



Vigyan Prasar

(An Autonomous Organisation of Department of Science and Technology)
A-50, NCMRWF Building, Sector- 62, Noida (UP) 201309

VP/SOT/973/IPTV/2017

Dated: 22 April, 2019

SUB: TENDER NOTICE INVITING PROPOSAL FOR TURNKEY PROPOSAL FOR OTT PLATFORM, MANAGED HOSTING and LIVE STREAMING SERVICES

Vigyan Prasar, an autonomous organization of Department of Science & Technology, Govt. of India, runs an internet-based science channel (OTT) and invites proposals from reputed OTT Solution providers to run Vigyan Prasar's OTT channel (India Science) which has web, android and iOS interfaces. The entire solution, which will include both the OTT platform as well as a comprehensive managed cloud hosting infrastructure, will have an entirely recurring (opex) billing model, which will comprise a fixed cost component and a variable cost component, the latter being based on usage and traffic. A 24x7x365 support team will need to be provided to ensure 99.99% uptime with 3-minute response time at no extra cost. The cost will be pegged to an assumption of traffic/data consumption for purposes of determining the lowest priced vendor.

Eligible service providers would need to offer OTT platform services and also cloud-based managed hosting services on composite turnkey basis. If the bidder is an OTT platform provider, it is requested to send a proposal with company profile and profile of its cloud service partner. If bidder is a cloud service provider, then it is expected to provide its company profile as well as the profile of its OTT platform partner. Technical and Financial bids should be contained in separate sealed envelopes, enclosed in an overall bid envelope with specifics clearly marked on the cover of envelope. Sealed envelope should reach Vigyan Prasar latest by **11:00 A.M on 14 May, 2019**. Bids will be opened on same day i.e. **03:00 PM on 14 May, 2019**.

1.0 Scope of work

The service provider will provide following services:

- 1.1 OTT Platform which is capable of catering to atleast 100,000 users approx(Tech Specs and features articulated in Annexure III)**
- 1.2 Managed Hosting:** This includes Load Balancer, Primary & Secondary App servers, two Database Servers (Master-Slave), caching servers & Backups.

Minimum Specs:

1 Load Balancer (Application)

1 EC2 with Autoscaling Enabled

vCPU - 16 (scaled up to 32); RAM - 32 GB (scaled up to 256 GB real time)

Object Storage

Hard Disk- 5TB scaled up to 100 TB real time

Storage: Monthly storage cost for upto **1.25 TB** Data (Assumption).

Caching 1 Server - 16 core cpu, 32 GB RAM

Database

2 servers - Mysql with 1 TB storage, 16 Core, 32 GB RAM Master / 8 Core, 16 GB Slave

Live Streaming

1 server - 16 core cpu, 32 GB RAM with 1 TB storage

Miscellaneous

OS –Linux / Ubuntu

Software

PHP, Apache, Mysql, FFMPEG

- 1.3 Transcoding:**Transcoding is required to convert the input video to different formats and bitrates that can then be consumed by various devices.
- 2400 minutes** (assumption) of **HD video** need to be submitted each month for publishing on the OTT channel. Service Provider shall also submit a quotation for 3000 minutes and 3600 minutes as optional elements, although 2400 minutes shall be considered for purposes of calculating L1.
 - Supported resolutions of the output should be **240p, 360p, 480p, 720p and 1080p.**
- 1.3 Bandwidth:**(Assumption). Approximately **6 TB data** per month. Cost for every additional GB thereafter needs to be mentioned. Service Provider must mention which CDN it will be using if selected and how many pops the said CDN has in India and where all. (Documentation from CDN partner to be enclosed)
- 1.4 LIVE Streaming Server:** A LIVE streaming server for **minimum, 1000 concurrent users** needs to be made available on demand (with 12 working hours notice for setup) with full HD quality streaming on a metered consumption basis for bandwidth and transcoding.
- 1.5 POP3 Email** (Upto 25 accounts) with mail server disk space of 1 GB each
- 1.6 Cpanel access**
- 1.7 24x7 Support** through Email, Phone & WhatsApp within 3 minutes (within this time service provider will either flag the error/glitch to Vigyan Prasar or will acknowledge the problem within 3 minutes if Vigyan Prasar first spots and flags the problem. Thereafter it will swing into action in order to provide solution to the fault/error at earliest.)

