

प्रसार भारती/Prasar Bharati (India's Public Service Broadcaster) प्रसारभारती सचिवालय/Prasar Bharati Secretariat आकाशवाणी भवन, संसदमार्ग, नईदिल्ली - 110001 Akashwani Bhawan, Parliament Street, New Delhi-110001 सूचनाप्रौधोगिकी विभाग/IT Division



Dated:15/10/2025

Subject: Inviting Industry Feedback on draft technical specification for hiring of CDN Services in Prasar Bharati

Prasar Bharati intends to invite a fresh tender on the GeM portal for Content Delivery Network (CDN) Services/Data for delivering live streaming of radio channels and other similar requirements through GeM Portal.

Draft of technical specifications are hereby published to invite Industry feedback from prospective Bidders/OEMs or their authorized dealers/Sellers on Draft technical specification (attached to this) for hiring of CDN services.

Budgetary quote for hiring of CDN services is mandatorily required to be submitted along with the feedback.

The response along with the feedback on technical specifications as well as budgetary quote for the same may be furnished by 03.11.2025 on following eMail ID

ade-it@prasarbharati.gov.in

(Simmi Mittal) Assistant Director (IT)

To Director (PBNS) for publishing on Prasar Bharati Corporate Website.

Prasar Bharati (India's Public Service Broadcaster) Prasar Bharati Secretariat IT Division, Akashvani Bhavan New Delhi

Specification for Hiring of CDN services

Prasar Bharati is currently running live web streaming of more than 280 radio channels. Live streaming of these radio channels has been made accessible to the users through digital services like **NewsOnAir**, **Waves**, **Web portals**. A CDN service procured through the GeM portal is being used for this purpose. The contract for the CDN service/data hired by Prasar Bharati, is expiring soon and fresh hiring is required to ensure continuity of service.

Scope of Work

Prasar Bharati intends to invite a fresh tender on the GeM portal for Content Delivery Network (CDN) Services/Data for delivering live streaming of radio channels and other similar requirements. The estimated yearly data consumption is **9000 Terabytes** (**9 Petabytes**).

CDN services are available on GeM under the category 'CDN Service Ver 2'. The Service Level Agreement (SLA) and Terms & Conditions of the same shall be applicable for the proposed services including following minor customisation/modifications in the agreement parameters:

Bill of Service

S. No.	Particular	Qty.
1.	Estimated Data consumption	9000 Tera Bytes Yearly i.e Total of 27000 Tera Bytes for 3 Years.
2.	Storage required in-case of dynamic resizing	01 TB
3.	Extra storage other than cache	20 TB
4.	Number of certificate slot	10
5.	Training	02 days for the IT Administrators

Contract Period:

The contract period shall be three (3) years (36 months), with an option to extend for an additional two (2) years on an annual basis under the same terms and conditions. The quantities of item "Estimated Data Consumption" listed in the Bill of Services are

based on the original term and shall be proportionally increased for extended period, if any, calculated on an annual or prorated basis.

CDN Parameters

The values of the parameters/filters as will be as per GeM portal for hiring the CDN. The vital parameters are as below:

S. No.	Parameter	Value
1	Maximum Hit per day within India	26-50 Million or better
2	Traffic Handling Capacity/Bandwidth	11-15 GBPS or higher
3	Points of Presence in India	5 And Above
4	Global Presence	More than 50
5	Concurrency of Visitors	100001-200000
6	Geo Fencing/Geo Restriction	Yes
7	Protection of CDN against volumetric attack on Network Layer 3,4,7 etc.	TCP State Exhaustion Attacks, HTTP And UDP Flood Attacks, Reflective Amplification Attacks, Other Volumetric Attacks, other
8	Dynamic Resizing of Images	Yes
9	Extra Storage other than Caching	Yes
10	TLS/SSL Required	yes

Additional Terms & Parameters

- 1. Prasar Bharati shall provide source streams in various formats including HLS, RTMP, MPEG-DASH, or a combination thereof. The CDN provider must ensure format-agnostic, transparent handling and delivery of these streams, irrespective of the input format. The solution architecture must remain scalable and flexible to incorporate emerging technologies such as LL-HLS, CMAF-based workflows, and content analytics. All services offered shall comply with applicable Government of India data protection and IT security guidelines.
- **2.** No charges shall be levied or invoiced for internal data transactions within CDN network i.e.:
 - a) Downloads from the originating server
 - b) Push uploads and distribution to the CDN
- **3.** Payment shall be made on actual consumption basis. The quantity mentioned at Bill of Service is only an estimated requirement.

- **4.** Payment shall be processed quarterly only on the receipt of invoices for the Clean Traffic (Edge Traffic), which means the legitimate end user traffic.
- **5.** There will be no additional cost for implementation of the distribution of existing 280+ streams through CDN as well as for any number of additional streams required for implementation in future.
- **6.** The successful vendor/CDN provider will:
 - a) Provide publishing/inbound stream URLs (ingest URLs) for all streams to facilitate the configuration of Prasar Bharati's audio encoding systems.
 - b) Ensure that the encoded input streams are successfully ingested and published onto the CDN's streaming infrastructure with high availability and low latency.
 - c) Provide playback URLs (HLS/DASH or other formats as required) for each stream, for seamless integration with:
 - Websites of the Prasar Bharati.
 - Mobile applications across Android, iOS and other platforms
 - d) Assist in configuring existing encoding systems. Noting that Adobe Flash Live Media Encoder (FLME) is currently used by Prasar Bharati, the vendor shall:
 - Provide compatible configuration details for FLME as required.
 - Additionally, provide guidance for transition to modern encoding tools (e.g., OBS, Wirecast, Wowza ClearCaster, etc.), considering FLME is deprecated and unsupported by Adobe.

7. Coordination Support:

The successful bidder will be responsible for coordinating with the website hosting/development agency and mobile app development teams of Prasar Bharati to ensure:

- a) Smooth integration of playback URLs across all digital platforms.
- b) Troubleshooting and assistance during go-live and updates.
- c) Support for implementation of fallback or failover mechanisms to ensure stream reliability.

8. Adaptive Bitrate Streaming (ABR):

The CDN must fully support Adaptive Bitrate Streaming (ABR), ensuring that users experience in optimal playback quality across varying network conditions on all the supported devices and platforms.

The General Terms and Conditions governing the CDN services as available on GeM portal are also part of the specifications.

The Service Level Agreement (SLA) Conditions governing the CDN services, as available on GeM portal, including those indicated in this document shall be adhered to by the service provider.
