



REQUEST FOR PROPOSAL (RFP)

FOR

Supply, Installation and Commissioning of IPTV Hardware Components

APSFL/IPTV/55/2016, Dated 06/07/2017

Andhra Pradesh State FiberNet Limited,
NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65,
Vijayawada - 520013
Web address: www.apsfl.in
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DISCLAIMER

The information contained in this Request for Proposal document (“RFP”) or subsequently provided to Applicants, whether verbally or in documentary or any other form by or on behalf of the APSFL or any of its employees or advisers, is provided to Applicants on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the APSFL to the prospective Applicants or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the preparation of their Proposals pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by APSFL. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. This RFP may not be appropriate for all persons, and it is not possible for APSFL, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP, may not be complete, accurate, adequate or correct. Each Applicant should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Applicants is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. APSFL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

APSFL, its employees and advisers make no representation or warranty and shall have no liability to any person including any Applicant under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.

APSFL also accepts no liability of any nature whether resulting from negligence or otherwise, howsoever caused, arising from reliance of any Applicant upon the statements contained in this RFP.

APSFL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.

Issuance of this RFP does not imply that the APSFL is bound to select an Applicant or to appoint the Selected Applicant, as the case may be, for the RFP, APSFL reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.

The applicant shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations which may be required by the APSFL or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Applicant and APSFL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Proposal, regardless of the conduct or outcome of the selection process

1. Inviting Authority

Andhra Pradesh State FiberNet Limited (APSFL) invites bids from the prospective bidders to procure requisite Hardware/Software for IPTV, OTT Services & VAS Delivery. The requisite Hardware / Software shall be installed at AP Fiber Grid Network Operations Center, Visakhapatnam and District Node, Vijayawada and has to be integrated with IPTV Headend available at NOC, Vishakhapatnam. The selected agency has to provide end-to-end Hardware/ Software to ensure smooth delivery of IPTV services and should manage, support and maintain the same with warranty for a period of two years.

1.1 Key Events and Dates

1.	Name of the Authority	Andhra Pradesh State FiberNet Limited
2.	Name of the Assignment	RFP for Supply, Installation and Commissioning of IPTV Hardware Components
3.	RFP Number	APSFL/IPTV/55/2016, Dated 06/07/2017
4.	Last date and time for receiving queries/clarifications	11/07/2017 at 5:00 PM
5.	Last date and time for submission of Proposal (Proposal Due Date)	20/07/2017 at 3:00 PM The proposal is to be submitted on www.apecurement.gov.in on e-procurement portal.
6.	Date and time of opening of Pre-qualification cum technical proposals on e-procurement platform	20/07/2017 at 4:00 PM Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada - 520013 Web address: www.apsfl.in Email address: apsfl@ap.gov.in
7.	Date and time of opening of financial proposal	To be intimated to the technically qualified agencies at a later date
8.	Bid Processing Fee (Non-refundable)	INR 20,000 (Twenty Thousand Indian Rupees Only) In the form of Demand Draft issued by one of the Nationalized / Scheduled Banks in India drawn in favour of Andhra Pradesh State FiberNet Ltd , payable at Vijayawada. Original DD must be submitted in APSFL office at Vijayawada before proposal due date.
9.	Bid Security / EMD (Refundable)	INR 5,00,000 (Five Lakh Indian Rupees Only) In the form of Bank Guarantee issued by one of the Nationalized / Scheduled Commercial Banks in India drawn in favour of Andhra Pradesh State FiberNet Ltd , payable at Vijayawada. Original BG must be submitted in APSFL office at Vijayawada before proposal due date. Bid Security / EMD should be valid for a period of 180 (One Eighty) days from Proposal Due Date. The Bid Security / EMD will be refunded to unsuccessful Applicant agencies within 30 (Thirty) days of completion of selection process.

10.	Performance Bank Guarantee	10% of the total contract value of the successful bidder. In the form of Bank Guarantee issued by one of the Nationalized / Scheduled Commercial Banks in India drawn in favour of Andhra Pradesh State FiberNet Ltd , payable at Vijayawada.
11.	Warranty & Maintenance	2 Years
12.	For any enquiries and clarifications, please contact:	Executive Director –Technical, Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, Vijayawada - 520013 Web address: www.apsfl.in Email: edt.apsfl@ap.gov.in
13.	Validity of the Proposal	Bidder proposals shall remain valid for a period of 180 days from the Proposal due date.

1.2 Procedure for Bid Submission

The Bidder shall submit their response through Bid submission process on e-Procurement platform at www.apecurement.gov.in by following the procedure given below:

The bidder would be required to register on the e-procurement platform www.apecurement.gov.in or <https://tender.apecurement.gov.in> and submit their bids online. Offline bids shall not be entertained by the RFP Inviting Authority for the RFPs published in e-Procurement platform.

The bidders shall submit their Pre-Qualification cum Technical bid and Price bid online in e-Procurement web site. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their Pre-Qualification cum Technical bids and other certificates/documents with clear readability, in the e-Procurement web site. The bidder should sign on all the statements, documents, certificates uploaded in the e-Procurement website, owning responsibility for their correctness/authenticity.

1.3 Registration with e-Procurement platform:

For registration and online bid submission bidders may contact HELP DESK on www.apecurement.gov.in or <https://tender.apecurement.gov.in>

1.4 Digital Certificate authentication:

The bidder shall authenticate the bid with the agency's Digital Certificate for submitting the bid electronically on e-Procurement platform and the bids not authenticated by digital certificate of the bidder will not be accepted on the e-Procurement platform.

For obtaining Digital Signature Certificate, you may please contact:

Andhra Pradesh Technology Services Limited, Vijayawada www.aps.gov.in/

(OR)

You may please contact any Registration Authorities of Certifying Authorities in India. The list of CAs is available in the link provided below.

