

## TELECOM COMMERCIAL COMMUNICATIONS CUSTOMER PREFERENCE REGULATIONS, 2018

Effectiveness of TCCCPR-2010 Regulations and other initiatives of TRAI Blacklisting & Signature Solution E 500 375 250 125 2010 2011 Regulation 2010 introduced 2012 2013 2014 TRAI DND App introduced 2015 2016 O No. OF COMPLAINTS Subscriber base: 926 Million (Dec. 201 1) 1206 Million (March. 201 8) Preference Registration Complaint Handling Revocation of Consent OAP TAP • RTM 1 Eco System O Consent Security Deposits and Deductions 600 450 c 300 150 c -150 -300 .225K 150K 50K 25K 75K Initial 1st 2nd 600K 80K 3rd 520K 400k '250k 120K 150K 250K 4th 5th 6th Time Violation Deductions Rs. 3.71 Crore collected as Deductions blacklisted After 6th Violation, telecom resources of RTM are disconnected by all access providers and blacklisted for 2 years Security Deposits Additional Deposits Examples for Probable Templates Inferred Consent Transactional SMS Templates TL-HEADER Hello! Your A/c no.< .....> has been debited by Rs.< .....> on The A/c balance is Rs.< .....> Info: <... Transaction Id or Reference Number....> Thank you for using <...PRODUCT.. > Card No < ..... > on for INR <..... > To check EMI eligibility on spends above INR <.....> log on Apply. Examples for Probable Service Templates Explicit Consent Service SMS Templates Welcome to ..COMPANY.. referral program, Multiply! Share your coupon code and get vouchers worth up to Rs. <.....>! Discover more <.....URL....> Upgrade to Bank Privilege Credit Card and get <..... > vouchers of more than Rs <.....> airport lounge access & more. Call now on <1800 .. ..... apply TSP NAME TARIFF PLAN- Rs < ... > Get daily GB DATA, UNLIMITED Free Local & STD calls, Free SMS on any N/w for days. T&C apply\*. For details dial <...TELEPHONE NUMBER....> All Residents are requested to login to ...URL... and participate in survey for MONTH/ YEAR on maintenance services. Dear Your ...PRODUCT.., <...PRODUCT ID..> is due for Service on Visit <... URL....> or contact your nearest BRAND or COMPANY Dealer for appointment. We look forward to serve you! Now transfer funds 24/7 with <...ENTITY. > Bank IMPS even on a bank holiday. Use <...SERVICE NAME.. > Internet , Mobile or SMS banking to transfer funds. T&C. Gift a <.....> to your family and friends this holiday season with <.....> .Bank Cards. Book now on <...URL... > apply. \* Text in Capital Letters may be important for Categorisation of Content, relationship of Source & sender Examples for Probable Promotional Templates TL-HEADER Lose weight naturally! Get MY DIET by <NAME OF CONSULTANT> & lose upto . No Machine.No exercise. First FREE consultation Click SHOWROOMS FOR SALE!! PRICE STARTS - Rs. <...VALUE RANGE ....> Crores RETURN- TENANT- INTERNATIONAL BRANDS LOCATION, CITY Call - <TELE PHONE NUMBER..> Redeem your COMPANY Rewards points before they lapse. Shop at The COMPANY OUTLET for the COLLECTION RANGE T&C TL-HEADER Latest in COLLECTION <.SEASON or YEAR...> now at a TRADE or BRAND NAME store near you. Shop now to upgrade your wardrobe. Apply. "SALE SALE" GET UPTO OFF ON SAREES, SUITS, LEHNGA, SHAWL, GOWN & READYMADE SUIT. COMPANY <STORE ADDRESS> <.TELEPHONE NUMBER..> HURRY SALE FEW DAYS MORE COMPANY SALE!! Avail <...>% Off on all products!Special offer <...>% off on select products!Contact- <..TELEPHONE NUMBER..> Now 7 Days Open. TL-HEADER Did you know TYPES OF PRODUCTS are in? Get styling tips & more with your Personal Shopper. Visit your nearest store or call <...TELEPHONE NUMBER....> to book your appointment and make shopping during the Shoppers Stop Up To <... >% Off Sale effortless. Apply. Celebrate this in COLLECTIONS-I from BRAND or TRADE NAME at Rs. onwards & COLLECTIONs-2 at Rs. <...> onwards only at Shoppers Stop. Grab one NOW!! apply Latest in COLLECTION now at a COMPANY OUTLET near you. Shop now to upgrade your wardrobe. T&C Apply. Communications on Instructions or Directions by Central Government, State Government, Constitutional Bodies TL-HEADER PROTECT YOUR CHILD FROM BY GIVING MEDICATION...> ON <...DD/ MM/YY...> <DAY TYPE> <..fâq-tZF Awareness related Templates Dear Customer, This is in continuation to the multiple reminders sent by the Bank for updating Aadhaar number with the Bank. Please note, customer failure to update Aadhaar Number will lead to a freeze being placed in his/her account/card post DD/ MM/YY. Please update at <.....URL....> immediately. Kindly ignore the message if you have already updated your aadhaar number-<BANK NAME> Labelling to categorize content and informing to customer that it is promotional Header or Telephone Number From which which Commercial Communication was received Transactional IMessages sent as inferred consent

