

Reference Interconnect Offer for Digital Addressable Cable Television Systems

This reference interconnect offer ("**RIO**"), *inter alia*, provides the broad technical and commercial terms and conditions offered by _____ ("**Company**") pursuant to regulation 4 of The Telecommunication (Broadcasting and Cable Services) Interconnection (Digital Addressable Cable Television Systems) Regulations 2012, as amended, for interconnection with digital addressable cable television system ("**DAS**") platforms, as set out hereafter. Party applying for interconnection shall be hereinafter referred to as a "multi system operator"/"**MSO**", as such term is defined in the Regulations.

Every MSO seeking interconnection with the Company under the Regulations shall ensure that its DAS platform meets the requirements of Schedule I of the Regulations and this RIO, as amended from time to time. If the Company finds that the DAS platform proposed to be used by the MSO does not meet the requirements specified in Schedule I of the Regulations, the said MSO shall rectify the defects and achieve compliance with the specified requirements and procure that the DAS platform is audited by M/s Broadcast Engineering Consultants India Ltd or such other agency as notified by the Telecom Regulatory Authority of India and obtain a certificate from such agency that its DAS platform meets the requirements specified in Schedule I to the Regulations.

The detailed terms of interconnection shall be as set out in further definitive agreement to be executed by the Company and MSO ("**Agreement**"). The broad technical and commercial terms and conditions are as follows:

1. **DEFINITIONS**

For the purposes of this Agreement, the following terms shall have the meanings ascribed to them below unless otherwise expressly stated in any provision of this Agreement.

1.1 "**CAM**" - shall mean conditional access module approved by the Company and used in conjunction with a viewing card and an IRD in order to facilitate the receipt of the signals of the Services by the MSO;

1.2 "**CAS**" – shall mean the conditional access system maintained by the MSO in accordance with the Regulations and the terms of this Agreement, which shall have the ability to provide selective access and denial of specific Services, data, information or services to paying Subscribers and meets the requirements of Schedule C of this Agreement;

1.3 "**Distribution System**" – shall mean digital addressable cable television platform owned and operated by MSO and its sub-operators listed in Schedule B hereto, comprising of an electronic device (which includes hardware and its associated software) or more than one electronic device put in an integrated system through which signals of the network can be sent in encrypted form and decoded by device(s) having an activated conditional access system at the premises of the Subscriber within the limits of authorization made, through the CAS and the SMS, on the explicit choice and request of such subscriber;

1.4 "**IRD**" – shall mean decoder, receiver or integrated receiver-decoders approved by the Company and used in conjunction with a viewing card in order to facilitate the receipt of the signals of the Services by MSO;

1.5 "**Monthly Average Subscriber Level**" – shall have the meaning ascribed to it in clause 2 below;

1.6 "**Monthly Licence Fee**" – shall have the meaning ascribed to it in clause 2 below;

- 1.7 **"Piracy"** – shall have the meaning ascribed to it in clause 6.1 below;
- 1.8 **"Service(s)"/"Channels"** – shall mean the linear television channels chosen by the MSO as confirmed in Schedule A and accordingly, each channel/service may be referred to as a **"Service"/"Channel"**;
- 1.9 **"Security Systems"** – shall have the meaning ascribed to it in clause 6.1 below;
- 1.10 **"Set Top Box"/"STB"** – shall mean a device which is connected to or part of a television set and as per requirement described in Schedule C to this agreement, which allows a Subscriber to receive the Service(s) in descrambled form;
- 1.11 **"SMS"** – shall mean the subscriber management system maintained by MSO in accordance with the applicable regulations and as described in Schedule C of this Agreement;
- 1.12 **"Subscriber"** - shall mean any ordinary subscriber availing the Channel through a single set top box through the Distribution System and does not further transmit the Service to any other person;
- 1.13 **"TRAI"** – shall mean the Telecom Regulatory Authority of India.

2. LICENCE FEE

2.1 For each month or part thereof during the term of the Agreement, the MSO shall pay to the Company, the Monthly Licence Fee which shall be the Rate multiplied by the Monthly Average Subscriber Level.

The a-la-carte and bouquet "Rate" per Subscriber per Channel is set out in Schedule A. The said rates are exclusive of all taxes and levies.

The "Monthly Average Subscriber Level" is equal to the sum of the number of Subscribers on the first and last day of the month in question divided by two.

For the purpose of calculation of the Monthly License Fee payable to the Company, "Subscriber" means, for any calendar month, each Set Top Box, which is availing the Channel(s) of the Company through the MSO. Notwithstanding anything contained herein once the MSO activates the Service(s) on a particular Set Top Box, such Set Top Box shall be included in the number of subscribers on the first day of the calendar month and on the last day of the calendar month for minimum three successive calendar months including the calendar month in which such Services were activated by the MSO in such Set Top Box and the MSO will pay the Monthly License Fee accordingly.

2.2 This Agreement does not apply for distribution to following categories of commercial subscribers namely:

- (i) hotels with rating of three star and above;
- (ii) heritage hotels (as described in the guidelines for classification of hotels issued by Department of Tourism, Government of India);
- (iii) any other hotel, motel, inn, and such other commercial establishment providing board and lodging and having fifty or more rooms; or
- (iv) in respect of programmes, shown on the occasion of a special event for common viewing, at any place registered under the Entertainment Tax Law and to which access is allowed on payment basis for a minimum of fifty persons.

3. CALCULATION OF LICENSE FEE

3.1 In case the MSO avails one or more bouquet(s) of the Company:

(i) if the MSO is providing the bouquet(s) as a whole to its Subscribers, the Monthly License Fee for such bouquet(s) shall be equal to the bouquet rate as set out in Schedule A multiplied by the number of monthly average number of subscribers availing the bouquet(s).

(ii) if the MSO does not offer such opted bouquet(s) as a whole to its Subscriber but offers only certain channels comprised in such bouquet or packages the channels comprised in such opted bouquet in a manner resulting in different subscriber base for different channels comprised in such opted bouquet, then the payment to the Company for such entire opted bouquet by the MSO, shall be calculated on the basis of subscriber base for the channel which has highest subscriber base amongst the channels comprised in the bouquet.

3.2 In case the MSO avails one or more or all channels of the Company on ala carte rate basis:

(i) if the MSO is providing the channels on ala carte basis to its Subscribers, the Monthly License Fee for such ala carte channels shall be equal to the ala carte rate as set out in Schedule A multiplied by the number of monthly average number of subscribers availing the channels on ala carte basis.

(ii) if the MSO does not offer such opted ala carte channel(s) as ala carte to its subscriber but offers the ala carte channel (s) in packages, then the payment to the Company for each of the ala carte channels, shall be calculated on the basis of subscriber base of the package in which such opted ala carte channel has been placed.

3.3 In case the MSO avails one or more channels on ala carte rate basis and also opts for different bouquet(s) not comprising of channels opted on ala carte basis of the Company:

(i) For bouquet(s), the monthly license fee shall be calculated on the basis of sub clause 3.1 above.

(ii) For ala carte channels, the monthly license fee shall be calculated on the basis of sub clause 3.2 above.

Payment of the License Fee shall be subject to deduction of any withholding tax/ TDS in accordance with the provisions of the Indian Income Tax Act, 1961, as amended from time to time.

4. PAYMENT TERMS

4.1 The Monthly Licence Fee shall be paid monthly in arrears within fifteen (15) days of receipt of invoice raised on the basis of report of the MSO by the Company without any deduction except deduction of withholding tax/TDS as provided in this Agreement.

4.2 Within seven days of end of each month, the MSO shall provide opening, closing and average number of subscribers for that month in the format attached herewith as **Schedule D**, based on which the Company shall raise an invoice on the MSO. In case the MSO fails to send the report within the said period of seven days, the Company shall have the right to raise a provisional invoice and the MSO shall be under obligation to pay the license fee on the basis of such provisional invoice in accordance with the terms of this clause. However the provisional invoice shall be for an amount not more than the monthly license fee payable by the MSO for the immediately preceding month. On receipt of the report from the MSO, the parties shall conduct reconciliation between the provisional invoice raised by the Company and the report sent by the MSO.

