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GOVERNMENT OF INDIA
MINISTRY OF LABOUR & EMPLOYMENT

e-Shram

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NATIONAL DATABASE OF UNORGANISED WORKERS

Guidelines on Data Integration/ Sharing through
eShram Portal with State/UT Governments

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1. Introduction to eShram

Ministry of Labour & Employment has developed eShram portal for creation of a comprehensive National Database of unorganized workers (NDUW) seeded with Aadhaar for all types of unorganized workers such as Construction Workers, Migrant Workers, Domestic Workers and other sub-group of unorganized workers. The registration of workers in the portal has commenced from August 2021.

The data on eShram portal is proposed to be shared with the State/UT Governments for the purpose of verification and for extending social security benefits/welfare schemes to the workers registered on the eShram portal.

2. Key Objectives of the Guidelines

The key objectives of the Guidelines are as under:

- To clearly define the process to be followed during data sharing.
- To clearly define the roles and responsibilities of the State/UT Governments for using eShram data.
- To provide necessary provisions and guidelines related to the privacy and security of eShram data being shared with the State/UT Governments.
- To list out the precautions to be taken regarding storage, handling and utilization of the data being shared from eShram.
- To provide transparency and remove any ambiguity related to procedure and nuances of the data sharing activity from eShram to the State /UT Governments and vice versa.

3. Key Points for sharing eShram data

The following are the key points for sharing of eShram data with States/UTs:

- All States/UTs are encouraged to build a system for sharing eShram data through API.
- State/UT mentioned in Permanent and Current address fields on eShram database of the worker will be basis for sharing eShram data of that worker with respective States/UTs.
- The States/UTs shall verify and validate the data shared by eShram before extending any benefit/scheme to eShram registrant.

- States/UTs will also seed corresponding UAN No. of the worker as per eShram data in their databases after required mapping, verification, and validation of the data.
- The State/UTs will share the verified eShram data record with eShram portal along with unique State Id, if any, of that worker.
- Once eShram receives verified data from States/UTs, the verified fields will be stored in the secondary table in eShram database. The State Id of the worker will be stored in the existing field earmarked for this in the eShram database.
- The verified data of State/UTs shared with eShram database will also be available to the eShram registrant for viewing along with the eShram data and as per his/her entries.
- eShram registrant will be able to update his/her data on eShram even after receipt of his/her verified record from the State/UT: -
 - Only data collected through eShram will be available for updation. The same shall be sent to States/UTs through API for re-verification.
 - In case of updation of verified data of workers in State/UT database, the same will be communicated to eShram through API. If State/UT verified data is already existing in eShram secondary table, the same will get overridden with the latest updated and verified data received from States/UTs for a particular worker.
 - The State/UT should also provide date of updation and verification along with the verified data records.
- Matching and tagging of State/UT records with eShram data as well as taking consent of workers for sharing their data with eShram will be the responsibility of States/UTs.

It is proposed to share data with the State / UT Governments through following two methods:

- i. Provision 1 – Data Sharing through API with State/UTs having their own portal for registration and maintaining database of unorganized workers.
- ii. Provision 2 – Data Sharing through Dashboard with State/UTs not having their own portal for registration and maintaining database of unorganized workers

4. Data Sharing Provision 1: Data exchange through API

For API based data exchange following activities will be carried out:



- Common API description document shall be shared by Ministry of Labour & Employment (MoLE) with the State/UT Governments. For each State/UT, API shall be created by both eShram and respective States/UTs for exchange of data from eShram to State/UT databases and vice versa.
- API parameters and responses to the API calls shall be defined through appropriate API documentation between State/UT technical team and the eShram team for each State/UT.

4.1 Scenario 1 - States/UTs having Aadhaar seeded Database

Steps to be followed for sharing of existing data

- Step - 1 -** eShram data with hashed Aadhaar number for the respective State/UT will be shared through API for matching of both the Databases. However, if the State/UT Database already has UAN number seeded into it, data exchange would be done based on eShram UAN only. The fields to be shared from eShram are as per **Annexure-I**.
- Step - 2 -** Based on the hashed Aadhaar comparison, each registrant in eShram and State/UT database will be uniquely identified and mapped. The data shared from eShram shall be stored in a separate table in the State/UT database.
- Step - 3 -** The States/UTs shall have to verify and validate eShram data and thereafter, UAN will be seeded in State/UT database for mapped data alongside State ID as additional field of common identifier along with the validated and verified data.
- Step - 4 -** States/UTs will return the verified data to eShram after required verification/ validation and consent of workers. The fields to be shared by States/UTs are as per **Annexure-II**.
- Step - 5 -** A separate table shall be created in eShram database wherein the verified data coming from the State/UT database shall be stored alongwith the UAN and State ID of the worker. State ID will get tagged in the original eShram database table also against the corresponding UAN number as a common identifier. Hence, UAN and State ID shall be present in both the tables in eShram as common identifier.
- Step - 6 -** Data sharing activity shall be done once in a quarter and incremental data from the point of last sharing shall be sent to the States/UTs. Additionally, if any fields for which data have already been shared with States/UTs is updated by a worker in eShram shall again be sent to States/UTs for re-

verification purpose. Similarly, in case of updation of verified data of workers in State/UT database, the same will be communicated to eShram through API. If State/UT verified data is already existing in eShram secondary table, the same will get overridden with the latest updated and verified data received from States/UTs for a particular worker.