may be identified From: HEADER <Promotional> revoke consent send SMS as REVOKE HEADER> to 1909 From: HEADER <Transactional> <consent inferred: inquiry for the product> Toll Free Number for revoking consent SMS: Transactional Template Register Inferred Consent VPN, Trusted Token, Sample Post Delivery Checks OAP Token LkN VIP TAP Token Header NO\*3 OAP Token Header Content Provider O elemarkete Register Tele-Markete- OAP O. Validity, Purpose. One Time Use O 0. Scri Originating Access Provider Terminating Access Provider Explicit Consent Similar to Promotional except validity period 8 Templates Template Register Consent Register TAP Token TAP Token Virtual IP TAP Token Header LRN VIP NO#I NO#2 NO#3 Validity, Purpose, One Time Use High Communication/ Entertainment/ IT Interest Area Set-1 Tourism and Leisure Any Other Interest Area Set-3 Banks/ Insurance Medium Low Real Estate N-Dimensional Space of Interest Area • Preference of Customer • Content Category Interest Area and Content Category in terms of probability of Overlap Interest Area Set-2 Interest Health Consumer Goods and Automobiles Content Categories/ Purpose SMS:Promotional OAP Token LRN VIP TAP Token Consent Register Register Header NOFI NO#2 NO#3 OAP Token Header Register Content Provider Preference Register O Scri oer Validity, Purpose, One Time Use O 0. Tele-Markete,- OAP Token Originating Access Provider Terminating Access Provider O.. List to Scrub Header Consent Purpose NO#I NO#2 Yes Scrubbed List Header NO#2 NO#3 TAP Token TAP Token Virtual IP Header LRN VIP TAP Token NO#1 NO#2 NO#3 Validity, Purpose, One Time Use Pairing using QR Codes or images Enhanced CNAME (eCNAM) Scrubber VoIP SIP based Call Tele-Marketer Gateway IP Multi-Media Subsystem (IMS) VOIP Cloud TSPs TSPs Rich Communication Services (RCS) Centralised Decentralised Distributed Book Keeping Across All Participants Distributed Ledger built by Participants Time ordered, Computationally and cryptographically architected to ensure permanence, widely replicated Ledger Ledger SCOO edger Ledger Ledger Shared Ledger 2 Ledger Shared, Distributed Private Ledger Access to database in entirety at all times Every party can verify and regenerate without central intermediary Cloud Platform based • Every Participants keeps its own ledger updated with their transactions Transactions mostly bilateral Complex Silos requiring reconciliation • Paradigm Shift: Single owner to lifetime history of asset or transaction distributed across multiple participants Instead of messaging based communications, the new paradigm is state based Smart Contracts incorporate business rules for automation of transactions (Intelligent and programmable contracts TRAI: Observer Access Providers (Governance of DLT Network, Decision making for finalising DLT processes, Selecting DLT System Operators, Preference Registration, Interro Revoking Consent) DLT System Operator(s) Solution Provider, Installation, Operation & Maintenance of Permissioned Private Consortium Open Source Code based DLT Network, Registrar Node TSP 1 TSP 3 Full Node (all functions) TSP4 4 DLT System Operator 1 Process(es) Executors (Sub-chains for Scrubbing, Recording Consent, Registration of Header, Template, Entity c.) DI-T Network Node DI-T Network Node Cloud Full Node Principal Entity TSP 2 DI-T System Operator 3 DLT System Operator 2 DLT Network Node Orincipa,' Entity DLT Network Node L Principal Entities (or Authorised Agents)/ Content Provider Banks Organizations Professionals Content Providers Individuals