4.3 The MSO shall be required to make payments by the applicable due date in accordance with the terms hereof, and any failure to do so on the part of the MSO shall constitute a material breach hereunder. Late payments shall also attract interest calculated from the date payment was due until the

date payment is made in full at a pro rata monthly rate of 1.5%. The imposition and collection of interest on late payments does not constitute a waiver of the MSO's obligation to pay the License Fee by the due date, and the Company shall retain all of its other rights and remedies under the Agreement.

4.4 All Licence Fee payments hereunder are exclusive of all applicable indirect taxes including all and any service taxes, VAT, works contract taxes, customs duties, excise duties, entertainment taxes and other such taxes. All such taxes shall be at MSO's cost and will be charged at the prevailing rates by the Company to the MSO.

4.5 If payment of the Licence Fee is subject to deduction of any withholding tax/TDS in accordance with the provisions of the Indian Income Tax Act 1961, as amended, the MSO shall provide tax withholding certificates to the Company within such period as has been specified in the Income Tax Act/ Rules/ Notifications/ Circulars issued thereunder.

4.6 The Monthly License Fee shall be payable in full by MSO to the Company irrespective of the basis of payment by the Subscribers to MSO. MSO shall sell the Service to its subscribers for a minimum period of three (3) months.

4.7 All payments from MSO to the Company under the agreement shall be paid by Demand Draft or banker's cheque in favour of '_____', payable at its head office or any other place that may be specified by the Company from time to time.

4.8 Any discounts or similar offerings made by MSO to its Subscribers in respect of the Services shall be at the sole cost and expense of MSO.

5. **DELIVERY AND SECURITY**

5.1 Subject to the terms of this Agreement and payment of applicable license fees, the Company grants to the MSO the non-exclusive and non-transferable right to retransmit the Services only in linear mode, solely for reception by Subscribers through the Distribution System, in the territory of _____ by itself and through sub-operators listed in Schedule B. The registration details of the MSO and details of equipment for availing the signals of the Channels are as set out in Schedule B hereto.

The MSO shall not sub-license any of its rights hereunder to any other person or extend its distribution to any other areas other than as expressly authorized hereunder. All other rights and means of distribution not specifically and expressly granted to MSO are expressly excluded and reserved by Company, including, but not limited to, transmission via any "headend-in-the-sky" ("HITS") platform to cable operators, cable systems, IPTV systems, Internet, and mobile. For the avoidance of doubt, this also excludes distribution of any non-linear content of the Channels through the Distribution System including, but not limited to time shifting/multiplexing/on-demand[PPV/VOD/SVOD]- whether currently existing or that may come into existence in the future. The MSO shall provide access to the content/ channels of the Company on a non-discriminatory basis.

5.2 All Channels must be delivered by MSO to Subscribers in a securely encrypted manner and without any alteration, interruption, editing, interference or recording. The MSO shall ensure that the Distribution System and the allied infrastructure used to deliver the Channels to the Subscribers meet the requirements of Schedule C at all times. The uplink specifications, satellite capacity and infrastructure allocated by MSO in respect of the broadcast signal of the Company's Channels by MSO to its Subscribers shall be no worse than that of the broadcast signal of any other channel within the same genre on its Distribution System.

5.3 It is clarified that MSO shall offer the Channels to Subscribers on as-is basis and shall not offer

any Channel on the basis of any specific programming event, feature, characteristic or attribute. MSO shall make available the Channels to Subscribers on 24/7/365 basis with effect from such Channels being activated at the Subscriber's end till the time such subscriber is switched off by MSO for being a defaulter or such Subscriber having expressly indicated its intention to discontinue its subscription to such Channels or packages containing such Channels in accordance with extant regulations. Provided that MSO shall keep such Channels or packages containing such Channels active at the Subscriber's end for a minimum period of six months from the date such Subscriber has subscribed to such Channels or packages containing such Channels. It is agreed that no independent advertising shall be inserted by MSO and MSO shall not superimpose or otherwise alter any copyright, trademarks, trade names, logos, names on any Channel.

5.4 Notwithstanding any clauses contained in this Agreement, MSO shall not store or cause to be stored any specific program or programming content of the Channels - including additional channels - in its servers or facilities. MSO shall also not deploy any advertisement skipping function in its Distribution system. There shall be no embedded functionality in MSO's Distribution System that shall enable it to show programmes of the Services at a time different than that of its original telecast.

5.5 The MSO shall, at its own cost and expense, cause the Services to be received only from the satellite(s) designated by the Company from time to time and shall ensure distribution throughout its Distribution Systems on separate, dedicated channel(s) for reception by all its Subscribers. The MSO shall be responsible, at its sole cost and expenses, for obtaining all licenses and permits necessary for the foregoing. The MSO shall use its best efforts to maintain a high quality of signal transmission for the Services and shall take all other necessary steps to ensure that: (a) each Service is received only by Subscribers who pay the full applicable subscription fees; and (b) no location for which the applicable subscription fees is not paid shall be capable of viewing the Service. The MSO shall not shift/ move/ change the frequencies of a Service at any time without advance prior written notice of at least thirty (30) days to the Company. The MSO shall cause continuous distribution of the Services to all its Subscribers during telecast without blacking it out or interfering with it in any manner whatsoever.

5.6 The MSO shall package the Services as per applicable law. The MSO shall ensure that none of the Services are disadvantaged or otherwise treated less favourably with respect to competing services on a genre basis or included in any package or tier that contains any Service with pornographic content or any gambling Service.

5.7 The Company may, at the request of the MSO supply or cause to be supplied necessary equipment to the MSO or has already supplied such equipment directly or through nominated suppliers. If the Company provides the equipment, the MSO agrees to pay for the equipment over and above the license fee. The MSO shall locate the equipment at a location approved by the Company in writing. All charges are exclusive of taxes, which shall be borne by MSO. Equipment may be provided by Company under the following conditions:

- (i) MSO shall pay a refundable security deposit per IRD/CAM/box, payable immediately upon execution of this Agreement, for IRD/CAM/boxes issued under security deposit scheme. The security deposit amount shall be intimated by the Company;
- (ii) Replacement of IRD - In case the MSO requires replacement of a defective IRD/ box/CAM, the MSO shall pay a non-refundable service charge per IRD/CAM/box for one time replacement. The service charge amount shall be intimated by the Company based on the nature of defect in the box/IRD/CAM;
- (iii) Replacement of Viewing Card - In case MSO requires replacement of a viewing card, the MSO shall pay non-refundable replacement charges at the rate of Rs. 1400/- (Indian rupees one thousand four hundred only) per viewing card at the time of activation for one time replacement.

6. ANTI-PIRACY

6.1 In order to prevent theft, piracy, unauthorized retransmissions, redistribution or exhibition, copying or duplication of any Channel, in whole or in part, (hereinafter collectively referred to as "Piracy"), the MSO shall, prior to the commencement of the term of the Agreement and at all times during such term, employ, maintain, and enforce fully effective conditional access delivery and content protection and security systems, and related physical security and operational procedures (hereinafter collectively referred to as the "Security Systems") as may be specified (security specifications), in a non-discriminatory manner in writing, from time to time, by the Company.

