

Code of Practice for Entities of Ecosystem (CoP-Entities)

A. Foreword:

- I. This Code of Practice (CoP) is formulated to comply with TRAI's The Telecom Commercial Communications Customer Preference Regulations, 2018 (6 of 2018) ('TCCCP Regulations 2018').
- II. This CoP deals with various entities involved in performing various functions as required under the said regulation, and prescribes the functions to be performed by them. It also provides for the process for header registration.
- III. For avoidance of doubt, in case of any difference between texts, the text set out in the TCCCP Regulations, 2018 shall take precedence. In case of any confusion in interpretation or clarification needed, the clarifications thus provided by respective Telecom Service Provider (TSP) shall be final and binding.
- IV. This CoP is the outcome of mandate given in TCCCP-2018 and has evolved with the joint initiative and concurrence of all the Access Providers.
- V. The CoP will take effect as per the provisions mentioned under the Section Effective date of this CoP document.
- VI. It is to be clearly understood by all stakeholders that any modification to this CoP would be well within the right of TSP, with no liability of any financial claim or damages or any other adverse action, subject to suitable information of such changes being provided to concerned stakeholders.

B. Sections

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Section I. Effective Date

1. Being a huge change in the entire chain of ecosystem (i.e. system, business processes and functions to be performed by associated parties), there is a need for seeking consensus of TRAI on the first CoP, before solutioning the architecture, its development and deployment.
2. As per Regulation, TRAI can give inputs to the CoP post its submission. This CoP being first of its kind, it is fair to wait for TRAI's inputs before further steps are taken towards its implementation. Therefore, this CoP will be effective after 15 days from the date of submission to TRAI ("CoP Effective Date"). In case of any observations from TRAI within such 15 days, this CoP will be effective once such observations are addressed by TSP and agreed with TRAI.
3. The solutioning of architecture, processes, its development and deployment activities will start after finalization of CoP as per point no. 2 above.
4. The estimated timelines for point no 3 mentioned above is at least 6 months post CoP Effective Date, though it would be subject to Vendor finalization, Solutioning& actual requirements emanating from finalized CoP and hence subject to review subsequently.
5. The effectiveness of new ecosystem and processes would depend on its concurrent deployment by all TSPs on a common date.

Section II. Scope

The Scope of this CoP is to:

1. Effective control of Unsolicited Commercial Communication.
2. Comply with the TCCCP regulation, 2018.
3. Provide for appointment of various Entities (internally within TSP or delegated to a partner entity) who would perform the respective functions assigned as per TCCCP Regulation and/or this CoP.
4. Cover process for registration of 'Sender(s)' (i.e. Principal Entities or Content Providers) and their obligations, who will be assigned and allocated the headers (SMS or voice CLIs).
5. Provide Network system functioning conditions including SLAs and architecture
6. Provide minimum set of information which will be put on DLT system for sharing with different Entities and in between TSPs.
7. From the implementation date of the TCCCP Regulations, in case any Originating Access provider (OAP) is not ready with the systems &processes and has not published its CoPs (prepared under TRAI's TCCCP Regulation, 2018), the Terminating Access provider (TAP) may block commercial communication to terminate on its network from such OAP, provided that the TAP shall not restrict any commercial communication from OAP for reasons owing to its own systems & processes not being ready in accordance with the TCCCP Regulations 2018.

Section III: Appointment of Entities

1. The Access Provider, at its sole discretion, may choose to perform the functions of Entity by its own or may also choose to delegate the same to a third party.
2. If delegated to a third party:
 - a. TSP should ensure proper authorization of such Legal entity through legal agreements, which should at least contain strict conditions for safety, security and confidentiality of the information being made available over the DLT system.
 - b. TSP should ensure that the third party is not an individual but, a reputed legal entity (i.e. public or private listed company or proprietorship firm, as per Indian laws)
 - c. TSP may choose to appoint one third party for performing the functions of various Entities, or may choose multiple third parties to perform different activities or may choose multiple third parties for an individual activity.