<https://tender.apecurement.gov.in/DigitalCertificate/signature.html>

1.5 Hard copies

- i. All the bidders shall submit original DD towards the bid processing fee & original BG towards EMD in APSFL office at Vijayawada before proposal due date. All the bidders shall invariably upload the scanned copies of DD/BG in e-Procurement system and this will be the primary requirement to consider the bid responsive.
- ii. APSFL shall carry out the evaluation solely based on the uploaded certificates/documents, BG towards EMD in the e-Procurement system and open the price bids of the responsive bidders only.
- iii. APSFL will notify the bidders for submission of original hardcopies of the uploaded documents if required.
- iv. APSFL will not take any responsibility for any delay in receipt/non-receipt of original DD/BG towards Document Fee/ EMD before the stipulated time.

On receipt of documents, APSFL shall ensure the genuinity of the BG towards EMD and all other certificates/documents uploaded by the bidder in e-Procurement system in support of the qualification criteria before concluding the agreement.

1.6 Deactivation of Bidders

Vide Ref GO Ms. No.174 – I&CAD dated 1-9-2008, if any successful bidder fails to submit the original hard copies of uploaded certificates/documents, BG towards EMD within stipulated time or if any variation is noticed between the uploaded documents and the hardcopies submitted by the bidder, the successful bidder will be suspended from participating in the RFPs on e-Procurement platform for a period of 3 years. The e-Procurement system would deactivate the user ID of such defaulting bidder based on the trigger/recommendation by the RFP Inviting Authority in the system. Besides this, APSFL shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the RFP process for execution of the development schemes taken up by the government. Other conditions as per RFP document are applicable.

The bidder is requested to get a confirmed acknowledgement from the RFP Inviting Authority a proof of Hardcopies submission to avoid any discrepancy.

a) Payment of Transaction Fee:

It is mandatory for all the participant bidders from 1st January 2006 to electronically pay a prescribed non-refundable Transaction fee to M/s. APTS, the service provider through "Payment Gateway Service on E-Procurement platform". The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any bank and Direct Debit facility/Net Banking to facilitate the transaction. This is in compliance as per G.O.Ms. 13 dated 07.05.2006.

b) Corpus Fund:

As per GO MS No.4, user departments shall collect 0.04% of ECV (estimated project cost) with a cap of Rs.10,000 (Rupees ten thousand only) for all works with ECV upto Rs.50 Crores, and Rs.25,000/- (Rupees twenty five thousand only) for works with ECV above Rs.50 Crores, from successful bidders on e-Procurement platform before entering into agreement / issue of purchase orders, towards e-procurement fund in favour of Managing Director, APTS. There shall not be any charge towards e-Procurement fund in case of works, goods and services with ECV less than and upto Rs. 10 lakhs

c) RFP Document:

The bidder is requested to download the RFP document and read all the terms and conditions mentioned in the RFP Document and seek clarification if any from the RFP Inviting Authority. Any offline bid submission clause in the RFP document could be neglected.

The bidder has to keep track of any changes by viewing the Addendum/Corrigenda issued by the RFP Inviting Authority from time-to-time in the e-Procurement platform. The Department calling for RFPs shall not be responsible for any claims/issues arising out of this.

d) Bid Submission Acknowledgement:

The bidder shall complete all the processes and steps required for Bid submission. The system will generate an acknowledgement with a unique bid submission number after completing all the prescribed steps and processes by the bidder. Users may also note that the bids for which an acknowledgement is not generated by the e-procurement system are treated as invalid or not saved in the system. Such invalid bids are not made available to the RFP Inviting Authority for processing the bids. The Government of AP is not responsible for incomplete bid submission by users.

1. The bidders may contact the EDT, APSFL Vijayawada for any further information / clarifications on e-procurement.
2. The bidders need to register on the electronic procurement market place of Government of Andhra Pradesh i.e., www.eprocurement.gov.in. On registration in the e-procurement market place they will be provided with a user ID and password by the system using which they can submit their bids on line.
3. While registering on the e-procurement market place, the bidders need to scan and upload the required documents as per the RFP requirements on to their profile. The e-procurement market place provides an online self-service registration facility to all such Contractors who are already registered with respective participating departments for supply of specified goods and services.
4. All the bidders shall invariably upload the scanned copies of DD/BG in e-Procurement system and this will be the primary requirement to consider the bid as responsive. The Department shall carry out the Technical bid evaluation solely based on the uploaded certificates/documents, BG towards EMD in the e-procurement system and open the price bids of the eligible and responsive bidders. The Department will notify the successful bidder for submission of original hard copies of all uploaded documents and DD/BG towards EMD prior to entering into agreement.
5. The bidders shall furnish a declaration in online stating that the soft copies uploaded by them are genuine. Any incorrectness/deviation noticed will be viewed seriously and apart from cancelling the work duly forfeiting the EMD, criminal action will be initiated including suspension of business.

2. Introduction:

Andhra Pradesh State FiberNet Limited (APSFL) has been incorporated under the Companies Act, 2013 in October 2015, to undertake the works of AP Fiber Grid, its operations & maintenance and its business activities. It is a fully owned entity of the Government of AP under the control of Energy, infrastructure & Investment (E, I&I) department. APSFL aims to provide the high quality & affordable digital services to households, Government and Business.

Fiber Grid is one of the 5 Grids identified by the Government of Andhra Pradesh to accelerate socio-economic growth of the State. Fiber Grid is primarily aimed at harnessing the power of information resource and enabling provision of qualitative and cost-effective IT, Communication (data, voice & video) related services to the citizens of A.P.

Vision of AP Fiber Grid is as follows:

“To establish a highly scalable network infrastructure, accessible on a non-discriminatory basis, to provide on demand, affordable and end-to-end broadband connectivity of 10 Mbps for ALL households and 1 to 10 Gbps for ALL institutions & Multi-Dwelling Units by 2018, to enable realization of the Vision of Digital Andhra Pradesh, in partnership with the Government of India and the private sector”

In line with the vision, a dual phased approach has been undertaken to deliver the project mandate in AP.

