



## Implementing National Do Not Call Registry

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### ABSTRACT

*Exponential growth of telecom industry in India has given rise to significant increase in the number of Unsolicited Commercial Communications (UCCs). This has led to increased level of public concern over receipt of large number of UCCs to the telecom subscribers. To give relief to affected telecom subscribers, Telecom Regulatory Authority of India (TRAI) has brought in “Telecom Unsolicited Commercial Communications Regulations 2007” to restrict UCCs. To implement the said regulation, TRAI has decided to setup National Do Not Call (NDNC) Registry Portal and engaged National Informatics Centre (NIC), Department of Information Technology (DIT), Government of India, a premiere Science & Technology organization for IT enablement of NDNC Registry.*

**Keywords:** NDNC, UCCs, TRAI, Telemarketers, National Informatics Centre

### 1. Introduction

Commercial Communication is defined as any form of communication (which could be electronic mail, telephone, automated calling systems or facsimile machines (fax)) designed to promote directly or indirectly, goods, services or the image of a company, whereas, Unsolicited Commercial Communication (UCC) is a communication in any form with commercial content that is sent to a recipient who has not requested it. Hence, any telecommunications service message, which is transmitted for the purpose of informing about or soliciting or promoting any commercial transaction in relation to goods, investments or services which a subscriber opts not to receive is categorized as UCC.

Telemarketing calls are a major cause of worry for people not only in India but the world over. Everyday large numbers of phone calls are made by Telemarketers (TMs) to Indian households, Cellular subscribers and Businesses. The TMs get a list of customers from a variety of public and private sources - like the telephone directory, yellow pages, customer database of another organization and so on. Apart from the TMs, charitable organizations, political bodies, airlines, banks and credit unions, insurance companies, non-profit organizations, and welfare associations also make unsolicited calls to consumers.

Currently there are about 300 million telephone connections (landline and mobile) in the country, which is growing rapidly. As telephones have become a ubiquitous communication medium, there has been a sharp increase in telemarketing calls related to marketing, advertising activities and direct sales promotions. Therefore, it has become imperative for the Government of India to step in to curb this malaise.

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Considering the large penetration of telecom subscribers, this form of UCC has become a source of great discomfort for the recipients of such calls. In addition to the inconvenience of the user, it also adds to the wastage of time as well as telephone resources.



**Figure 1:** A cartoon depicting menace due to telemarketing calls

## 2. Objective

TRAI was set up to nurture conditions for growth of telecommunications, broadcasting and cable services in a manner and at a pace which will enable India to play a leading role in the emerging global information society. At the same time, TRAI also ensures that the interests of consumers are protected. In order to curb the UCC, TRAI has stepped in to bring about the “Telecom Unsolicited Commercial Communications Regulations 2007” (The Gazette of India, 2007) and set up the NDNC Registry portal <http://www.ndncregistry.gov.in>. To enforce the TRAI regulation, various stakeholders like TRAI, Department of Telecommunications (DoT), Telecom Operators (TOs) like Aircel, Airtel, BPL, BSNL, HFCL, Idea, MTNL, Reliance, Shyam, Spice, Tata, Vodafone, TMs and affected telecom subscribers (both mobile and landline) who do not wish to receive such UCCs have contributed significantly to make this initiative possible. TRAI has further strengthened the regulation in March 2008 by issuing amended regulation “Telecom Unsolicited Commercial Communications (Amendment Regulations 2008)” by recommending heavy tariff for violating UCC. The NDNC Registry was setup to provide citizen centric services to the citizens, business communities and government with technical support from NIC, a premiere Science and Technology Organisation of Government of India under Ministry of Communications and Information Technology.

While TRAI recognizes telemarketing as a legitimate method by which business houses can market their products and services and the direct marketing industry makes an economic contribution to the national growth, the NDNC Registry will enable individuals to opt out of receiving unsolicited telemarketing calls. However UCC does not include:

- any message (other than promotional message) relating to a service or financial transaction under a specific contract between the parties to such contract;
- any messages relating to charities, national campaigns or natural calamities transmitted on the directions of the Government or agencies authorized by it for the said purpose;
- messages transmitted, on the directions of the Government or any authority or agency authorized by it, in the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality.

