Notice for

Expression of Interest

Shortlisting of Agencies

For

Development of Indian Conditional Access System (CAS)

EOI No.: 8(22)/2012-IPHW

Ministry of Communications & Information Technology
Department of Electronics & Information Technology
Electronics Niketan, 6 CGO Complex, New Delhi 110003
Table of Contents

1. INTRODUCTION ..............................................................................................................5
  1.1. Introduction & Issuer .....................................................................................................5
  1.2. Background & Rationale for the CAS ........................................................................5
    1.2.1. Components of a CAS ...........................................................................................8
  1.3. Purpose .......................................................................................................................10
  1.4. Estimated Domestic Market Size ................................................................................10
2. COST OF EOI ..................................................................................................................11
3. DEADLINES & OTHER CRITICAL INFORMATION ......................................................11
4. CHECK LIST ....................................................................................................................12
5. OBJECTIVES & SALIENT FEATURES OF INDIAN CAS ........................................13
6. SCOPE OF WORK ...........................................................................................................13
7. TERMS OF REFERENCE .................................................................................................16
8. PAYMENT TERMS AND CONDITIONS .......................................................................17
9. FORMATION OF CONSORTIUM/ASSOCIATION WITH OTHER ENTITIES ........17
10. EVALUATION PROCESS & AWARD CRITERIA .........................................................17
  10.1. Evaluation Process .....................................................................................................17
  10.2. Pre-Qualification Criteria ..........................................................................................18
11. INSTRUCTIONS TO BIDDERS .....................................................................................20
  11.1. Completeness of Response .......................................................................................20
  11.2. Proposal Preparation Costs .....................................................................................20
  11.3. Signing of Communication to the DeitY ..................................................................20
  11.4. Pre-Bid Meeting ........................................................................................................21
  11.5. Bidder inquiries and DeitY’s responses ....................................................................21
  11.6. Amendment of EOI Document ..................................................................................21
  11.7. Supplemental information to the EOI .....................................................................22
  11.8. DeitY’s right to modify submission deadline ............................................................22
  11.9. DeitY’s right to terminate the process ......................................................................22
  11.10. Submission of Responses .......................................................................................23
  11.11. Bid Submission Format ...........................................................................................23
  11.12. Venue and Deadline for submission .......................................................................23
  11.13. Documents Comprising the Bid .............................................................................24
  11.15. DeitY Rights to accept / Reject any or all Proposals ...............................................25
  11.16. Notification of Short listing .....................................................................................25
12. ANNEXURES ................................................................................................................. 26
12.1. Annexure 1 - Covering Letter from the Bidding Agency ........................................... 26
12.2. Annexure II: Pre-qualification Bid Format ................................................................. 28
12.3. Annexure III: Names of software development/services professionals on permanent rolls of the company ......................................................................................... 28
12.4. Annexure IV: Other Documents and Certificates ......................................................... 29
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>MC&amp;IT</td>
<td>Ministry of Communications &amp; IT</td>
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<td>DeitY</td>
<td>Department of Electronics &amp; Information Technology</td>
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<td>ESDM</td>
<td>Electronics System Design and Manufacturing</td>
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<td>CAS</td>
<td>Conditional Access System</td>
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<td>MSO</td>
<td>Multi System Operator</td>
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<td>LCO</td>
<td>Local Cable Operators</td>
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<td>DAS</td>
<td>Digital Addressable System</td>
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<td>CAREL</td>
<td>Core Advisory Group for Research &amp; Development in Electronics Hardware</td>
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<tr>
<td>DTH</td>
<td>Direct to Home</td>
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<tr>
<td>STB</td>
<td>Set Top Box</td>
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1. INTRODUCTION

1.1. Introduction & Issuer

Department of Electronics & Information Technology (DeitY), Government of India invites eligible bidders to submit their Expression of Interest (EOI) for the development of “Indian Conditional Access System (CAS)” in accordance with the conditions and manner prescribed in this Expression of Interest document.

Conditional Access System (CAS) is a description used for a set of hardware devices and connected software (including a set top box) used at different stages of distribution of a TV channel through which normally the pay channels are transmitted in encrypted form. The subscriber is given an authorization depending upon the request to view one or more of such encrypted pay channels of his choice. The subscriber will pay for only chosen pay channels for viewing.

The authorization is given and controlled usually by a Multi System Operator (MSO) who owns the Conditional Access System in a Cable Television Network. An MSO is often assisted by the Local Cable Operators (LCO).

Basically it is the protection of content by requiring certain criteria to be met before granting access to this content. The signal is encrypted to prevent unauthorized reception. A set-top box containing a conditional access module is used in the customer premises to receive and decrypt the signal.

