



भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India



Recommendations on

Regulatory Framework for Promoting Data Economy Through

Establishment of Data Centres, Content Delivery Networks, and

Interconnect Exchanges in India dated 18.11.2022

(Response to Back- Reference Dated 29th August 2025

Received from Department of Telecommunications

On the Recommendations dated 18th November 2022)

New Delhi, India

17th November 2025

CONTENTS

INTRODUCTION AND BACKGROUND.....	1
DoT's VIEW	2
TRAI's RESPONSE	4
ANNEXURE	11

Introduction and Background

1. TRAI issued Recommendations on *Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India, dated 18.11.2022.*
2. One of the aspects of the recommendations dealt with the ethics and ownership of personal data of users collected by the Telecom Service Providers (TSPs) during KYC. As TSPs handle data in a fiduciary capacity, if there is a provision for a simple and secure mechanism that enables data sharing with the prior consent of such users, it may empower users to control the use of their personal data for the intended purposes and avoid any unauthorised use.
3. Concept of adopting Data Empowerment Protection Architecture¹ (DEPA) in the telecom sector, and allowing TSPs to become one of the financial information providers may enable subscribers to access their data and share it with third-party institutions on a consent basis, was one of the basic building blocks of the said recommendations.

TRAI Recommendations

4. Accordingly, the Authority *inter alia*, recommended the following:
 - 6.39 *The Authority therefore recommends that the Government should put in place a data sharing and consent management framework on lines of Data Empowerment and Protection Architecture (DEPA) framework to provide telecom subscribers consent based option to share their KYC data with recipient TSP when they port their numbers.*

¹ **Data Empowerment Protection Architecture** (DEPA) is an Indian framework and strategy, initially drafted by NITI Aayog, designed to shift data control from organizations to individuals, creating a "human-centric" data ecosystem. It enables secure, consent-based data sharing through a network of Consent Managers (like Account Aggregators in the financial sector) and open APIs, facilitating the use of personal data for services while ensuring privacy and data portability.

6.40 *This framework can later be merged with Financial Stability and Development Council (FSDC) Account Aggregator ² (AA) system facilitating onboarding of entities from other sectors and in process allowing telecom subscribers to access, control, and consent-based sharing of their other data with any onboarded entity.*

5. The Department of Telecommunications (DoT) vide letter no. 800-12/2025-LPU dated 29.08.2025 has referred back the sub-recommendations number 6.39 and 6.40 of TRAI recommendations on *Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India* dated 18.11.2022 (placed as Annexure).

DoT views

6. The relevant extract from DoT's back reference dated 29.08.2025 is given below:

" 2. *In this regard, it is intimated that after receiving inputs from DG-T for the prevention of fraudulent MNP, DoT vide letter dated 13.07.2022 had requested TRAI to incorporate the matching of demographic details, including photograph, between donor operator & recipient operator at the time of porting. Further, many communications have been occurred between DoT & TRAI in this matter. Subsequently, TRAI vide its letter dated 23.02.2024 requested DoT to carry out, through DIU, a trial and*

² **Account Aggregators** (AA) are RBI regulated non-banking financial companies (NBFCs) that act as "consent managers". Account Aggregators (AAs) act as Consent Managers for the financial sector, working with Financial Information Providers (FIPs) to share the data of an individual or small business with their consent to a Financial Information Users (FIU).

assessment of matching demographic details of customers at the time of porting, with the help of telecom service providers.

- 3. The PoC of matching demographic details of customers at the time of porting, with the help of telecom service providers, was undertaken by the AI & DIU wing of DoT, and the report for the PoC was shared with TRAI on 31.07.2024. Based on the report, TRAI has constituted a Working Group, comprising of representatives from TSPs, MNPSPs, officers from TRAI and AI & DIU Wing. It is also stated that TRAI has issued MNP regulations wherein 7th MNP Regulation mentioned that –*