6.2 To ensure the MSO's ongoing compliance with the security requirements set out in the Agreement, the Company may require technical audits ("Technical Audit(s)") conducted by an independent security technology auditor ("Technical Auditor"), approved by the Company in writing no more than twice per year during the term, at the Company's cost and expense. If the results of any Technical Audit are not found to be satisfactory by either the MSO or the Company, then the Company shall work with the MSO in resolving this issue in the next fourteen (14) business days. If a solution is not reached at by then, the Company may, in its sole discretion, suspend the MSO's right to distribute the Channels or take other actions as provided under the Agreement, until such systems, procedures and security measures have been corrected to the Company's satisfaction. MSO shall bear the cost and expense of any subsequent Technical Audit to verify that the systems, procedures and security measures have been corrected by the MSO to the Company's satisfaction. The scope of such audit shall be as set out in Schedule E.

For the Technical Audits referred to above, MSO shall make available all the above data, records, systems information and details for inspection and audit by the Company or representatives, auditors designated by the Company on reasonable notice to MSO, during normal business hours during the term of the Agreement and for one year after its termination. Provided further that neither the Company's acceptance of any such information or payment, nor the Company's inspection or audit of MSO's records or accounts shall prevent the Company from later disputing the accuracy or completeness of any payment made or information supplied. The Company and its representatives shall be entitled to visit all offices, head ends, control room and other locations (of MSO and, or, any of its sub operator) for any such inspection and audit. MSO undertakes to provide and cause to provide access to all offices, head ends, control room and other locations (of MSO and, or, any of its sub operator) for any such inspection and audit by the Company or its representatives.

6.3 The MSO shall comply with all content protection measures that may be specified by the Company from time to time and shall report compliance to the Company in a timely manner as may be required and specified by the Company to this effect. The MSO shall also allow the Company full access to systems and controls for the Company to be satisfied that the Distribution System is fully compliant with such content protection measures as may be specified in this regard.

6.4 MSO shall deploy finger printing mechanisms to detect any piracy, violation of copyright and unauthorized viewing of the Channels, distributed / transmitted through its Distribution System at least every 10 minutes on 24 x 7 x 365(6) basis.

6.5 MSO shall not allow unauthorized taping or receipt of the Channels. MSO shall not authorize, cause or suffer any portion of any of the Channels to be recorded, duplicated, cablecast, exhibited or otherwise used for any purpose other than for distribution by MSO at the time the Channels are made available. If MSO becomes aware that any unauthorized third party is recording, duplicating, cablecasting, exhibiting or otherwise using any or all of the Channels for any other purpose, MSO shall within ten minutes of so becoming aware of such recording, duplicating, cablecasting, exhibiting or otherwise using any or all of the Channels for any other purpose, notify the Company and the MSO

shall also switch off the concerned Set Top Box to prevent such unauthorized use. However, use of a Set Top Box with Personal Video Recorder/ Digital Video Recorder facility which has been supplied by the MSO shall not be treated as unauthorized use, as long as such Set Top Box is used in accordance with the terms and conditions of the subscription agreement between the MSO and the subscriber for non-commercial and technical use such as equipment testing, footprint evaluation, CAS & SMS examination, etc., in compliance with applicable laws.

6.6 If so instructed by Information (as defined below) by the Company, the MSO shall shut off or de-authorize the transmission to any unauthorized subscriber/ subscriber indulging in piracy, within ten minutes from the time it receives such instruction from the Company. Any communication under this clause shall be considered as valid Information only if (i) the information is sent through e mail in a format as mutually agreed by the parties and (ii) the information is sent by a person(s) who is designated to send such information. However the "information" may even be provided by the Company representatives through other means of communications such as telephonic message, fax etc and the said "information" shall later be confirmed by the Company through e mail and the MSO shall be under obligation to act upon such information.

6.7 MSO undertakes that the Services shall be distributed through its Distribution System only and shall ensure that:

(i) The Finger Printings (FP), both covert & overt and on-screen-display messages ('OSD') of the Company should be displayed by MSO without any tampering with regard to time, location, duration, colour and frequency;

(ii) Finger Printings (both covert and overt) shall be provided by MSO at the scheduled time, location (by x-y coordinates), duration, colour and on demand specified by the Company and with a notice (either verbal or in writing) of ten (10) minutes from the Company to MSO. It should be possible to programme the STB / CPE to display its FP through OSD messaging;

(iii) Covert FP would be made available every 30 seconds;

(iv) Overt FPs are displayed at least 5 times every hour between 9.00 AM – 11.00 PM and during the period of major events on the Channels / Services;

(v) The background box and font of the Overt FPs should be programmable in 05 different colours including "transparent" option. The font sizes of the overt FP must be programmable in 05 different sizes;

(vi) All STBs / CPEs/ VCs must be compliant with standards prescribed by the bureau of Indian standards and must support FPs, both overt and covert types as well as the OSD feature. OSD (minimum of 150 characters message) should be programmable on a specific duration / continuous basis. The overt FP, and OSD should not be removable by any remote control / STB / CPE button operation;

(vii) FPs and OSDs must be programmable on global, group, and individual STB/ CPE basis;

(viii) All STBs / CPEs shall support both overt & covert Finger Printing as well as OSD messaging. They should have no ports / interface through which software / middleware can be upgraded / downgraded / modified;

- (ix) No common interface STB / CPE is to be used by the MSO in the Distribution System;
- (x) The STB / CPE must contain secure chipset and must be paired with the smart card at all times;
- (xi) The CAS, SMS, STBs and CPEs shall be compliant with applicable BIS standards or such other standards as may be prescribed by relevant government bodies;
- (xii) Remote access (e.g. through dial up or otherwise) to the MSO's DAS platform (information related to Subscribers) of the MSO shall be provided to the Company in order to permit the Company to verify the Subscriber numbers;
- (xiii) No change in the Channel numbering plan will be made without prior written notice to the Company;
- (xiv) It shall provide the Company with 10 STBs / CPEs for which Company shall pay applicable charges, authorised for every channel/ bouquet / package distributed by the MSO, for anti-piracy monitoring;
- (xv) The MSO shall make available to the Company, every month, logs containing channel wise history of all the activations and de-activations of all the STBs / CPEs/ viewing cards/ smart cards for each month from the CAS and SMS logs / databases. These logs / reports, in electronic form, must be verified and authenticated by the CAS provider personnel of a rank not less than that of Chief Technical Officer / Chief Operating Officer / Head of Department;
- (xvi) That overt Finger Printing shall have highest 'priority' amongst any other on-screen-displays generated by the STB / CPE;
- (xvii) It shall not resort to and, or, use any method technology, software now known or hereinafter devised to subvert the MSO's DAS platform to the detriment of the interests of the Company;
- (xviii) If security of CA is breached, or if the Services are viewed through an STB without FP or OSD, the Company reserves the right to discontinue its Services to MSO, subject to applicable TRAI regulations.
- (xix) FP on single channel / all channels must be possible.
- (xx) FPs must also be visible in the electronic programme guide / PIP/Menu/Guide windows which carry live video of the channels / services.
- (xxi) Opacity of all on-screen-displays must be 80% or greater and not changeable by viewer.
- (xxii) CAS and SMS must have provision to tag and blacklist VC numbers and STB numbers that have been involved in piracy in the past to ensure that the VC and / or the STB cannot be re-deployed.
- (xxiii) No activations or deactivations shall be performed or initiated directly in the CA system. All such actions must be routed through SMS only.
- (xxiv) it shall be possible to force STBs to display its FP through OSD messaging.
- (xxv) watermarking network logo for all channels shall be inserted at encoder end only.
- (xxvi) necessary controls shall be deployed to ensure integrity and reliability of the reports such as

logs, access controls, time stamp etc.

(xxvii) The STB outputs should have the following copy protections:

- A. Macro vision 7 or better on Composite video output.
- B. Macro vision 7 or better on the Component Video output.
- C. HDCP copy protection on the HDMI & DVI output.
- D. DTCP copy protection on the IP, USB, 1394 ports or any applicable output ports.

(xxviii) DVR / PVR STB recorded content, if and to the extent permitted under this Agreement, shall be encrypted & not play on any other devices.