Section IV: Types of Entities Registration and their functions:

There are seven types of Entities which are to be appointed by a TSP, either to be done within its organization or for delegation to a third party, for performing the functions as per TRAI TCCCP Regulation, 2018. The functions and process steps to be followed by such Entities are given as follows:

1. Header Registrar (Entity – HR)

A. Broad Functions:

- a) establish and maintain header register as distributed ledger to keep headers, in a secure and safemanner, and make accessible relevant information for identifying the assignee at the time ofrequest to carry out various functions, e.g. scrubbing function from the registered telemarketersfor scrubbing, delivery function from telemarketer;
 - b) carry out Header Registration Function;
 - c) manage record of headers throughout its lifecycle, i.e. free for assignment, assigned to an entity, withdrawn, surrendered, re-assigned etc.;
 - d) keep record of header(s), header root(s) reserved for specific purpose;
 - e) incase of voice header(s), header root(s) will refer to the dedicated number series specified for this purpose.
- (this is the function of the DLT Solution and not of the Header Registrar.)
- f) maintain with minimum performance requirements as specified;
 - g) perform any other function and keep relevant details required for carrying out pre and post checksfor regulatory compliance;

B. Process steps to be followed:

- a) assign header or Header root for SMS via Header Registration Functionality, on its own or through its agents, as per allocation and assignment principles and policies, to facilitate content provider or principal entity to get new headers;

Process for Allocation and Assignment Principles and policies:

- i. Total length of a SMS Header is 11 alphabets or numbers or alphanumeric. First three characters or last three characters will be fixed as:First being an alphabet as indicator of TSP name,Second being an alphabet as indicator of

licensed service area name and Third being an alphabet as indicator of whether purpose of SMS intended to be pushed is promotional or service or transactional or Government (i.e. 'P' or 'S' or 'T' or 'G'), followed by a hyphen '-'. Rest 7 characters or numbers are free and can be used for assignment. In case TSPs are able to develop a solution whereby it is possible to identify category of message (promotional/service/transactional/Government) and licensed service area, without using the indicators in the headers, they may do so after arriving at suitable consensus between said TSPs.

Suggested: First character indicates TSP, second LSA, third P/S/T/G (promotional, service, transactional or government). Let there be a separator in fourth place, followed by unique ID assigned to the principal entity or aggregator, as the case may be. We propose the message script still be prefixed with labels 'promotional, service, transactional or government' for the recipient to distinguish between the types of messages received. All promotional-messages-under-consent should also provide for opt-out or consent revocation. The 7-character header branch should be unique irrespective of whether the same Principal Entity is using it from other operators' network also. In case of the principal entity using more than one 'sender' for similar campaigns, the uniqueness of sender to be identified from the last character which may be 'x' where x is any number between 1 and 9. In case the number of senders using the same OAP network crosses 9, the last two characters of the header are replaced with the numeric code indicating the unique sender. The distinguishing feature of the CLIs across operators will be the header root and the last one/two characters as the case may be.

Example :

Header Root	Separator	Header Branch	Header	Decoding the header
JMP	-	HDFCBK1	JMP-HDFCBK1	Jio Mumbai Promo - HDFC Bank
JMS	-	HDFCLF2	JMS-HDFCLF2	Jio Mumbai Service - HDFC Life Insurance
JMT	-	HDFCHF3	JMT-HDFCHF3	Jio Mumbai Transactional - HDFC Housing Finance
JMP	-	HDFCA14	JMP-HDFCA14	Jio Mumbai Promo - HDFC Asset Management
VDP	-	HDFCB12	VDP-HDFCB12	Vodafone Idea Delhi Promo - HDFC Bank
AAS	-	HDFCL67	AAS-HDFCL67	Airtel AP Service - HDFC Life Insurance
BHT	-	HDFCHF6	BHT-HDFCHF6	BSNL Haryana Transactional - HDFC Housing Finance
MMP	-	HDFFCAM2	MMP-HDFFCAM2	MTNL Mumbai Promo - HDFC Asset Management

- ii. No absolute right or ownership of Sender on the header(s). In case of any dispute or otherwise, under pure discretion of the TSP, the assignment of header(s) can be revoked, with or without notice. TSPs under its discretion, can disallow allocation of any specific headers as well. (we should capture in COPs on which scenario/ground sender ID is disallowed or revoked).

