

Section 1 : In this section we are giving brief Introduction about our company

ReliableSoft is the leading Subscriber Management Services provider in India. With 18+ years of rich experience in PayTV industry, the company has developed Software Product to accommodate & fulfil requirements of PayTV Channels Distributors & Retailers (DPOs & LMOs) across India.

*ReliableSoft has expertise in providing Billing & CRM solutions to Digital Pay TV Operators across India and several other countries across Globe. Our agenda and priority is to make our system compatible with all regulations of TRAI & BECIL. Currently ReliableSoft is working to embed all the guidelines mentioned in **New Tariff order 1.0 , 2.0** to help clients meet out the mandatory norms.*

We are seamlessly managing more than 10 million Subscriber base of 100+ Digital Headends & 1000+ LMOs/JVs in India & Neighboring countries. We are the pioneers in bringing innovative technologies for PayTV industry. Our unique platform www.mycabletv.tv and advanced version of Mobile app for collection are designed to upgrade the consumer experience and improving efficiency in operational work of Digital Network Operators (DPOs / LMOs).

Section 2 : In this section, we are giving our replies on issues for Consultation regarding Standardisation of SMS

ISSUES FOR CONSULTATION

Q1. List all the important features of CAS & SMS to adequately cover all the requirements for Digital Addressable Systems with a focus on the content protection and the factual reporting of subscriptions. Please provide exhaustive list, including the features specified in Schedule III of Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations, 2017?

Reply Q1: As per the focus points in the question, please find the requirements as below :

Content protection: Comes majorly under the responsibility of CAS. SMS is limited up to the accuracy of integration between the SMS and the CAS. Also, SMS has the responsibility to Authenticate & Authorized users to make strategic decisions and control CAS functions.

Factual reporting of subscriptions: This responsibility lies with the SMS when the CAS is busy managing the distribution of secure content. Reporting becomes strong based on the data being captured and maintained. We can get subscription reporting of any selected date or time with extensive capturing of *data not limited to the dates like 7,14,21,28 which is the case these days after NTO 1.0.*

List of some of the entities on which Historical data of each activity should be maintained in the SMS system are given hereunder :

Subscriber :

1. Subscriber Contact details change history
2. Connection Count History (Important after NTO 2.0)
3. Change in Status of connection (Primary to Secondary and vice versa)
4. Transition of Connection between Disconnected / Active / Temporary Disconnected.
5. Subscription change history.

LMO :

1. LMO Contact details change history
2. LMO and DPO sharing change history of each product.

Product (Bouquet/ à-la-carte) :

1. Broadcaster **à-la-carte** relation
2. Bouquet name Change history
3. **À-la-carte** name Change history
4. Bouquet **À-la-carte** Status Change History
5. Bouquet composition change history
6. Product rate change history
7. Product wise NCF

STB/Smartcard

1. Change in location history
2. Change in status (Active/Damaged/Repaired)

In addition to the requirements mentioned in Schedule III, there are many other requirements from DPO & Broadcaster Auditors which are mandatorily required to run business of Standard level Digital Network. *Please find [Annexure-I](#) covering Standard Feature list of SMS for your kind reference.*

Q2. As per audit procedure (in compliance with Schedule III), a certificate from CAS / SMS vendor suffices to conform the compliance. Do you think that all the CAS & SMS comply with the requisite features as enumerated in question 1 above? If not, what additional checks or compliance measures are required to improve the compliance of CAS/SMS?

Reply Q2: We don't think that all the SMS comply with the requisite features as enumerated in question 1 above. Although, features mentioned above can be considered as Standard features for all SMS vendors and certainly should be considered (in full or partial) while defining the new framework for Standardization. Primarily, TRAI should finalise benchmark features of SMS apart from Schedule III features as explained in our Reply for Q7 and then all DPOs should conform those features with their existing SMS or New SMS that DPOs are going to finalise. Based on that SMS compliance can be improved.

Q3. Do you consider that there is a need to define a framework for CAS/ SMS systems to benchmark the minimum requirements of the system before these can be deployed by any DPO in India?

Reply Q3 : Yes, we strongly recommend that TRAI should define a framework for SMS systems to benchmark the minimum requirements of the system before these can be deployed by any DPO in India.

Q4. What safeguards are necessary so that consumers' as well as other stakeholders do not suffer for want of regular upgrade/ configuration by CAS/ SMS vendors?

Reply Q4: If all stakeholders follow the standard guidelines of TRAI without much customization of requirements, discuss the requirement well in advance, provide proper time frame for documentation, design & development, testing, staging, UAT and most importantly ready to pay for such new enhancements or requirements then SMS vendor might ensure timely upgradation / Configuration required at DPO end. DPOs are paying for product they are using on SaaS model but any new requirement including 3rd party solution integration which is not part of Agreement between DPO & SMS vendor incur additional Cost which DPO has to pay additionally. Any requirement which is part of Agreement shall be provided on FOC basis during the Agreement term including all TRAI Compliance meeting requirements (eg. Schedule III requirements, Tariff order requirements, NTO 1.0 & NTO 2.0 etc.).

Q5. a) Who should be entrusted with the task of defining the framework for CAS & SMS in India? Justify your choice with reasons thereof. Describe the structure and functioning procedure of such entrusted entity.

Reply Q5(a) : According to us, Standardization Testing and Quality Certification (STQC) Directorate should be entrusted with the task of defining the framework for SMS in India. As STQC Directorate already providing Quality Assurance and conformity assessment services in the area of Electronics and Information Technology (IT) related to Information Security, Software Testing/Certification and Development of National Level Assurance Framework in IT and software sectors ([Referring Point No. 4.5.4 of Consultation Paper](#)), So we recommend STQC to be entrusted with this task.

(b) What should be the mechanism/ structure, so as to ensure that stakeholders engage actively in the decision making process for making test specifications / procedures? Support your response with any existing model adapted in India or globally.

Reply Q5(b): We suggest that Professional SMS vendors with atleast 10 SMS Installations in India should be informed well in advance via email or message before taking any decision for making test specifications / procedures. This will help stakeholders to take participation in any decision making process.

1. SMS is key entity to run Digital Network business and providing an independent view to TRAI about the Digital Products Periodic usage, Actual STB Activation/Deactivation counts, Pricing & Billing Information for LMOs & end-consumers and with many other mandatory information about Digital Network. If new standards are being setup, it is imperative that SMS vendors should be involved in the decision making.
2. In the proper RACI matrix, SMS vendors would be the consultants while the responsibility will stay with the entrusted entity as suggested in [Point No. 5\(a\)](#) above.

Q6. Once the technical framework for CAS & SMS is developed, please suggest a suitable model for compliance mechanism.

- a) Should there be a designated agency to carry out the testing and certification to ensure compliance to such framework? Or alternatively should the work of testing and certification be entrusted with accredited testing labs empaneled by the standards making agency/ government? Please provide detailed suggestion including the benefits and limitations (if any) of the suggested model.