1.2. Background & Rationale for the CAS

A Conditional Access System is a system that is used to limit the access of TV signals to only authorized viewers. While a CA is not meant to operate for Digital TV only and it can be used for digital radio broadcasts, digital data broadcasts, and non-broadcast information and interactive services, it is mostly associated with the Digital TV and related operations.

A CAS system must enable subscribed customers to view the content and must prevent unauthorized viewers from viewing the content at the same time.

Some related terms used in the context are the following.

Data Streams
A CA system is highly compute algorithm driven and is used to operate on digital data. The content that is subjected to conditional access therefore must be converted into digital data. An
individual program that a broadcaster provides is composed of many elements, such as video, audio and text. In digital television, these elements are converted into digital form using an MPEG-2 (or MPEG-4) encoder. The MPEG-2 data streams of multiple TV channels are encrypted and are carried multiplexed to the end subscriber. There are two kinds of data streams relevant to the CAS and Digital Video Broadcast. In order to enable multiplexing, the data stream is broken up into packets.

- **PES**: The sum total of the data stream packets for a program (TV Channel) is called the Program Elementary Stream (PES).
- **Transport Stream (TS)**: The PES for multiple TV channels are time-multiplexed (combined) together, into a Transport Stream (*aka* Digital Video Broadcast MPEG-2 Transport Stream). The Transport Stream is organized in 188-byte packets for transmission.

A CAS may implement encryption on the PES or on the TS depending upon the needs, requirements and flexibilities offered.

**Keys**
The Conditional Access system works by using a set of secret keys for scrambling or encryption. These keys are protected and hidden by various methods and are securely carried between the two end points of the CAS, one being the end subscriber. The keys are used to scramble the signal, making it accessible only to authorized set-top boxes.
CAS in DVB
In India, we follow the European DVB (Digital Video Broadcasting) standard. DVB standards have been specified separately for the following.

- DVB-CA (Conditional Access),
- DVB-CSA (the Common Scrambling Algorithm)/DVB-CSA2/DVB-CSA3 and
- DVB-CI (the Common Interface).

These standards define the method by which a digital TV stream can be made unviewable to all except those STBs with valid decryption smart cards.

Scrambling and Encryption
Making the TV signal un-viewable selectively, is achieved by a combination of scrambling and encryption.

- **Scrambling Key**: The data stream is scrambled with an 8-byte or higher secret key, called the control word. Knowing the value of the control word at a given moment is of relatively little value, as under normal conditions, content providers will change the control word several times per minute.

  The Control Word (CW) is generated automatically in such a way that successive values are not predictable. The DVB specification recommends using a physical process for that. In order for the receiver to unscramble the data stream, it must be permanently informed about the current value of the control word. In practice, it must be informed slightly in advance, so that no viewing interruption occurs.

- **Encryption**: Encryption is used to protect the control word during transmission to the receiver. Encrypted information (the control word) is sent out using two separate methods (one for short term and the other one for long term use).
  - **ECM**: The control word is encrypted as an Entitlement Control Message (ECM). The Conditional Access (CA) subsystem in the receiver will decrypt the control word only when it is authorized to do so.
  - **EMM**: The authorization to decrypt is sent to the receiver in the form of an Entitlement Management Message (EMM). The EMMs are specific to each subscriber, as identified by the smart card in his receiver. New EMMs are issued much less frequently than ECMs; typically at intervals ranging from about every 10 minutes to up to once every 6 weeks. One of the international CA systems generates a new EMM every 6 weeks, while another CA system generates a new EMM every 3 days to make hacking more difficult.
The Security of a CA System depends on the Algorithm used for ECM, EMM Encryption. The contents of ECMs and EMMs are not standardized and each Conditional Access System uses different ECMs and EMMs. In fact the security of a given CA system depends primarily on the efficiency of the algorithm used for ECM, EMM encryption. Such algorithms are closely guarded secrets of the company. The CA module in the STB carries relevant ECM, EMM decryption algorithms.

- **SIMULCRYPT**: The control word can be transmitted through different ECMs at the same time. This effectively creates and allows the use of several Conditional Access Systems at the same time. This technique is known as SimulCrypt. SimulCrypt uses multiple set-top boxes, each using a different CA system and saves communication bandwidth and encourages multiple operators to cooperate. DVB SimulCrypt is widespread in Europe; some channels, like the CNN International Europe from the Hot Bird satellites, can use 7 different CA systems in parallel.

The decryption cards are read, and sometimes updated with specific access rights, either through a Conditional Access Module (CAM), a PC card format card reader meeting DVB-CI standards, or through a built-in ISO/IEC 7816 card reader.