- iii. The assignment of header(s) will as per commercial terms prescribed by respective TSP
 - iv. For the purposes of sending messages to its own subscribers, TSP will not need to undergo registration process under this CoP. As the connection by itself is part of service opted by customer, TSP can send Service and Transactional messages to its own customers without seeking separate consent. For the purposes of sending promotional messages to its own customers, the TSPs would have to ensure scrubbing of preference register. (We are of the view that there should be uniformity across all types of 'Senders' and no exceptions should be permitted. Why do we want to have a separate internal mechanism for scrubbing our own promotional messages when we already have the DLT system in place.
- b) carry out pre-verifications of documents and credentials submitted by an individual, business entity or legal entity requesting for assigning of the header;

Process for Pre-verification Checks and request for assignment of header:

- i. The Sender has to submit request for header registration by filling up a simple Universal application form, mention the header(s), and enclose copy of KYC documents (for both sender entity and its Authorised signatory) and authorisation letter from the said Principal Entity/Content provider, in the format prescribed.
 - In case of individual, the authorised signatory will not apply.
 - In case of Government agencies approaching directly Entity-HR or the TSP, the KYC documents will not apply. A letter/email from official email ID will suffice In case a Registered Telemarketer (RTM) with a TSP, approaches on behalf of Government agencies then, an undertaking would have to be furnished by said RTM that the header will be used for said Government agencies SMS only. It is to be noted said header will be registered in name of Government agency. RTM will have to furnish an Authorization Letter from the Govt agency.
- ii. The applicant should also declare purpose of sending the SMS through such header(s).
- iii. If the declared purpose is of sending stock related tips etc, further authentication steps as mentioned in sub-point d) below should be followed. If the declared purpose is for sending messages on behalf of Union or State Government or institutions, autonomous bodies established under constitution or any statute, further authentication steps as mentioned in sub-point e) to be followed.

- iv. TSPs/Entity-HR to aim for providing digital modes also for collection of this information and registration of Sender(s) and/or Header(s), for a seamless experience and faster processing.
- v. Check that the header(s) should be related to company name or initial alphabets of the words in the company name or said individual or the brand name such Sender holds. In case the header does not fall into any of these categories, the Entity-HR to check whether the header can have a correlation with any of the Government entities/projects, well known brands, corporates etc. as defined in the list at Annexure _____. If there is no correlation with the list, then the request can be taken forward else to be declined. <Check if clarification to be separately sought from TRAI on well known brands> (We believe that there be no such ‘reserved header list’ and header assignment be left to the HR’s discretion subject to proper KYC verification and unique identification of the sender to whom the header may have been allocated, including authority of the HR to revoke the header assigned earlier. Also, such list of reserved headers will never be comprehensive.)
- vi. Entity-HR should maintain a list of financial institutions like Banks, Mutual fund houses, Insurance companies, Payment Banks etc. Header(s) requirements from such institutions should have another step of checking with the said institutions through a separate communication. (We believe that there be no such list provided the Entity-HR has followed the steps for proper KYC. Also, list of such institutions will never be comprehensive.)
- c) bind with a mobile device and mobile number(s), in a secure and safe manner, which shall be used subsequently on regular intervals for logins to the sessions by the header assignee;

Process to bind mobile device and its role:

- i. Entity-HR should also aim to launch a mobile app/website or any other mode, (wherever applicable), enabling Sender(s) to login securely and safely for using different services which a TSP may choose to provide through such mode. The mobile app should have authentication based on the registered mobile number and/or email id of the Sender.
- d) carry out additional authentications in case of a request for headers to be issued to SEBI registered brokers or other entities specified by Authority by directions, orders or instructions issued from time to time;

Process for Additional Authentications – SEBI related

- i. No header should be used for sending any SMS related to investment advice or tip, unless it has gone authentication as provided for in this step. All Sender(s)

should confirm if the header being sought for allocation, is to be used for sending any SMS relating to investment advice or tip. If yes, then following steps to be followed:

- ii. The Sender should be a SEBI registered investment advisor or broker or sub broker or portfolio manager or merchant banker, and should provide its SEBI registration document. The Entity-HR should cross-check the same with the SEBI website. In case details do not match, header registration request to be declined.
- e) carry out additional authentications in case of a request for headers to be issued to government entities, corporate(s) or well-known brands, including specific directions, orders or instructions, if any, issued from time to time by the Authority;

Additional Authentications – Government entities, corporate/well-known brands:

Entity-HR to maintain list of corporate/well-known brands. To start with, list may be taken from _____. (or to be sought from TRAI). Such list is enclosed as Annexure____ and its subsequent revisions would not require any amendment to CoP. This list should be published by TSP on its website. Any corporate/legal entity can approach Entity-HR for inclusion of their brands etc. in this list, subject to commercial considerations as prescribed from time to time by TSP. (Further clarification to be sought from TRAI that if one TSP declares a particular brand as well known brand then is it deemed to be applicable across all TSPs.) (We believe that there be no such 'reserved header list' and header assignment be left to the HR's discretion subject to proper KYC verification and unique identification of the sender to whom the header may have been allocated, including authority of the HR to revoke the header assigned earlier. Also, such list of reserved headers will never be comprehensive.)