Reply Q6(a): We suggest that QCI should be designated to carry out testing and certification to ensure compliance to such framework. QCI can ensure the Quality of new framework designed by STQC on regular basis and might suggest further improvement required in new framework, if any.

(b) What precaution should be taken at the planning stage for smooth implementation of standardization and certification of CAS and SMS in Indian market? Do you foresee any challenges in implementation?

Reply Q6(b): We suggest that multiple detailed discussions are required to make every Stakeholder understand the importance of new framework. Properly planned training sessions shall also be part of such discussions to ensure smooth implementation of standardization and certification of SMS in Indian market. After such discussions & Training sessions, we recommend that a network level certification program should be conducted to ensure that all DPOs/LMOs comply with the new Framework. Further, Separate Training Program should be conducted for DPO/LMO officials and should be made compulsory for the DPO to have at least one person (for eg. Nodal Officer) to get the above mentioned certification. This certificate program should cover all the standard information related to run a DPO business. It is expected that the DPO equipped with the information gained by this training program & Certification will be able to safeguard its business from sub-standard solutions as concern raised in **Point No. 1.9 of Consultation Paper** and can take decision more efficiently.

As we see, there is very limited education on the ground in context with implementation of New Tariff Order 1.0, 2.0 & Schedule III mandatory requirements to run Standard level Digital Network in Indian Market, so we suggest that above mentioned precautions should be taken care to safeguard smooth implementation of standardization and certification of CAS and SMS in Indian market.

(c) What should be the oversight mechanism to ensure continued compliance? Please provide your comments with reasoning sharing the national/ international best practices.

Reply Q6(c) : Considering the dynamic nature of the PayTV industry the certification program of any Digital Network mentioned in Point No. 6(b) above should be bound to have regular upgradation courses to renew their DAS License validity. This certification program should be affiliated with BECIL (as it has already having experience of conducting Audits at the DPO headends). Further, BECIL can give affiliation to any recognized institution having zone wise centers (viz. North, South, East, and West) and thus ensuring to reach each & every Digital Headend installed across length & breadth of Indian Market.

Q7. Once a new framework is established, what should be the mechanism to ensure that all CAS/ SMS comply with the specifications? Should existing and deployed CAS/ SMS systems be mandated to conform to the framework? If yes please suggest the

timelines. If no, how will the level playing field and assurance of common minimum framework be achieved?

Reply Q7 : We suggest there should be detailed Audit performed by entrusted entity as suggested in [Point No. 5 \(a\)](#) above of the mechanism to ensure that all SMS comply with the specifications. Yes, existing and deployed SMS systems be mandated to conform to the framework. We suggest that based on the Digital Network current practical complexities of Business Operations on ground, 3-6 months time frame atleast should be given to implement new framework.

Q8. Do you think standardization and certification of CAS and SMS will bring economic efficiency, improve quality of service and improve end- consumer experience? Kindly provide detailed comments.

Reply Q8: Yes, we think that standardization and certification of CAS and SMS will bring economic efficiency, improve quality of service and improve end- consumer experience. The sub-standard solution after sometime indirectly enforce DPOs to upgrade to Standard solution to meet benchmark features of Standard Solution as per TRAI guidelines, but valuable time, money & efforts in the implementation of sub-standard solution become insignificant. And in case, DPO continue to migrate from one sub-standard solution to another, then certainly it will increase the Capital & Operational expenses of DPOs (for eg. paying upfront charges every time, paying migration & Training cost for new system, Loss due to interruption of Pay TV services ruining consumer experience etc.) which in turn increase the cost of LMOs & finally end-consumers because definitely DPOs will try to recover that overhead cost from other entities in the value chain.

Q9. Any other issue relevant to the present consultation.

Reply Q9: There are some issues relevant to the present consultation. Please find some issues below which should be strongly considered while defining new framework to resolve such issues up to some extent and improve Digital Network Headend Business Operations :

Issue 1: CAS companies should not be allowed their own SMS software (*Referring Point No. 1.9 of Consultation paper*). Having both Solutions from one company has possibility of following issues :

1. Conflict of Interest in generating an authentic report for audit purposes and might create integrity issues. There is high possibility of discrepancy between CAS and SMS reporting to be hidden which would not allow an independent auditor to find mismatches.
2. What if DPO having multiple CAS installed at his headend or require multiple CAS systems to be deployed at his headend? DPO might face conflict for getting support in this case.
3. DPO would be under obligation to take one SMS per CAS. This means each DPO will have multiple SMS systems to support and thus increase the work & Operational cost for each DPO resulting in increased overhead expenses. Also, it will be very difficult to consolidate all data for analysis and reporting, whether it is required for DPOs or for Auditors.
4. CAS vendors are experts in their own domains and SMS vendors are experts in their domain. If the CAS vendors are given the opportunity to create SMS software, the software will be sub-standard. As it has been seen many times in the past that the DPO will likely need to switch to a third-party Professional SMS for proper Network Management and fulfill all TRAI compliance requirements. We recommend that if any CAS company is providing their own SMS that should be stopped immediately to control such issues mentioned above.
5. We strongly oppose considering SMS vendors as 3rd party vendors rather should be considered as important entity under Digital Network operations.

Issue 2: Sync Report of CAS & SMS and Standardized CAS Report format not available

It has been observed that the reporting provided by different CAS are not following single standard. In relation to the already mentioned importance of having separate CAS and SMS vendors in Suggestion 1, it is in utter importance to have a mechanism to sync the data of both CAS and SMS and to trace the data mismatches at the DPO headend on periodic basis that shall ensure correctness of Standard SMS solution & Authenticity of reports required during Audits.

For the above purpose, CAS should provide a standard report with the minimum fields as listed below. This report should be generated as-on-date and will help DPO to sync Report of CAS & SMS with particular date criteria.

1. STB NO.
2. VC No.
3. Product Code
4. Start Date of entitlement
5. End Date of entitlement
6. Status of card (Active/Inactive)

Most Importantly, with the help of the above required report from CAS system, Standard SMS should have Data Sync tool to generate mismatch report between SMS & CAS, if any.

Issue 3: Due to the lack of Investment Capabilities and Technical Knowledge, the DPOs are not even able to procure the basic infrastructure requirements for implementation of SMS like :

1. Servers (Application server, Database server, Reporting server / Staging server),
2. Disaster Management tools (Backup utility software, NAS / External hard disk / backup server / redundant server)
3. Software licensing (Operating System, Database etc.)
4. Antivirus / Anti-Malware Software
5. Hardware Firewall for network

SMS/CAS providers are forced to implement their solutions without the above-mentioned minimum requirements.