- **MULTICRYPT**: MultiCrypt allows multiple CA systems to be used with one set-top box by using a PC card with an embedded smart card for each CA system used. Each card is then plugged into a slot in the set-top box. Each card recognizes the ECM and EMM needed for authorization.

1.2.1. Components of a CAS

In summary, a typical Conditional Access system involves 3 basic blocks, viz.: The broadcast equipment or the transport system, the Set-Top Box (shown in a blue box), and the security module as shown in the following figure.
The broadcast equipment generates the encrypted programs that are transmitted to the subscriber. The STB receives these signals and contacts the security processor, located inside the STB, asking which of all the received channels can be decrypted. The security processor dictates which channels can be decrypted and viewed by that particular STB / subscriber. The STB then decrypts / un-scrambles these permitted channels.

A CA system consists of the following main operational blocks.

- **Subscriber Management System (SMS)**: The SMS is a subsystem of the CA system that stores and manages details of each subscriber, and the TV channels that are subscribed to by the subscriber. Based on the channels that the subscriber has paid for, the SMS asks for Entitlement Management Messages (EMM) from the Subscriber Authorization System (SAS). An EMM provides general information about the subscriber and the status of the subscription. The EMM is sent with the ECM. The ECM contains the key for decrypting the transmitted programs.

- **Subscriber Authorization System (SAS)**: The SAS is a subsystem of the CA system that translates the information about the subscriber into an EMM, when the Subscriber management System requests for it. The SAS also ensures that the subscriber's security module receives the authorization needed to view the programs. Further, the SAS acts as a backup system in case of failure.
- **Security Processor**: The security processor, usually in the form of a smart card, extracts the EMM and ECM necessary for decrypting the transmitted programs. The security processor is either embedded within the set-top box or in a PC Card that plugs into the set-top box.

- **Set-Top Box**: The set-top box (STB) houses the security module that gives authorization for decrypting the transmitted programs. The set-top box also converts the digital signal to an analogue signal so an older television can display the programs.

- **Middleware**: No STB is complete without a middleware, a software program that is located in the middle of two programs or systems, and provides smooth exchange of data. For the STB consumer, the middleware provides the on-screen look and feel of the STB. Middleware can also provide interfaces in multiple languages. For example, two STBs may have identical hardware but their users may see completely different user interface screens as provided by their middleware. Also when an MSO decides to offer added services such as Pay per view, only the middleware needs to be updated.

### 1.3. Purpose

The Government of India has issued an Act to amend the Cable Television Networks (Regulations) Act, 1995 to provide for a Digital Addressable System (DAS). This amendment makes it obligatory for every operator to transmit or re-transmit contents from a provider in an encrypted form through a DAS. According to the said decision, all Cable operators will have to abandon analog in the four metros by October 31, 2012 (Phase-I). Cities with a population of more than one million will be covered by March 31, 2013 (Phase-II). All other urban areas would be covered by September 30, 2014 (Phase-III) while the entire country will be covered by December 31, 2014 (Phase-IV).

Thus the Government of India has already announced digitization implementation plan and is all up with its support in every respect to facilitate indigenization of the set top box.

### 1.4. Estimated Domestic Market Size

As per industry reports out of total of 138 million TV homes, about 30 million are dependent on Doordarshan’s terrestrial broadcast services, 73 million are covered by cable services and the rest by DTH (Direct to Home) and IPTV (Internet Protocol Television Services). Out of 73 million cable subscribers, only about 5 million are on digitized platform
and rest of 68 million on analog system. Cable services are predominantly analog in nature. There are Multi System Operators (MSOs) who set up their own Headend for reception, aggregation and retransmission of Signals from Broadcasters to Local Cable Operators (LCOs). There are Independent Cable Operators (ICOs) who have their own headends and distribute directly to subscribers. As per industry reports, there are about 100 MSOs; 7,000 ICOS and 60,000 LCOs. LCOs do not have headends and about 6,000 headends need to be digitized.

2. COST OF EOI

The EOI document is available at a cost of Rs. 5000/- in form of a Demand Draft from any Commercial Bank, payable at New Delhi in favor of “Pay and Accounts Officer, Department of Electronics and Information Technology, New Delhi”. The soft copy may be downloaded from the department website: http://www.deity.gov.in or www.eprocure.gov.in; the bidders are required to submit the cost of EOI in the form of a demand draft of Rs.5000/- issued from a commercial bank along with the bid.