The primary objective of the NDNC Registry is to curb UCC by TMs thereby protecting the privacy of the

telecom subscribers. The NDNC Registry provides a platform for the TMs to register themselves along with the telephone/broadband resources being used by them to make telemarketing calls. TOs also can upload their private Do Not Call (DNC) list of telecom subscribers who do not want to receive telemarketing calls. As a result, the NDNC registry has databases of subscribers who do not wish to receive UCC, TMs who want to scrub the list of telephone numbers they want to call and the telephone/ broadband resources being used by the TMs to make such calls.

Through regulatory framework of TRAI, the TMs who make calls to the numbers registered in NDNC Registry, are penalized by payment of Rs.500/- to the TO for every first UCC and Rs.1000/- shall be payable for subsequent UCC. There is a provision for disconnection of the telecom resources of the TM if UCC is sent even after levy of Rs.500/- & Rs.1000/- tariff. In case of non-compliance to the Telecom Unsolicited Commercial Communications Regulations, 2007, the TO is also liable to pay an amount by way of financial disincentive, not exceeding Rs.5000/- for first non-compliance of the regulation and in case of second or subsequent such non-compliance, an amount not exceeding Rs.20,000/- for each such non-compliance.

The NDNC Registry will give relief to the society at a large who is making use of telecom resources. Making unsolicited pesky calls is a social wastage of time and infrastructure and these calls are indeed very irritating at times leading to loss of concentration when someone is in serious meetings or in deep thought.

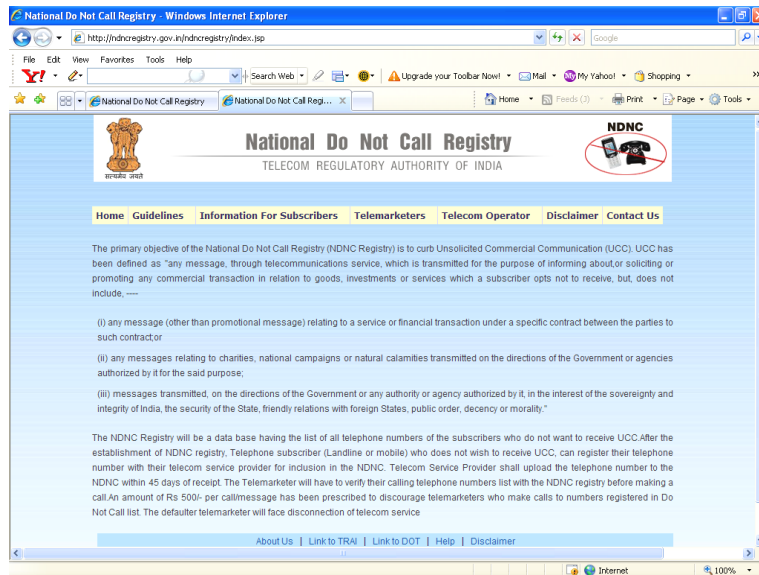


Figure 2: NDNC Registry Portal Page

### 3. Processes in NDNC Registry

The NDNC Registry is a database having the list of all telephone numbers of the subscribers who do not want to receive UCC. Telephone subscribers who do not wish to receive UCC, can register their telephone numbers with their TOs for inclusion in the NDNC. TOs shall upload these telephone numbers to the NDNC Registry database from their private Do Not Call (DNC) list, which gets updated on every 15<sup>th</sup> and last day of the month. The TMs will have to verify their calling telephone numbers list with the NDNC registry before making a call. The defaulter TMs to face financial penalty and even disconnection of telecom service. The various technical and workflow processes involved for the implementation of NDNC Registry are as follows:

### 3.1 TM Registration with DoT

As per regulation framed by TRAI, every TM has to register with DoT (Department of Telecommunications website) and get permanent registration valid for 10 years before making any telemarketing calls. The registration is mandatory as per provisions of the regulation, to enable the TM get the list of callers scrubbed by the NDNC Registry. The steps involved are as follows:

- TM fills the registration form online on the NDNC Registry Portal, gets the Unique Reference number (URN)
- TM submits hard copy of the filled in registration form along with declaration, undertaking and Demand Draft (DD) of prescribed amount to its primary TO
- On receipt of registration form, primary TO checks the enclosed DD. If the DD is in order the TO logs into the system and issues acknowledgement
- The TO then verifies TM's telecom resources
- On Primary TO's approval, the TM is provisionally registered and gets temporary User ID and Password through email
- TO then submits the application along with DD to DoT. After approval by DoT, permanent registration valid for 10 years is issued to the TM

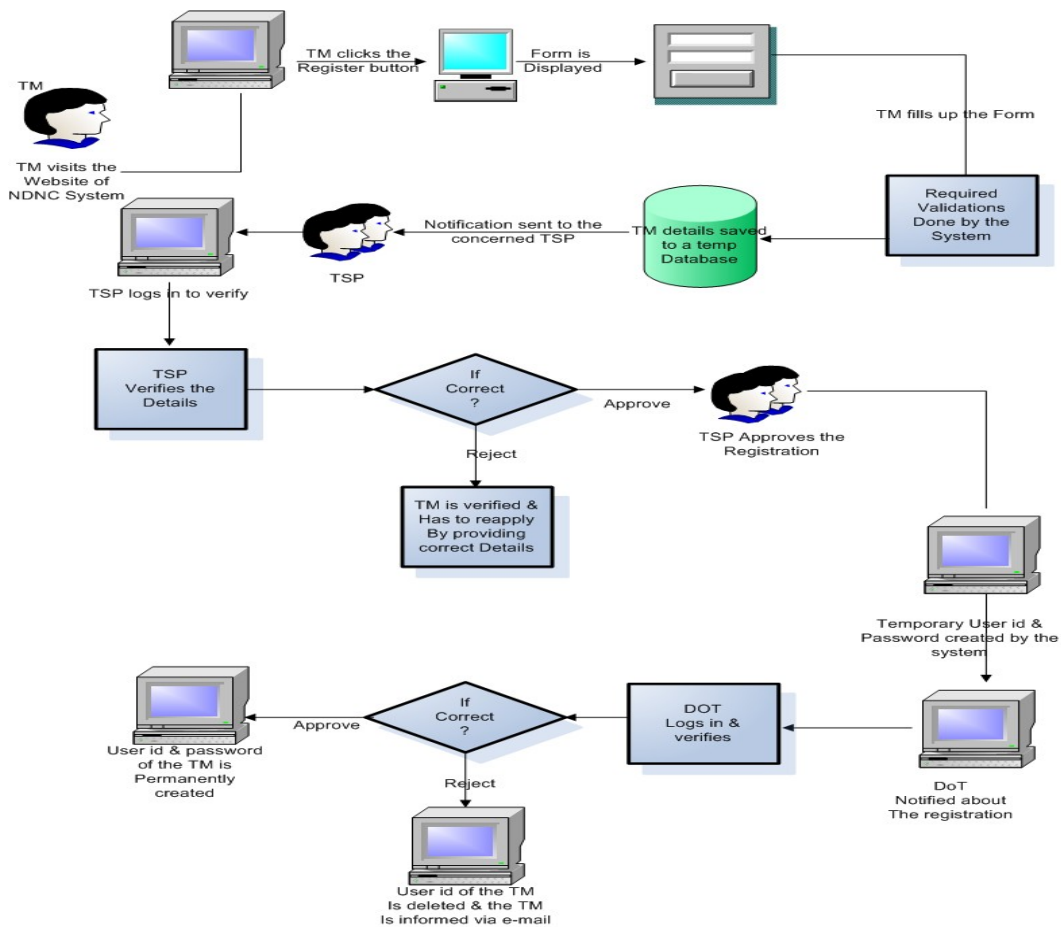


Figure 3: Workflow for TM Registration process

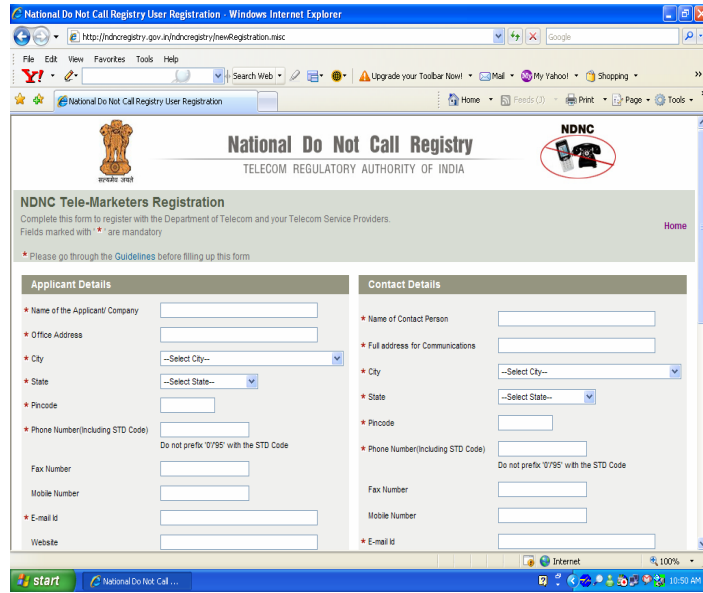


Figure 4: TMs registration page on NDNC Registry

### 3.2 Registration of subscriber phone number in NDNC Registry

The registration of telecom subscribers for NDNC Registry database is done through their respective TOs. Telecom subscribers who want to register themselves for the NDNC Registry can simply send SMS (free of cost) with message **START DND to 1909**. Similarly those subscribers who are already registered with NDNC Registry and want to opt out of this facility can do so by sending SMS with message **STOP DND to 1909**. The number 1909 is common to all the TOs. Subscribers can also register their numbers through call centers or web portals of TOs. The TOs, after authentication and verification, put the subscriber number in their private DNC list.