Entity-HR to maintain list of Government bodies, entities, major project of central Government having requirement of SMS blast to public etc. For this, Entity-HR through TSP and COAI may approach and seek help of TRAI/DoT for list of such headers and the Nodal officers for coordination. (We believe that there be no such 'reserved header list' and header assignment be left to the HR's discretion subject to proper KYC verification and unique identification of the sender to whom the header may have been allocated, including authority of the HR to revoke the header assigned earlier. Also, such list of reserved headers will never be comprehensive.)

- i. In case the purpose of sending SMS is on behalf of Government entities, Government projects the Sender/Telemarketer should provide the Government authorization letter .The Sender/Telemarketer would undertake that the billing for such SMS would be made to them and cleared by them unless otherwise mentioned in the Government Authorization letter specifically.

- ii. In case the purpose of sending SMS is on behalf of corporate/well-known brands, the Sender should provide the Authorization letter from such corporate/well-known brand on their letter-head, along with other requisite documents.
- f) carry out additional checks for look-alike headers which may mislead to a common recipient of commercial communication, it may also include proximity checks, similarity after substring swaps specifically in case of government entities, corporate(s), well-known brands while assigning headers irrespective of current assignments of such headers, and to follow specific directions, orders or instructions, if any, issued from time to time by the Authority;

Process steps for Additional checks for look-alike headers:

- i. Data set for this is the well-known brand list formulated
 - ii. Headers should not be allocated with %'well known string'% as defined in the list for initial three months. The entire sender ID should be in upper case only.
 - iii. In case, the said brand wants the above string or a part thereof, to remain blocked with a particular TSP, they may approach the said TSP and agree on the commercial basis.
 - iv. Above to be done on a best effort basis.
 - v. If, despite all best efforts as above, a header is allocated to an entity, and the bonafide entity approaches the TSP later for the header or for preventing the other entity from using it, the TSP may withdraw or re-allocate the header. This to be provided in the standard agreement.
- g) Process steps for Registration of Sender and/or Header:** Post successful checks and documents availability as per above sub-clause from a) to f), the Entity-HR will register the Sender and/or assign the header/header root and make respective entries in the system.
- h) Process steps for De-registration of Sender and/or Header:** The Entity-HR will temporarily or permanently de-register a Sender and/or Header in following scenarios:
- In case of repeated complaints as defined in the complaint handling CoP.
 - In case limited period mentioned in the Authorisation letter provided by Government agency or Corporate/well-known brand.
 - On direction from LEAs, Regulators or other competent authorities
 - Any other scenarios, as defined by TSP from time to time.
- Such de-registration of Sender or Header(s) should be immediately informed to the respective Sender on their registered email id, along with process of re-allotment as defined by TSP from time to time.
- i) Above process steps as defined from sub-point a) to h) are to be followed in case a Sender or Telemarketer seeks allocation of telecom resource for voice calls, except

the provisions which are specific to SMS as a bearer.Resources for voice calls should be given to Entity from number series (GSM/Wire-line i.e. 140) allocated to TSPs for telemarketer activity. Also there is no mechanism to identify header of voice calls whether it is transactional/service or promotional.Depending upon technical feasibility, TSP may choose to allocate naming feature to be displayed as CLI for commercial voice calls made to its own subscribers.

j) Process Steps in case Header already allocated:There could be following scenarios:

- i. In case, a header is already allocated to an entity and a different, seemingly bonafide entity approaches the TSP later for the header or for preventing the other entity from using it, the TSP may withdraw or re-allocate the header. This to be provided in the standard agreement.
- ii. In case, two entities at one point of time seek a particular header. TSP should frame a guiding framework to resolve such issues, on case to case basis.