2.0 Terms & Conditions: -

- 2.1** The bid should be accompanied with an EMD of Rs.3.5 lakhs and Non-refundable tender fee of Rs.1000.00/- in the form of DD, drawn in favour of "Vigyan Prasar", payable at New Delhi or can be paid through online by NEFT/RTGS/IMPS to Vigyan Prasar account as detailed below (kindly submit details of NEFT with the proposal the):-

Account Name/ VIGYAN PRASAR
ADDRESS- A- 50, NCMRWF BUILDING, SECTOR- 62, NOIDA.
NEFT/RTGS DETAIL
BANK NAME- UNION BANK OF INDIA.
BANK ACCOUNT NUMBER- 349902010040204.
IFSC CODE- FOR RTGS/NEFT- UBIN0534994.
BANK ADDRESS- SAFDARJANG DEVELOPMENT AREA,
C-4, COMMUNITY CENTRE, NEW DELHI- 110016

- 2.2 Please quote your rates in the prescribed format as per annexure-II (Price Bid). After awarding the contract if bidder fails to provide the services within the stipulated time or not accepting the work order, his EMD will be forfeited. The rates quoted by the agency should be valid for a period of one year. Contract will be awarded for the initial period of one year. Period of contract may be extended for further period of one year on mutual acceptance. The scope of this contract can be extended up to a total period of three years in total. There will not be any price revision during the contract period of three years.
- 2.3 The quotations in a sealed cover addressed to “The Registrar, Vigyan Prasar, A – 50, Institutional Area, Sector-62, Noida – 201 309” should reach VP on or before 14 May, 2019 by 11:00 AM. The envelope should be superscripted with “**PROPOSAL FOR OTT PLATFORM, MANAGED HOSTING and LIVE STREAMING SERVICES**”.
- 2.4 Bids received late or incomplete shall be summarily rejected.
- 2.5 The Committee constituted by Vigyan Prasar will open all the proposals and check all the necessary documents listed in eligibility criteria and select the service provider as articulated in Clause 3.
- 2.6 Vendor would need to furnish its company profile, containing details of technology infrastructure prior client experience for similar services and at least 5 qualified technical manpower who can sustain a 24x7 support mechanism.
- 2.7 Service provider has to complete the server setup within fifteen days of work order.
- 2.8 Payment to the Service provider will be made on monthly basis after successful & satisfactory completion as per the channel requirement.
- 2.9 Monthly bill will be calculated based on fixed and variable billing based on assumptions provided. In the event of any incremental usage, the same shall be added to the bill. Service provider will need to furnish usage statistics to support the bill.
- 2.10 Service provider will need to alert Vigyan Prasar when consumption of services reach 50% and 90% milestones of minimum assumptions as given in this RFP.
- 2.11 However in case of any technical downtime upto 1%, an alert will be flagged and a penalty of **3% of total monthly invoice value** will be imposed if the downtime touches 3% in a month. Similarly, any downtime beyond 3% shall invite a penalty of equivalent percentage value of the monthly invoice. Similarly, any failure / delay / technical glitch to go LIVE during a pre-designated period will invite a penalty of **5% of total monthly invoice value**. However, such a penalty clause will not be applicable in any force majeure situations, e.g. fire, earthquake, acts of terrorism etc.
- 2.12 The OTT Platform provider must have a tried and tested B2C deployment of its technology, on some popular OTT site / app for at least 2 years. Proof / Details to be provided for verification by Vigyan Prasar.
- 2.13 In the event of tender expiry or termination, the vendor shall be obliged to assist and cooperate in the migration process with the new incoming vendor, so that there is no

downtime. All possible activities related to the migration, some of which may involve resource deployment, will be the responsibility of the outgoing vendor. As pointers, the following tasks are being listed, though this may not be an exhaustive list:

- Machine/Server preparation
- Installing software's
- Machine/Server Patching
- Apache/My SQL/PHP Configuration
- Load Balancer Configuration
- Data migration
- Application set up
- Mail Server set up (if part of migration)
- Functional testing of the newly hosted application
- Data testing for the migrated data
- Performance Testing to ensure that the new infrastructure can handle the desired load.
- Security Testing (to ensure that the newly hosted app environment is secure)