4.2 Scenario 2 - States/UTs that have non-Aadhar seeded Database

Steps to be followed for sharing the data from eShram to the State/UT portal and vice versa

- Step - 1 -** eShram data for that State/UT will be shared through API for the fields as per **Annexure-I**.
- Step - 2 -** Based on the comparison of the data shared from eShram and State/UT databases, the State/UT will uniquely identify and map the common registrant in both the databases.
- Step - 3 -** The data shared from eShram shall be stored in a separate table in the State/UT database.
- Step - 4 -** The States/UTs shall have to verify and validate eShram data and thereafter, UAN will be seeded in State/UT database alongside State ID as additional field of common identifier.
- Step - 5 -** States/UTs will return the verified data to eShram after required verification/validation and consent of workers. The fields to be shared from States/UTs are as per **Annexure-II**.
- Step - 6 -** A separate table shall be created in eShram database wherein the verified data coming from the State/UT database shall be stored alongwith the UAN and unique State ID of the worker. State ID will get tagged in the original eShram database table against the corresponding UAN number as a common identifier. Hence UAN and State ID shall be present in both the tables in eShram as common identifier.
- Step - 7 -** Data sharing activity shall be done once in a quarter and incremental data from the point of last sharing shall be sent to States/UTs. Additionally, if any fields for which data have already been shared with States/UTs is updated by a worker in eShram shall again be sent for re-verification purpose. Similarly, in case of Updation of verified data of workers in State/UT database, the same will be communicated to eShram through API. If State/UT verified data is already existing in eShram secondary table, the same will get overridden



with the latest updated and verified data received from States/UTs for a particular worker.

5. Data Sharing Provision 2: Through Data sharing Module

The Ministry of Labour and Employment envisages to provide Display and Download provision of State/UT specific eShram data to the States/UTs not having their own database. In this regard, separate module within the eShram portal will be created. This module intends to provide exclusive access to States/UT Governments to view and download the State/UT specific data of unorganized workers registered on eShram portal only on need basis.

The process for display, download/ Sharing of data will be as under:

- A single common portal will be prepared under eShram and the same will be hosted centrally along with eShram portal.
- This portal/module will enable any State/UT to get role-based access of the eShram registrant data for view/ download purpose.
- The role-based access will be controlled centrally at MoLE through permissions based on requests received from State/UT Governments.
- Central Admin at MoLE can control the data access limit (specific State or district and number of parameters, etc) and type of access (only view or download or both).
- This portal/module will have User Management (User Creation, assignment of specific State/district data visibility/downloading, assignment of specific parameters for access, Activating/ Deactivating of user privileges, etc.) with central control.
- States/UTs will be required to nominate an officer not below the rank of Secretary in the State/UT to receive user id and password with view and/or download provision from the data sharing module of eShram. The nominated officer will also be required to bio-authenticate to access the data sharing portal/module.
- In order to avoid large data files, the last 7 days' data will be made available for view and/or download provision. This duration will be customizable as per the specific requirement.
- The data download link will be sent to registered email id of authorized user. After the secured access by the authorized user inside the date sharing portal/module, the data file will be available for 20 minutes (configurable as per requirement) for

download, after which file will become unavailable. The password to open the secured file will be sent to registered email id of authorized user in a separate mail.

- The download/view action on eShram data by any authorized user can be tracked and all actions will get logged in the system which can be seen by the user and the Central eShram administrator as well.
- For the purpose of incorporating Multi Factor Authentication, all the users shall also be authenticated through Aadhaar bio-auth for logging into the system. In case of change of officer, the relieving officer shall authenticate the next officer for access to the portal/module.

6. Terms and Conditions of Data Sharing

6.1 Ministry of Labour and Employment (MoLE), Government of India shall not be liable for any incorrectness of the eShram data or resultant losses to the concerned State/UT upon use of eShram data without prior verification because the eShram data is based on self-declaration by the registrant.