2. Consent Template Registrar (Entity-CsTR) and Consent Registrar (Entity-CR)

A. Broad Functions:

- a) establish and maintain consent register as distributed ledger to keep consent, in a secure and safemanner, and make accessible relevant data for the Scrubbing Function.
- b) establish Customer Consent Acquisition Facility (CCAF), to record recipient's consent to receivecommercial communications from the sender or consent acquirer; the method of acquiring consent to be standard across all TSPs.
- c) establish Customer Consent Verification Facility (CCVF) for the purpose of facilitating:
 - i. customers to verify, modify, renew or revoke their consent in respect of commercial communications, through a web interfaceand
 - ii. Access Providers to verify the consent in case of complaint;
- d) keep consent for each consent acquirer, in a manner that client data of entity is adequatelyprotected;
- e) keep record of revocation of consent by the customer, whenever exercised, in an immutable andnon-repudiable manner;
- f) synchronize records, in real time, among all consent ledgers available with participating nodes inConsent Acquisition Functionality in an immutable and non-repudiable manner;
- g) maintain with minimum performance requirements as specified;
- h) perform any other function and keep relevant details required for carrying out pre and post checksfor regulatory compliance;

B. Process steps to be followed:

- a) **Record consent** via Customer Consent Acquisition Functionality on Consent Register, on its own or through its agents, to facilitate consent acquirers to record the consent taken from the customers in a robust manner which is immutable and non-repudiable and as specified by relevant regulations;

Process Steps for Recording Consent:

- i. The sender will share the consent template which should explicitly convey the purpose, with the consent template registrar (Entity-CsTR), which is to be presented to the customer for acquiring consent and clearly mention purpose of the consent and details of the sender (Header).
- ii. The Entity-CsTR will cross check the consent template with purpose, Header and sender and approve/disapprove the same for the registration. In case of rejection, the sender to share the revised template. Entity-CsTR will assign a unique ID to each approved consent template.
- iii. TSPs under their discretion, can cause deregistration of some/particular consent template(s) based on any specific content through keywords or otherwise.
- iv. The Entity-CsTR will register and record the approved consent template along with sender and header name in its register (will replicate at Header Registration)
- v. TSPs/Entity-CsTR may charge sender for such template registration as per their commercials.

Examples of the templates (generic messages): Members/TSPs to provide

- b) **Presenting content of consent acquisition** template to the customer before taking consent;
and
- c) **Taking agreement** to the purpose of consent and details of sender;
and
- d) Authenticate customer giving the consent through OTP;

Process Step for Presenting content of consent acquisition, taking agreement and authentication:

- i. The sender may have multiple consent templates registered with Entity-CsTR.
- ii. Sender will initiate a trigger to Entity-CR along with registered consent template ID and MSISDN (individual or in batches) for presenting the same to the consumer seeking his consent.

- iii. Entity-CR will share the registered consent template containing details of the sender and Header (Principal Entity name/brand name e.g. Amazon) and OTP with the consumer through short code as SMS. Consumer will respond back on the same short code (toll free level 5, to be identified by each TSP) with OTP, to provide consent for the stated consent template.
 - iv. The Entity-CR will cross check the OTP and do the automated Authentication. On the successful confirmation of OTP, the consent is recorded in the system paired with the MSISDN along with date and time of such consent from the consumer (time when it hits the system). Post consent recording, a confirmation is sent to the consumer through SMS, and also to the Sender.
 - v. In case of OTP mismatch, consumer and sender/consent acquirer will be notified.
 - vi. In the case of Voice calls it is very difficult to acquirer Consent from the customer in the absence of any medium/means to share the content/template for the purpose of consent. Like in the case of wireline customer how we will share the content/template with them for consent and it is very difficult to check/examine the complaints made by customer in the case of voice calls due to non availability of consent.
- e) **record revocation of consent** by the customer via revoke request in a robust manner which is immutable and non-repudiable and as specified by relevant regulations;
- Process Step for recording revocation of Consent:**
- The revocation of consent can happen through various modes mentioned below:
- i. sending SMS to short code 1909 with Label <Revoke> and <Sender ID> or to telephone number mentioned in the message or during the voice call received from the sender(s); or
 - ii. (calling on 1909 or number mentioned for revoking the consent during the voice call received from the sender(s); or
 - iii. calling on customer care number; or
 - iv. Interactive Voice Response System (IVRS); or
 - v. Mobile app developed in this regard either by the Authority or by any other person or entity and approved by the Authority; or
 - vi. Web portal with authentication through OTP; or
 - vii. Any other means as may be notified by the Authority from time to time.
- f) **record sufficient contact information**, valid for at least 30 days, required to revoke consent and present it to recipient to enable them to submit request for revoking consent;
- g) In case, more than 90% of the customers don't give consent out of the total consent messages presented to the customers in a single day, the activity done by the sender

could be suspicious. Hence, a warning notice should be sent to the sender. Post the notice, Entity-CR will monitor future conversion of consent messages for the said consent template and take suitable necessary action as agreed between TSP and Entity -CR..