### Subscriber's Registration

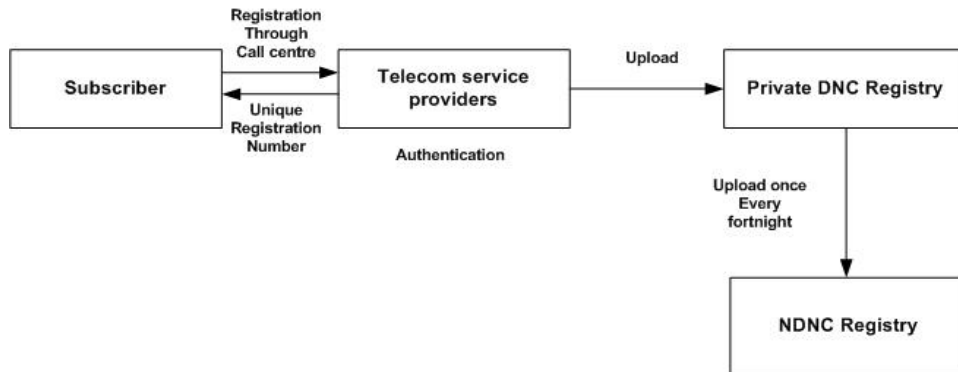


Figure 5: Telecom Subscriber's Registration in NDNC Registry database

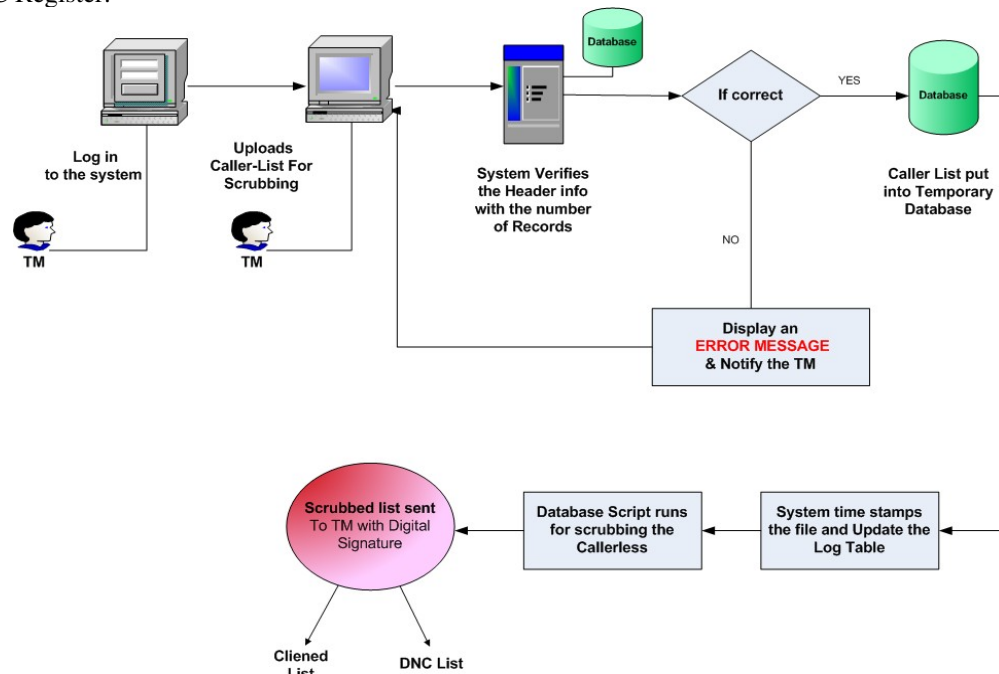
### 3.3 NDNC database updation by TOs

The process of updation of NDNC database by TOs is as follows:

- The TOs will log into the NDNC using assigned login id and password through VPN connectivity and upload their private DNC list in specified format
- If conforms to the format, a log file will be created in the NDNC system, which will timestamp the file received from the TO. This can be referred to in case of a conflict/complaint
- Database scripts will extract data from the received file and store it into temporary tables and acknowledgement will be sent
- On every 15th and last day of the month all the DNC lists received from TOs will be processed to update the NDNC database

### 3.4 Scrubbing by TMs

The scrubbing of the list refers to the process of comparing the list of callers provided by the TM with the NDNC database and segregates the telephone numbers, which can be called, and the ‘Do Not Call’ numbers of the callers who are registered with NDNC database. It will be in the interest of the TMs to get the caller list scrubbed by the NDNC database and calls only those numbers which are permitted else they will be penalized as per TRAI regulation if they call individuals who have registered themselves in the NDNC Register.



**Figure 6:** Scrubbing of Caller List by TMs

- The TMs will be required to upload the caller list for scrubbing by the NDNC System
- The TM will login into the System using the User Id and Password and upload the phone numbers list. The system accepts only excel format and 131000 records in two sheets. If the file format is wrong, the entire file will be rejected. If the record in the file is not in a proper format that record will be rejected