6.2 The State/ UT Government shall:

- i. use the data only for the purpose of extending social security scheme/benefits and formulation of any policies for the workers by the State/UT Government.
- ii. not re-share eShram data with any other Agency, Department, individual or other State/UT Governments without prior explicit approval of MoLE.
- iii. comply with all rules & regulations brought out by Government of India, UIDAI, court rulings etc regarding privacy and security of the individual data shared through eShram.
- iv. follow the Guidelines and all the subsequent amendments/corrigendum to these Guidelines.
- v. return the eShram data shared with the States/UTs after due verification and validation, UAN wise and along with State/UT Id if any.
- vi. make necessary arrangement for storage of the shared data in a secured environment.
- vii. be the complete responsibility of the State/UT Government for the protection of eShram data from any leakage, theft, phishing or other cyber-attack on the data, once downloaded from the eShram sharing module or once transferred through API.



- viii. mandatorily verify the data received from MoLE in terms of deduplication, cleansing, physical/ online verification etc. before use of data for any purpose/ benefits or schemes which are intended to be provided to the eShram registrant.

The Labour Department of the State/UT headed by Secretary shall be the Nodal Department for sharing the data and for carrying out the obligations as indicated above.

7. Data Security, Protection and Privacy guidelines for the States/UT governments

Data security, protection and privacy guidelines advised to be followed by the States/UTs while handling the eShram data in their environment are as under:

- i. The States/UTs shall use appropriate antivirus for the system where data is stored.
- ii. The States/UTs should ensure Intrusion Detection and Prevention system to be in place for the environment where the eShram Data is stored or used.
- iii. The States/UTs should ensure whitelisting of only required ports/IPs in their network's firewall.
- iv. The States/UTs should ensure OS hardening in the host system where eShram registrant data will be sent.
- v. The States/UTs should ensure latest patches and updates of all the system software are implemented timely and on regular basis.
- vi. The States/UTs should carry out periodic security audit of the application and infrastructure used in data sharing through Cert-In empanelled agency.
- vii. Security Audit of the State/UT system wherein the data is stored may be carried out by MoLE or its designated agency at any point in time.
- viii. The States/UTs in discussion with eShram team should ensure encryption of the data, through Public and Private key combination for encrypting and decrypting while exchange and storage of data.
- ix. The States/UTs should ensure that there is regular Vulnerability Assessment of servers used in transfer and receiving of data.
- x. Aadhaar storage guidelines to be followed by States/ UTs with whom data is being shared including creation of vaults and so forth.
- xi. States/UTs shall ensure that data resides in a data centre located in India. In case, cloud services are used, the services of only NIC Cloud or MeitY empanelled Cloud Service Providers (CSPs) will be utilized. At no point, the data should not be stored or replicated outside India.

- xii. All the relevant acts related to data sharing, data protection data privacy and their subsequent amendments will also be applicable in addition to the data sharing guidelines mentioned in this document.
- xiii. States/UTs should ensure that Personal Identifiable Information is not visible to any unauthorised officials, persons, individuals etc. and such information shall be masked to ensure privacy of data.

Annexure – I

Fields To be shared with States/UTs from eShram

SI No.	Fields To be shared with States/UTs from eShram
1	Hashed Aadhaar (SHA 512)
2	Hashed Aadhaar (SHA 256)
3	UAN No.
4	Name of the person
5	Mobile Number
6	DoB
7	Gender
8	Father's/ Husband's name
9	PIN Code - Permanent Address
10	LGD code of District in Permanent Address
11	LGD code of State/UT of Permanent Address
12	LGD code of District in Current Address
13	LGD code of State/UT of Current Address
14	Current Address
15	PIN Code - Current Address
16	Primary Occupation - NCO Code
17	Secondary Occupation - NCO Code
	Mandatory Master Tables to be Imported from eShram
1	Master table of Income Slab
2	Master table of Disability Type
3	Master table of Education Qualification
4	Master table of Gender
5	Master table of Social category

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Fields to be shared by States/UTs with eShram

Sl. No.	Fields to be shared by States/UTs with eShram
1	Hashed Aadhaar (SHA 512)
2	Hashed Aadhaar (SHA 256)
3	State specific Unique Beneficiary ID
4	Father's/ Husband's name
5	Mobile Number
6	Social Category Code
7	Income Slab Code
8	Is Migrant Worker?
9	PIN Code - Permanent Address
10	LGD code of District in Permanent Address
11	LGD code of State/UT of Permanent Address
12	LGD code of District in Current Address
13	LGD code of State/UT of Current Address
14	LGD code of Domicile State/UT
15	PIN Code - Current Address
16	LGD Code of Domicile District
17	Occupation - NCO Code
18	LGD code of Sub-District
19	LGD code of Village
20	Education Qualification Code
21	Bank account – Verified
22	IFSC Code of Bank account – Verified
23	Death of Registrant
24	Disability Type
25	Disability status
26	Is BOCW