Annexure-I

1. It is evident that Standard & Professional SMS Should mandatorily Follow all Features required as per Schedule III and need not require explanation of those features in this document.
2. Apart from Schedule III, We Suggest that some of the Standard & Professional SMS Key Modules & Features should be mandatorily included in next version of Schedule III Features requirement. Some of the Key Modules & Features are listed below :

Company Management Module & Features	Stake Holder(s) Effected
<p>Company creation with hierarchy (National Level DPO, State Level DPO, JV's/Distributors, Sub Distributors, LMO & Sub LMO) (Single & Bulk)</p> <p>Feature Summary: This feature is required to define hierarchy of all Business Partners associated with Digital Network Headend to Manage all Digital Assets and Generate Reports accordingly</p>	DPO
<p>Set Billing Entity of Operator to Manage & Auto Calculate Taxes</p> <p>Feature Summary: This feature is required to define Billing entity who shall generate Monthly billing for LMOs & Subscribers. This feature should also facilitate Auto calculation of Central & State Taxes as per Billing Entity Registration with Government departments.</p>	DPO/ Government
Employee & User Management Module & Features	Stake Holder(s) Effected
<p>Employee & User Creation (Single & Bulk)</p> <p>Feature Summary: This feature is required to create an account (Single & Bulk) for users & employees will allow them to access data in SMS and to interact on any enabled features such as third parties, business documents, and any modules according to their permissions.</p>	DPO
<p>Company Permission</p> <p>Feature Summary: Each User should have access to selected companies only. this is needed for the situations where on the one hand LMOs with more than one company and on the other hand, the backend users assigned to look after multiple companies' data are using the software, and data privacy is important.</p>	DPO / LMO
Product Management Module & Features	Stake Holder(s) Effected
<p>Channels Creation with NCF Value & Applicability Setting (Single & Bulk)</p>	DPO

<p>Feature Summary: Channel details with NCF definition should be administered with this Feature of Manage Channels. Various properties of each channel should be available in this feature</p>	
<p>Channels Modification with Historical Info (Single & Bulk)</p> <p>Feature Summary: The history of the modification of channel properties needs to be managed. For eg. Broadcaster or Name of the channel may change depending on the change in the status of the business entity. All such changes should not affect the old reports extracted earlier.</p>	DPO
<p>Package Creation for Broadcaster & DPO with NCF Value & Applicability Setting (Single & Bulk)</p> <p>Feature Summary: This module is required to manage all the Bouquets/Packages along with the related info like its Broadcaster or DPO Package, NCF configuration, and package content.</p>	DPO
<p>Package Modification with Historical Info (Single & Bulk)</p> <p>Feature Summary: The history of the modification of Bouquets/Package properties needs to be managed. For eg. Broadcaster or Name of the Bouquets/Package may change depending on the change in the status of the business entity, Bouquets/Package, changes in the content policy also need to be auditable for all the changes in history. All such changes should not affect the old reports extracted earlier.</p>	DPO
<p>CAS Product IDs Update for Packages & A_la_carte Channels (Single & Bulk)</p> <p>Feature Summary: This feature is important for the smooth working of SMS and CAS integration. It is used to link the products created in CAS with the product info being managed in SMS. This link is further used to create commands receptive to the selected product.</p>	DPO
<p>Channel Detail Update DHE wise (Single & Bulk)</p> <p>Feature Summary: This feature is needed by the DPOs having sub-Digital-Headend to manage their large territory. Based on the EMM list of products they can link each channel with its respective sub-Digital-Headend.</p>	DPO
<p>Historical Data Management of Broadcasters, DRP, MRP & Product Name</p>	DPO/Broadcaster

<p>Feature Summary: This feature will be useful for DPO & Broadcaster to manage product historical reports. Periodic data of product broadcaster change, name change, MRP & DRP change is always required for reporting purpose</p>	
<p>NCF Policy Creation</p> <p>Feature Summary: This feature came into existence due to the NTO norms released by TRAI. All the NCF (Network Connection Fee) related norms mentioned by NTO1.0 and NTO2.0 should be covered under this feature. This feature should further help to produce auto calculations of NCF during transactions in SMS.</p>	<p>DPO/LMO</p>
<p>Product Revenue Sharing Between Broadcaster & DPO (Single & Bulk)</p> <p>Feature Summary: As per the agreement between DPO and Broadcaster, a sharing has to be defined in the system to calculate Broadcaster share, and based on this share, a further calculation is done to calculate sharing with LMOs. This provision of defining Revenue sharing between Broadcaster and DPO should be there in the system in both bulk and single mode. With the option to maintain it historically.</p>	<p>DPO/Broadcaster</p>
<p>Product Revenue Sharing Between LMO & DPO Entity (Single & Bulk)</p> <p>Feature Summary : As per the agreement between DPO and LMO a Product Revenue sharing has to be defined in the system to calculate DPO and LMO share and based on this share, further deduction or reversal entries are auto-generated during the various transactions. This provision of defining Product Revenue sharing between DPO and LMO should be there in the system in both bulk and single-mode. With the option to maintain it historically.</p>	<p>DPO/LMO</p>
<p>NCF Revenue Sharing Between LMO & DPO Entity (Single & Bulk).</p> <p>Feature Summary : As per the agreement between DPO and LMO, an NCF Revenue sharing has to be defined in the system to calculate DPO and LMO share, and based on this share, further deduction or reversal entries are auto-generated during the various transaction. This provision of defining NCF Revenue sharing between DPO and LMO should be there in the system in both bulk and single-mode. With the option to maintain it historically.</p>	<p>DPO/LMO</p>
<p>Inventory Management Module</p>	<p>Stake Holder(s) Effected</p>
<p>STB & VC Pattern Setting to Avoid Wrong STB & VC Serial Number Updating in SMS.</p>	<p>DPO</p>

<p>Feature Summary: This feature will help LMO to eliminate standard human error while adding STB & VC in stock, which often occurs due to manual data accumulations. Pattern serialization provides fast and reliable solutions.</p>	
<p>STB & VC Transfer from Main Warehouse to Operator Warehouse (Single & Bulk)</p> <p>Feature Summary: This feature will help DPO/LMO to maintain record of stock transfer between warehouses, to access real-time stock at each location.</p>	DPO/LMO
<p>STB & VC De-Allocation, Allocation, Replace (Single & Bulk)</p> <p>Feature Summary: This is a basic feature that is very important for general day to day operations. In a life cycle of any connection, the STB and VC are allocated to it or it is deallocated. At times we need to perform both at a time known as a replacement. Reasons behind such operations may be like surrender of hardware or replacement of faulty hardware. This operation helps in the management of Inventory too.</p>	DPO/LMO
<p>CRM Management Module</p>	Stake Holder(s) Effected
<p>Activity Head, Category, Reason Creation for Call Center</p> <p>Feature Summary: By providing master entries to create Activity Head (Ticket /Complain Head), category and reason, DPO will get the flexibility to Manage CRM more efficiently, without depending on the vendor to manage CRM. Further reporting based on these custom heads, category and reason will be helpful to the DPO in finding out the pinpoint areas.</p>	DPO
<p>Ticketing Creation & Updation.</p> <p>Feature Summary: This feature provides centralized ticketing for all the Customer-generated queries, complaints, and internal departmental issues. A well-managed ticket flow supports efficient closure of tickets which in turn earns customer satisfaction.</p>	DPO/ LMO/ Consumer
<p>LMO & Subscriber's Billing Module</p>	Stake Holder(s) Effected
<p>Prepaid & Postpaid Billing of LMOs & Subscribers</p> <p>Feature Summary: SMS should support both pre-paid and post-paid billing options for subscribers and LMOs. In today's world Subscriber are free to choose their mode of Billing and TRAI has also made it mandatory for DPO's to provide this facility to the End Subscribers. Even conversion from Prepaid to Postpaid or vice versa should be available in SMS.</p>	DPO/ LMO/ Consumer