6.8 MSO undertakes to take all appropriate and necessary steps and measures to prevent piracy or any other violation of intellectual property rights in the Service, directly or indirectly. MSO further undertakes that:

- (i) It shall ensure that no duplicate feed of the Services are provided;
- (ii) It shall not indulge into channel disguise (as an example showing the Services under the name or heading of any other channel distributed by the MSO with the view to under declare the total number of Subscribers); and
- (iii) At no point Channels shall be transmitted without encryption.

6.9 In the event MSO is unable to disconnect an STB / CPE involved in piracy/ signal theft of the Service within 12 hours of receiving the information from the Company, the Company shall be entitled to discontinue the Service(s) in accordance with TRAI's applicable regulation.

6.10 The Company and its representatives shall be entitled to visit all offices, head ends, control room and other locations (of MSO and, or, any of its sub operator) for any inspection, verification or other purposes mentioned hereinabove.

6.11 MSO shall, subject to the provisions hereof, ensure that the Services is provided to and received only through MSO's DAS platform:

- (i) By such Subscribers who have paid the full applicable subscription fees in respect thereof and no Subscriber who is in default of payment of Subscription Fees is permitted to or is capable of viewing the Services; and
- (ii) To such Subscriber's whose name, complete address, CPE and, or, smart card number (other details of STB / CPE) have been disclosed to the Company.

6.12 MSO shall ensure that:

- (i) Its CA and SMS systems should be able to handle individual Channels, packages, tiers, discounts, free offers, promotional offers etc.;
- (ii) The CAS and SMS must have the capability or recording activation/deactivation history in the system for at least the preceding 2 years; and

(iii) its logo is present on all the Channels that are being received and redistributed through its platform for timely detection of the source of piracy in cable networks i.e. cable operator that are unauthorisedly downloading and redistributing the Channels in their network, using MSO's platform.

6.13 The MSO shall not:

(i) Transfer, alienate or part with possession of the IRD/box/CAM and or viewing card to and in favour of any third party without prior written permission of the Company; and

(ii) Change, remove or shift the IRD/box/CAM and or viewing card from its authorised location i.e. the one recorded in the agreement without prior written approval of the Company;

In the event the IRD/box/CAM and or viewing card is/are transferred to any other location in contravention to the terms of the agreement, the Agreement will be deemed to be terminated without prejudice to any other rights of the Company.

6.14 MSO shall keep and maintain up-to-date proper, true, fair and correct conditional access log, subscriber management system data, duly executed agreements, forms & contracts with the Subscribers, receipt books regarding payments from the Subscribers, books of accounts and records reflecting all transactions relating to the Services and authorizations of STB / CPE, in particular, name, complete address, billing and payment details of all Subscribers.

6.15 MSO shall have such SMS / billing system software & facilities in its system to ensure flexible in adapting and implementing any new schemes/ billing options/ payments modes/ plans etc. of the Company.

6.16 MSO shall take all necessary steps to ensure that the distribution of STBs and smart cards is limited solely within the territory permitted by the Company and to genuine subscribers residing in the said territory. Such steps shall include the following:

(i) requiring all subscribers to submit a legally valid proof of address such as bank statement and conduct physical verification of the address prior to activation of any STB or smart card, including at the time of any relocation; and

(ii) investigating multiple smart cards issued in the name of one individual name or address, if any, such as periodic visits to the premises of such individuals or addresses from time to time.

6.17 MSO shall install all STBs and smart cards directly or through its authorised dealers and solely within the territory permitted by the Company. With respect to every installation, MSO shall verify that the address at which the installation is done is the same as the address supplied by the subscriber at the time of purchase of the STB and as detailed in the SMS. MSO's SMS shall contain all information relevant to the subscriber prior to activation of the STB and smart card and shall include the following at a minimum – (a) name; (b) installation address; (c) billing address; (d) telephone number of the installation address; (e) authorized subscriber's unique subscriber reference or subscription agreement number; (f) Services that have been selected; (g) name and unique reference number of the dealer who sold the STB to such subscriber; (h) name and unique reference number of the dealer who sold the subscription to such subscriber; (i) name and unique reference number of the installer; (j) unique smart card /viewing card number; and (k) unique STB number.

6.18 MSO shall, at the request of the Company, send a report in respect of systems, measures and compliances with above clauses, in accordance with the format and medium, electronic and hard copy, as may be specified by the Company from time to time. Such report shall be authenticated by the

agencies / vendors providing conditional access (CA) software and Subscriber Management / Billing system software. It is agreed that neither the Company's acceptance of any such information or payment, nor the Company's inspection or audit of MSO's records or accounts shall prevent the Company from later disputing the accuracy or completeness of the same provided that the Company submits reasons for disputing the same.

6.19 MSO shall inform the Company about any proposed addition of any new equipment/systems such as new STB model, CAS or SMS from time to time and such equipment may be used only after technical audit and approval by the Company.

6.20 MSO will provide the following upon execution of the Agreement:-

- (i) complete network diagram;
- (ii) CAS declaration from the Conditional access vendor (CA declaration form enclosed as **Schedule F**); and
- (iii) SMS declaration from the SMS vendor (SMS declaration form enclosed as **Schedule G**).

7. REPORTS

7.1 MSO will maintain at its own expense a SMS which should be fully integrated with the CAS.

7.2 MSO shall provide to the Company complete and accurate opening and closing subscriber monthly reports for the Channels and the tier and/or package containing the Channels within seven (7) days from the end of each month in the format provided by the Company and set out in Schedule D. Such reports shall be system generated only through SMS and CAS and the same should be in a pre-defined read only format such as a suitable PDF format which cannot be manually edited and attested and shall specify all information required to calculate the Monthly Average Subscriber Level (including but not limited to the number of Subscribers for each Channel and each package in which a Channel is included) and the Licence Fees payable to the Company. The said reports shall be signed and attested by an officer of the MSO of a rank not less than Head of Department/Chief Financial Officer who shall certify that all information in the Report is true and correct. Any difference between the SMS and CAS reports shall have to be reconciled to the satisfaction of the Company. Such provisioning of Subscriber Report shall constitute material obligation on the part of MSO.

7.3 It is clarified that in any event, the MSO shall submit the report within 15 days of the end of each month failing which the MSO shall be construed to be in material breach. For the purpose of computing opening and closing subscriber base – MSO shall allocate a unique identification number/code to such STBs receiving one or more of the Services so that subscriber counts can be generated on the basis of such unique identification numbers. Such codes shall be shared by MSO with Company.

8. AUDIT

8.1 The Company's representatives shall have the right, not more than twice in a calendar year, to review and / or audit the subscriber management system, conditional access system, other related systems and records of Subscriber Management System of the MSO relating to the Channel(s) provided by the broadcaster for the purpose of verifying the amounts properly payable to the Company under the Agreement, the information contained in Subscriber Reports and full compliance with the terms and conditions of the Agreement. If such review and or audit reveals that additional fees are payable to the Company, the MSO shall immediately pay such fees, as increased by the Late Payment Interest Rate. If any fees due for any period exceed the fees reported by the MSO to be due for such period by two (2) percent or more, MSO shall pay all of the Company's costs incurred in connection with such review and / or audit, and take any necessary actions to avoid such errors in the future.

8.2 The scope of such Audit shall be as set out in Schedule E. MSO shall provide full cooperation to Company's auditors in order to carry out the audit including but not limited to granting unfettered, unqualified and unrestricted access to MSO's facilities and systems including but not limited to SMS, CAS, IT systems and providing documents as may be required by the Auditors. MSO shall have no objection to Auditors carrying/using their own equipment's, systems including but not limited to laptop, software & hardware for conducting such audit and shall be provided with free ingress and egress from the premises where in such audit is conducted. This shall also apply to Technical audits. Any breach by or on the part of the MSO with regard to the above covenants shall be construed as material breach of this Agreement.

