(IT)

(Aditya Chaturvedi)  
DDG(CA)

(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

(Devesh Kumar)  
DE

4.1.8.8 The storage capacity (Online/near line) shall be expanded as per the exact requirement.

4.1.8.9 Bidder shall provide the information about transcoding cost of the media content to any other required format.

#### 4.1.9 LIBRARY MANAGEMENT:

4.1.9.1 There are media libraries operational at each of the AIR stations and Doordarshan Kendra's in order to cater the needs of radio and television broadcast operations.

4.1.9.2 The content/media available at these libraries shall be hosted on Media Asset management System. The System shall be customised as per the work flow decided by Prasar Bharati.

4.1.9.3 In order to understand the function, two categories of libraries viz 'local library' and 'global library' will be operational to manage the media assets hosted on MAM System.

4.1.9.4 A user of a particular station/kendra/library shall have full access to the media operations like search, browse, preview, transfer and download etc. on the content of the library, may be referred to as 'local library' in respect of the user.

4.1.9.5 Users of other stations/libraries shall be only allowed to browse, search, preview and make a request for download it from the MAM, where such assets shall be catalogued under common area called as 'Global library'.

4.1.9.6 An online indent form(to prescribed by PB) shall be filled by a user of a library through system in order to get the media assets belonging to other libraries(Global Library).

4.1.9.7 The request/indent form shall be notified to the users, who have full rights or rights to transfer the media. After approval is granted as per the predefined workflow, a notification shall be sent to the indenter and the media asset could be downloaded.

4.1.9.8 The MAM System shall support sharing of media to external users.

4.1.9.9 The system shall be able to generate an unique URL, which can be shared to external users so as to download the media asset or a part of it. The validity of the link/URL shall be pre-defined by the authorized user.

#### 4.1.10 BACK END MEDIA OPERATIONS

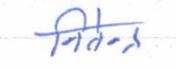
4.1.10.1 The proposed solution shall provide means to run all media related operation in such a way that it does not disrupt user operations.

##### 4.1.10.2 Purge :

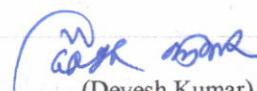
- The MAM system shall have ability to set purge policy to automatically delete essences and/or assets.
- The MAM system shall have ability to set specific purge rights, applied to the users.

  
(R.P.Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

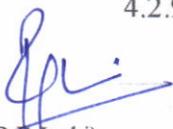
- The MAM system shall have ability to lock assets to prevent purge.

#### 4.1.11 API TOOL INTEGRATION

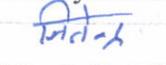
- 4.1.11.1 The MAM system shall provide an REST API, B2B based on well-known standards that will enable third party applications to control and manipulate the proposed solution.
- 4.1.11.2 The API shall allow for control, import and export of metadata from the MAM system
- 4.1.11.3 The API shall allow for manipulation of system process and status.
- 4.1.11.4 Access to the API shall be based on user / login.
- 4.1.11.5 The API documentation shall be available online.
- 4.1.11.6 The MAM system shall provide scalable B2C API to allow 3rd party app to fetch relevant data.
- 4.1.11.7 API-based integrations with Video Restoration applications and Scheduling & play out applications.

#### 4.2 CLOUD SERVICE

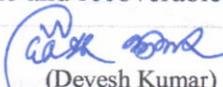
- 4.2.1 The MAM system shall be hosted on a MeitY emplaned CSP. The system/solution shall be offered as Software as a Service (SaaS).
- 4.2.2 Adequate dedicated bandwidth, shall be allocated to the application for accessing, browsing and download.
- 4.2.3 Adequate compute power (CPU/RAM) shall be allocated for the application in order to power the system to work on a fly on mouse click.
- 4.2.4 The MAM system shall fully secure web-based solution. The solution shall facilitate cross platform access to the solution.
- 4.2.5 The system shall be accessible from different web browsers including chrome, Firefox, opera, edge etc.
- 4.2.6 Platform responsibilities such as backups, system maintenance, security, hardware refresh, power management, etc. are managed by the cloud service provider.
- 4.2.7 Bidder shall provide the information of parameters viz time, bitrate etc. for migration of content in a multi-tier storage.
- 4.2.8 The Cloud service provider shall follow the MeitY guidelines for service conditions as indicated below:
  - Availability
  - Performance
  - Security
  - Audit and Monitoring
  - Measurement and Monitoring
  - Runtime
  - Up-time etc.
- 4.2.9 The bidder shall provide the expertise, services, technologies that help Prasar Bharati to keep their vital system secure, available, reliable and recoverable