<p>LMO & Subscriber Billing with 30 Days Mode and Month-wise Mode</p> <p>Feature Summary: This feature is required to provide an option to DPO to choose the convenient duration for bill generation of LMOs/Subscribers. They can go for fixed 30days or Month-wise (28Day Month,29Day Month, 30Day Month, or 31Day Month) to automatically create invoices based on recurring duration and subscriptions.</p>	<p>DPO/ LMO/ Consumer</p>
<p>Reversal or Generating Credit notes for LMO and Subscriber when a product is removed, or box is deactivated.</p> <p>Feature Summary: Feature to generate credit note is mostly required by the DPO's to provide a credit memo to LMO or Subscriber as a source document for the reversal amount that a DPO owes to an LMO/Subscriber under the terms of an earlier invoice, due to the product removal or box deactivation. This memo is generated in an automated way when the transaction causing it is done.</p>	<p>DPO/ LMO/ Consumer</p>
<p>NCF Amount Reversal with True/False Setting Base for LMO & Subscriber on Pro-rata basis</p> <p>Feature Summary: Feature of NCF Reversal setting of the SMS is a useful module for DPOs to enable or disable NCF reversal setting for LMO & Subscriber. If a midterm change is done in the subscribed products the amount of NCF is refunded to the subscriber/LMO based on the value of this setting as "enabled". The calculation is done on a pro-rata basis.</p> <p>The DPOs in the interest of their business need to do micro amendments in their billing flow with the help of such settings provided in SMS</p>	<p>DPO/ LMO/ Consumer</p>
<p>Itemized LMO & Subscribers Billing formats with Product Subscription</p> <p>Feature Summary: This feature is required to bring transparency in the billing system. With itemized billing, a detailed view of Products Subscribed along with Subscription Period is available to the LMOs and Subscribers which helps them in analyzing their billing period usage. In addition to Subscription details, debit or credit notes, discounts, payments done, or any other transaction entry generated during the billing period should be available in this Itemized format.</p>	<p>DPO/ LMO/ Consumer</p>
<p>Text Message & Mailing Module</p>	<p>Stake Holder(s) Effected</p>
<p>Notification on Receipt, Invoice and Complaints creation to LMOs and Subscribers</p> <p>Feature Summary: Various notifications are needed to be sent to Subscribers and LMOs. This module is very much required to view, store, compose messages and send the messages via email or short messages on mobile to LMO & Subscriber. Some examples of notification are Invoice/Bill Generated, Amount received against a Bill, Complaint ticket Registered, etc.</p>	<p>DPO/ LMO/ Consumer</p>

<p>Daily Auto Mailing of Last Night Expired & Renewed STBs Details to DPO</p> <p>Feature Summary: This feature of automatic emailing allows DPOs to receive real-time, one-to-one emails on daily reports for last night expired STBs & renewed STBs. Any unusual deviation is identified and resolved in the early stages due to these daily reports.</p>	<p>DPO</p>
<p>Daily Auto Mailing of Next Day Expiring STBs details with required amount to DPO</p> <p>Feature Summary: This feature of automatic emailing allows DPOs to receive real-time, one-to-one emails on daily reports for upcoming expiring STBs counts and required amount for renewals of the listed STBs. Based on this report DPOs can have a discussion with the LMOs if the balances are low.</p>	<p>DPO</p>
<p>Auto Text Massaging & Mailing for Subscriber & LMOs Related to CRM Complain Management</p> <p>Feature Summary: This feature of automatic text messaging & emailing allows user to manage CRM Complaint Management and sent relevant information to subscriber and LMOs.</p>	<p>DPO/ LMO/ Consumer</p>
<p>LMO Invoice mail with PDF Attachment</p> <p>Feature Summary: This feature of email module is required by DPO to send invoice copy to LMOs as .pdf attachment and to keep a record of it.</p>	<p>DPO/ LMO</p>
<p>LMO & Subscriber Management Module</p>	<p>Stake Holder(s) Effected</p>
<p>LMO Mobile App & Web Portal for Different Activities on Daily Basis</p> <p>Feature Summary: These days it is mandatory to have an SMS interface on 2 platforms i.e. Web-Browser and Mobile Phones. Feature of interactive self-service web portal and mobile application for LMO's is required to manage their accounts and get have all the daily activities like Activation, De-activation, renewals together with channel/package management. This LMO Mobile App & Web Portal will be controlled by DPO</p>	<p>DPO/ LMO</p>
<p>Fresh Subscriber STB Activation, STB Re-Activation Single & Bulk (available with Products Revenue Sharing Details in single mode)</p>	<p>DPO</p>

<p>Feature Summary: To manage subscribers, STB Activation & Re-Activation is a key feature for LMO to activate the new connections and re-activate the DC connection by defining the product revenue sharing b/w LMO & DPO. STB Activation & Re-Activation process should be available in bulk also.</p>	
<p>STB De-activation / Temporary De-activation Single & Bulk</p> <p>Feature Summary: To manage subscribers STBs, feature of STB De-Activation & Temporary De-Activation is required by LMO to de-activate the connections and make temporary de-activation with reversal calculation for subscriber and LMO. STB De-Activation & Temporary De-Activation process should be available in bulk also.</p>	<p>DPO/ LMO/ Consumer</p>
<p>Product Addition, Product Removal, Product Change, Product Renewal Single & Bulk (available with Products Revenue Sharing Details in single mode)</p> <p>Feature Summary: Channel package management should be available in SMS for DPO/LMO to manage product subscription and perform activities like Product Addition, Removal, Renewal and Product Change on subscriber STBs (In Bulk also). One can define Products Revenue Sharing while doing these activities on single connection.</p>	<p>DPO/LMO</p>
<p>Auto & Manual Setting for STB Renewals – Product wise & Connection wise (Single & Bulk)</p> <p>Feature Summary: SMS provide service that requires renewal in a certain time period (yearly, monthly, quarterly, etc.), so auto and manual STB renewals setting is must require for LMO to use the Auto Renewal feature for bulk renewals. This feature will capture all the details required for the STB auto/manual-renewal before expiry.</p>	<p>DPO/ LMO/ Consumer</p>
<p>STB & VC Pairing / De-Pairing (Single & Bulk)</p> <p>Feature Summary: SMS should have STB & VC Pairing feature to set up a secure communication between set-top box and smart card for the benefit of service providers and the legal rights of users.</p>	<p>DPO</p>
<p>Daily Auto OSD on STBs Before STB Expiry Date</p> <p>Feature Summary: Feature to send OSD on subscriber STBs with renewal details before expiry date is very much required for LMO to send up-coming expiry notification to his subscribers with amount and expiry date.</p>	<p>DPO/ LMO/ Consumer</p>
<p>Renewal (Package Wise & Connection Wise) Both</p> <p>Feature Summary: Product Renewal and Connection Renewal module of SMS is useful module that will empower users to handle billing cycles and recurring payments and</p>	<p>DPO/ LMO/ Consumer</p>