3. DEADLINES & OTHER CRITICAL INFORMATION

1. Bidding agencies are advised to study this EOI document carefully before submitting their proposals in response to the EOI Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

2. Bidding agencies are requested to attend a pre-proposal briefing meeting as per details provided below.

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<tr>
<th>S.No.</th>
<th>Information</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>EOI No. and Date</td>
<td>8(22)/2012-IPHW dated 31.1.2013</td>
</tr>
<tr>
<td>2</td>
<td>Last date for submission of written queries for clarifications</td>
<td>7.2.2013</td>
</tr>
<tr>
<td>3</td>
<td>Date of pre-proposal briefing</td>
<td>11.2.2013</td>
</tr>
</tbody>
</table>
5. CHECK LIST

Bidders are required to ensure that content/documents as mentioned in the table below will constitute the Expression of Interest. Incomplete submission will not be considered for shortlisting.

1. Approach paper for Expression of Interest (up to 5 A4 pages)
2. Signing of Communication to the DeitY
3. Submission of Responses
4. Bid Submission Format
5. Venue and Deadline for submission
6. **Documents Comprising the Bid**

7. **Pre-Qualification Criteria**

8. **Estimated Timelines**

9. **Annexure I: Covering Letter from the Bidding Agency**

10. **Annexure II: Pre-qualification Bid Format**

11. **Financial information**

12. **Names of software development/services professionals on permanent rolls of the company**

13. **Other Documents and Certificates**

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**5. OBJECTIVES & SALIENT FEATURES OF INDIAN CAS**

The objective is to develop; and maintain (with appropriate upgrades) a CAS which can be used by STBs. Existing CAS providers with suitable modifications may also participate. The salient features of the CAS should be as follows:

(i) It should meet the technical requirements of the broadcasters so that they should be willing to adopt STBs manufactured around the said Indian CAS

(ii) The developer should be able to upgrade/develop updated versions and maintain the CAS in an ongoing basis, so that the CAS remains relevant

(iii) The CAS should be available at USD 0.5 per device/STB for all manufacturers in India for a period of three years. During the period the developer will be free to license the CAS to manufacturers outside the country without restriction.

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**6. SCOPE OF WORK**

Preparing detailed specifications of the proposed CAS specifications is in scope of this EoI.

The broad specifications for the development of the CAS system (to be incorporated at the STB and head-end systems) are as follows:

1. The CAS should support Simulcrypt and Multicrypt.

2. Boot loader which can be used to update the software on the STB. The boot loader must permit the change in the STB software only upon establishment of authenticity of the source of the software, genuineness of the software and must provide protection against the malicious, unproven software to be loaded.

3. The control words on the STB should be kept securely and must not be shareable.
4. CAS may be smart card based or cardless.
5. The fingerprinting should be changeable through the head-end system. The
   fingerprinting location, presentation including background and foreground colors, fonts
   and orientation should be controllable by the head-end system.
6. The covert and overt channels should be available for handshaking the finger prints
   between head-end devices and viewing device.
7. Subscriber management system (SMS) should incorporate mechanisms so that they are
   not modifiable in an unauthorized manner.
8. CAS system should support Bmails. The Bmails may be typed (persistent, one-time
   viewable, stored-until-deleted etc.). STBs must have storage to keep about 100 Bmails.
9. CAS system must support the following features.
   a. Local language display (Indian languages) on screen for EPG and other
      messages using Unicode character coding with at least one (preferably two) font
      for each Indian language. English must be supported using multiple fonts.
   b. Parental Control.
   c. Entitlement renewals - Card based STBs must have mechanisms to handle re-
      entitlement.
   d. Support for business models. The STB along with the CAS should be able to
      support the following features
      i. A-la-carte selection.
      ii. Pay-per-view based selection.
      iii. Program packaging (bouquets-ability with same programs offered in
           different ways, different geographical areas and different pricing)
      iv. Subscription upgrade.
      v. Event pricing.
   e. Custom EMM generation and handling. For example, mechanisms must be
      provided to change PINs/Reset PINs for parental control, triggering a software
      update for specific model/vendor etc.
   f. Addressing. EMM addressability in groups/individuals etc. should be
      achievable. The definition of the groups may be based on rules definitions such
      as geographic locations based on pin code, city, etc.
10. Smart cards for the smart card based CAS should support the following features
a. Security. A smart card that is not bound to a specific set-top-box must get bound to that in the beginning when inserted. A smart card that is bound will get paired with the same set-top-box and will not work with another STB.

b. Logical security to provide protection against cloned cards or hacked cards should be provided.

c. Smart card authentication is a must using strong cryptographic challenge-response techniques involving zero-knowledge proof systems. The protections must be provided against man-in-the-middle and eavesdropper hacking attempts.

d. The EMMs must be authenticated using the smart cards only. For this purpose the smart cards must carry keys which would be known to the smart cards.