Phase I – Aerial Fiber Grid Network will create an aerial fiber network up-to Mandal Level by leveraging assets of Electricity companies.

Phase II - Underground Fiber Network is envisioned to create an underground fiber network covering the entire State upto Gram Panchayats level.

Phase-I of the Project (Aerial fiber grid project), which is presently under implementation is creating an overhead fiber network across AP State. The fiber is being laid overhead using the network of electricity poles across the State. Approximate length of fiber to be laid as part of this project is 23,500 Kms.

Phase-I project components include laying aerial optical fiber across the State upto Mandal level, so that the State, District, Zonal and Mandals are connected with each other using ring topology as much as possible. In addition, the last mile connectivity is to be made available through a network of Local Cable Operators that have the capability to provide bandwidth.

Points of Presence (PoPs) are to be created at the State, District and Mandal level. The objectives of the PoPs are to enable the customers / ecosystem partners like Local Cable Operators etc. to have easy access to the network. A total of approx. 2449 PoPs are created across the state.

Phase 1 – AP Aerial Fiber project implementation works have been completed and commercial services scheduled recently.

The specifications and open standards for Customer Premises Equipment (CPE) under this network, which can deliver all the three services i.e. Triple play – Cable TV, high-speed broadband and Telecom, have already been released. Online enrolment of MSOs/LCOs for business association with APSFL has been opened on 14th March 2016 and received enthusiastic response from MSOs/LCOs so far.

APSFL has obtained the required licenses to carry on its business activities – Internet Service Provider (ISP-B), National Long Distance and Unified Service Access License from the Dept. of Telecom, Govt. of India on 8th March 2016.

In this context, APSFL wants to procure Hardware/Software Infrastructure required to support the existing solution for IPTV, OTT Services & VAS Delivery.

3. Scope of Work:

APSFL is in the process of providing Fiber connectivity to all the households across Andhra Pradesh to deliver Triple play services including IPTV, Broadband Internet and Fixed Telephony services. As part of this project it requires Middleware, DRM & other software for IPTV, OTT Services & VAS Delivery to deliver secured Television services (Live Channels, Value Added Services including Video on Demand, Catchup TV, Government and Education related application) in the existing APSFL's IP network. The DRM (Digital Rights Management) solution will secure the channels and ensure delivery of services to subscribed users connected to IP Set top boxes.

APSFL intends to deliver these Television services across one million households (connected with IP Set top boxes) of Andhra Pradesh in the first phase. In this context, APSFL wants to procure Hardware/Software Infrastructure required to support the existing solution for IPTV, OTT Services & VAS Delivery.

The vendor has to take care of the Supply, Installation & Configuration of below mentioned hardware components at Vijayawada and Visakhapatnam. The selected vendors should also provide technical support for next 2 years as required. The vendor need to share the configuration file (in desired format) to departments and the same may be used to reset.

Following materials to be supplied and configured in Vishakhapatnam and Vijayawada.

- 1) 250 channel IPTV multiplexer with AES-CBC scrambling for all the channels, IP in and SPTS IP out, necessary NMS/Web interface for management, dual 100-240V power supply, installation, configuration, service support for 2 years, warranty
- 2) 4 channel H.264 HD Encoder with HDMI input and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty
- 3) 8 channel H.264 SD Encoder with AV input and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty
- 4) 4 DVB-S/S2 input IRD with 2 CI and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty
- 5) Cisco make WS-C2960G 24 Port Gigabit Switch

Minimum required hardware specifications for the above components is provided in **Annexure – X**

However, based on the requirements, vendor is free to provide higher or better specifications in line with the current solution available to render triple play services. It is the responsibility of bidder to provide the recommendations to APSFL in case of any such modifications required.

4. Eligibility Criteria

The prospective bidder must satisfy the following eligibility criteria for submission of their bids and provide supporting documents as proof of eligibility.

***Note: Consortium is not allowed**

#	Criterion	Documentary Proof to be submitted
A.	General Eligibility	
1.	The bidder* must be a company / legal entity registered in India, under the relevant statutes for the last 3 years as on 31.03.2017	Certificate of Registration / Incorporation
2.	The bidder must be registered with Service Tax and Sales Tax (VAT) authorities concerned	Copies of certificates with registration number Copy of PAN
3.	The bidder should not have been blacklisted by any Govt. department or any PSU in India as on the last date of bid submission	Self-declaration by the bidder duly signed by the authorized signatory
B.	Financial Eligibility	
4.	The bidder should have an average annual turnover of Rs. 2 crores for the last 3 financial years as on 31.03.2017	Certificate from CA/ statutory auditor along Audited Balance sheets and Profit & Loss statements for the last 3 financial years as on 31.03.2017. Provisional statements certified by statutory auditor for the FY 2016-17 may be submitted incase audited statements not available.
5.	The bidder should have a positive net worth as on 31.03.2017	Certificate from the statutory auditor having positive net worth as on 31.03.2017
C.	Technical Eligibility	
1)	Technical compliance for the minimum specifications provided in Annexure- X	The bidder shall submit all the technical leaflets /technical literature/product certifications etc. to confirm the technical compliance. The OEM should submit the compliance confirmation for each parameter in their letterhead and also Manufacturers authorization form. If there is any deviation, the deviation with justification should be spelt out by the bidder in the OEM letter head.
2)	The Bidder/OEM partner should have executed two work orders for a min value of INR 50 Lakhs for supply of Hardware/ Software as mentioned in scope of work	Copy of Purchase Orders/client certificate should be submitted

5. Instructions to the Bidder

5.1. Pre-bid Queries

All enquiries from the Bidders relating to this RFP must be submitted to the Executive Director (Technical), APSFL, Vijayawada. These queries should be e-mailed in non-editable Format document to edt.apsfl@ap.gov.in. The queries should necessarily be submitted in the following Format:

#	RFP Part No.	Section No.	Page no.	Content of the RFP requiring clarification	Clarification Sought

5.2. Language of the Bid

The bids prepared by the Bidder and all subsequent correspondence and documents relating to the bids exchanged by the Bidder and APSFL shall be written in **English** language. Any printed literature furnished by the Bidder, written in another language, shall be accompanied by an accurate English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

5.3. Hand written documents, Erasures or Alterations

The offers containing erasures or alterations will not be considered. There should be no hand-written material, corrections or alterations in the offer. Filling up of the information using terms such as “OK”, “noted”, “as given in brochure/manual” is not acceptable and may lead to the disqualification of the Bid.