- 2.14 Live Streaming services will be provided as and when required. While Vigyan Prasar shall organize the remote LiveU unit to capture the signal, the Service Provider shall be responsible for patching it on to the Live Streaming server and ensuring a smooth user experience.
- 2.15 Vigyan Prasar would require the service provider to ensure that its OTT platform is STQC certified and a third party security audit done by a CERT.in empaneled vendor. If the OTT platform is not already STQC certified and security audited at the time of tender opening, the service provider shall undertake to start the process within 10 days of issue of Work Order and plug all vulnerabilities and acquire the necessary certifications within 3 months of issue of the Work Order. The Service provider shall bear all costs involved in the certification and audit process.
- 2.16 The Cloud Service Provider (CSP) partner of the OTT platform service provider should preferably be empaneled with the Ministry of Electronics and Information Technology.
- 2.17 The service provider shall be given a period of 15 days to effect the entire transition. The Work Order billing shall start from the day India Science website and apps go live from the platform / servers of the selected bidder.
- 2.18 The OTT Platform Provider shall ensure its platform / software is updated at all times for compatibility with newer versions of different Operating Systems and Devices at no extra cost.
- 2.19 The OTT Platform Provider shall provide the facility to Vigyan Prasar to make minor changes to the User Interface of the Website / Mobile Apps at no extra cost, provided the said changes do not entail any fresh coding.
- 2.20 The OTT Platform Provider shall provide API access to a designated third party, whom Vigyan Prasar shall select to build an interactivity platform for the OTT audience for better engagement and interactivity.

- 2.21 The OTT Platform Provider shall also provide an in-principle pro rata per man-hour quotation for carrying out any significant augmentations / improvements to the OTT website / app, including incorporating fresh functionalities or features.
- 2.22 . Vigyan Prasar reserves the right to cancel the whole contract or part thereof without assigning any reason at any time during the contract period and no claim on this account will be entertained.VP reserves the right to cancel the contract and to blacklist the firm for a period of five years without giving any notice.
- 2.23 Any dispute or differences including those considered as such by only one of the parties arising out of or in connection with this work shall be, to the extent possible, settled amicably between the parties. If amicable settlement cannot be reached, then all disputes shall be settled by an Arbitrator. The Director, Vigyan Prasar or any officer nominated by him will be the sole arbitrator and his/her award shall be final and binding upon both the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of Law.
- 2.24 In case of any proceedings/Suits, Indian Law shall govern the contract and courts in New Delhi shall only have the jurisdiction to hear such matters.
- 2.25 Vigyan Prasar reserves the right to accept or reject any of the bids without assigning any reason.
- 2.26 Only firms having 24x7 network support team and managed OTT services team physically located in India would be eligible.
- 2.27 EMD will be returned back to all unsuccessful bidders within 30 days once the evaluation is completed and the contract is signed by the successful bidder.
- 2.28 Selected vender has to submit PBG of 10% of Total contract value. The PBG should have a validity of 60 days after the completion of the contract period.
- 2.29 Pre-Bid Conference will be held on May 7, 2019 at 3 pm in the VP Noida Office. Prospective bidders can send in their queries in advance to tenders@vigyanprasar.gov.in . No queries shall be entertained after the pre-bid conference.

3. EVALUATION PROCESS:

3.1 All received proposals will be first seen by the purchase committee of Vigyan Prasar for opening the tender. The committee will check the all documents (Application in format / Firm Registration Certificates/ Work Experience / Studio and other equipment facility / Turnover last three years/ List of key personnel / Application fee / EMD/ PAN number / financial bids etc. submitted by the agency. The committee will prepare a list of all eligible agency/firms and will recommend their name for technical evaluation.

3.2 VP has adopted a two-bid selection process (QCBS) in evaluating the proposals comprising a 70:30 criteria, where 70% weightage will be accorded to technical evaluation

and 30% weightage will be accorded to the financial bid.