11. EMMs and ECMs should be sent and received using the TCP/IP protocol over media.

12. The head-end must queue up the messages in case of non-successful transmission of messages due to network failure (for example, due to power failure) and must retry them at specified intervals using additive back off retrial timings. The life of the messages in case there are unsuccessful deliveries should be specifiable.

13. On the head-end system, the CAS system should be able to generate various reports including the following.

a. Channel and package subscriptions

b. Active/suspended/deactivated subscribers

c. System health and load profile

d. Error reports (for example due to unsuccessful deliveries, failed authentication etc.)

e. Processing Time reports for messages

f. EPG upload errors

14. Critical data such as SMS and other data on the head-end must be recoverable using DR mechanisms. The data should be backed up periodically.

15. Integration with requests handlings through mobile phone SMS, web interfaces and other such channels should be possible.

16. Support for MPEG4 part 10 as HD MPEG2/4 must be provided.

17. CAS must enforce the Code Integrity. It must not allow any unsigned code to be running on certified STB.

18. CAS must protect the various interface on the STBs which are vulnerable for the attack.

19. The STB boot time must be less than 30 seconds.
7. TERMS OF REFERENCE

The framework for development of Indian CAS is as follows:

(i) The CAS would be developed broadly as per the provisions of the existing Multiplier Grants Scheme of DeitY. Under the scheme, assistance is provided to encourage industry to collaborate with premier academic and Government R&D institutions for the development of products/packages under Electronics and IT. Under the scheme, if the industry supports the innovation and commits an amount “R”, the Government would commit a grant of n*R to the institute, where n is less than or equal to 2. Based on the said scheme, the following model is proposed:

(ii) The industry partner is proposed to be identified through a transparent bidding mechanism. The bidding would be on a QCBS basis, wherein the bidders would indicate the “n” required to develop the CAS.

(iii) The successful bidder would hold rights to the CAS. The bidder would be required to commit the following:
   a. Make the CAS available to domestic manufacturers at USD 0.5/license for a period of 3 years.
   b. Integrate CAS for at least 5 operators covering at least 250,000 end users.
   Once the bidder has satisfied the above conditions, he may be free to sell CAS at market price.

(iv) The successful bidder should tie up with operators covering minimum 10% of the market share.

(v) The bidder MUST support the CAS for at least 10 years. The bidder must have 24*7 support team for problem resolution.

(vi) The integration/validation fees must be indicated in the bid.

(vii) The integration/validation fees charged to the STB manufacturer (or any other peripheral system developer/manufacturer) MUST be uniform.

(viii) The integration/validation timeline should also be included in the bid.

(ix) The CAS must be able to integrate prevailing STB chipsets, which should be given in the bid.
8. **PAYMENT TERMS AND CONDITIONS**

It is proposed to enter into a deliverables based payment with the Bidding Agency selected to conduct this exercise. The funding provided by the government will be made in tranches which will be proportional to the amount invested by the CAS developer. More details regarding the same will be provided in the RFP.

9. **FORMATION OF CONSORTIUM/ASSOCIATION WITH OTHER ENTITIES**

Any legal entity duly incorporated under law can participate in the bidding process. If the bidding entity is a Consortium, then it necessarily has to include a software developer and may include one or more of the following: Operator, STB manufacturer, financer.

10. **EVALUATION PROCESS & AWARD CRITERIA**

10.1. **Evaluation Process**

Selection of agency shall be done based on a 2 stage selection including pre-qualification, technical and financial evaluation.

**Stage I (Expression of Interest): Pre-qualification evaluation**

In this stage, bids shall be evaluated based on the pre-qualification criteria listed below and only those bids which are found eligible against the required criteria, shall be considered for the next stage which is the Technical evaluation and financial evaluation.

**Stage II (RFP): Quality cum cost based evaluation**

In this stage, bids shall be evaluated for technical and financial scores based on the parameters to be defined in the RFP and shall be based on QCBS methodology. Please note that as stated above, RFP will be issued only to the bidders shortlisted in Stage I.

**Stage I (Expression of Interest): Pre-qualification evaluation**

1. DeitY will constitute a Tender Evaluation Committee to evaluate the responses of the bidders to the EOI.
2. The Tender Evaluation Committee constituted by the DeitY shall evaluate the responses to the EOI and all supporting documents / documentary evidence.
Inability to submit requisite supporting documents / documentary evidence shall be rejected.