5.4. Bid Prices

The Bidder shall indicate in the proforma prescribed, the unit rates and total Bid Prices for the equipment / services, it proposes to provide under the Contract. Prices should be shown separately for each item as detailed in this document.

If during the course of execution of the project any minor revisions to the work requirements like technical specifications, equipment sizing, etc. are to be made to meet the goals of the Project; such changes shall be carried out within the proposed price. If any deviation has a major impact on the Project Cost, the Authority shall take appropriate decision and such decisions would be binding on the Bidder.

5.5. Firm Prices

Prices quoted in the Bid must be firm and final and shall not be subject to any modifications, on any account whatsoever. The Bid Prices shall be indicated in Indian Rupees (INR) only.

The Price Bid should clearly indicate the price quoted without any ambiguity / qualifications whatsoever and should include all applicable taxes, duties, fees, levies, and other charges as may be applicable in relation to the activities proposed to be carried out. Should there be a change in applicable taxes, the actual taxes on the date of billing would prevail.

Prices in any form or by any reason before opening the Price Bid should not be revealed, failing which the offer shall be liable for rejection. If price change is inevitable due to any factor external to the bidders, the bidders may be given chance to submit revised Bids in a separate sealed cover. Decisions of the Authority shall be final in this regards.

5.6. Conditional bids/Offers by the bidders

The Bidder should abide by all terms and conditions specified in the RFP Document. Conditional bids/offers shall be liable for disqualification.

5.7. Late Tender bids

Any tender offer received by APSFL after the deadline for submission of tender offer prescribed by the Authority, will be summarily rejected.

5.8. Opening of Bids

Bids received within the prescribed closing date and time will be opened on the e-procurement platform, on the date, time and at the address mentioned in the RFP Documents.

- Price Bid of only those Bidders who fulfilled all the eligibility criteria shall be opened.

5.9. Right to accept any Bid and reject any or all Bids

Authority reserves the right to accept or reject any Bid, and to annul the RFP process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder(s) or any obligation to inform the affected Bidder(s) of the grounds for such action.

5.10. Notification of Award

Authority will notify the Successful Bidder via letter / fax /email of its intent of accepting the bid. Within 7 days of receipt of the Letter of Intent (LOI) issued by the Authority, the Successful Bidder shall be required to sign the LOI and return the same to the address specified above as a token of acceptance of the LOI.

5.11. Performance Bank Guarantee

As a condition precedent to execution of the Agreement, the Successful Bidder shall ensure submission of the requisite unconditional irrevocable Bank Guarantee, in the prescribed Format within 15 days of receipt of the LOI as a Performance Bank Guarantee (PS) for the services to be performed under the resultant Agreement. The Bank Guarantee shall be equivalent to **10% of the Total Project Cost** and must be issued by a Nationalized/Scheduled Commercial Bank. The Performance Bank Guarantee shall be valid for the term of the resultant Agreement, and shall be renewed and maintained as necessary by the SI for the term of the resultant Agreement, and extensions if any. In case of any delay/ non-submission of PBG, decision of APSFL shall be final & binding on the bidder.

Earnest Money Deposits (EMD) submitted by the bidders along with their bids shall be refunded to all bidders, except the Successful Bidder, within 30 days of issuance of the LOI. EMD of the Successful Bidder & the second ranked Bidder shall be returned on submission of Performance Bank Guarantee by Successful Bidder after successful execution of the Agreement.

The Performance Bank Guarantee may be liquidated by the Authority as penalty/liquidated damages resulting from the successful bidder's failure to complete its obligations under the resultant Agreement. The Performance Bank Guarantee shall be returned by Authority to the Bidder within 120 days of the term/expiration of the resultant Agreement after applicable deductions as per the Agreement, if any.

5.12. Signing of Agreement

Subsequent to Authority notification to the Successful Bidder by way of a LOI, acceptance of the LOI and submission of the Performance Guarantee, the Successful Bidder shall execute the Agreement with the APSFL. Failure of the Successful Bidder to furnish the Performance Guarantee or execute the Agreement within the

prescribed time shall cause the EMD of the Successful Bidder to be liquidated. In such event, APSFL shall negotiate with the next eligible bidder. The Successful Bidder will be liable to indemnify APSFL for any additional cost or expense, incurred on account of failure of the Successful Bidder to execute the Agreement.

Notwithstanding anything to the contrary mentioned above, the Authority at its sole discretion shall have the right to extend the timelines for execution of Agreement on the request of the Successful Bidder, provided the same is bonafide.

5.13. Rejection criteria

Besides other conditions and terms highlighted in the RFP Document, bids may be rejected under following circumstances:

- a) Conditional Bids;
- b) If the information provided by the Bidder is found to be incorrect / misleading / fraudulent at any stage / time during the RFP Evaluation Process;
- c) Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions;
- d) Bids received after the prescribed time & date for receipt of bids;
- e) Bids without signature of person (s) duly authorized on required pages of the bid;
- f) Bids without power of attorney/ board resolution or its certified true copy.
- g) Bids received without submission of the prescribed Bid processing fee/EMD.

5.14. Price Bid Rejection Criteria

- a) Incomplete Price Bid;
- b) Price Bids that do not conform to the RFP 's Price Bid Format;
- c) If there is an arithmetic discrepancy in the Price Bid calculations the RFP Evaluation Committee shall rectify the same. If the Bidder does not accept the correction of the errors, its Bid may be rejected.