3.3 Technical Evaluation:

S.N.	Parameters		Total Marks
1	Firm's relevant experience in running an OTT Platform and Managed Hosting Services		50
	Experience of more than 5 years in running OTT Platform	50	
	Experience of more than 3 but less than 5 years in running OTT Platform	40	
	Experience of more than 1 year but less than 3 years in running OTT Platform	30	
2.	Cloud Hosting Infrastructure and CDN		30
	CSP hosts more than three OTT platforms	30	
	CSP hosts at least one OTT platform	15	
3	Managed Hosting Support Team Profile		10
4	Cloud Service Provider (CSP) partner of the OTT platform service provider be empaneled with the Ministry of Electronics and Information Technology.		10
	TOTAL		100

Bids securing 70 percent or more will qualify for financial evaluation

3.4 Financial Evaluation:

A date, time and venue will be notified to all shortlisted applicants for announcing the result of technical evaluation and opening of Financial Proposals. The opening of financial proposal shall be done in presence of representative of applicants who choose to remain present. VP will not entertain any query or clarification from applicants about technical evaluation marks. No TA/DA will be admissible to the agency/firms. Proposer or authorized representative will attend the presentation at their own cost.

The lowest Bid (L1) will be based on the lowest combined score (CS) after considering the Price quoted Format given in Annexure D on this NIT and the Technical scores referred above. All shortlisted applicants would be assigned financial score. For financial evaluation, the total cost indicated in the Financial Proposal, excluding GST, will be considered. Each Financial Proposal will be assigned a financial score as detailed below:

The lowest financial proposal (L1) will be awarded 100 % score. The financial scores of other proposals will be computed as follows: Financial Score of a bidder = $\{(Financial\ Bid\ of\ L1/Financial\ bid\ of\ the\ Bidder) \times 100\}\%$ (adjusted to 2 decimals)

Proposals will finally be ranked according to their combined technical and financial scores (CS) as follows:

CS= Technical Score X 0.7 + Financial Score X 0.3

Weight assigned to technical and financial Proposals that shall be 0.7 and 0.3 respectively.

Generally, the successful applicant will be the applicant having the highest combined Score. The second highest Applicant will be kept in reserve and may be invited for negotiations in case the first-ranked applicant withdraws or is not selected for any reason.

Example of scoring and evaluation of Tender:

The marks scored by Bidders in the technical evaluation will be given a weightage of 70. Similarly, the financial bids of the Bidders will be given a weightage of 30. The lowest financial proposal (L1) will be awarded 100 % score. Illustration of scoring criteria: Assume 3 participating Bidders have total technical scores as per column (3) in table below and in case of rates, the total rates quotes is as under:

SN. (1)	Description (2)	Total Technical Scores(3)	Rate quotes (say in Rs.) Financial scores (4)	Financial Score of a bidder= (Financial Bid of L1/Financial bid of the Bidder)X100}%
1	Bidder 1	80	60	$(50/60) \times 100 = 83.33$
2	Bidder 2	75	55	$(50/55) \times 100 =$

				90.90
3	Bidder 3	70	50	$(50/50) \times 100 = 100$

The Bidder scoring minimum rates in the financial scores i.e. 50 scoring point will be awarded 100 % score and the other bidders will be worked out on proportionate basis and thereafter weightage. Their combined technical and financial scores (CS) as follows:

(CS obtained by firm = **Technical Score X 0.7 + Financial Score X 0.3**)

CS obtained by Bidder A = $80 \times 0.7 + 83.33 \times 0.3 = 56 + 24.999 = 80.999$ (CS1)

CS obtained by Bidder B = $75 \times 0.7 + 90.90 \times 0.3 = 52.5 + 27.27 = 79.77$ (CS2)

CS obtained by Bidder C = $70 \times 0.7 + 100 \times 0.3 = 49 + 30 = 79.00$ (CS3)

For financial evaluation, the total cost indicated in the financial proposal, excluding GST, will be considered.