3. The decision of the Tender Evaluation Committee in the evaluation of responses to the Expression of Interest shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.

4. The Tender Evaluation Committee may ask for meetings with the bidder to evaluate its suitability for the Development of “Indian Conditional Access System”. The Tender Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.

5. Each of the bidders need to comply with the short listing / pre-qualification criteria as defined in this EOI to qualify for subsequent submission of proposal to the RFP for selection of the Bidding Agency.

6. Each of the responses shall be evaluated to validate compliance of the bidders according to the following criteria as per format and supporting documents mentioned against each clause.

10.2. Pre-Qualification Criteria

<table>
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<tr>
<th>S. No.</th>
<th>Criterion</th>
<th>Supporting Documents to be submitted</th>
<th>Complied Yes/No</th>
<th>Ref Pg No.</th>
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<tr>
<td>1</td>
<td>The responding Company / Consortium should have made a payment of Rs. 5,000/- (Rupees Five thousand Only) for the EOI document.</td>
<td>Proof of payment of Rs. 5,000/- (if EOI Document is downloaded) or Bank DD of Rs. 5000/- must be furnished.</td>
<td>Yes</td>
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<tr>
<td>2</td>
<td>Any legal entity duly incorporated under law can apply and submit.</td>
<td>Appropriate documents as proof of incorporation.</td>
<td>Yes</td>
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<td>3</td>
<td>The bidder shall not have been blacklisted by any Central / State Government (Central/State Government and Public Sector) or under a declaration of ineligibility corrupt or fraudulent</td>
<td>A self certified letter by the authorized signatory of the bidder must be submitted on original letter head of for the</td>
<td>Yes</td>
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<tr>
<td>Practice / Section</td>
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<td><strong>4</strong></td>
<td>The responding Company / Consortium must have on its rolls consulting staff of at least 100 technically qualified personnel in field of development/service of a software system (&amp; related activities in this domain) possessing relevant degrees/credentials with prior experience as on last date of submission of EoI. Certificate from Head (HR) or company secretary for number of technically the field qualified professionals employed by the company and appropriate supporting undertakings.</td>
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<td><strong>5</strong></td>
<td>It is expected that the bidder will have experts having in-depth knowledge about software system development and/or maintenance domain. Details of experience of two such professionals need to be provided.</td>
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<td><strong>6</strong></td>
<td>Approach Paper to Express the Interest Up to a maximum of five A4 pages</td>
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<td><strong>7</strong></td>
<td>Timelines to build the CAS system An undertaking that the CAS system would be built, tested and be ready for integration and deployment within 12 months of award of contract.</td>
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<td><strong>8</strong></td>
<td>Condition for foreign bidders If the bidder is a foreign company then they have to submit an undertaking that they will get registered in India prior to award of contract.</td>
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11. **INSTRUCTIONS TO BIDDERS**

11.1. **Completeness of Response**

1. Bidders are advised to study all instructions, forms, terms, requirements and other information in the EoI documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the EoI document with full understanding of its implications.

2. The response to this EoI should be full and complete in all respects. Failure to furnish all information required by the EoI documents or submission of a proposal not substantially responsive to the EoI documents in every respect will be at the Bidder's risk and may result in rejection of its Proposal.

11.2. **Proposal Preparation Costs**

1. The bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by DeitY to facilitate the evaluation process, and in negotiating a definitive Contract or all such activities related to the bid process. DeitY will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2. This EOI does not commit DeitY to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award or for preparing this bid.

3. All materials submitted by the bidder become the property of DeitY and may be returned completely at its sole discretion.

11.3. **Signing of Communication to the DeitY**

All the communication to DeitY including this EOI and the bid documents shall be signed on each page by the authorized representative of the bidder and authority letter should be attached with the bid.
11.4. Pre-Bid Meeting

1. Department of Electronics & Information Technology shall hold a pre-bid briefing meeting with the prospective bidders on 11.2.2013 at 11:00 AM at DeitY, Electronics Niketan, Room No.4009, 6 CGO Complex, Lodhi Road, New Delhi. The Bidders will have to send their queries for Pre-Bid meeting by 7.2.2013 (17.00 Hrs) to Shri S.K. Marwaha, Addl. Director, Room No.2078-79, Department of Electronics & Information Technology, 6, CGO Complex, New Delhi 110003, 91-11-24365940, smarwah@deity.gov.in by post or email.

2. All queries to be raised in the pre-bid meeting will relate to the EOI alone and no queries related to scope of work of the development of Indian Conditional Access System, payment terms and mode of selection will be entertained. These issues will be amply clarified at the RFP stage.