- The NDNC System will verify if the header information matches with the actual number of telephone numbers provided in the list and will proceed only if the information is found to be

correct. After complete verification, the caller list will be stored in the database with Time stamping and the log tables will be updated accordingly

- Database scripts will extract the numbers from the uploaded list and scrub it against the NDNC database. The list will be segregated into the numbers, which can be called, and the numbers, which cannot be called. The scrubbed file will be sent to the TM and the log tables will be appropriately updated. The scrubbed file will be a composite of three sheets, first sheet will be the scrubbed file having the cleaned caller list, second sheet will be having the number list which cannot be called, and the third sheet will be having the list of number which were received in corrupted form from the TM
- The scrubbed list will be made available for download within 24 hours of uploading the file. The TM will be able to login to the NDNC system and download the file
- Presently TM can upload 3 files per day for scrubbing i.e. about 3.93 lakhs number

### 3.5 Reconciliation of NDNC database with private DNC list of TOs

The telecom subscribers register their telephone numbers with TOs, which is maintained in the private DNC list by the respective TOs. Every fortnight NDNC registry database is updated from the private DNC list of TOs. In order to ensure that the private DNC list of individual TOs match with the list available in NDNC, the consolidated list of telephone numbers corresponding to each TO is made available to them every quarter. The TOs, then reconcile both the databases. Any deviations in the two lists are then looked into and necessary corrections are made. This process ensures synchronisation of NDNC registry database with private DNC list of TOs.