5.15. Concessions permissible under statutes

Bidder, while quoting against this RFP, must take cognizance of all concessions permissible, if any, under the statutes and ensure the same is passed on to the Authority, failing which it will have to bear extra cost. In case Bidder does not avail concessional rates of levies like customs duty, excise duty, sales tax, etc. APSFL will not take responsibility towards this. However, the Authority may provide necessary assistance, wherever possible, in this regard.

5.16. Taxes

The Bidders shall fully familiarize themselves about the applicable domestic taxes (such as value added or sales tax, service tax, income taxes, duties, fees, levies, GST etc.) on amounts payable by APSFL under the Agreement. All such taxes must be included by Bidders in the Price Bid. (Bidder needs to find out applicable taxes for the components being proposed.)

5.17. Bid forms

- a. Wherever a specific form is prescribed in the bid document, the bidder shall use the form to provide relevant information.
- b. For all other cases the bidder shall design a form to hold the required information.

5.18. Evaluation and Award of Contract

#	Description	Details
1	Stage-I: Eligibility criteria	Bids which meet all the Eligibility criteria will be considered for financial evaluation
2	Stage-II: Financial	Price bids of the bidders shortlisted in the eligibility criteria stage shall be opened and the bidder quoting the lowest Grand Total (i.e. L1) in price bids shall be declared as the successful bidder.

Any bid failing to meet any one of the eligibility criteria is liable to be summarily rejected and will not be considered for further evaluation.

APSFL may ask Bidder(s) for additional information to verify claims made in Bid documentation from already submitted Proposals at any point of time before announcement of final results.

APSFL reserves the right to

1. Negotiate with the Bidder whose offer is the lowest evaluated price for further reduction of prices.
2. Insist on quality / specification of materials to be supplied.
3. Modify, reduce or increase the quantity requirements to an extent of the tendered quantity
4. Change the list of areas of work from time to time based upon the requirement of the purchase.
5. If delivery performance of the Bidder is not as per the Schedule, then APSFL reserves the right to take action against them.
6. APSFL reserves its right to withhold any amount for the deficiency in the service aspect of the ordered items supplied.

5.19. Delivery Timelines

The Successful Bidder shall deliver the requisite Hardware/Software within **two weeks** from the date of entering into contract, or such other date as may be mutually agreed. If the Successful Bidder fails to commence the assignment, the LOI may be, cancelled /terminated.

5.20. SLA & Warranty

Successful bidder shall conform to the service levels required by APSFL towards incident management and shall resolve all issues as per the SLA. Non-performance shall attract penalty, as decided by APSFL.

The equipment supplied would carry two years onsite comprehensive OEM warranty; this period shall commence from the date of commissioning of the equipment.

As part of the warranty services successful bidder shall provide:

- Successful bidder shall provide a comprehensive warranty and on-site free service warranty for three years from the date of Go Live for the equipment.
- Successful bidder shall provide the comprehensive manufacturer's warranty and support in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered by RFP. Vendor must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this RFP against any manufacturing defects during the warranty period
- Successful bidder shall provide the performance warranty in respect of performance of the installed hardware
- Successful bidder shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.

The successful bidder shall replace any parts/ components of the equipment supplied if the components are defective and during the entire warranty period Successful bidder shall apply latest upgrades for all the hardware components after appropriate testing. APSFL will not pay any additional costs separately for warranty.

Onsite Warranty for all components

Service Metric Description	Quality of AMC Support provided by the selected vendor
Service level Requirement	Time taken for resolution of any issues encountered at any location: 48 hours from the communication of the issue to the selected bidder
Measurement of Service Level Parameter	Feedback would be taken from the authorized representative at each of the location. Logs would be maintained by the Dept. relating to issues encountered at various locations and the support provided by the vendor
Penalty for non-achievement of Service level	For any location: Resolution after 1 day: Rs. 1000 per location per day
Service support	Should be available on 24*7*365 basis

5.21. Payment Terms

1. 90% of the total value will be given after successful installation & commissioning as per the timelines.
2. 10% of the total value will be given after completion of the warranty period or 100% of the payment will be released upon submission of PBG to APSFL for the period of 24 months

6. ANNEXURES

Annexure I – Cover Letter (To be submitted by Bidder on original letterhead)

To,

(Date)

The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Subject: Request for Proposal for Supply, installation and commissioning of IPTV hardware components

Ref: APSFL/IPTV/55/2016, dated 06/07/2017

Dear Sir,

With reference to your RFP Document dated, I/We, having examined all relevant documents and understood their contents, hereby submit our Proposal to Supply, Installation and Commissioning of IPTV hardware components

1. All information provided in the Proposal and in the Appendices is true and correct and all documents accompanying such Proposal are true copies of their respective originals.
2. I/We shall make available to the Authority any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
3. I/We acknowledge the right of the Authority to reject our Proposal without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
4. I/We to the best of our knowledge certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.
5. I/We to the best of our knowledge certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.

6. I/We to the best of our knowledge further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
7. I/We agree and understand that the Proposal is subject to the provisions of the RFP document. In no case, shall I/We have any claim or right of whatsoever nature if our Proposal is not opened or rejected.
8. I/We agree to keep this offer valid for 180 days from the Proposal Due Date specified in the RFP.
9. I/We agree and undertake to abide by all the terms and conditions of the RFP Document. In witness thereof, I/We submit this Proposal under and in accordance with the terms of the RFP Document.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Annexure II – Profile of the Bidder

(To be submitted by Bidder on original letterhead)

#	Particulars	Details
1.	Name of the Company	
2.	Year of incorporation	
3.	Nature of the Company (Registered Company)	
4.	Registered Office Address	
	Office Telephone Number	
	Fax Number	
5.	Contact Person	
	Name	
	Telephone Number	
	Email Address	
6.	Local presence at Andhra Pradesh	
	Office Address	
	Office Telephone Number	
	Fax Number	
7.	Contact Person (in Andhra Pradesh)	
	Name	
	Telephone Number	
	Email Address	
8.	Registration Details	
	Permanent Account Number	
	VAT Registration Number	
	CST Registration Number	
	Service Tax Registration Number	
9.	Banker's Name, Address and Account Number	

Annexure III - Financial Information

(To be submitted by Bidder on original letterhead)

Annual Turnover of the Bidder

Criteria	Sub Criteria	FY	Total Financials
Financial Capability	Overall turnover (in INR crores)#	FY 2014-15	
		FY 2015-16	
		FY 2016-17	
	Turnover exclusively from business activities related to Technology Consulting Services	FY 2014-15	
		FY 2015-16	
		FY 2016-17	

Documentary Proof Required:

Statutory Auditor Certificate clearly specifying the turnover for the specified years.