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

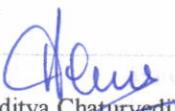
  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

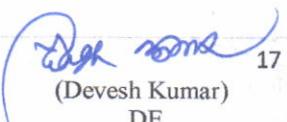
- 4.2.10 CSP compute service should offer managed containers solution for orchestration, provisioning, scaling & monitoring.
- 4.2.11 The rates offered in the price bid for cloud services shall be valid for entire contract/project duration. No hike in these quoted rates shall be allowed during this period. However if the rates goes down due to the prevailing market conditions, the cost benefit shall be passed on to PB.
- 4.2.12 Prasar Bharati will have liberty to order additional cloud service items, at the rates offered in the commercial bid. PRASAR BHARATI reserves the right to scale down and scale up the Cloud IT infrastructure.
- 4.2.13 Scalability**
- 4.2.13.1 The cloud Infrastructure/service provisioned by the Bidder must be scalable and flexible. Prasar Bharati will be able to add/reduce cloud infrastructure / services on demand basis.
- 4.2.13.2 The Cloud service shall be available online, on-demand and dynamically scalable up or down per request for service from the Prasar Bharati.
- 4.2.13.3 The CSP should have adequate elasticity to provide additional resources as and when required on auto-scale (up and down both). The complete cloud solution should work in full capacity on auto-scale environment.
- 4.2.13.4 The solution should have necessary provisions to enable and define the various parameters like triggers/events to achieve the said auto-scale environment without any human intervention based on the criteria/rules decided by Prasar Bharati.
- 4.2.14 Data Security/Disaster recovery**
- 4.2.14.1 Disaster Recovery Site shall be a 100% replica of the Prasar Bharati MAM Solution. Data between the main site and disaster recovery site must be replicated in real time.
- 4.2.14.2 Disaster Recovery Solution shall also be hosted on MeitY empaneled cloud.
- 4.2.14.3 In case of a disaster, when the on-cloud data centre's services get affected, it shall be the responsibility of the bidder to ensure uninterrupted services to the user, meeting all the SLA requirements defined in the RFP.
- 4.2.14.4 Data in cloud should be stored in encrypted form.
- 4.2.14.5 SaaS providers must undergo regular third-party application security audits, and that they are willing to share those results with us.
- 4.2.14.6 Since all the data is transferred using Internet, data security is of major concern in the cloud. So CSP must use following mechanisms for protecting data.
- Access Control
  - Auditing
  - Authentication
  - Authorization

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

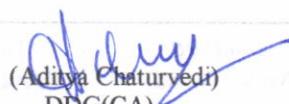
### 4.3 Data Migration

Prasar Bharati has a lot of media /content in the form of Audio and Video assets available at its media libraries across the network. These libraries has media content in the form of legacy tapes, digital tapes, Digital file formats, etc. Some of the libraries has been equipped with stand-alone MAM systems like Dalet, Tidial, etc., wherein the data (media content along with its metadata) is available on SAN & LTOs. Under the scope of this RFP, data available at MAM Systems deployed at the centers given in **Annexure-D** has to be migrated by the bidder after the appropriate quality check/pre audit.

The bidder shall conform following specifications after deploying, customizing and configuring the MAM system on cloud as per Prasar Bharati requirement regarding migration of existing data on to the cloud hosted system:-

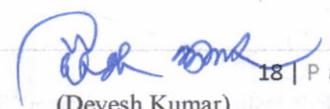
- 4.3.1 The supplier shall submit the plan/schedule for migration of data along with the technical bid.
- 4.3.2 The system shall support bulk data migration for quick and efficient transport of data on to the cloud.
- 4.3.3 During migration of data, the supplier shall provide adequate manpower and technical support to complete the work with in stipulated time period.
- 4.3.4 Metadata fields of existing MAM system has to be matched perfectly with the MAM system provided on the cloud. Additional fields on the metadata schema may be created on the cloud hosted system, if required in order to ensure complete migration of meta data in respect of Media assets.
- 4.3.5 The supplier shall device data migration tools for the Media Content available in Hard disk drives (HDDs). Prasar Bharati will provide the Media in file format along with Metadata in excel format for the purpose.
- 4.3.6 The cloud-based MAM system shall be able to link the metadata, Low resolution copy, High resolution Video file stored on a Storage and LTO tape Library.
- 4.3.7 In the case propriety system/formats of data are deployed in existing MAM, liasioning with the vendor and designing of data extraction tools in order to migrate the data on cloud shall be undertaken by the supplier. The bidder shall be entirely responsible for data migration, validation, and integrity check.
- 4.3.8 After the completion/termination of contract period, the complete data to be handed over to Prasar Bharati in Open standard format in some other cloud / on-premise Storage with in a period of 2 months.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