8.3 The MSO shall remain the sole owner and holder of all customer databases compiled by the MSO under the Agreement. MSO will maintain at its own expense a SMS capable of, at a minimum:

(i) maintaining a computerised customer database capable of recording adequate details of each Subscriber, including name, address, chosen method of payment and billing;

(ii) administering subscriptions of Subscribers by producing and distributing contracts for new Subscribers and setting up and maintaining an infrastructure whereby Subscriber contracts are collected and recorded in the SMS database for ongoing administration;

(iii) handling all ongoing administrative functions in relation to Subscribers, including, without limitation, billing and collection of subscription payments, credit control, sales enquiries and handling of complaints;

(iv) administering payments of any commission fees from time to time payable to the MSO's authorised agents for the sale to Subscribers of programming packages;

(v) obtaining and distributing receivers and smartcards, if applicable, to Subscribers, and issue replacement smartcards from time to time in its discretion; and

(vi) enable new Subscribers via the SMS over-the-air addressing system and disable defaulting Subscribers from time to time in its discretion.

9. **TERM**

9.1 As mutually agreed between the Company and the MSO subject to a minimum of one (1) year from the date of signing of the Agreement unless terminated earlier in accordance with the Agreement.

9.2 The term of the Agreement may be extended on terms and conditions to be mutually agreed and recorded in writing between the parties.

10. **TERMINATION**

10.1 Either Party has a right to terminate this Agreement by a written notice, subject to applicable law, to the other in the event of:

(i) material breach of this Agreement by the other Party which has not been cured within thirty (30) days of being required in writing to do so;

(ii) the bankruptcy, insolvency or appointment of receiver over the assets of the other Party;

(iii) The DAS licence or any other material licence necessary for MSO to operate its DAS service being revoked at anytime.

10.2 The Company shall have the right to terminate this Agreement by a written notice to MSO if

(i) MSO breaches any of the Anti Piracy Requirements and fails to cure such breach within ten (10) days of being required in writing to do so; or

(ii) the Company discontinues any of the Channels with respect to all distributors in the Territory and provides MSO with at least ninety (90) days prior written notice.

10.3 MSO shall have the right to terminate this Agreement on written notice to the Company if MSO discontinues its DAS business and provides at least ninety (90) days prior written notice.

11. SUBSCRIBER RECORDS AND ACCESS

11.1 The MSO shall keep accurate, complete and up to date records of every subscriber's details, details of the location of every Set Top Box, Viewing Card, records and accounts of billings including historical billing data, type of subscribers, sublicenses and all relevant matters ("Subscriber Records"). The MSO shall ensure that its SMS and billing software allows for monitoring and printing historical data relating to subscriber activation and/or deactivation, going back to at least 2 years.

11.2 MSO shall keep and maintain up-to-date proper, true, fair and correct conditional access log, subscriber management system data, duly executed agreements, forms & contracts with the Subscribers, receipt books regarding payments from the Subscribers, books of accounts and records reflecting all transactions relating to the Services and authorizations of STB / CPE, in particular the name, complete address, billing and payment details of all Subscribers.

11.3 MSO shall, at the request of the Company, send a report in respect of systems, measures and compliances with above clauses, in accordance with the format and medium, electronic and hard copy, as may be specified by the Company from time to time. Such report shall be authenticated by the agencies / vendors providing conditional access software and subscriber management / billing system software.

11.4 It is agreed that neither the Company's acceptance of any such information or payment, nor the Company's inspection or audit of MSO's records or accounts shall prevent the Company from later disputing the accuracy or completeness of the same provided that the Company submits reasons for disputing the same.

12. INTELLECTUAL PROPERTY RIGHTS

12.1 The Company and its licensors shall have the sole right and privilege to determine which events and programmes, advertisements, messages and the like shall be included in the Channels/Services. The MSO agrees and undertakes to distribute the Services in their entirety as and how delivered by the Company, without any cutting, editing, dubbing, scrolling or ticker tape, substituting or any other modification, alteration, addition, deletion or variation.

12.2 The MSO shall use its best efforts to promote an awareness of the Service among its Subscribers and potential subscribers. The MSO acknowledges that the trade names and marks "_____", "The Total Sports Network", "Inside Sports", "Inside Asia", "STAR Sports", "STAR Sports 2", "STAR Cricket" and "FOX Sports News" (and the names of programs which appear in the Service including but not limited to Sports Center) are and shall remain the exclusive property of the Company

and its licensors, as applicable. The MSO has not and shall not acquire any proprietary or other rights or interests therein by reason of this Agreement. The Company shall have the sole discretion to approve the use of such trade names or marks by the MSO with respect to the programmes included in the Services. The MSO shall keep fully confidential and shall not publish or disseminate any material/information which violates any conditions imposed by the Company or its programme suppliers and disclosed to MSO by Company for the purpose of this Agreement.

12.3 All rights to the Services and its contents are specifically reserved to the Company and its licensors, as appropriate, and may be freely exercised and exploited by them by any means, any locations and in any manner whatsoever.

12.4 Notwithstanding anything contained in this Agreement, the MSO agrees that Company, its parent, successors, assigns or any entity that owns or controls the Company, directly or indirectly during the term hereof, or for any extension, may re-name and/or re-brand the Services in its sole discretion.

13. REPRESENTATIONS AND WARRANTIES

13.1 Each party represents and warrants to the other party that:

(i) each of them is a validly formed and existing company under the laws of India and it has full authority and all rights (including necessary licenses and approvals from competent authorities) necessary to enter into this Agreement and perform its obligations hereunder;

(ii) upon execution hereof, this Agreement shall be legally binding and enforceable against itself;

(iii) it is in compliance with and shall comply with all material laws with respect to its covenants under this Agreement and it will not do any act or thing which causes the other party to violate any such laws;

(iv) it has obtained, and shall maintain in full force during the Term all approvals and consents necessary to operate the business it is conducting in connection with this Agreement, with respect to distribution of the Channels or operation of the platform, as applicable.

13.2 The MSO undertakes, represents and warrants to the Company that:

(i) It will submit to the Company a copy of registration/license to operate the Distribution System within the permitted area and all other necessary supporting documents, including licenses/registrations of all sub-operators. The MSO confirms that it shall abide by the Cable Television Networks (Regulation) Act, 1995, as amended and shall duly inform the Company in the event of any changes or termination in its registrations or in the event of a change in names and addresses of sub-operators working under the MSO within 10 (ten) days of such change failing which it shall be construed as a breach;

(ii) the Distribution Systems used by it to exercise the rights under this Agreement meets the requirements of applicable laws and regulations, as amended from time to time, and this Agreement;

(iii) It shall not remove/shift any equipment used to avail of the signals of the Channels from the address referred to in Schedule B, without the prior written consent of the Licensor;

(iv) It shall not shift, remove, modify, misuse or tamper with the equipment used to avail of the signals of the Channels including the paper seal to prevent opening of the equipment or any signals emanating there from, in a manner that prevents the identification of the equipment number or interferes with the signals emanating there from;

(v) it shall not distribute the Channels other than by itself or through sub-operators identified in

Schedule B hereto or otherwise deal with the Channels/Services except as expressly authorized under this Agreement;

(vi) It has the appropriate net worth, good and paying subscriber base, necessary infrastructure including office, support staff and the equipment for running the Distribution System smoothly and efficiently and discharging its entire obligations under this Agreement. The MSO further represents that it is not in breach of contractual obligation to other service providers to whom it is connected;

(vii) The MSO shall not purchase any other network, sub-operator, cable operator or any other DAS distribution system without first giving the intimation of the same to the Licensor including details such as the subscriber base and agreeing upon the increased subscription fees that would be payable in such an event.

The breach of any of the above shall constitute an event of default under this Agreement and shall entitle the Company to disconnect/deactivate the service hereunder provided and/or terminate this Agreement, subject to observance of TRAI's applicable regulations, without prejudice to any other rights available to it in law.