Annexure IV - Declaration of Acceptance of Terms and Conditions in the RFP

(To be submitted by Bidder on original letterhead)

To,

[Date]

The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Subject: Request for Proposal for Supply, installation and commissioning of IPTV hardware components

Ref: APSFL/IPTV/55/2016, dated 06/07/2017

Sir,

It is to certify that the RFP document – RFP No..... dated..... is carefully read & understood and all the sections and clauses are **COMPLIED UNCONDITIONALLY AND UNEQUIVOCALLY**. There is no deviation from the terms & conditions of the RFP. We also hereby confirm that the solution proposed by us will meet the project requirements.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Annexure V - Declaration regarding Clean Track Record

(To be submitted by Bidder on original letterhead)

To,

[Date]

The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Subject: Request for Proposal for Supply, installation and commissioning of IPTV hardware components

Ref: APSFL/IPTV/55/2016, Dated 06/07/2017

Sir,

I/We hereby declare that my company has not been debarred / black listed as on Bid submission date by any State Government, Central Government, Central & State Govt. Undertakings / Organizations and by any other Quasi Government bodies / Organizations, and any other major Enterprise / Organizations in India for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Annexure VI -EMD Format
(To be executed in Rs.100/- Stamp Paper)

To,
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgment of claim:

This Deed of Guarantee executed by _____ (Banker's Name & Address) having our Head Office at _____ (address) (hereinafter referred to as “the Bank”) in favour of Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada – 520013 India (hereinafter referred to as “the Beneficiary”) for an amount not exceeding Rs. _____/- (Rupees _____ Only) as per the request of M/s. _____ having its office address at _____ (hereinafter referred to as “Supplier”) against Letter of Acceptance reference _____ dated ___/___/___ of M/s. Andhra Pradesh State FiberNet Limited (APSFL) This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum Rs. _____/- (Rupees _____ Only) and the guarantee shall remain in full force up to ___ months from the date of Bank Guarantee and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before ___ months from the date of Bank Guarantee.

ANDWHEREAS it has been stipulated by you in the said ORDER that the Supplier shall furnish you with a Bank Guarantee by a Scheduled/Nationalized Bank for the sum specified therein as security for compliance with the Contractor’s performance obligations for a period in accordance with the contract.

ANDWHEREAS we have agreed to give the Supplier a Guarantee.

THEREFORE, we (Bankers address) , hereby affirm that we are Guarantors and responsible to you on behalf of the Supplier up to a total of Rs. _____/- (Rupees _____ Only) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the contract and without any demur, cavil or argument, any sum or sums within the limit of Rs. _____/- (Rupees _____ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Supplier.

This Guarantee is valid until _____ months from the date of Bank Guarantee.

Notwithstanding, anything contained herein

RFP for Supply, Installation and Commissioning of IPTV Hardware Components

Our liability under this guarantee shall not be exceed Rs. _____/- (Rupees _____ Only). This bank guarantee shall be valid up to ___ months from the date of Bank Guarantee and we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____

In witness whereof the Bank, through its authorized Officer, has set its, hand and stamp on this _____ at _____.

Witness: (Signature)

(Name in Block Letters)

Annexure VII – Performance Bank Guarantee Format

(To be submitted by the successful bidder on Rs.100/- stamp paper)

In consideration of the APSFL, _____, having agreed to accept from _____ “the said Contractor”, a Performance Security Deposit as maybe modified from time to time wherever necessary under the terms and Conditions of the Contract entered into by the said Contractor(s) in respect of work _____, Contract No. _____ under the APSFL for the due fulfilment of the terms and conditions of the said Contract under the APSFL, on production of a Bank Guarantee for Rs. ___ (Rupees _____ only), we _____ Bank _____ branch, hereby undertake the guarantee to pay immediately to the APSFL, on demand in writing by the APSFL, an amount of Rs. _____ (Rupees _____) without any reservation and recourse against any loss or damage caused to or suffered by the APSFL by reason of any breach by the said Contractor(s) of any of the terms and conditions of the said contract under the said Authority

We _____ Bank, _____ further agree that the guarantee hereby contained shall remain in full force and effect during the period that will be taken for the performance of the said Agreement under the APSFL and that it shall be in enforcement until all the dues of the _____ APSFL under or by virtue of the said Contract under the APSFL have been fully paid and their claims satisfied or discharged or until the said Authority certifies that the terms and conditions of the said Agreement under the APSFL have been fully and properly carried out by the said Contractor and accordingly discharges the guarantee subject, however, that the _____ APSFL shall have no rights under this guarantee after (date). We _____ Bank Ltd., lastly undertake not to revoke this guarantee during its currency except with the previous consent of the APSFL in writing.

Dated _____ day of _____ 2017.

Place:

Date: _____ Signature and seal of guarantors

Annexure VIII- Manufacturer's Authorization Form
(To be submitted in Manufacturer's letterhead)

To
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Sir,

We hereby authorize M/s _____ to undertake to submit a Bid, and subsequently negotiate & sign the contract with APSFL for the Tender No: _____ for product manufactured by us. We hereby extend our full warranty for the goods offered for supply by the above firm against this tender.