The detailed process on revocation of consent is covered in CoP- Process for Registration, modification and Deregistration of Preferences and Recording and Revocation of Consent, and its provisions would be binding on Entity-CR and Sender(s)/Consent Acquirers.

3. Content Template Registrar

A. Broad Functions:

- a) Content Template Registrar (Entity-CTR) to carry out content template registration function;
- b) keep records of registered templates in immutable and non repudiable manner;
- c) maintain with minimum performance requirements as specified;
- d) perform any other function and keep relevant details required for carrying out pre and post checks for regulatory compliance;

B. Process Steps to be followed:

- a) **to check content of the template being offered for registration as a transactional template and service message template;**

Process Steps for checking Content offered for registration:

- i. Sender will share with Entity-CTR the proposed template to be registered under the category of transactional or service message. Further, the sender will also provide consent template id (as provided during registration) for the proposed template of service messages. The template should carry both fixed and variable portion, distinctly identified. Sample Templates with fixed and variable portions will be prescribed and shared with senders during Registration.
- ii. Sender to ensure not to send any objectionable, obscene, unauthorized or any other content, messages or communications infringing copyright and intellectual property right etc., in any form, which is not permitted as per established laws of the country. TSPs' to be indemnified for any such misuse by sender/aggregator through relevant clause in the agreement. TSPs may prepare common guideline for identification of such kind of messages which will be referred at the time of header registration and content template registration.

Entity-CTR to check the content of the service message templates and transactional message templates submitted by the sender, and also cross-check the service message template with the purpose defined in the approved consent template.

- iii. TSPs under its discretion, can disallow registration or cause deregistration of any content template based on any specific keywords or otherwise.
 - iv. **In the case of Voice calls it is very difficult to send Content i.e. OBD to wireline customer in the absence of any medium/means to share the content**
- b) to identify fixed and variable portion(s) of the content in the offered transactional template and service message template with identification of type of content for each portion of variable part of the content, e.g. date format, numeric format, name of recipient, amount with currency; reference number, transaction identity;**

Process Steps:

- i. Entity-CTR is required to ensure the above.
- c) **to estimate the total length of variable portion, viz. total length of fixed portion for a typical transactional message, service message for offered template;**

Process Steps:

- i. Entity-CTR to ensure that the length of the variable portion for a typical transactional and service message should not be more than xx% of the total length. Entity-CTR along with TSP, would put in place a process for approval of exception to this percentage threshold.
- d) **to de-register template or temporarily suspend use of template;**

Process Steps:

- i. Entity-CTR will de-register/ temporarily suspend use of a content template (transactional or service) in case of following scenarios:
 - a) In case of repeated complaints as defined in the complaint handling CoP.
 - b) In case of non-usage of the template for a period of 180 days.
 - c) As per inputs arising from CoP Detect or otherwise as per discretion of TSP
- e) **to generate one-way hash for fixed portion of content of template and ways to extract fixed portion and variable portion(s) from actual message for carrying out**

pre and post checks of actual content of actual message offered for delivery or already delivered;

Process Steps:

Post the CoP formulation and approval from TRAI and availability of actual agreement on the message content for promotional and transactional, the solution will be worked out. During the solutioning the process of hashing/reading etc. will be detailed and subsequently, suitably incorporated in the CoP as well.

f) assigning unique template identity to registered template of content;

Process Steps for assigning unique template identity:

- i. Entity-CTR to assign unique id to each template against each registered sender id and update the system. The unique ID shall be generated by the DL_Content Template module. In case the unique ID is required to be generated by TSP local IT system a common format can be agreed with the demarcation of operator/circle as a part of the format designed.
- ii. The second option is that the unique id is generated at the DLT platform level and passed on to the TSPs local IT system for correlation.

4. Telemarketer functional Entity Registrar (Entity-TFER)

A. Process Steps:

- i. TSP itself or through an entity (Entity-TFER) will register Telemarketer functional Entities i.e. TM-SF, TM-DF, TM-AF and TM-VCF and arrange execution of respective agreements with them, as per the format specified by TSP. TSPs should endeavour to restrict TM-SF entities to a minuscule single digit number, to ensure confidentiality of information.
- ii. These Telemarketer functional entities will perform respective functions as mentioned hereinafter.
- iii. It is in complete discretion of TSP to appoint and register one or multiple entities as TM-SF.
- iv. TSP may formulate process and scenarios for de-registration of Telemarketer Functional Entities