11.5. Bidder inquiries and DeitY’s responses

1. All enquiries / clarifications from the bidders, related to this EOI, must be directed in writing exclusively to the contact person notified in this EOI document.

2. The preferred mode of delivering written questions to the aforementioned contact person would be through post or email. Telephone calls will not be accepted. In no event will the DeitY be responsible for ensuring that bidders’ inquiries have been received by DeitY.

3. After distribution of the EOI, the contact person notified by DeitY will begin accepting written questions from the bidders. DeitY will endeavor to provide a full, complete, accurate, and timely response to all questions. However, DeitY makes no representation or warranty as to the completeness or accuracy of any response, nor does DeitY undertake to answer all the queries that have been posed by the bidders. The responses to the queries from all bidders will be distributed to all.

11.6. Amendment of EOI Document

1. At any time prior to the last date for receipt of bids, DeitY, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the EOI Document by an amendment.
2. The amendment will be published in the DeitY website [www.deity.gov.in](http://www.deity.gov.in) or [www.eprocure.gov.in](http://www.eprocure.gov.in).

3. In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, DeitY may, at its discretion, extend the last date for the receipt of Bids.

4. The bidders are allowed resubmit their bid, if required, after such amendments.

### 11.7. Supplemental information to the EOI

If DeitY deems it appropriate to revise any part of this EOI or to issue additional data to clarify an interpretation of provisions of this EOI, it may issue supplements to this EOI. Any such corrigendum shall be deemed to be incorporated by this reference into this EOI.

### 11.8. DeitY's right to modify submission deadline

DeitY may, in exceptional circumstances and at its discretion, extend the deadline for submission of proposals by issuing a corrigendum published in the DeitY website [www.deity.gov.in](http://www.deity.gov.in) in which case all rights and obligations of the project and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

### 11.9. DeitY's right to terminate the process

1. DeitY may terminate the EOI process at any time and without assigning any reason. DeitY makes no commitments, express or implied, that this process will result in a business transaction with anyone.

2. This EOI does not constitute an offer by DeitY. The bidder's participation in this process may result in DeitY short listing the bidder to submit a complete technical and financial response to a RFP.
11.10. Submission of Responses

1. The bidders should submit their responses in the format given in this document in both 2 printed copies and on a non-rewritable CD as a single file in PDF format media in a separate sealed envelope.

2. The CD media must be duly signed using a permanent Pen/Marker and should bear the name of the bidder.

3. The hardcopies and softcopy of the Expression of interest should be in a single sealed envelope, clearly marked as "Response to the call for EOI from << Bidder Name>>".

4. The original hardcopy version will be considered as the official proposal.

5. The bidder shall seal the response to the EOI in an inner envelope marked “Response to the call for EOI for Development of Indian Conditional Access System”. The envelope shall indicate the name and address of the bidder.

6. The inner envelopes of EOI shall be sealed in an outer envelope marked “EOI for Development of Indian Conditional Access System”.

7. The outer envelope shall indicate the name and address of the bidder to enable the proposal to be returned unopened in case it is declared "late". Both inner and outer envelopes shall be addressed to DeitY at the address specified in this section.

8. The original proposal shall be prepared in indelible ink. It shall contain no inter-lineation or overwriting, except as necessary to correct errors made by the bidder itself.

9. Any such corrections must be initialed by the person (or persons) who sign(s) the proposals.

10. All pages of the proposal must be sequentially numbered and shall be initialed by the Authorized Representative of the bidder.

11.11. Bid Submission Format

The entire proposal shall be strictly as per the format specified in this Expression of Interest and any deviation from the format shall lead to rejection of the bid.

11.12. Venue and Deadline for submission

1. Proposals must be received at the address specified below by 25.2.2013 by 14:30 hours - Shri Rajesh Suri, Deputy Director, Cabin No 4216, Department of
Electronics & Information Technology, 6, CGO Complex Lodhi Road, New Delhi 110003.

2. Any proposal received by the DeitY after the above deadline shall be rejected and returned unopened to the Bidder.
3. The bids submitted by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
4. DeitY shall not be responsible for any postal delay or non-receipt/non-delivery of the documents. No further correspondence on the subject will be entertained.
5. DeitY reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

11.13. Documents Comprising the Bid

The bids prepared by the Bidder shall comprise of the following:
1. Proposal Covering letter
2. A power of attorney by the CEO or competent authority authorizing the Bidder to sign/execute the proposal as a binding document and also execute all relevant agreements forming part of RFP
3. Declaration that the bidder has not been debarred/blacklisted by Central Government Department/entity or State Govt. department/entity or Semi-Govt. organization and there is no major complaint against the bidder by any organization
4. Expression of Interest Cover letter
5. Approach Paper to Express the Interest (up to a maximum of five A4 pages).
6. Documents that substantiate the submissions provided in the Expression of Interest

11.14. Short listing Criteria

1. DeitY will shortlist bidding organizations that meet the pre-qualification criteria mentioned in this Expression of interest.
2. Any attempt by a Bidder to influence its bid evaluation process may result in the rejection of the Bidder's Bid.
11.15. **DeitY Rights to accept / Reject any or all Proposals**

DeitY reserves the right to accept or reject any proposal, and to annul the short listing process and reject all responses at any time without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected bidder or bidders of the grounds for DeitY’s action.