13.3 Except as expressly set out in this agreement and to the maximum extent permitted by law, the Channels/Services are provided by the licensor on an 'as-is' 'where-is' basis without warranties of any kind whatsoever, express or implied, including in relation to quality, merchantability, fitness for purpose or non-infringement or that the services will be error free or uninterrupted.

14. INDEMNITY AND LIMITATION OF LIABILITY

14.1 The MSO shall forever keep and hold the Company and its MSO's companies, officers, directors, employees and agents fully indemnified and harmless against all claims, suits, actions, proceedings, causes of action, damages, awards, liabilities, costs and/or expenses of any kind (including reasonable attorney's fees) arising out of any actual or alleged breach of any terms of this Agreement by the MSO.

14.2 It is expressly understood and agreed between the Parties that the Company shall have no liability or obligation whatsoever under this Agreement, towards the MSO or the Subscribers, arising from and/or in respect of:

(i) any defect in any equipment attributable to or resulting from any unauthorized/improper use, tampering, negligence or failure to follow the Company's instruction, or any use of the equipment with any apparatus or equipment not authorized by the Company, in which event the Company shall not be under any obligation to provide MSO with other equipment;

(ii) any action or failure to act or default on the part of any of MSO's equipment distributor or installer;

(iii) any delay or failure in the performance of this Agreement caused by any reason or event beyond the reasonable control of the Company; or

(iv) deactivation, disconnection, interruption of the Services or termination of this Agreement by the Company in accordance with the terms of this Agreement for any reason whatsoever (including without limitation on account of the non-payment of license fee by the MSO or on account of any other breach of this Agreement by the MSO).

14.3 The MSO undertakes that it shall be solely responsible for dealings with the Subscribers and shall be liable for any claims, actions, demands or proceedings by the Subscribers arising out of the actions or omissions of MSO. Nothing in this Agreement shall entitle the Subscriber to receive the Services from the Company, notwithstanding anything contained in the contract(s) between the subscriber and the MSO or the operator/ sub-operator, including in the events of any disconnection/suspension of the Services or termination of the Agreement.

14.4 The Company shall not be liable to the MSO, any Subscriber or to any other person, whether under contract, tort or otherwise, for any indirect, special, incidental or consequential damages or for any lost profits, business, revenues or goodwill arising out of or in connection with this Agreement or the provision of the Services or inability to provide the same whether or not due to suspension, interruption or termination of the Services or for any inconvenience, disappointment due to deprivation of any programme or information whether attributable to any negligent act or omission or otherwise.

14.5 Without prejudice to the foregoing, the maximum aggregate liability of the Company for proven and awarded direct damages/losses that may arise out of or in connection with this Agreement shall not exceed the license fee actually paid by the MSO to the Company hereunder.

15. **COMPLIANCE WITH LAWS**

The MSO shall at all times adhere to all applicable laws in the territory, including but not limited to the anti-corruption and anti-bribery laws, provisions of the Foreign Corrupt Practices Act of United States of America and UK Anti-Bribery Act etc. The MSO further agrees that the MSO and any person or entity working on MSO's behalf in connection with the Services or this Agreement shall not make any payment or transfer anything of value, directly or indirectly to: any governmental official or employee (including employees of government-owned and government-controlled corporations and public international organizations); any political party, official of a political party, or candidate for public office; any intermediary, including, but not limited to, agents or family members of government officials, for payment to any government official; any other person or entity in a corrupt or improper effort to obtain or retain business or any advantage, in connection with the Company's affairs; any business entity selling a competing product in order to eliminate or restrict competition, including, but not limited to, agreements to divide the market; or any other person or entity; if such payment or transfer would violate the laws of the country in which the transaction is made.

16. **AGENCY**

Neither MSO nor Company shall be or hold itself out as the agent of the other under this Agreement. No sub-operators/Subscribers shall be deemed to have any privity of contract or direct contractual or other relationship with Company by virtue of this Agreement or by Company's delivery of the Services to the MSO.

17. **WAIVER**

No waiver by any Party of any default with respect to any provision, condition or requirement hereof shall be deemed to be a waiver of any other provision, condition or requirement hereof. No delay or omission of any Party to exercise any right hereunder on one occasion in any manner shall impair the exercise of any such right on any other occasion.

18. **FORCE MAJEURE**

Neither Party shall be liable to the other for any delay in the performance of its obligations caused by any reason or event beyond its reasonable control, including without limitation, an act of God, governmental action, civil insurrection and riot or act of terrorism, or satellite failure or satellite jamming which may affect the retransmission of signals of any of the Services to the Subscribers.

19. **ASSIGNMENT**

The MSO shall not have the right without the prior written consent of Company, to assign, transfer, convey, delegate or sub-contract this Agreement or any of its rights or obligations hereunder. The Company may assign or transfer its rights or obligations under the Agreement to any party acquiring all or a substantial portion of its business or to any corporation or entity controlling, controlled by, or under common control with the Company.

20. **NOTICES**

All notices given hereunder shall be given in writing, by personal delivery, courier, registered post AD, confirmed facsimile or electronic mail at the respective address of MSO and Company set forth above, unless either party designates another address by notifying the other Party thereof by registered post AD only, in which case all notices to such Party shall thereafter be given at its most recent address. Notice given by facsimile shall be deemed given upon receipt of confirmation report. Notice given by facsimile or electronic mail shall also be accompanied by dispatch through registered post, personal delivery or courier.

21. **SEVERABILITY**

If any provision of this Agreement is determined as invalid, illegal or unenforceable by a competent legal forum, the remaining provisions of this Agreement shall continue in full force and effect.

22. **JURISDICTION**

The governing law shall be Indian law and TDSAT shall have exclusive jurisdiction in respect of any dispute between the parties, arising out of /in connection with or as a result of the Agreement.

23. **ENTIRETY AND AMENDMENTS**

This Agreement contains the entire understanding between the Parties with respect to the subject matter hereof and supersedes any prior agreements, writings, understandings or communications in this connection. This Agreement shall not be modified, amended or varied unless otherwise mutually agreed in writing.

The terms and conditions of this RIO may be modified by the Company at any time in accordance with applicable regulations.

Schedule A – LIST OF CHANNELS

MSO shall indicate its choice of Channels by appropriately ticking the boxes below. MSO shall not select the same Channel both *a-la-carte* as well as in a bouquet.

A-la-carte:

Channel/Service	Price (INR) Per Set Top Box Per Month[#]
.. STAR Cricket	12.58*
.. STAR Sports 2	16.38*
.. ESPN	14.89*
.. STAR Sports	14.89*

.. FOX Sports News 03.82*

Bouquet:

Bouquet	Price (INR)
	Per Set Top Box Per Month[#]
.. ESPN & STAR Sports Bouquet	19.85*

* The rates above are stipulated at 42% of rates applicable to non-addressable systems in compliance with the interim order of the Hon'ble Supreme court dated 18 April 2011 passed in Civil Appeal No. 2847-2854 of 2011 but without prejudice to the Company's rights and contentions in the said appeals and appeal no. 7247 of 2011 or any other matters and would be subject to revision depending upon the orders as may be finally passed.

#Company reserves its right, subject to applicable regulations of TRAI, to revise the Price per Set Top Box per month mentioned herein above. Upon such revision, MSO agrees and unconditionally undertakes to pay the revised license fee pro rata from the effective date of such revision.