make it manageable. They will be allowed to toggle automatic renewals, but also renew services before the due date as well as freely alter the billing cycle of any owned product.	
LMO / Subscriber Debit & Credit Note (Single & Bulk) Feature Summary: This feature of SMS to create debit note and credit note is useful for DPO & LMO. As credit note, debit note are also involved in business-to-business transactions and include details such as date on which the debit note was issued by the user, a serial or unique identification number, description of previous business transaction, details of product reversal including tax and the signatures of the appropriate company authorities.	DPO/ LMO/ Consumer
Resend CAS Commands (Re-Pair, Re-Entitle, Re-Activation, Re-Deactivation, Re-Add Card) Feature Summary: Feature of Resend CAS Commands is required in SMS for DPOs to Resend Commands , if numbers of sent CAS Commands available in the queue shows error or a subscriber complaint that de-activation is not done and system show de-activation command sent. Resend feature should support Re-Pair Command, Re-Entitle Command, Re-Activation Command, Re-Deactivation Command & Re- Add Card.	DPO/ LMO
Subscriber Conversion (Postpaid to Prepaid or vice versa) Feature Summary: Subscriber conversion from post-paid to prepaid is must require feature for SMS. As most of LMOs and Subscriber wants to migrate their connections from post-paid to prepaid with the same product policies and subscription tenure.	DPO/ LMO
CAS Provisioning Module	Stake Holder(s) Effected
OSD ECM & EMM Based on STBs According to Fields Available in CAS (Single & Bulk)	DPO
OSD Global ECM & EMM Based on STBs According to Fields Available in CAS	DPO
Finger Print ECM & EMM Based on STBs According to Fields Available in CAS (Single & Bulk)	DPO
Finger Print Global ECM & EMM Based on STBs According to Fields Available in CAS	DPO

Cancel OSD & Finger Printing on STBs According to Features Availability in CAS (Single & Bulk)	DPO
B-Mail on STBs According to Fields Available in CAS (Single & Bulk)	DPO
B-Mail Global on STBs According to Fields Available in CAS	DPO
Blacklisting of STB-VC (Single & Bulk)	DPO / LMO
Set Default Bootup Channel on STBs	DPO
All Type of CAS Commands Provisioning Log Report with Multiple Criteria	DPO / LMO
User's Log Reporting Module	Stake Holder(s) Effectuated
Application Panel User Detail Log Report with Assigned Permissions Feature Summary: With this module DPO can manage user detail logs with the id of users on each login event. User can view the listing of recently logged users, ID and time with username and uid filter, this feature will provide data for other modules to use for analytical and authentication purpose as per the user assigned permission.	DPO / LMO
User Activity Log Reports Feature Summary: With this module DPO can easily track users work history they have performed. DPO will have the rights to track user activity for every individual user. While every individual can't track other user's activity it will work as per the assigned permission. What changes were made and who made them can be easily known with this module. Again, the users other than user's with permission can't deleted records stored in user activity log.	DPO / LMO
Analytics & Reporting Module	Stake Holder(s) Effectuated
Total Active STB, In-Active STB Count on Dashboard According to Permission Feature Summary: Information on daily updated counts of Total Active STB & In-Active STB is required for both DPO and LMO for day to day business requirements and for reporting purpose. LMO can see this information on dashboard with permission only.	DPO / LMO
Total STB & VC Stock Count on Dashboard According to Permission	DPO / LMO

<p>Feature Summary: Information on daily updated counts of Total STB In Stock & VC In Stock is required for both DPO and LMO for day to day business requirements and for reporting purpose. LMO can see this information on dashboard with permission only.</p>	
<p>Total Number of Product & STB Expiring Detail till given future Date on Dashboard According to Permission.</p> <p>Feature Summary: Information on daily updated counts of Total Numbers of Product Expiring & STB Expiring Detail till required upcoming date is required for both DPO and LMO to send notification to subscriber for payment and renewal. LMO can see this information on dashboard with permission only.</p>	DPO / LMO
<p>Today's Fresh Activation Count, De-Activation Count, Re-Activation Count, Product Addition Count, Product Removal Count on Dashboard According Permission.</p> <p>Feature Summary: Information on current date updated counts of Total Today's Fresh Activation Count of STB, De-Activation Count of STB, Re-activation Count of STB, Product Addition Count & Product Removal Count is required for both DPO and LMO for day to day business requirements and for reporting purpose. LMO can see this information on dashboard with permission only.</p>	DPO / LMO
<p>Total Active & Inactive Subscriber's Details with Multiple Criteria</p> <p>Feature Summary: Detail report on Active and Inactive Subscriber is required for both DPO and LMO for day to day business requirements and for reporting purpose. User should generate or filter this report with multiple criteria like City wise, State wise, Colony wise, LMO wiseetc.</p>	DPO / LMO
<p>All Reports with Multiple Criteria (Network Wise, Product Wise, State-City Wise & Broadcaster Wise)</p> <p>Feature Summary: All the available reports in SMS should have multiple criteria like Network Wise, Product Wise, State-City Wise & Broadcaster Wise, so DPO / LMO can generate the reports in required criteria with permission.</p>	DPO / LMO
<p>Complete Inventory Report of STB In Detail wise & Summary Wise.</p> <p>Feature Summary: Feature of STB inventory report (Detail & Summary) is required in SMS to keep a comprehensive account of the STB in stock, VC in stock, Active STB/VC on ground & De-activated STB/VC on ground.</p>	DPO / LMO
<p>All, Selective & Single Boxes Current Status With their First Time Activation Date</p> <p>Feature Summary: Information on current box status of All the boxes, Selective boxes or Single box is required for both DPO and LMO for day to day business requirements and for reporting purpose. LMO can see this information on dashboard with permission only.</p>	DPO / LMO