11.16. **Notification of Short listing**

1. DeitY shall notify by email and by speed post all organizations that have been shortlisted.
2. Only Shortlisted firms will be issued the Request for Proposal.
12. ANNEXURES

12.1. Annexure 1 - Covering Letter from the Bidding Agency

Company Letterhead

[Location, Date]

To:
The Deputy Director
Cabin No. 4216
Department of Electronics & Information Technology
6, CGO Complex, Lodhi Road
New Delhi 110003

Dear Sir,
We, the undersigned, offer to provide services for the development of “Indian Conditional Access System”, in accordance with your notice for Expression of Interest dated [Insert Date] and our response.

Primary and Secondary contacts for our company are:

<table>
<thead>
<tr>
<th>Details</th>
<th>Primary Contact</th>
<th>Secondary Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Name:</td>
<td></td>
<td></td>
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<tr>
<td>Address:</td>
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<td>Phone:</td>
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<td>Mobile:</td>
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<td>Fax:</td>
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<tr>
<td>E-mail:</td>
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</tr>
</tbody>
</table>
We are hereby submitting our Expression of Interest in both printed format and as a soft copy in a CD. We understand you are not bound to accept any Proposal you receive.

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to DeitY is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so, for the Development of “Indian Conditional Access System”. We agree to abide by the conditions set forth in this EOI.

It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company/firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this, Day of , 2013

(Signature) (In the capacity of)

Duly authorized to sign the EoI Response for and on behalf of: Sincerely,
[Bidding Agency Name]
Name
Title
Signature
Date
(Name and Address of Company) Seal/Stamp of the Bidding Agency
CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, ........................................................., certify that I am ................................. of ............................................................... and that .................................................. who signed the above response is authorized to bind the corporation by authority of its governing body.

Date

Seal here

12.2. Annexure II: Pre-qualification Bid Format

Details of the Organization

<table>
<thead>
<tr>
<th>Name of the Company &amp; Holding company (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of the legal status in India</td>
</tr>
<tr>
<td>Nature of business in India</td>
</tr>
<tr>
<td>Date of Incorporation</td>
</tr>
<tr>
<td>Date of Commencement of Business</td>
</tr>
<tr>
<td>Address of the Headquarters</td>
</tr>
<tr>
<td>Address of the Registered Office in India</td>
</tr>
</tbody>
</table>

Other Relevant Information

- Brief history of the company
- Company ownership structure/ Organizational structure
- Total No of Employees on Rolls
- Details of the Awards received/ Quality Certification that may be in place (e.g. ISO certification, etc.) with the company.

12.3. Annexure III: Names of software development/services professionals on permanent rolls of the company

Please note that this data is only for verification purpose and will be kept confidential.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Professional</th>
<th>Qualifications</th>
<th>Skills Sets</th>
<th>Details of any one of the assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
In case the bidding agency has more than 100 consultants in its payrolls, it can submit the names of any 100 software development/service professionals of the firm.

12.4. **Annexure IV: Other Documents and Certificates**

1. Demand Draft of Rs. 5,000/- of any Commercial Bank, payable at New Delhi in favor of Pay and Accounts Officer, Department of Electronics & Information Technology or proof of payment made earlier for the EOI document.
2. Copy of Certificate of incorporation
3. Copy of Service Tax Registration Certificate
4. A self certified letter by the authorized signatory of the bidder that the bidder has not been blacklisted by any Central / State Government (Central/State Government and Public Sector) or under a declaration of ineligibility for corrupt or fraudulent practices as on Last Date of submission of EOI must be submitted on original letter head of the bidder with signature and stamp.
5. Certificate from Head (HR) or company secretary for number of technically qualified professionals employed by the company.
6. Copy of the audited profit and loss account/ balance sheet/ annual report of the last three financial years. In the absence of audited statements for the last year, provisional statements may be considered.
7. Approach Paper to Express the Interest to a maximum of five A4 pages.

--------- End of EoI Document ---------