Process Steps for processing Scrubbing:

- i. The Telemarketer or Sender can submits target numbers, headers and template for the scrubbing function.
 - ii. For Scrubbing function can be for either category of message i.e. promotional and service.
 - iii. The Scrubbing function would mean checking of customer's preference or consent, depending upon the message being promotional or Service respectively. The TSP may choose, at its own discretion, to have Scrubbing function and Content Template verifier function, to be done simultaneously, through a single entity or a single system.
 - iv. The Telemarketer or Sender will provide the MSISDNs and content of message along with the category of content (i.e. promotional or service) to the TM-SF as per the format prescribed by the TSP/TM-SF.
 - v. The TM-SF will scrub the promotional message with the Preference register and the Consent Register (including checking the preferred time slots and types of days for delivery) and generate a Token which should also contain preferred time slots and types of days for delivery.
 - vi. Similarly, TM-SF will scrub the service message with the Consent Register and generate a Token.
- a) take necessary measures to protect Preference Register and Consent Register data during scrubbing, e.g. by Generating virtual identities and tokens for each number for the messages and voice calls and not disclosing real identities to any other entity than authorized to know it;

Process Steps for Protection of Data during scrubbing:

- (i) The Tokens generated by the TM-SF will not disclose the real identities (i.e. MSISDNs) to the Telemarketer/Sender. TM-SF will share the OAP Token with OAP and TAP Token with TAP, and also share the Token with Telemarketer/Sender. These Token are to be used by respective OAP and TAP for ascertaining the content of message, SMS header and actual list of MSISDNs on which the SMS is to be sent. OAP may charge the Sender/Telemarketer for the scrubbing and decrypting of token, through TM-SF or directly.
- b) make available relevant details of scrubbed list to corresponding OAPs and TAPs for carrying out reverse mapping of virtual identities to real identities for further delivery;

Process Steps for reverse mapping:

Make available relevant means to identify the actual subscriber to which the message needs to be delivered

- c) to identify and report probable instances of request received for scrubbing of list of phone numbers collected through harvesting software or instances of dictionary attack to relevant entities authorized to take action;

Process Steps for identifying and reporting instances of harvesting software or dictionary attack:

- i. TM-SF and OAP should put in place system to identify probable instances of list of phone numbers collected through harvesting software or instances of dictionary attack.
- iii. The broad rules for such identification should be fixed by TM-SF and OAP from time to time. If required, same should be shared with TRAI for guidance. Since, the system development and vendor finalization is yet to start, hence, the identification rules are not available at this stage. Similarly, TAPs (actually are OAPs also) should also define broad rules for the same.
- iv. Once identified, TM-SF should report such instances to Entities-HR, for further necessary action.

A. Process Steps to be followed:

- a) deliver messages to OAP, in a secure and safe manner, during specified time slots and types of days of delivery in accordance to the preferences of the customer(s);

Process Steps: TM-DF to follow above including broad functions.

- b) In the case of voice call above mentioned scrubber function will not work due to non availability of Consent. Only scrubber will be done against preferences of customer.
- c) select OAP for particular customer(s) or messages and conveying to Scrubber for generating tokens for corresponding OAP to access information of list of messages which would be required to be delivered by it;

Process Steps:

- i. **TM-DF to follow above including broad functions.**
- ii. In line with the Token generating provisions mentioned in section related to TM-SF, the same activity related to Token generation, decryption should be carried out by TM-SF as well as TAP. The Token containing virtual identities should be shared by TM-SF with TM-DF.

A. Process to be followed:

- a) deliver messages to RTM having telecom resource connectivity with access provider(s), in a secure and safe manner;

Process Steps: TM-AF to follow above including broad functions.

5. Telemarketer for voice calling function with Telecom Resource Connectivity for voice calls to AccessProvider (TM-VCF)

A. Broad Functions:

- a) to carry out voice calling function;
- b) take necessary measures to protect Preference Register and Consent Register data during voicecalling, e.g. using virtual identities to make voice calls on a secure Internet Protocol (IP) basedVirtual Private Networks (VPN) with OAP and not disclosing real identities to any other entities thanauthorized to know it;
- c) take initiatives to enable calling name display (CNAM) based on Intelligent Network or ISDN basedprotocols, enhanced calling name (eCNAM) functionality as defined in 3GPP technical specificationsTS 24.196 for providing services to terminating user with the name associated with the originatinguser and optionally delivering metadata about that originating user;
- d) maintain with minimum performance requirements as specified;
- e) perform any other function and keep other relevant details which may be required for carrying outpre and post checks for regulatory compliance;