We also undertake to provide timely supplies as per terms of tender and as agreed mutually and also to provide a trouble free and continuous support either directly or through our authorized distributors/dealers under our supervision during the said support period. We will provide the necessary support in the event of up gradation of any of the software is necessitated while providing the support will arrange for complete replacement of the item(s) with an equivalent / higher version.

In case of violation of any of the conditions above, I/We understand that I/We are liable to be blacklisted by APSFL for a period of three years.

(Signature of authorized Personnel)

Note: Competent authority of the Manufacturer should issue the letter of authority individually for each bidder separately.

Annexure IX – Price Bid Form
(To be submitted by Bidder on original letterhead)

To
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Date:

Subject: Request for Proposal for Supply, installation and commissioning of IPTV hardware components

#	Description	Quantity (Nos)	Unit Price(exclusive of all taxes) (INR)	Total Price (INR)
1	250 channel IPTV multiplexer with AES-CBC scrambling for all the channels, IP in and SPTS IP out, necessary NMS/Web interface for management, dual 100-240V power supply, installation, configuration, service support for 2 years, warranty	2		
2	4 channel H.264 HD Encoder with HDMI input and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty	1		
3	8 channel H.264 SD Encoder with AV input and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty	1		
4	4 DVB-S/S2 input IRD with 2 CI and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty	1		
5	Cisco make WS-C2960G 24 Port Gigabit Switch	2		
		Grand Total		
	Amount in Words :			

Note:

- 1) The rates to be quoted by the bidder as mentioned above shall be excluding of all the taxes / duties such as VAT, Excise Duty, Service Tax & Service charges, and GST etc.
- 2) Taxes as applicable at the prevailing applicable rates shall be paid to selected bidder.

RFP for Supply, Installation and Commissioning of IPTV Hardware Components

- 3) All the amounts should be quoted in figures and words. In case of a discrepancy in the figures and in words, the amount quoted in the words shall prevail.
- 4) The bidder quoting the lowest Grand Total (i.e. L1) in price bid form shall be declared as the successful bidder

Bidder
Signature

Name

Annexure X – Technical Specifications

250 Channel IPT TV MULTIPLEXER & SCRAMBLER	
TS-Over-IP Input	
Numbers of Interface	1 x 100/1000 Base-T Ethernet
Connector	RJ-45
Operation Mode	Input only
Data Format	7 x 188 Bytes
Transport Protocols	MPEG-TS Over UDP/RTP
Addressing	Unicast, Multicast(IGMPv1, IGMPv2, IGMPv3)
TS-Over-IP Output	
Numbers of Interface	1 x 100/1000Base-T Ethernet
Connector	RJ-45
Operation Mode	Output
Data Format	7 x 188 Bytes
Transport Protocols	MPEG-TS Over UDP/RTP
Addressing	Unicast, Multicast(IGMPv1, IGMPv2, IGMPv3)
Transport Stream Multiplexing	
Capacity of Processing	Processing up to a 250 of input transport streams and 250 SPTS output transport streams
PCR	Auto correction
PSI/SI	PSI/SI table auto-generation, manual insertion
	Comply with: ISO/IEC 13818-1
	DVB SI(ESI EN 300 468)
PID	Remapping, filtering and pass-through
Transport Stream Scrambling	
Scrambling	Fully featured DVB Simulcrypt based scrambler
	Should support DVB-CSA, AES-ECB and AES-CBC algorithms
Numbers of CAS	Up to four DVB Simulcrypt CAS(s)
CAS Interface	Dedicated Ethernet interface towards CA server
ECM	Up to 250 different ECMs
No. of Services	Scrambling of up to 250 services or 850 Mbit/s
Interface	1 x 10/100 Base-T Ethernet
Connector	RJ-45
Management	Web management
Power Supply	
Input Voltage	90 - 250 VAC, 50/60Hz
No. of Power supplies	Dual Power supply
Warranty	Two years comprehensive onsite warranty

4 DVB-S/S2 input IRD with 2 CI and IP out	
Function	Broadcast grade IRD with DVB-S/S2 tuner, IP & ASI inputs
INPUT	DVB-S/S2 tuner (DVB-C/DMB-T/DVB-T/ ISDB-T/ATSC-T / DVB-T2 optional)
	IP input (100M, RJ45 Port) UDP, RTP/RTSP
	1x ASI input (supports 188/204 package formats)
DECODING	
Video	MPEG-2, H.264/MPEG-4
Audio	MPEG1 layer 2, AC3, HE-AAC(v2), LC-AAC
CONTROL PORT	Ethernet Port 10/100M
OUTPUT	
Video	1x HD/SD-SDI(BNC): 1080i@25, 29.97, 30fps; 720p@50, 59.94fps; 576i@25fps; 480i@29.97fps
	1x HDMI: 1080i@25, 29.97, 30fps; 720p@50, 59.94fps
	1x YPbPr(BNC): 1080i@25, 29.97, 30fps; 720p@50, 59.94fps
	1x CVBS(BNC): 576i@25fps, 480i@29.97fps
IP	IP 1x MPTS / 32x SPTS over UDP, 1000M Ethernet interface (UDP unicast / multicast), RTP/RTSP
ASI	4x ASI output, BNC interface
Audio	Stereo unbalanced audio: BNC interface
	Stereo balanced audio: XLR interface
	Digital audio: SPDIF
Control	Management: front panel (LCD + Keyboard);
	Network (NMS/SNMP);
	Web-based NMS Management
	Ethernet port for CPU/FPGA upgrade
	USB port for decoder upgrade
Monitor	LCD Monitor on the front panel for decoded video
Power	AC 110V±10%,50/60Hz or AC 220V±10%, 50/60Hz, Consumption: 25 W
Warranty	2 Years comprehensive onsite warranty