<p>Daily Expiry Report with Required Renewal Amount in Pre-paid mode</p> <p>Feature Summary: Report on daily product expiry with required amount for renewal of prepaid subscriber till required upcoming date is required for LMO to send notification to subscriber with product expiry date for payment and renewal.</p>	DPO / LMO
<p>LMO Ledger Details of Deduction & Reversal with their Respective Activity Heads Information</p> <p>Feature Summary: Detail LMO ledger is required in SMS to show LMO the details of every amount deduction transaction and reversal transaction of his accounts. These transactions are generated whenever he issues Invoices to subscriber, de-activate the connection, add product & remove product so LMO's detail ledger of all the transaction should come with respective activity heads.</p>	DPO / LMO
<p>Subscriber Ledger Details of Deduction & Reversal with their Respective Activity Heads Information</p> <p>Feature Summary: Detail Subscriber ledger is required in SMS to show LMO & Subscriber the details of every transaction of amount deduction and amount reversal of subscriber accounts. These transactions are generated whenever he receives Invoices from LMO, de-activate the connection, add product & remove product on his connection so subscriber's detail ledger of all the transaction should come with respective activity heads.</p>	DPO / LMO
<p>Easy Export Option to Extract the All Type of Reporting</p> <p>Feature Summary: All the available reports in SMS must have Export option to easily export the report in Excel or PDF.</p>	DPO / LMO
<p>DPO & LMO Earning Report</p> <p>Feature Summary: DPO and LMO Earning Report is a unique report, useful for both DPO & LMO in which DPO can see his net earning with LMO's billing details and their sharing and LMO can select Billing period from Date & To Date to see LMO & Subscriber both billing details in single report as per defined rates of subscriber's & defined sharing of LMOs.</p>	DPO / LMO
<p>Subscriber Due Report</p> <p>Feature Summary: This report is required to manage subscriber's due amount. LMOs can use this report to see the subscriber details, their due amount with due date and send his collection boy for collection or send notification to subscriber for online payment.</p>	DPO / LMO
<p>All LMO Company Listing Report (Required During Broadcaster Audit)</p> <p>Feature Summary: This report is required for DPO to view detail of all the LMO company listing in one report. Company Name, Company Code, Billing Type, Under Companies, ...etc.</p>	DPO / LMO
<p>STB-VC History Report Transaction Date wise</p>	DPO / LMO

<p>Feature Summary: This report is required by LMO to view History of STB-VC transactions like Activation Date, Location, Products, De-Activation Date...etc date wise.</p>	
<p>Ticket Listing Report with Multiple Criteria</p> <p>Feature Summary: Ticket Listing reporting enables you to monitor daily ticket activity, raised issues, average resolution times, and so on. It will be easy for user to filter the report and generate it, if this report will be available with multiple criteria like; City, State, LMO, Colony & Subscriber.</p>	DPO / LMO
<p>STB-VC Pairing & De-Pairing Details Report.</p> <p>Feature Summary: STB-VC Pairing & De-Pairing Details Report is required by LMO for day to day business requirements and STB-VC stock update.</p>	DPO / LMO
<p>LMO & Subscriber Receipt Details Report.</p> <p>Feature Summary: LMO & Subscriber Receipt Details Report is required to gives user a detailed overview of all Receipts have created in a given time period. User is also able to customize this to show a particular range of receipts with the optional filters.</p>	DPO / LMO
<p>Periodic Fresh Activation, De-Activation, Re-Activation, Product Addition, Product Removal Report.</p> <p>Feature Summary: Historical information on the counts of Fresh Activation of STB, De-Activation Count of STB, Re-activation Count of STB, Product Addition Count & Product Removal Count is required for both DPO and LMO for day to day business requirements and for reporting purpose. LMO can see this information with permission only.</p>	DPO / LMO
<p>TRAI & Broadcaster's Audit Reporting Module</p>	Key features
<p>AsOnDate Active-Inactive Subscriber's Details.</p> <p>Feature Summary: AsOnDate Active-Inactive Subscriber's Detail report is required by DPO to generate the active and in-active subscriber detail report on 7,14,21& 28 days of month and submit it to the broadcaster.</p>	As per Schedule III
<p>Product wise AsOnDate Active-Inactive Subscriber's Details</p> <p>Feature Summary: Product wise AsOnDate Active-Inactive Subscriber's Detail report is required by DPO to generate the active and in-active subscriber detail report product wise on 7,14,21& 28 days of month and submit it to the broadcaster.</p>	As per Schedule III
<p>Month End wise Subscriber's Active-Inactive Historical Details</p> <p>Feature Summary: Month End wise AsOnDate Active-Inactive Subscriber's Detail report is required by DPO to generate the active and in-active subscriber detail report monthwise on 7,14,21& 28 days of current month and previous months (Historical detail) and submit it to the broadcaster.</p>	As per Schedule III

<p>AsOnDate Package-Channel Composition Details</p> <p>Feature Summary: AsOnDate Package-Channel Composition Detail report is required by DPO to generate the package- channel composition detail report (like Added Channels, Added Add-on packs, Channel Genre & Broadcaster) monthwise on 7,14,21& 28 days of current month and submit it to the broadcaster.</p>	<p>As per Schedule III</p>
<p>Historical Package-Channels Composition Details (Package-Channels Composition Modification Log)</p> <p>Feature Summary: Historical Package-Channel Composition Detail report is required by DPO to generate the package- channel composition detail report (like Added Channels, Added Add-on packs, Channel Genre & Broadcaster) monthwise on 7,14,21& 28 days of current month and previous months (Historical detail) and submit it to the broadcaster.</p>	<p>As per Schedule III</p>
<p>Product & Subscriber Ageing Report</p> <p>Feature Summary: Product & Subscriber Ageing Report is required in SMS to find out the ageing of product subscription on a connection (STB).</p>	<p>As per Schedule III</p>
<p>A_la_Carte wise Active STB's Count Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the count of monthly subscribers according to a-la-carte channels. This will also show the channel names as a-la-carte channels if they are included in DPO bouquet or as the a-la-carte channel.</p>	<p>As per Schedule III</p>
<p>Package wise Active STB's Count Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the count of monthly subscribers according to bouquet wise. This will also show the broadcaster bouquets if they are included in DPO Pack and Add-on.</p>	<p>As per Schedule III</p>
<p>Channel Under Package wise STB's Count Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the count of package wise monthly subscribers with channel details come under those packages. This will also show the broadcaster bouquets if they are included in DPO Pack and Add-on.</p>	<p>As per Schedule III</p>
<p>Package & A_la_Carte wise Active STBs Count Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the total counts of monthly active subscribers of broadcaster a-la-carte channels & Broadcaster/DPO Packages. This report will include all type of Broadcaster a-la carte channel subscription whether it's subscribed as a-la-carte channel or as part of Bouquet.</p>	<p>As per Schedule III</p>