**Technical Compliance cum Deviation Statement**  
(on bidder's letter head)

To

(AS PER NIT)

Tender No:

**Subject: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF  
CLOUD HOSTED MEDIA ASSET MANAGEMENT (MAM) SYSTEM FOR  
PRASAR BHARATI**

Dear Sir,

1. It is certified that we have studied and understood the terms and conditions of the Tender Ref. No. ....
2. We hereby undertake and agree to unconditionally abide by all the terms & conditions and scope of services stipulated in the Tender including all annexures, addendum and corrigendum.
3. All the details mentioned by us are true and correct and if Tenderer observes any misrepresentation of facts on any matter at any stage, Tenderer has the absolute right to reject the bid/proposal and disqualify us from the bidding /selection process.
4. We confirm that we have noted the contents of the tender and the offer submitted against the tender under reference, complies fully with all the clauses specified in the Technical specifications(tender) except for the following deviations:

Sr.No	Clause No.	Page No.	Statement of deviations and variations

Date  
Place

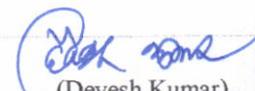
Signature  
Name  
SEAL OF THE BIDDER

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

**ANNEXURE — B**

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF CLOUD HOSTED MEDIA ASSET MANAGEMENT (MAM) SYSTEM FOR PRASAR BHARATI**

**PRICE BID (on bidder's letter head)**

S. No	Items	Total Qty	UoM per Month	Duration (in months)	Unit Rate (in INR)	Total Price (in INR)
A	B	C	D	E	F	G=C*E*F
1	MAM Application along with the customization and features specified from Sl.No 4.1.1 to 4.1.11 in the document with perpetual license and upgrades upto 4 years contract period.	50 Users license		48		
2	Incremental Charges for user license	500	Per user	24		
<b>3 Cloud Storage/Compute (Tender reference 4.2)</b>						
a	High performance online cloud Storage immediately available for download	10	TB	48		
b	Cold storage with data available to download within 2 hour	2000	TB	48		
c	Egress Charges for downloading	10000	GB	48		
d	Egress Charges for transcoding	1000	Hour	48		
4	Migration Charges (Tender reference 4.3)	1	PB	1		
5	Training	As per scope				
6	Any other charges	In order to complete the project				

**OPTIONAL ITEMS/SERVICES**

SN	SERVICE	UoM	RATE
1	SUBTITLING (Speech to Text)	per hour	
2	Water Marking Audio	Per hour	

[The quantity mentioned in the price bids are for financial evaluation/ranking purposes only]