" (3) Each porting request shall be accompanied by (a) a customer acquisition form as specified by the recipient operator, accompanied by all documents as applicable to a new subscriber;"
- 4. It is worthwhile to mention here that as per current MNP regulations of TRAI, complete KYC is done by the recipient operator and KYC data collected, by the recipient operator is proposed to be matched with the KYC data available with Donor operator before porting of the number. For this, a POC has been done and a Working group has been constituted by TRAI. On the other hand, TRAI is recommending the Government to put in place a data sharing framework to provide telecom subscribers a consent-based option to share their KYC data with the recipient TSP when they port their numbers. DoT is of the opinion that these two aspects appear to be contradictory and require a revisit by TRAI.*
- 5. In view of above-mentioned facts and extant MNP regulations of TRAI, consent-based sharing of KYC data with the recipient operator, at the time of porting, is not feasible. Accordingly, the recommendations no. 6.39 & 6.40 of TRAI recommendations on 'Regulatory Framework for promoting data economy through establishment of Data Centres, Content*

Delivery Networks and Interconnected Exchanges in India' dated 18.11.2022, are being referred back to TRAI for reconsideration."

TRAI response

7. The Authority has carefully examined the DoT back-reference dated 29.08.2025. Based on a thorough analysis, the Authority has formulated the current response to the back-reference. Accordingly, TRAI's response is given below:

(i) While mentioning certain aspects of Mobile Number Portability (MNP), DoT in its letter dated 13.07.2022, had stated that – *"It has come to notice that many mobile connections are being fraudulently ported out by the criminals/fraudsters in the name of a new customer, who is not the original customer with the Donor operator, due to fact that in the existing Mobile Number Portability (MNP) process, as notified by TRAI, **there is no exchange of customer details from Donor operator to Recipient operator.** In view of the above, it is requested that the following suggestions be considered for incorporation in the extant MNP process for the prevention of fraudulent portings:*

- 1. After generation of the UPC code, at appropriate stage, copy of old Customer Application Form (CAF) along with the attached documents may be transferred from Donor Operator to Recipient Operator.*
- 2. The Recipient Operator should match the credentials of the customer (including photograph) in the new CAF with the old CAF. Only after establishing that the porting request is from the original bonafide customer, the MNP may be allowed."*

- (ii)** In consideration of the DoT's specific suggestions towards prevention of fraudulent portings, TRAI vide letter dated 19.06.2023 has sought a further clarification from DoT about the confidentiality of user information, in accordance with the prevailing licensing framework.
- (iii)** In response, DoT vide its letter dated 24.07.2023 has stated that *clause 37.2 of Unified Licensing (UL) prohibits the licensee to divulge/use the information of the party (subscriber) to whom it provides services, for sharing with any other third party, if there is no written consent of party (subscriber) to divulge/use such information with the third party. In case of MNP, the existing subscriber of Donor operator voluntary approaches the Recipient operator and shares his demographic details through KYC verification with the Recipient operator for taking telecom services by retaining the same mobile number.*
- (iv)** Thereafter, TRAI initiated the consultation process on *Draft Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2023* vide Consultation Paper issued on 27.09.2023, which included DoT's proposal regarding transfer of CAF from Donor operator to Recipient Operator, and matching of demographic details by the Recipient operator.
- (v)** Subsequently, TRAI notified *Telecommunication Mobile Number Portability (Ninth Amendment) Regulations, 2024* on 14.03.2024. It is worth noting that most TSPs have suggested that a machine-based validation of subscribers' demographic details should be carried out before the porting process, as mentioned in the Explanatory Memorandum of MNP (Ninth Amendment) Regulations, 2024.
- (vi)** Accordingly, a Proof of Concept (PoC) has been undertaken by TRAI for matching demographic details by way of comparing the demographic information given by the customer to the Recipient Operator during

porting, with the customer's demographic information stored with by the Donor operator. Matching is being done electronically through the DIU platform.

- (vii)** This matching process has avoided direct interchange of KYC from one operator to another, which is in accordance with the prevailing licensing conditions, while serving the purpose of matching the demographic details. On the conclusion of PoC, the final decision regarding the date of implementation of the demographic matching of the users, through DIU, will be taken.

Recent developments

- (viii)** Further, for matters related to biometric verification of users, storage of user data, and consent-based sharing of data certain developments have taken place recently with the notification of rules/ draft rules issued by DoT.

These are detailed as follows:

- (a)** Mandatory fulfilment of KYC requirements through any verifiable biometric based identification for provision of any telecommunication service, vide Section 3(7) of the Telecommunications Act 2023.