<p>Unique Channels wise Active STB's Count Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the total counts of active STB with the subscription of broadcaster a-la-carte channels. This report will provide unique count of Broadcaster a-la carte channel subscription whether it's subscribed as a-la-carte channel or as part of Bouquet.</p>	<p>As per Schedule III</p>
<p>HD & SD wise STB's Active Count Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the count of unique active subscribers. This will include HD and SD both, HD only and SD only on active subscribers. Here Active Paying Subscriber means total number of Subscribers who are connected to the DPO/DPO's Platform and have subscribed to one or more pay Channels of any Broadcaster.</p>	<p>As per Schedule III</p>
<p>DPO's Overall Subscriber Base Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the count of unique active subscribers. This will include Free to Air (FTA), HD and SD both, HD only and SD only on active subscribers. Here Active Paying Subscriber means total number of Subscribers who are connected to the DPO/DPO's Platform and have subscribed to one or more pay Channels of any Broadcaster.</p>	<p>As per Schedule III</p>
<p>Broadcaster Package Summary Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the total counts of monthly subscribers of broadcaster bouquet. This report will include all type of Broadcaster bouquets subscription whether it's subscribed as Broadcaster Bouquet only or as part of DPO Bouquet.</p>	<p>As per Schedule III</p>
<p>DPO/DPO Package Details</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the details of broadcaster channels or bouquets which are part of DPO/DPO bouquets.</p>	<p>As per Schedule III</p>
<p>LCN Ranking with Channel Genre</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to show the Local Channel Number (LCN) and Ranking within the Channel Genre. This report will show each channel name of subscribed bouquets with their category, genre and language.</p>	<p>As per Schedule III</p>
<p>A_la_Carte Channel's Summary Report</p> <p>Feature Summary: This report is required in SMS as broadcasters' requests DPO to provide the total counts of monthly subscribers of broadcaster a-la-carte channels. This report will include all type of Broadcaster a-la carte channel subscription whether it's subscribed as a-la-carte channel or as part of Bouquet.</p>	<p>As per Schedule III</p>
<p>Complete CAS Commands Log</p> <p>Feature Summary: This log report is required in SMS to manage command log. This report will log important informational events like authentication success and failure; it can be customized to produce additional information for troubleshooting.</p>	<p>As per Schedule III</p>

Performance & Monitoring Module	Stake Holder(s) Effected
CAS Commands Monitoring tool	DPO / LMO
Multiple Threading management for simultaneous CAS wise Command execution to handle Bulk Load	DPO
CAS-SMS Data Sync Tool	DPO

3. Apart from above Mentioned Features, Advance Key Modules & Features Which should be available in Professional & Standard SMS to Manage Standard Digital Network

Company Management Module	Stake Holder(s) Effected
<p>DHE (Digital sub Head-Ends) Creation</p> <p>Feature Summary: Useful to the DPO/DPO with the territory enough big to be divided into multiple sub headend. Used to get information from the SMS, categorized on the basis sub head-ends. Helps management to divide and analyze data to better serve their subscribers. These subhead ends may even differ with their counterparts when compared based on the list of service being catered by them.</p>	DPO
<p>Reference Number Format Setting on Interface (Invoice Number, Subscriber ID, Receipt Number etc.)</p> <p>Feature Summary: Majorly used to manage reference number formats as required by their respective accounts/finance/legal team. Multiple formats and sequence numbers are needed when LMOs opt to manage their network transactions, taking the Tax liability in their hands, using the DPO's SMS platform.</p>	DPO / LMO
Employee & User Management Module	Stake Holder(s) Effected
<p>Password Policy Creation for Users</p> <p>Feature Summary: SMS should have this feature as the password of any userID should never be compromised. To secure the passwords few industry standards should always be there with any kind of UserID /Password management module. Most used of those are minimum length, restricting the composition of password (upper and lower case characters, numeric, alphabets or special characters) and forced password changes.</p>	DPO / LMO

<p>Product Permission</p> <p>Feature Summary: The business scenarios at DPO/Broadcaster end frequently require having a dynamic structure of products. This creates product groups like Prime, Ordinary, etc. Access to prime products is given to selected backend users with more responsibility. Another scenario depends on the LMO/DPO agreement, product rights at the LMO end can also be defined.</p>	<p>DPO / LMO</p>
<p>Notification message Configuration on User Portal (Single & Bulk)</p> <p>Feature Summary: This feature works on one of the integral requirements of a business i.e the flow of important information to the stakeholders in the business hierarchy and the team members. Notification messages should get configured to appear on the screen for logged-in users. This should be a targeted notification user wise.</p>	<p>DPO / LMO</p>
<p>Product Management Module</p>	<p>Stake Holder(s) Effected</p>
<p>EMM list of products DHE & Zone wise</p> <p>Feature Summary: Required in the case of National level DPOs. SMS should have support to manage Zone / Sub-Headend wise EMM list, in sync with the list available in the CAS.</p>	<p>DPO</p>
<p>Inventory Management Module</p>	<p>Stake Holder(s) Effected</p>
<p>STB & VC Transfer Transaction Type wise (Fresh, Stock Return, Repaired or Replacement-OOW) (Single & Bulk)</p> <p>Feature Summary: This feature is useful when we need to have a different billing amount of the hardware based on the status of the hardware in the transaction. E.g. If the STB is Fresh then it is of higher cost than the repaired one. These customized billing operations can be managed using this feature.</p>	<p>DPO / LMO</p>
<p>STB Material Schemes LMO wise (Single & Bulk)</p> <p>Feature Summary: The scheme of each material based on its make and status is needed to manage different rates for each combination. This feature is used to manage it. These schemes are further used while doing actual transactions.</p>	<p>DPO / LMO</p>

CRM Management Module	Stake Holder(s) Effected
<p>Call Center Tickets Escalation Matrix</p> <p>Feature Summary: Tickets Escalation Matrix is required when a ticket needs to be escalated to the next higher authority in the hierarchy. Such a situation gets arose if the reporter finds his ticket not being attended up to his/her satisfaction or the ticket qualifies any of the pre-configured auto escalations condition.</p>	<p>DPO / LMO / Consumer</p>
<p>Interactive chat Conversation between User & End Subscriber</p> <p>Feature Summary: Many a times just by listening to a Customer's problem gives satisfaction to Customer and solves his/her problem. This feature of chatting should be available in Subscriber Portal or Apps to directly get their answers via Chatbots at the first level and at next level in case of some advanced level query, human resource can be available for its solution. This feature can help the DPO to get closer to Customer and can interact with many subscribers at a time. The whole conversation during this chat can be recorded.</p>	<p>DPO / LMO / Consumer</p>
LMO & Subscriber's Billing Module	Stake Holder(s) Effected
<p>LMO & Subscriber Billing with Last Day of The Month Mode, Addon & Alacarte Equal to Base Package Mode, LMO wise End Date, Fix Tenure Mode, Per Day Mode</p> <p>Feature Summary: This feature is required to provide an option for DPOs to choose their convenient duration for bill generations. As per their business model, they can select a different end-date mode for billing like</p> <ul style="list-style-type: none"> • Last Day of the Month • Addon & Alacarte end-date equal to Base Package end-date • LMO wise end-date mode • Fixed Tenure mode and • Per day end-date mode <p>to automatically create invoices based on recurring duration and subscriptions.</p>	<p>DPO / LMO / Consumer</p>
<p>Product-wise Renewable setting</p> <p>Feature Summary: Renewable property is used to decide that after the expiry date of a product, can it be renewed on the same connection.</p> <p>This feature needs to be configurable on selective products, as the DPOs in the interest of their business need to do micro amendments in their billing flow with the help of such settings provided in SMS</p>	<p>DPO / LMO / Consumer</p>
<p>Product wise Reversal setting for Subscriber Account (Enable & Disable Mode on pro-rata basis)</p> <p>Feature Summary: Reversal is needed to auto calculate the amount to be refunded to the subscriber if he discontinues the product midterm. The amount of the remaining term is refunded. Reversal for LMO is not made mandatory by this feature.</p>	<p>DPO / Consumer</p>