B. Process Steps to be followed:

- (a) deliver voice calls to OAP, in a secure and safe manner, during specified time slots and types of days of delivery in accordance to the preferences of the customer(s);
- (b) select OAP for particular customer(s) or voice calls and conveying selected OAPs to Scrubber for generating tokens for corresponding OAP to access information of list of messages which would be required to be delivered by it;

Process Steps for delivery of voice calls:

- i. Above to be followed including the broad functions.
- ii. In line with the Token generating provisions mentioned in section related to TM-SF, the same activity related to Token generation, decryption should be carried out by TM-SF and TAP for voice calls as well and the Token containing virtual identities should be shared by TM-SF with TM-VCF.

Section V. Network/System Functioning Conditions

1. Network/System Architecture

Depending upon CoP finalization and discussions with vendor, the Network/system architecture freezed by TSPs for implementation should be incorporated in this CoP as well.

2. Standards, Specification and SLAs

An SLA will be agreed between TSPs interconnecting over DLT layer, from time to time and same will be translated into technical SLAs.

3. Flowchart of Sender/Telemarketer registration process

- Agreement should be signed between a legal entity & Access service providers and registration not to be given to any individual.
- KYC process should be followed and document i.e. CAF, PAN No., Aadhar of Authorized signatory/directors, Company ROC certificate.
- Minimum 50,000/- or higher registration fee should be taken from entity.

Section VI. Consequence management

1. In case of default/breach in functions to be performed by respective Entities registered/appointed by TSP, TSP should take strict action against the same which may include warning notice or show cause notice or penalty or temporary/permanent termination etc.
2. TSP should formulate an internal process on above.
3. Action of blacklisting can be taken against Telemarketer or aggregator doing the SMS or voice delivery function. For this, the TSP taking action of blacklisting should inform other TSPs along with details of default..

Section VII. Information handover over DLT to Entities and/or other TSPs

Following information should be handed over by a TSP to all other TSPs:

1. Sender
 - a. Sender ID
 - b. Header
 - c. Sender Name and Address
2. Header
 - a. Header
 - b. Date-Time of registration
 - c. Purpose (Transactional, Service, Promotional or Government)
 - d. Linked Telemarketer
3. Consent Template
 - a) Consent Template registration unique number
 - b) Consent template format including fixed and variable portion
 - c) SMS header
 - d) Sender ID
4. Consent Register
 - a) Customer Number
 - b) Consent Template registration unique number
 - c) SMS header
 - d) Date/time of OTP message generation
 - e) Date/time of OTP validation and consent recording
 - f) Validity of consent, if any
5. Content Template
 - a) Sender ID
 - b) SMS header
 - c) Consent Template registration unique number
 - d) Content Template
 - e) Fixed portion and Variable portion
 - f) Linked Telemarketer

Section VIII. Amendment to CoP

This CoP can be amended by respective TSPs at any given point in time subject to following:

- a) It is understood that CoPs stipulate various requirements which are interlinked with CoPs of other TSPs as well. Considering the same, wherever the amendment can lead to change in information sharing with other TSP and/or billing, processing etc with other TSP, such amendment should be shared with two weeks advance intimation before actually implementing the same.
- b) Wherever there is any material change for any existing Sender(s) which impacts performance of its obligations, an advance notice of at least 7 calendar days along with changes and its effective date for such existing Sender(s), should be given on their respective registered email-id.

Section IX. Publication of CoP

This CoP should be published by TSP on its website. A digital copy of the same should be sent to below, on their appointment/registration:

- a) Entity - HR
- b) Entity – Consent Template Registrar
- c) Entity - Consent Registrar
- d) Entity - Content Template Registrar
- e) Entity – Content Template Verifier
- f) Entity- Telemarketer functional Entity registrar
- g) All registered Sender(s)
- h) All registered Telemarketers
- i) All registered Aggregators

Further, on any amendment to the CoP, same should be published by TSP over its website and also sent to above over their registered email-ids.

Section X. Definitions

In this Code of Practice, unless the context otherwise, the Definition of various terms used under different clauses of the document will be according to the Definitions given under Regulation 2 of the Telecom Commercial Communications Customer Preference Regulations, 2018.

Section XI. Version History

The space below is provided to keep a track and record details of Amendments of this Document

S.no	Date	Details	Remarks