Section 3(7): Any authorised entity which provides such telecommunication services as may be notified by the Central Government, shall identify the person to whom it provides telecommunication services through use of any verifiable biometric based identification as may be prescribed.

(b) Provision of Mobile Number Validation³ (MNV) platform vide newly inserted Rule 7A vide *Telecommunications Cyber-security (Amendment) Rules 2025*, as notified on 22.10.2025. MNV platform established under Rule 7A enables validation by authorised entities and licensees as regards whether telecommunication identifiers (mobile numbers) specified by users, correspond to the users as present in the database of an authorised entity or licensee. Therefore, service profile of a user associated with a particular mobile number could be validated electronically by using the user-database of the concerned TSP.

“7A. Validation of telecommunication identifiers. —

- (1) *The Central Government, for ensuring telecom cyber security and preventing security incidents, shall either by itself, or through an agency authorised by it, establish a MNV platform and issue directions to authorised entities and licensees to participate on such platform.*

- (2) *The following entities may place a request on the MNV platform and upon payment of fees, as specified therein, seek validation as to whether the telecommunication identifiers as specified by their customers or users, correspond to the users as available in the database of an authorised entity or licensee:—*
 - (a) *a TIUE⁴, either suo moto, or upon a direction from Central or State Government or an agency authorised by the Central or State Government; or*

³ Rule 2(cb) : **MNV platform** means the mobile number validation platform established under rule 7A to enable validation by authorised entities and licensees as regards whether telecommunication identifiers specified by TIUE customers or users, correspond to the users as present in the database of an authorised entity or licensee, as the case may be.

⁴ Rule 2(i) : **TIUE (telecommunication identifier user entity)** means a person, other than a licensee or authorised entity, which uses telecommunication identifiers for the identification of its customers or users, or for provisioning, or delivery of services.

(b) the Central Government or State Government or any agency authorised by the Central Government or State Government:

...

(5) The mobile number validation under this rule shall facilitate validation of customers or users associated with a telecommunication identifier for the purpose of services linked to such identifier, and the TIUE, authorised entity and licensee, as the case may be, shall ensure compliance with applicable laws relating to data protection for this purpose.

(c) Exception provided to the Confidentiality of user information vide Draft Rule 41 of *Telecommunications (Authorisation for Provision of Main Telecommunication Services) Rules 2025*, as circulated on 05.09.2025. As per proviso to draft rule 41(4), user's information may be divulged or used, in accordance with the express consent accorded by the concerned user.

Draft Rule 41: Confidentiality of information

....

(4) An authorised entity shall, subject to the terms and conditions of the authorisation, take all necessary steps to safeguard the privacy and confidentiality of any information of a user and its business, to whom it provides the telecommunication service or from whom it has acquired such information by virtue of the telecommunication service being provided and shall endeavour to ensure that:

(a) no authorised entity or any person acting on its behalf, seeks such information other than what is necessary, for the purpose of providing telecommunication;

(b) no authorised entity or any person acting on its behalf, divulges or uses any such information except as may be

necessary in the course of providing telecommunication service to the user:

Provided that sub-rule (4) shall not apply where:

the information relates to a specific user and that user has consented in writing to such information being divulged or used, and such information is divulged or used in accordance with the terms of that consent;

- (ix)** The Authority observes that the provisions in the above-mentioned notifications and draft Rules indicate the intent of the Government to create a mechanism in place that permits KYC data interchange between platforms, with the consent of the user. This is in spirit of TRAI recommendations 6.39 and 6.40.
- (x)** The demographic matching during MNP is proposed to be done through the DIU platform in order to meet the present licensing norms. But in the future, when all the rules under the Telecommunications Act 2023 are notified, the matching of demographic details during MNP may be accomplished through a third-party platform or between the operators themselves.
- (xi)** Keeping in view of the above, the Authority hereby revises sub-recommendation 6.39 as follows:

6.39 The Government should put in place a data sharing and consent management framework on the lines of the Data Empowerment and Protection Architecture (DEPA) framework, for consent-based sharing or validation of telecom subscriber KYC data, including during number portability.