<p>This feature needs to be configurable on selective products, as the DPOs in the interest of their business need to do micro amendments in their billing flow with the help of such settings provided in SMS</p>	
<p>Product wise Reversal & Renewable setting for LMO Account (Enable & Disable Mode on pro-rata basis)</p> <p>Feature Summary: Reversal is needed to auto calculate the amount to be refunded to the LMO if he or the subscriber discontinues the product midterm. The amount of the remaining term is refunded. Reversal for Subscriber is not made mandatory by this feature</p> <p>Reversal for Subscriber is not made mandatory by this feature. This feature needs to be configurable on selective products, as the DPOs in the interest of their business need to do micro amendments in their billing flow with the help of such settings provided in SMS</p>	<p>DPO / LMO</p>
<p>Product Tenure wise LMO & Subscriber Discount Scheme / Free Days Scheme</p> <p>Feature Summary: With the help of this feature user can create Discount Scheme and Free day scheme for LMO and Subscriber, based on duration (Tenure) of product subscription. This feature needs to be configurable on selective products, as the DPOs in the interest of their business need to do micro amendments in their billing flow with the help of such settings provided in SMS</p>	<p>DPO / LMO / Consumer</p>
<p>Material's Transaction Type wise LMO Billing on Return or Replacement</p> <p>Feature Summary: This feature is needed to auto-generate different bills based on the transaction type selected during STB/VC stock transfer to and from LMOs. E.g. If the STB is Fresh, then it is of higher cost than the repaired one. These customized billing operations can be managed using this feature.</p>	<p>DPO / LMO</p>
<p>Text Message & Mailing Module</p>	<p>Stake Holder(s) Effected</p>
<p>Notifications on Other Events to LMOs and Subscribers.</p> <p>Feature Summary: This feature of sending notification to LMOs & Subscriber on other events is required to send daily notification to LMO on Total No. Activation Done, De-Activation Done, Product Removed, Product Added, Renewal Done & Upcoming Expiry.</p>	<p>DPO / LMO / Consumer</p>
<p>Daily Auto Text Messaging & Mailing of Payment Reminder to LMOs Before Expiry of STBs</p> <p>Feature Summary: This feature of automatic text messaging & emailing allows user to send Payment Reminder before expiry of STBs to LMOs.</p>	<p>DPO / LMO</p>

<p>Auto Text Messaging to LMO of LOW Wallet Amount</p> <p>Feature Summary: This feature of automatic text messaging & emailing allows user to send reminder of low wallet balance.</p>	DPO / LMO
LMO & Subscriber Management Module	
<p>Subscriber's Company Transfer (Single & Bulk)</p> <p>Feature Summary: Subscriber shifting is one of the useful features of SMS for user to transfer subscriber from one LMO to another with same products subscription and proper bill adjustment.</p>	DPO / LMO / Consumer
<p>Activity Scheduler for (Activation, Deactivation, Product Addition, Product Removal & Package-Channels Composition Modification)</p> <p>Feature Summary: With the help of this feature user can schedule CAS activities in advance like STB Activation, Deactivation, Product Addition, Product Removal & Package –Channels Composition Modification.</p>	DPO / LMO
<p>Bulk Package Addition & Removal with Different Products on Different Cards</p> <p>Feature Summary: With the help of this feature LMO can perform bulk activity of product addition and removal on all his STBs. He can add different products on different STBs</p>	DPO / LMO
<p>Balance Transfer from DPO to Distributor, Distributor to LMO, LMO to LMO, LMO to Customer</p> <p>Feature Summary: This feature will allow user to transfer balance from one company to another company means from DPO to Distributor, from Distributor to LMO, from LMO to LMO, from LMO to Customer.</p>	DPO / LMO
<p>LMO & Subscriber Payment Reconciliation</p> <p>Feature Summary: Feature of Payment Reconciliation between LMO and Subscriber is required in SMS to ensure that the money leaving an account matches the amount spent at the end of each recording period.</p>	DPO / LMO / Consumer
Analytics & Reporting Module	
<p>Product Entitle Log Report</p> <p>Feature Summary: The Product Entitle Log report will provide information to user about the details of all product entitlement on STBs that occurred over a period</p>	DPO / LMO

Account Balance Transfer Details Report.	
Feature Summary: This report will provide information of balance transfer from one company to another company means balance transfer from DPO to Distributor, from Distributor to LMO, from LMO to LMO, from LMO to Customer.	DPO / LMO
TRAI & Broadcaster's Audit Reporting Module	Key features
Platform to Download Multiple Generated Reports with the Help of Token Number	
Feature Summary: Platform to download generated reports is required in SMS to download all the audit reports with different intervals, from single platform, the user should get a token no. while generating a report.	As per Schedule III
Performance & Monitoring Module	Stake Holder(s) Effected
System Health check Monitoring	DPO
System auto Self-decision making for CAS commands traffic control to avoid any delay in execution	DPO
Add-on Products & Services	Optional Features
PayTV Subscriber SelfCare Portal with 3rd Party Payment Gateway Integration (www.paytvselfcare.tv)	Should be Available on request
PayTV Subscriber SelfCare Android /iOS Mobile App for End Cable TV Subscribers with 3rd Party Payment Gateway Integration	Should be Available on request
SMS Web Service Credits	Should be Available on request
3rd Party Services Integrations	
CAS Integrations	Should be Available on request
Exclusive Payment Gateway Integrations	Should be Available on request
3rd party IVR Integrations	Should be Available on request

3rd party SMS Gateway Integration	Should be Available on request
Support & Service Availability	
Support & Service Availability (24 x 7) Feature Summary: 24X7 Support & Service is require for SMS, so our expertly trained support team will answer user questions and solve thier problems 24/7 via phone, email or chat.	As per Schedule III

Thank You

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