### 3.6 Monitoring Mechanism by TRAI

Using various MIS reports, TRAI does regular monitoring of various activities like

- TMs registration with DoT,
- Acknowledgement and Verification process by TOs,
- Permanent registration issued by DoT,
- Scrubbing by TMs, and
- NDNC database updates by various TOs.

## 4. Present Status of Implementation

NDNC Registry Portal is operational since July 16, 2007. Different milestones for setting up of the NDNC registry are as follows:

- Registration of TMs 16 July, 2007 onwards
- Creation of NDNC Registry 15 September, 2007 onwards
- Scrubbing of phone numbers by TMs 12 October 2007 onwards

NDNC Registry database size as on October 23, 2008 and transactions made by the TMs and TOs are shown below

**Table 1: NDNC Registry Status**

S.N.	Item	Size
1.	Total Number of Registered TMs	19600
2.	Telephone Numbers Registered in NDNC Registry	18.1 Million
3.	Average No. of telephone numbers scrubbed by TMs per day	50 Million
4.	Highest scrubbing in a day by TMs	103.2 Million
5.	Number of TMs scrubbed their calling list since Oct. 12, 2007	2,51,300
6.	Total number of telephone numbers scrubbed by TMs (since 12 October, 07)	8.85 Billion

## 5. Concluding Remarks

It is hoped that the reforms brought in by the “Telecom Unsolicited Commercial Communications Regulations 2007” will go a long way in protecting the Indian telecom subscribers from the hassles of UCC. The mission of TRAI is to ensure that the interests of consumers are protected and at the same time to nurture conditions for growth of telecommunications, broadcasting and cable services in India. The NDNC Registry Portal has been successful in protecting the consumers’ interest and reduction in UCC, which have become source of discomfort for the recipients of such calls. At the same time, it facilitates the TMs to make commercial communications to prospective consumers who have not opted out of getting UCCs by scrubbing their calling list against the NDNC registry. Unwanted telemarketing calls are intrusive. The NDNC Registry has set up a mechanism to ensure that the TMs respect the privacy of our Nation's citizens. Joint collaboration of TRAI and NIC has resulted in establishing the NDNC registry portal where the objective of the “Telecom Unsolicited Commercial Communications Regulations 2007” has been achieved. India is one of the first few countries in the world to set up a NDNC Registry common to all TOs. It is hoped that this initiative will go a long way in protecting the Indian telecom subscribers from the hassles of unwanted commercial calls.

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## About the Authors

*Shefali S. Dash* is a Doctorate in Physics and is working as a Deputy Director General in National Informatics Centre, Department of Information Technology, Government of India. Currently she is In Charge of Informatics development in the ICT sector of Government of India. Her Areas of specialisation are Planning and implementation of MIS and DSS, Development and implementation of e-Governance programmes, Informatics Development Services for the Rural Areas and Setting up of Computer Centres, Local Area Networks and computer communication infrastructure in rural areas. She has Implemented a number of large scale projects like the Rajiv Gandhi National Drinking Water Mission computerisation Project, Community Information Centre Project, GRAMSAT Project, Warana Wired Village Project, etc. She has been instrumental in preparing e-Governance Plans for various state governments in India as well as for Government of Lao Peoples Democratic Republic. Setting up of the Do Not Call Registry for TRAI is one of her major contributions towards e-enabled citizen centric services. She is currently implementing the Wide Area Network project for connecting Post Offices across the country.

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support to the office of Cabinet Secretariat and was actively involved in setting up of Community Information Centres (CICs) in North Eastern States during 2001-2005. Presently Mr. Sethi is working NDNC Registry Project for TRAI, VAT project for Govt. of Sikkim and Meghalaya, Lao PDR – India ICT bilateral cooperation project for Govt. of Lao PDR, e-Governance project for CMET Pune, online registration of Other Service Providers (OSPs) project for DoT.

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