Date  
Place

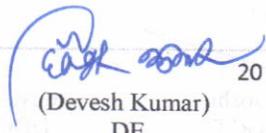
Signature  
Name and seal of the bidder

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

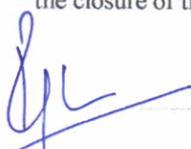
  
(Devesh Kumar)  
DE

## Penalties on failure to achieve the service level objectives

S.No	Service Level Objective	Measurement Methodology /	Target	Penalty
1	Availability of all provisioned Services which are provided by CSP including VM, Storage, DB, API gateways security services and any other critical services	Availability (as per the definition in the SLA) will be measured for each of the services over all the user types as defined in the RFP and PRASAR BHARATI users irrespective of service	Availability for each of the services over all the Portals and APIs (where applicable) $\geq 99.9\%$	Default on any one or more of the services will attract penalty as indicated below.
				$< 99.9\%$ and $\geq 99.5\%$
				(1% of the Periodic Payment)
2	Availability of the links Internet and MPLS	Availability (as per the definition in the SLA) will be measured for each of the network links provisioned in the cloud to access the portal or admin services	Availability for each of the links: $\geq 99.5\%$	Default on any one or more of the provisioned links will attract penalty as indicated below.
				$< 99.5\%$ & $\geq 99.0\%$ (1% of the periodic Payment)
				$< 99.0\%$ (2% of the periodic Payment)
3	Availability of certification of compliance to the Empanelment of MeitY requirements		30 working days from the end of the Empanelment of MeitY	1% of periodic Payment
4	Response Time	Average Time taken to acknowledge and respond once a ticket/incident is logged through one of the agreed channels. This is calculated for all tickets/incidents reported within the reporting month	95% within 15 minutes	(1% of the periodic Payment)
				$< 90$ (2% of the periodic Payment)
5	Time to Resolve - Severity 1	Time taken to resolve the reported ticket/incident from the time of logging	For Severity 1, 98% of the incidents Shall be resolved within 2 Hours of the reporting	$< 98\%$ & $\geq 90\%$
				(1% of the periodic Payment)
				$< 90\%$ (2% of the periodic Payment)
6	Time to Resolve - Severity 2	Time taken to resolve the reported ticket/incident from the time of logging.	95% of Severity 2 within 6 hours of Incident reporting	$< 95\%$ & $\geq 90\%$
				(1% of the periodic Payment)
				$< 90\%$ & (2% of the periodic Payment)
7	Availability of SLA reports covering all parameters required for SLA monitoring within the defined time	10 working days from the end of the quarter	10 working days from the end of the quarter	1% of periodic Payment
8	Availability of Root Cause Analysis (RCA) ports for Severity 1 & 2	Average within 10 Working days	2% of periodic Payment	Availability of Root Cause Analysis (RCA) ports for Severity 1 & 2

**Note:**

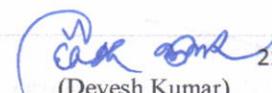
- Periodic Payment means Quarterly Payment for the associated service.
- Days: All Working and Non-working days (365 days in a calendar year)
- 24\*7 means three shifts of 8 hours every day. This is applicable for all seven days of the week without any non-working days.
- Severity Levels: Below severity definition, provide indicative scenarios for defining Incident's severity. However, Prasar Bharati will define / change severity at the time of the incident or any time before the closure of the ticket based on the business and Compliance impacts.

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

**ANNEXURE D**

**SUBJECT: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF CLOUD HOSTED MEDIA ASSET MANAGEMENT (MAM) SYSTEM FOR PRASAR BHARATI**

**ESTIMATION OF DATA READY FOR MIGRATION**

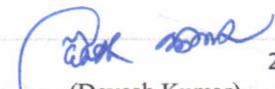
S.N.	Library	MAM System	HSM	HDD/SSD	Data in SAN	LTO
1	Central Archives (DD)	Dalet	Divia	100 TB	30 TB	400 TB (18000 Hr)
2	Central Archives (AIR)	CubeTech	Dell	100 TB	10 TB	
3	DD News New Delhi	Vizrt	Spectra Blackpearl		5 TB	168 TB (15600 Hr)
4	DDK Delhi	NA		600 TB (25000 Hr)		
5	DDK Kolkata	Tedial	AST		5 TB	150 TB 60 LTO-6
6	AIR Guwahati	CubeTech		2 TB		

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

*e-signed*  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE

**SUBJECT: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF CLOUD HOSTED MEDIA ASSET MANAGEMENT (MAM) SYSTEM FOR PRASAR BHARATI**

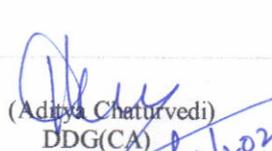
**ESTIMATION OF DATA/USERS**

Sl.No	AIR Station	Users	Data Storage in TB	DD Kendra	Users	Data Storage in TB
1	Central Archives	8	20	Central Archives	10	1000
2	Zonal Arch. Chennai	2	4	Zonal Arch. Kolkata	4	400
3	Zonal Arch. Guwahati	2	4	Zonal Arch. Mumbai	4	400
4	Zonal Arch. Hyderabad	2	4	DDK Delhi	4	400
5	Zonal Arch. Kolkata	2	4	CPC Delhi	4	400
6	Zonal Arch. Mumbai	2	4	DD News Delhi	4	400
7	BH New Delhi	2	2			
	<b>Total</b>	<b>20</b>	<b>42</b>		<b>30</b>	<b>3000</b>

Tentative Users=50 (Users may be changed as per PB actual requirements)

Data Storage = 3042 TB

  
(R.P. Joshi)  
DDG(IT)

  
(Aditya Chaturvedi)  
DDG(CA)

  
(Jitendra Pruthi)  
DDG(E)

20/11/2022

e-signed  
(Manoj Gupta)  
DDG(E)

  
(Devesh Kumar)  
DE