ANNEXURE-I

OTT Platform Features

Vigyan Prasar runs an OTT channel, called India Science, which has a web version and two mobile apps – android and iOS. As part of its long-term strategy to grow its target audience:

1. The platform should be able to handle the following:
 - a) **Scheduled Play** (24x7 Linear run of programmes based on a backend scheduler)
 - b) **Video on Demand**
 - c) **LIVE streaming** (will supersede scheduled play during the duration of Live streaming)
2. The platform should be able to deliver streaming videos with **adaptive bit rates (240p, 360p, 480p, 720p and 1080p)**.
3. The platform should provide a **single sign-on as an optional facility** to facilitate engagement, to understand subject preferences and also to give access to virtual rewards.
4. The platform should have a robust **in-built advertising / ad revenue leveraging** mechanism
5. The platform should have a robust intra-site / intra-app **search** mechanism
6. The platform should have a robust **analytics engine** that can go beyond the normal Google Analytics dashboard, to understand user behavior on the website / apps.
7. The platform should have a **video scheduler** to enable 24x7 scheduled play services
8. The platform should provide a **language selector** to users. Users who wish to watch Hindi films can be taken to the default hindi site, while there should be a **redirect URL for other languages**. This should be scalable to multiple languages in future.
9. The platform should provide a **slider for promotional banners** (jpegs, mpegs)
10. The platform should provide a robust **backend console to monitor video upload traffic and server analytics**.
11. These are the minimum features and Service Providers are welcome to provide any additional features on their Platform for better User Experience.

ANNEXURE-II
ELIGIBILITY CRITERIA

- 1.1 Service Providers should have a minimum 3 years' experience in offering both OTT platforms and Managed Hosting services (client or revenue share partner work orders to be enclosed).
- 1.2 Service Provider should have a minimum average turnover of Rs. 5 crore in the last three financial years (2015-2016, 2016-2017, 2017-2018).
- 1.3 Agency should have adequate in-house infrastructural facilities for the said work including 24x7 technical maintenance team (attach company profile including infrastructural and manpower list).
- 1.4 Only service providers having 24x7 manned network support facility in India would be eligible.
- 1.5 Service Provider should have PAN and GST registration certificate (attach photocopy).
- 1.6 Service Provider should submit EMD, Tender Fee and all the pages of tender document duly signed and stamped accepting all the terms & conditions of the tender.
- 1.7 The Service Provider should also enclose a certificate stating that the firm has a good reputation and there is no complaint against it and have not been blacklisted from any Govt. organization.

(If tenderer, does not submit any one among all these documents, the bid will be rejected.)

Annexure-III

Price Bid(in sealed envelope)

(On the letterhead of the Applicant)

Subject: NOTICE INVITING TENDER FOR OTT PLATFORM AND MANAGED HOSTING SERVICES FOR OTT CHANNEL FOR 100,000 USERS/ MONTH

Rate exclusive of GST:

S.No.	Service/Product	Managed Services Cost (Fixed + Variable) - A	Incremental Cost B		
		Description/ Assumptions	Cost (Rs.)		
1.	OTT Platform (A1)	Capable of catering to at least 100,000 users			
			Cost (Rs.)	Description per unit	Incremental Cost (Rs.)
2.	Managed Hosting (A2)	Load Balancer, Primary & Secondary App servers, two Database Servers (Master-Slave), caching servers & Backups.			
3.	Storage(A3)	1TB / Month		Cost per additional GB(B1)	
4.	Transcoding (A4)	3000 minutes per month		Cost per additional minute (B2)	
5.	Bandwidth (For supporting upto 1 lakh page view per month)(A5)	6 TB/Month (Please mention which CDN you are using and number of pops it has in India as part of its coverage)		Cost per GB(B3)	
6	LIVE streaming(A6) (Upto 1000 concurrent users)	Full HD stream / Per Hour rate (Please mention which server you are using and its specs)		Cost for additional 1000 concurrent users (B4)	
7.	25 POP3 Email Accounts (A7)	1 GB per mail account		Cost per extra email per month (B5)	
8.	Cpanel access (A8)	Cost per month (if any)			
9.	Support (24x7 support)(A9)	24x7 support, E-mail, Phone, WhatsApp			

	Grand Total (A1-A9)	(A1 + A2 + A3 + A4 + A5 + A6 + A7+A8 + A9)		(B= B1 + B2 + B3 + B4 + B5)	
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Grand Total in Rs. (in words):

NOTE:

L1 to be determined only on the basis of Managed Services Cost (A = A1 + A2 + A3 + A4 + A5 +A6+A7+A8+A9). In the event of a tie, Incremental Cost (B = B1 + B2 + B3 + B4 + B5) will be considered as a tie breaker.