8-in-1 MPEG-2/ H.264 SD Encoder	
Input	8×CVBS inputs , BNC interface
	8 pairs unbalanced stereo audio inputs, BNC interface
	Or 8x3 RCA
	1×ASI input, BNC interface
Video Resolution	PAL:720*576/352*288/320*240/320*180/176*144/ 160*120/160*90@50Hz
Encoding	MPEG-2 /H.264
Bit rate	0.25~15Mbps for H.264 encoding, and 0.5~15Mbps for MPEG-2 encoding
Rate Control	CBR/VBR
GOP Structure	IBBP
Advanced Pretreatment	De-interlacing, noise reduction, sharpening
Encoding	MPEG1 Audio Layer 2, LC-AAC,HE-AAC
Sampling rate	48KHz,
Resolution	24 bit
Bit-rate	64Kb/s~384Kb/s (each channel)
Stream output	MPTS over UDP,10/100Base-T Ethernet interface (UDP unicast / multicast)
Management	NMS support/Web-interface English control interface Ethernet software upgrade
Warranty	2 Years comprehensive onsite warranty

4-Channel H.264/MPEG-2 HD/SD Encoder	
Video	
Encoding	MPEG2 & MPEG4 AVC/H.264 or Higher
Input	HD SDI*4 Or HDMI *4 or equivalent
Resolution	1920*1080_60P, 1920*1080_50P, (MPEG2/H.264 Only) 1920*1080_60i,1920*1080_50i 1280*720_60P,1280*720_50P

	720*480 60i,720*575 50i
Bit Rate	0.5 19.5mbps for H.264 encoding
	1 19.5Mbps for MPEG-2 encoding
Rate Control Mode	CBR/VBR or equal
Chroma Sample	4:2:0 / as per industry norms
Aspect Ratio	16:9, 4:3 or as per industry norms
Audio	
Encoding	MPEG1 Layer II, MPEG2-AAG, MPEG4-AAC, Dolby Digital AC3 or higher
Sample rate	48KHZ or equal
Bitrate	64kbps,96kbps, 128kbps, 192kbps,256kbps,320kbps or higher
System	
Local Interface	LCD / LED + Control Buttons
Remote Management	Web NMS
Low Latency Mode	Normal Mode 1 Mode 2 / As per norms
Output	2* ASI Out (BNC type)
	IP (1 MPTs &4 SPTS) over UDP, RTP (RJ45,100m)
NMS Interface	RJ45, 100M
Warranty	2 Years comprehensive onsite warranty

Cisco make WS-C2960G 24 Port Gigabit Switch	
IPv4 IGMP Groups:	255
Voltage:	100 to 240 VAC (Auto ranging); 50 to 60 Hz
Forwarding Bandwidth:	32 Gbps
VLAN IDs:	4000
Rack Height:	1 RU
Current:	3.0 to 1.5 A
Operating Altitude:	Up to 10,000 feet (3000 m)
Unicast MAC Addresses:	8000
Jumbo Frames:	9018 bytes
Flash Memory:	32 MB
Operating Relative Humidity:	10% to 95% noncondensing
Operating Temperature up to 5000 ft (1500 m):	23 to 113 F (-5 to 45 C)
Memory DRAM:	64 MB
Max VLANs:	255
Storage Relative Humidity:	10% to 95% noncondensing
Dimensions (H x W x D):	1.73 x 17.7 x 12.9 inches (4.4 x 45 x 32.8 cm)
Forwarding Rate (64-byte Packet):	35.7 mpps
DC input voltages (RPS)	12 V at 10.5 A

input):	
Maximum Transmission Unit (MTU):	Up to 9000 bytes
Short-term Exception up to 5000 feet (1500 m):	23 to 122 F (-5 to 50 C)
Uplinks:	4 dual-purpose uplinks (each dual-purpose uplink port has 1 10/100/1000 Ethernet port and 1 SFP-based Gigabit Ethernet port, 1 port active)
Switching Bandwidth:	32 Gbps
Ports:	24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose
Warranty	2 Years comprehensive onsite warranty

Annexure XI – Compliance Sheet

Equipment Name:			
Parameters	Specifications Required	Specifications Proposed	Compliance (Y/N)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			

7. Scope of Work:

APSFL is in the process of providing Fiber connectivity to all the households across Andhra Pradesh to deliver Triple play services including IPTV, Broadband Internet and Fixed Telephony services. As part of this project it requires Middleware, DRM & other software for IPTV, OTT Services & VAS Delivery to deliver secured Television services (Live Channels, Value Added Services including Video on Demand, Catchup TV, Government and Education related application) in the existing APSFL’s IP network. The DRM (Digital Rights Management) solution will secure the channels and ensure delivery of services to subscribed users connected to IP Set top boxes.

APSFL intends to deliver these Television services across one million households (connected with IP Set top boxes) of Andhra Pradesh in the first phase. In this context, APSFL wants to procure Hardware/Software Infrastructure required to support the existing solution for IPTV, OTT Services & VAS Delivery.

The vendor has to take care of the Supply, Installation & Configuration of below mentioned hardware components at Vijayawada and Visakhapatnam. The selected vendors should also provide technical support for next 2 years as required. The vendor need

to share the configuration file (in desired format) to departments and the same may be used to reset.

Following materials to be supplied and configured in Vishakhapatnam and Vijayawada.

- 6) 250 channel IPTV multiplexer with AES-CBC scrambling for all the channels, IP in and SPTS IP out, necessary NMS/Web interface for management, dual 100-240V power supply, installation, configuration, service support for 2 years, warranty
- 7) 4 channel H.264 HD Encoder with HDMI input and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty
- 8) 8 channel H.264 SD Encoder with AV input and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty
- 9) 4 DVB-S/S2 input IRD with 2 CI and IP out, necessary NMS/Web interface for management, installation, configuration, service support for 2 years, warranty
- 10) Cisco make WS-C2960G 24 Port Gigabit Switch

Minimum required hardware specifications for the above components is provided in **Annexure – X**

However, based on the requirements, vendor is free to provide higher or better specifications in line with the current solution available to render triple play services. It is the responsibility of bidder to provide the recommendations to APSFL in case of any such modifications required.

RFP for Supply, Installation and Commissioning of IPTV Hardware Components