Schedule B - DETAILS OF MSO

I. Registration No. (under the Cable Television Networks (Regulation) Act, 1995, as amended)
-
Address –
.....

II.SERVICE C Band Satellite Receiver No.:

Viewing Card No.:

ESPN

STAR Sports

STAR Cricket

STAR Sports 2

FOX Sports
News

III. Address for locating equipment: _____

IV. All sub-operators and cable operators of the MSO as on the effective date of the Agreement through whom the subscribers shall receive the Service during the term of the Agreement is as follows:

S. No	Operator	Address and contact details	Area	Subscriber base

Schedule C - SPECIFICATIONS

Specifications for Set-Top-Boxes (STBs), Conditional Access System (CAS) & Subscribers Management System (SMS) for implementation of Digital Addressable Systems

(A) STB Requirements:

1. All the STBs should have embedded Conditional Access.
2. The STB should be capable of decrypting the Conditional Access inserted by the Headend.
3. The STB should be capable of doing Finger printing. The STB should support both Entitlement Control Message (ECM) & Entitlement Management Message (EMM) based fingerprinting.
4. The STB should be individually addressable from the Headend.
5. The STB should be able to take the messaging from the Headend.
6. The messaging character length should be minimal 120 characters.
7. There should be provision for the global messaging, group messaging and the individual STB messaging.
8. The STB should have forced messaging capability.
9. The STB must be BIS compliant.
10. There should be a system in place to secure content between decryption & decompression within the STB.
11. The STBs should be addressable over the air to facilitate Over The Air (OTA) software upgrade.

(B) Fingerprinting Requirements:

1. The finger printing should not be removable by pressing any key on the remote.
2. The Finger printing should be on the top most layer of the video.
3. The Finger printing should be such that it can identify the unique STB number or the unique

Viewing Card (VC) number.

4. The Finger printing should appear on all the screens of the STB, such as Menu, EPG etc.
5. The location of the Finger printing should be changeable from the Headend and should be random on the viewing device.
6. The Finger printing should be able to give the numbers of characters as to identify the unique STB and/ or the VC.
7. The Finger printing should be possible on global as well as on the individual STB basis.
8. The Overt finger printing and On screen display (OSD) messages of the respective Company should be displayed by the MSO/LCO/MSO without any alteration with regard to the time, location, duration and frequency.
9. No common interface Customer Premises Equipment (CPE) to be used.
10. The STB should have a provision that OSD is never disabled.

(C) CAS & SMS Requirements:

1. The current version of the conditional access system should not have any history of the hacking.
2. The fingerprinting should not get invalidated by use of any device or software.
3. The STB & VC should be paired from head-end to ensure security.
4. The SMS and CA should be integrated for activation and deactivation process from SMS to be simultaneously done through both the systems. Further, the CA system should be independently capable of generating log of all activations and deactivations.
5. The CA company should be known to have capability of upgrading the CA in case of a known incidence of the hacking.
6. The SMS & CAS should be capable of individually addressing subscribers, on a channel by channel and STB by STB basis.
7. The SMS should be computerized and capable of recording the vital information and data concerning the subscribers such as:
 - a. Unique Customer Id
 - b. Subscription Contract no
 - c. Name of the subscriber
 - d. Billing Address
 - e. Installation Address
 - f. Landline no
 - g. Mobile No
 - h. Email id
 - i. Service /Package subscribed to
 - j. Unique STB No
 - k. Unique VC No

CHANNELS/SERVICES OFFERED AS PART OF PACKAGE

S no	Package Name		Channel(s) contained therein		Opening Subs		Closing Subs		Average Subs	
	As per CAS	As per SMS	As per CAS	As per SMS	As per CAS	As per SMS	As per CAS	As per SMS	As per CAS	As per SMS

TOTAL OFERRING ON A-LA-CARTE/PACKAGE BASIS

S.No.	Channel Name	Opening Subs		Closing Subs		Average	
		As per CAS	As per SMS	As per CAS	As per SMS	As per CAS	As per SMS

DETAILS OF MONTHLY ACTIVATION/DE-ACTIVATION:

Month:

- Landline telephone number
- Mobile telephone number
- Email id
- Service/Package subscribed to
- Unique STB Number
- Unique VC Number
- The SMS should be able to undertake the viewing and printing historical data in terms of the activations, deactivations etc.
- Location of each and every set top box VC unit
- The SMS should be capable of giving the reporting at any desired time about:
 - The total no subscribers authorized
 - The total no of subscribers on the network
 - The total no of subscribers subscribing to a particular service at any particular date.
 - The details of channels opted by subscriber on a-la Carte basis.
 - The package wise details of the channels in the package.
 - The package wise subscriber numbers.
 - The ageing of the subscriber on the particular channel or package
 - The history of all the above mentioned data for the period of the last 2 years

1. Following parameter should be validated during the audit

1. i. Review Complete Network Diagram
2. ii. Undertaking from Operators for all SMS and CAS installed at Head end – issue of Multiple CAS / SMS
3. iii. Certificate from CAS provider for details of CA ID, Service ID, N/w ID, version and no. of instances installed. Also confirmation with respect to history of hacking
4. iv. Check the number of MUX's installed with active TS outputs. Also whether all TS from MUX are encrypted for non DAS & DAS area.
5. v. Review whether Live diagram / fibre details of network are captured in SMS system
6. vi. To check if MSO specific coding / ID is available for Finger Printing
7. vii. Confirm whether watermarking network logo for all pay channels are inserted at encoder end only
8. Review the controls deployed to ensure integrity and reliability of the reports such as logs, access controls, time stamp etc.
9. ix. Review the Subscriber parameters which are captured in the SMS and validate if following parameters are present for subscriber
 - Unique Subscriber ID
 - Subscriber Contract Details – No, Term, Date, Name, Address & contact details
 - Hardware details
1. x. Review the subscribers activation/ de-activation history in the SMS system
2. xi. Validate if the SMS is integrated with the Conditional Access (“CA”) system.
3. xii. Review if all the active and de-active STBs are synchronized in both SMS and CA system.
4. Validate if independent logs/report can be generation for active and de-active VCs with the product/channels active in both SMS & CA systems.
5. Review if the system support the Finger Printing and OSD features at Box level, Customer

account level as well as Global level.

6. xv. Validate if all the STBs are individually addressable from the System and are paired with the viewing cards.
7. Review the Electronic Programming Guide to check LCN/CDN and genre of all Channels
8. Review the various packages programmed in the Systems with respect to the subscriber reports submitted to the Company/ Aggregators.
9. Extraction and Examination of System Generated reports, statistics, data bases, etc. pertaining to the various packages, schemes, channel availability, bouquet composition, rates,
10. Review of the following reports are supported by SMS & CA System.
 1. Total no of Subscribers – active & de-active separately
 2. De-active subscribers with ageing
 3. Channel wise Subscribers - total
 4. Channel wise Subscribers – split by package
 5. Revenue by Package / Channel
 6. Subscriber/Revenue Reports by State/City
 7. No of packages/services offered
 8. List of Channels / rates of each package
 9. Rate Card Options offered / Attached with active Subscribers
 10. Historical data reports
 11. Free / demo Subscribers details
 12. Exception cases – active only in SMS or CA system

IV. STB Audit: All STB should be individually paired in advance with unique smart card at central warehouse of MSO before handing down the line distribution.

- MSO to provide details of manufacturers of STB's being used / to be used by him (OS/Software, memory capacity, zapping time). All STBs must be secure chipset with chipset pairing mandatory.
- MSO should provide one set of all type/model of boxes for testing and monitoring purpose.
- All STBs used by MSO's should be certified by their CAS vendor.
- Forensic watermarking to be implemented on the MSO headend & STBs.
- ECM/EMM base Forced messaging full screen and ticker mode should be available.
- All the STBs should have embedded Conditional Access.
- The STB should be capable of doing Finger printing. The STB should support both Entitlement Control Message (ECM) & Entitlement Management Message (EMM) based fingerprinting.
- The STB should be individually addressable from the Head end.
- The messaging character length should be minimum of 120 characters.
- There should be provision for the global messaging, group messaging and the individual STB messaging.
- The STB should have forced messaging capability.
- The STB must be BIS compliant.
- The STB must have secure chip set with mandatory pairing.
- There should be a system in place to secure content between decryption & decompression within the STB.
- The STBs should be addressable over the air to facilitate Over The Air (OTA) software upgrade.
- The STB outputs should have the following copy protections
 1.
 - i. Macro vision 7 or better on Composite video output.
 - ii. Macro vision 7 or better on the Component Video
 - 2.

output.