- (xii)** While framing the sub-recommendation 6.40, TRAI considered that mobile numbers are being increasingly used to fulfil KYC norms by various government and private institutions, including financial and banking institutions. Since there is no centralised institutional mechanism in place today, each institution devises its own KYC fulfilment norms in its own way. To address this void and provide a robust institutional mechanism, TRAI proposed these sub-recommendations for consent management, aiming to avoid duplication.
- (xiii)** Further, the Authority has favoured a more inclusive framework which can be used in the future for consent-based transfer of not only KYC data of telecom subscribers, but also other data like credit history, tariff choices, UCC preferences, etc., with other entities from telecom as well as other sectors like banking and finance. Accordingly, the Authority has framed sub-recommendation 6.40. Since no specific reason has been mentioned by DOT while not accepting the sub-recommendation 6.40, the Authority reiterates its sub-recommendation.

DoT reference dated 29.08.2025

Government of India
Ministry of Communications
Department of Telecommunications
(Licensing Policy Wing)

12th Floor, Sanchar Bhawan, 20 Ashoka Road, New Delhi – 110 001

File No: 800-12/2025-LPU

Dated: 29.08.2025

To

The Secretary
Telecom Regulatory Authority of India (TRAI)
Tower-F, World Trade Centre,
Nauroji Nagar, New Delhi: 110029

Subject: TRAI recommendations on Regulatory Framework for promoting data economy through establishment of Data Centres, Content Delivery Networks and Interconnected Exchanges in India dated 18.11.2022-reg

This is in reference to TRAI recommendations dated 18.11.2022 on above mentioned subject wherein, vide recommendation no. 6.39 & 6.40, it has been recommended that:

6.39 The Authority recommends that the Government should put in place a data sharing and consent management framework on lines of Data Empowerment and Protection Architecture (DEPA) framework to provide telecom subscribers consent based option to share their KYC data with recipient TSP when they port their numbers.

6.40 This framework can later be merged with Financial Stability and Development Council (FSDC) Account Aggregator (AA) system facilitating onboarding of entities from other sectors and in process allowing telecom subscribers to access, control, and consent-based sharing of their other data with any onboarded entity.

2. In this regard, it is intimated that after receiving inputs from DG-T for prevention of fraudulent MNP, DoT vide letter dated 13.07.2022 had requested TRAI to incorporate the matching of demographic details including photograph between donor operator & recipient operator at the time of porting. Further, many communications have been occurred between DoT & TRAI in this matter. Subsequently, TRAI vide its letter dated 23.02.2024 requested DoT to carry out, through DIU, a trial and assessment of matching demographic details of customers at the time of porting, with the help of telecom service providers.

3. The PoC of matching demographic details of customers at the time of porting, with the help of telecom service providers was undertaken by AI&DIU wing of DoT and the report for the PoC was shared to TRAI on 31.07.2024. Based on the report, TRAI has constituted a Working Group, comprising of representatives

from TSPs, MNPSPs, officers from TRAI and AI&DIU Wing. It is also stated that TRAI has issued MNP regulations wherein 7th MNP Regulation mentioned that –

"(3)Each porting request shall be accompanied by (a) a customer acquisition form as specified by the Recipient Operator accompanied by all documents as applicable to a new subscriber;"

4. It is worthwhile to mention here that as per current MNP regulations of TRAI, complete KYC is done by the recipient operator and KYC data collected by the recipient operator is proposed to be matched with the KYC data available with Donor Operator before porting of the number. For this, a POC has been done and a working group has been constituted by TRAI. On the other hand, TRAI is recommending the Government to put in place a data sharing framework to provide telecom subscribers consent based option to share their KYC data with recipient TSP when they port their numbers. DoT is of the opinion that these two aspects appear to be contradictory and require a revisit by TRAI.

5. In view of above mentioned facts and extant MNP regulations of TRAI, consent based sharing of KYC data with the recipient operator, at the time of porting, is not feasible. Accordingly, the recommendations no. 6.39 & 6.40 of TRAI recommendations on '*Regulatory Framework for promoting data economy through establishment of Data Centres, Content Delivery Networks and Interconnected Exchanges in India*' dated 18.11.2022, are being referred back to TRAI for re-consideration.

This is issued with the approval of **Secretary (T)**.

Digitally signed by
PRASHANT VERMA
Date: 29-08-2025
12:24:31
(Prashant Verma)
Director (LPU)

Copy to: JS(T), DDG(DS), & DDG (AI&DIU), DoT HQ- for kind information.