3. iii. HDCP copy protection on the HDMI & DVI output.
4. iv. DTCP copy protection on the IP, USB, 1394 ports or any applicable output ports.

- Types of boxes launched / to be launched:
 - Vanilla STB
 - DVR STB
 - Others (please specify)
- Please furnish STB details as following:
 - Open Standards or Proprietary?
 - Audio Video and Data I/O Configuration?
 - Local Storage?
 - Smarts Card?
 - PVR Functionality?
 - Tamper Resistance?
 - I/O Copy Protection? Please provide the details.
 - I/O Interface to Other Devices?
- Are the STB's interoperable?
- DVR / PVR STB should be compliance of following:
 - Content should get recorded along with FP/watermarking/OSD & also should display live FP during play out.
 - Recorded content should be encrypted & not play on any other devices.
 - Content should get record along with entitlements and play out only if current entitlement of that channel is active.
 - User should not have access to install third party application/software.
- Does the Set Top Box support any type of interactive middleware? Please describe.

V. Distribution Network Audit: MSO should provide below information in detail:

- Fiber network and PIT information on Geo Map.
- Service area to be defined.

VI. Anti Piracy Measure: Use of any device or software should not invalidate the fingerprinting.

- The OVERT Finger Printing should not be removable by pressing any key from the remote.
- The OVERT Finger printing should be on the top most layer of the video.
- The Finger printing should be such that it can identify the unique STB number or the unique Viewing Card (VC) number.
- The Finger printing should appear on all the screens of the STB, such as Menu, EPG etc.
- The location of the Finger printing should be changeable from the Head end and should be random on the viewing device.
- The Finger printing should be possible on global as well as on the individual STB basis.
- The Overt finger printing and On screen display (OSD) messages of the respective Company should be displayed by the MSO without any alteration with regard to the time, location, duration and frequency.
- Covert finger printing should be available.
- No common interface Customer Premises Equipment (CPE) to be used.
- The STB should have a provision that OSD is never disabled.

VII. Commercial Audit*1. Provide system generated channel-wise and package-wise reports of channels for the platform in a non-editable format.

2. Understand/ Verify the Customer Life Cycle Management process by performing a walkthrough of the following processes and their underlying systems

- Customer acquisition
- Provisioning of the subscriber in authentication, billing and SMS system
- Scheme / package change request process
- Customer Retention process, if any
- Deactivation and churn process

3. Understand/ Verify the various schemes / packages being offered to customers

- Obtain details of all approved schemes / packages and add on which are being offered to customers
- Interactions with the Operator's marketing and sales team on how the various channels are being marketed
- Any special marketing schemes or promotions
- Details of the consumers subscribing to the various schemes/ packages, including 'demo'/ free/ complimentary/ testing/ promotional subscribers

4. Understand the declaration report generation process by performing a walkthrough of processes and underlying systems (to understand completeness and accuracy of subscriber report generation process):

- Generation of reports for subscriber declaration for Channels/ bouquets
- Any reconciliations / checks /adjustments carried out before sending the declarations

5. Analyze declaration reports on a sample basis:

- Reconciling the declaration figures with base data from various systems (SMS / Provisioning / Billing and Authentication systems)
- Analyse the computation of average subscribers
- Ascertain the average subscribers for a specific period on a sample basis by generating a sample report for a given period in the presence of the representative/auditors

6. Analysis of the following - :

- Input and change controls of customer data into SMS
- SMS user access controls – authentication, authorization and logging
- Analyze system logs to identify any significant changes or trail of changes made
- Security controls over key databases and systems including not limiting to SMS, Provisioning, authentication and billing systems
- Review the system logic for the reports which are inputs to Broadcaster declarations
- Channel allocation/fixation to a particular LCN/CDN
- Mapping of subscriber id across the CRM and SMS billing system if the same is different across the systems
- Sample of activation and deactivation request logs
- Opening and closing numbers of the active subscribers for sample months (report to be taken in front of the auditors/ rep)
- Confirmation of the numbers on the middle of the month on a random chosen dates (report to be taken in front of the auditors/ representatives of both parties)

- Live Demo of the queries being put in to the system to generate different reports.
- List of CAS and SMS used by Operator in DAS area. In case more than one CAS and SMS system is used by Operator for both DAS and non-DAS areas, then understand and analyze how the two markets are segregated, controlled, reported and invoiced
- Similarly, list of head-ends of the operator providing services to both DAS and non-DAS areas and for such head-ends, understand and analyze how the two markets are segregated, controlled, reported and invoiced.

In case of multiple CAS being used by MSO, to understand synchronization between multiple CAS and SMS.

Schedule F - CA Declaration form

(On CAS Company Letter Head)

TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s _____, address: _____ having its DAS headend at _____ has installed Conditional Access System (CAS) from our company for its digital cable network.

Date of CAS Installation: _____ CAS Version: _____

CAS ID: _____, NETWORK ID: _____

With respect to the CAS installed at above mentioned headend and in terms of Schedule 1 of the TRAI (Digital Addressable Cable Television System) Notification dated 30 April 2012, we confirm the following:

1. The current version of CAS does not have any history of hacking.
2. We have the capability of upgrading of CAS in case it gets hacking.
3. The CAS is currently in use by other pay TV services and it has an aggregate of at least 1 million subscribers in the global pay TV market.
4. The CAS has the capacity to handle at least 1 million subscribers in the system.
5. We, the CAS system provider are able to provide monthly log of activation and deactivation on a particular channel or on an particular package.
6. We have the technical capability in India to maintain this CAS system on 24x7 basis through the year.
7. This CAS is independently capable of generating log of all activations and deactivations.
8. This CAS has the provision to tag and blacklist VC numbers and STB numbers that have been involved in piracy in the past to ensure that the VC or the STB cannot be redeployed.
9. The CAS is capable of individually addressing subscribers, on a channel by channel and STB by STB basis.
10. This CAS has the capability to store history logs of all activations and deactivations for the period of last 2 years for every channel and package.

Please find enclosed sample log of all activations & deactivations of a particular channel generated from this CAS system.

Thanking you,

For (CAS company name)

(Signature)

Name: _____

Designation: _____ (not below the level of COO or CEO or CTO)

Company seal:

Schedule G - SMS Declaration form

(On SMS company letterhead)

TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s _____, Registered Office address _____ having its DAS headend at _____ has installed SMS from our Company for its digital cable network.

Date of SMS Installation: _____

SMS Version : _____

With respect to the SMS installed at above mentioned headend and in terms of Schedule 1 of the TRAI (Digital Addressable Cable Television System) Notification dated 30 April 2012, we confirm the following:

1. The SMS is currently in use by other pay TV services that have an aggregate of at least 1 million subscribers in the global pay TV market.
2. The SMS has the capacity to handle at least 1 million subscribers in the system.
3. We have the technical capability in India to be able to maintain their system on 24 x 7 basis through the year.
4. We, the SMS system provider are able to provide monthly log of activation and deactivation on a particular channel or on an particular package.
5. This SMS has the provision to tag and blacklist VC numbers and STB numbers that have been involved in piracy in the past to ensure that the VC or the STB cannot be redeployed.
6. The SMS is capable of individually addressing subscribers, on a channel by channel and STB by STB basis.
7. This SMS is independently capable of generating log of all activations and deactivations.
8. This SMS has the capability to store history logs of all activations and deactivations for the period of last 2 years for every channel.

Please find enclosed sample log of all activations & deactivations of a particular channel generated from this SMS system.

Thanking you,

For (SMS company name)

-

(Signature)

Name: _____

Designation: _____ (not below the level of COO or CEO or CTO)

Company seal: