Agenda of Workshop

01

DGQI 2.0 framework orientation

- DGQI Overview
- Walkthrough of 3
 Pillars
- Overview of Themes within Pillars
- Weightage and Scoring
 Mechanism – Pillar and Theme Wise

02

Score and Ranking - Current & Previous

- Previous Score & Ranking
- Current Score & Ranking
- Scheme wise –
 Previous and
 Current Score
- Pillar and Theme
 Wise score

03

Theme - wise detailed walkthrough

- DGQI Theme wise detailed walkthrough
- Question wise walkthrough & explanations
- Feedback on responses

04

Q&A and Way Ahead

- Questions from scheme officials
- Way Ahead and future plan of action

05

User Manual

- Walkthrough of user manual to access DGQI portal for scheme officials
- · Queries, if any

DGQI 2.0 framework orientation

Larger Purpose of this activity

Data Security & Privacy

Ensuring security, confidentiality and integrity of government data from unauthorized access, breaches and misuse

Data Access & Transparency

Promoting access to government data for citizens and other stakeholders ensuring appropriate controls and permissions

Data Governance Framework

Establishing a robust data governance framework that includes roles, responsibilities, and processes for managing data assets within ministries

Data Sharing and Interoperability

Facilitating data sharing and interoperability among various government ministries to enable seamless exchange of information

Data Quality and Standardization

Establishing guidelines and standards for data quality, accuracy, consistency, and completeness across different ministries

Capacity Building & Training

Enhancing data literacy and skills among government officials to effectively manage and utilize data

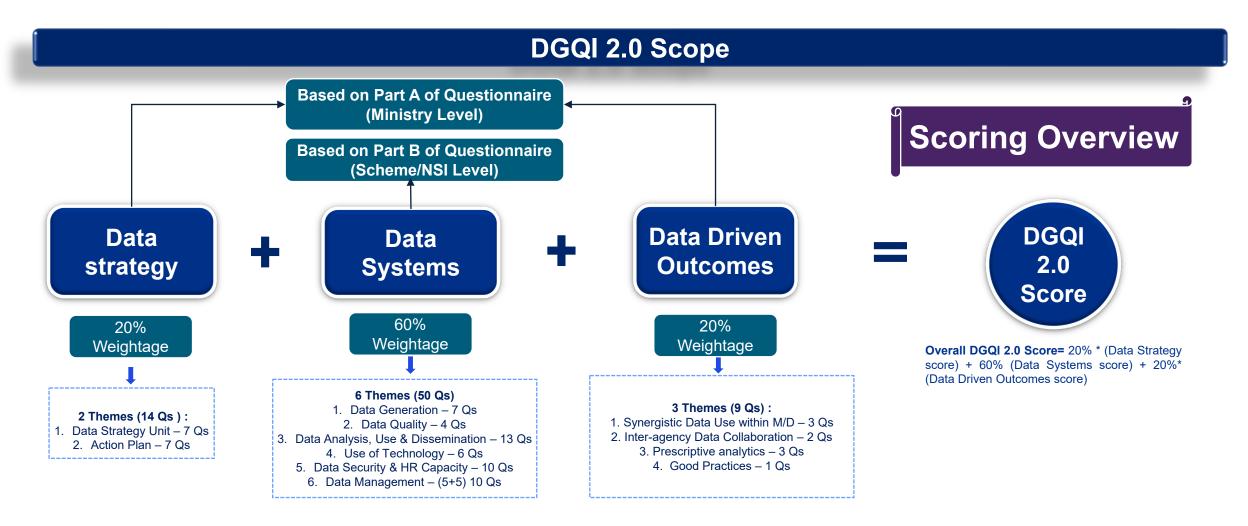
Data Analytics and Decision Making

Leveraging data assets to enable evidence-based policy formulation, monitoring, and evaluation

Compliance with Regulatory Requirement

Ensuring compliance with relevant data protection laws, regulations, and policies, both at national and international levels

DGQI 2.0 Overview



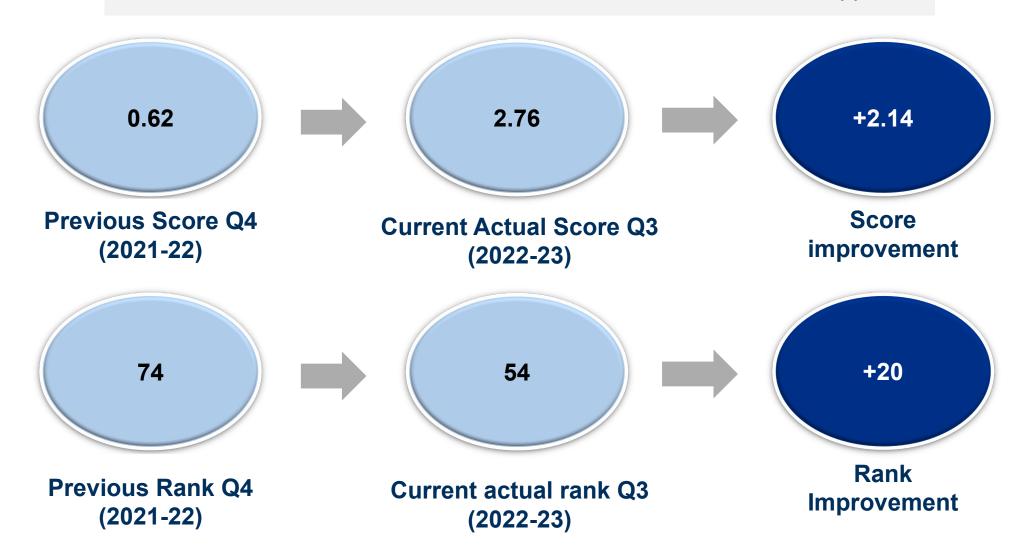
O2 Score and Ranking Current & Previous

Internal Scheme-Wise Score and Ranking

Sr No	Scheme Name	Previous Score - Q4 FY21-22	Previous Rank – Q4 FY21-22	Current Score – Q3 FY22-23	Current Rank – Q3 FY22-23	Score Improvement
1	SWADESH DARSHAN	1.92	1	4.18	1	2.26
2	CAPACITY BUILDING FOR SERVICE PROVIDERS	1.53	2	4.13	2	2.6
3	PRASHAD	0.86	3	4.09	3	3.23
4	ASSISTANCE TO IHMS/FCIs/IITTM/NIWS	0.60	4	3.99	4	3.39 🔺
5	OTHER SUPPORT TO TOURIST INFRASTRUCTURE	0.46	5	1.79	5	1.33 🔺
6	DOMESTIC PROMOTION AND PUBLICITY INCLUDING MDA	0.21	6	1.18	6	0.97 🔺

Current score and ranking of the ministry

There is an incremental shift in the DGQI score since DGQI team stepped in



O3
Theme – Wise detailed walkthrough

DGQI Themes Overview

1) Data Generation

 Measures the ability to collect and report data on inputs, outputs and outcomes of schemes

2) Data Quality

 Measures the ability to undertake data quality assessment procedures to evaluate quality of incoming data and make suitable corrections

3) Data Analysis, Use and Dissemination

 Measures the ways in which collected data is analyzed and used for evidence creation and decision making

4) Use of Technology

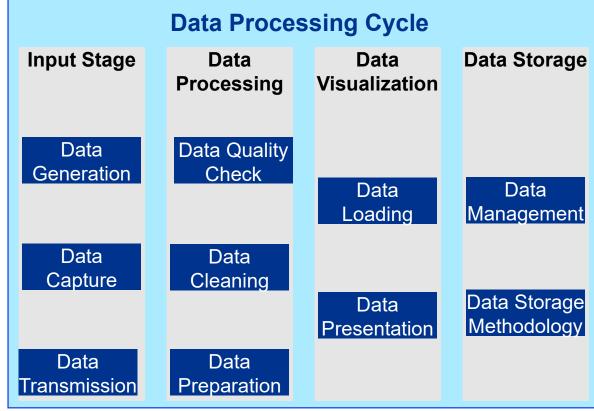
 Covers linkages with other platforms like PFMS, Aadhar, etc. and use of emerging technologies like Al/ML, Drones, etc. in scheme monitoring

5) Data Security and HR Capacity

 Measures capacity to ensure data security and privacy related concerns of data systems

6) Data Management

• Covers guidelines for data management, storage, archival and retention



7) Inter-Agency data collaboration

 Covers how data-based collaborations have been undertaken with other agencies to drive better databased outcomes

8) Synergistic Data Use

 Covers how gaps in available data have been identified from decision making perspective and corrective steps taken to remedy the same

9) Prescriptive Analytics

 Covers how a data culture is being created by movement to prescriptive analytics

Data System Pillar (60%) - Data Generation Theme (11%) - (1/2)

Q1 - Are the data requirements of the scheme well defined and documented? Input - Yes/No

Scheme divisions need to document below defined for compliance

- a. Need for collecting data
- b. Input, Output and Outcome indicators
- c. Granularity and frequency at which the data needs to be collected
- d. Mode and method of data collection

Q2 - Is data collected for all identified data requirements?

Input - Input - Yes/ No/ Partial

Output- Yes/ No/ Partial

Outcome points- Yes/ No/ Partial

Way Forward

- Schemes/ Divisions to share any document covering points mentioned in Question 1 for Compliance
- Scheme As-Is Report will be developed to measure compliance level
- In Case data requirement document is not available, this document to be developed with assistance from DSU

Q3 - Is collected data reported digitally? (i.e., is there is a digital electronic database/MIS)? (Yes/No)

Answer can be 'Yes' if data is collected digitally via a MIS (Management Information System). Includes schemes where data is collected on paper first and converted to later report it digitally via MIS

Data System Pillar (60%) - Data Generation Theme (11%) - (2/2)

- Q4 At what granularity is data reported digitally for the scheme? Multi-select question.
 (State/District/subdistrict/tehsil/block/village/facility/project)
- Q5 At what frequency is data reported digitally for the scheme? Multi-select question.

 (Realtime/Daily/weekly/monthly/quarterly/half-yearly/annually)
- Q6 How is this data collected at the ground level?
 (Collected on pen and paper then fed on digital system or collecting using digital modes or Transactional Data)

Appropriate option to be selected as per the method of data collection currently implemented at ground level. Collected data can be **transactional** in nature if collected in the **process of a digital transaction** requiring no separate human resources.

Q7 – Are any of the following technologies used?

Input - CAPI Surveys - Yes/ No/ NA

Geotagged Information - Yes/ No/ NA

Geofenced Information - Yes/ No/ NA

Data System Pillar (60%) - Data Quality Theme (11%) - (1/2)

Q1 - Are there pre-defined documented mechanisms to assess quality of incoming data? (Yes/No)

Scheme divisions need to document below aspects of incoming data for compliance

- a. Quality Dimensions Accuracy, Completeness, Timeliness, Validity of data, Consistency, etc.
- b. Protocols for Data Validation, Filtering, Summary statistics, Data deduplication
- c. Frequency to assess data quality
- d. Backchecks to check data quality
- **Q2** How is data quality assessment done?

(Automatically/Manually/Hybrid/Not Done)

Way Forward

- a. Schemes/ Divisions to share any document covering points mentioned in Question 1 for Compliance
- b. Scheme As-Is Report will be developed to measure compliance level
- c. In Case data quality assessment document is not available, this can be developed with assistance from DSU

'Automatically' if undertaken automatically by advanced digital systems with no human intervention.

'Manually' if undertaken manually without using any digital systems.

'Hybrid' if undertaken by using a hybrid of both manual and automated systems.

Data System Pillar (60%) - Data Quality Theme (11%) - (2/2)

- Q3 Are following protocols followed during data quality assessment? Multi-select question.
- a) Incoming data is filtered/cleaned after checking for missing values, logical flaws in data, incorrect values etc.
- b) Summary statistics of incoming data are generated and checked for errors/abnormalities
- c) Existence and accuracy of metadata for all the scheme's data is periodically checked (Schema is well defined)
- d) There is a system for identifying duplicate data and removing redundancies
- e) There is a system to ensure data is accurate, consistent and traceable to origin/source, whenever it is reproduced by any agency (data integrity)

Appropriate options to be selected as per protocols currently followed for data quality assessment

Q4 - Are following feedback mechanisms/backchecks also leveraged for data quality control? Multi-select question.

(Social Audits/ Telephonic backchecks/verification with beneficiaries/ Multimedia data – citizen voice, video, images as evidence/ Sample inspections based on data/ Third party data verification/ data audits)

- A. Social audit is a form of citizen participation that focuses on government performance and accountability.
- B. **Telephonic backchecks** can be undertaken to verify that data is accurate.
- C. Provisions for citizens to submit multimedia evidence to improve the quality of data.
- D. Random inspections made to verify data on ground.
- E. Data on the MIS is verified/audited by third parties

Data System Pillar (60%) - Data Analysis, Use and Dissemination (11%) - (1/4)

- **Q1** What types of data analysis is undertaken on collected data?
- **a. Descriptive data analysis** (e.g., basic cross tabulation, frequency distribution, mean, median etc.)
- **b.** Exploratory data analysis (e.g., correlation etc.)
- c. Inferential data analysis (Using a small sample of data to infer about a larger population)
- **d. Predictive analysis** (Using historical or current data to find patterns to make predictions about the future)
- e. Causal analysis (Looks at the cause and effect of relationships between variables, focused on finding the cause of a correlation)
- **f. Mechanistic Analysis** (Understand exact changes in variables that lead to other changes in other variables)
- **Q2** Is cross-schematic/sectoral data also analyzed, wherever needed?
 - (Yes/No) Answer can be 'Yes' if in addition to schematic data, data from other schemes or sector level data is used to inform scheme level decision making on a regular basis.
- Q3 How often is this data analysis well-documented (in reports/ notes/ publications)? (Real time/Quarterly/Half-yearly/Annually/Never)

Multi-select question.

- A. **Descriptive Analysis-** Basic level of analysis that generates **simple summaries** about the data population.
- B. **Exploratory Analysis** It tries to also find **relationships** between **variables** present in the dataset.
- C. **Inferential Analysis** Use a small sample of data to make **inferences about a larger population**.
- D. **Predictive Analysis-** Use historical/ current data to find patterns to make **predictions about the future**.
- E. Causal Analysis- Cause and effect of relationships between variables.
- F. **Mechanistic Analysis** Understand exact changes in variables that lead to other changes in other variables.

Data System Pillar (60%) - Data Analysis, Use and Dissemination (11%) - (2/4)

Q4 - How often is this data analysis being used by the M/D officials for:

- a) To re-design the schemes or activities undertaken under the scheme at the end of the tenure.
- b) To do mid-course corrections through design or implementation changes?
- c) To guide intra-scheme funding decisions like interstate allocations, inter-component allocations, etc.?
- d) To guide inter-scheme budgetary allocations?
- e) To decide quarterly releases to implementing agencies?
- f) For fraud management and analysis?
- g) Day to day delivery and monitoring of implementation/ performance of the scheme

Q5 - What other modes are used to disseminate the MIS/ paper-based data and related data analysis? Multi-select question

(Social Media/ Dashboard/ Mobile App /SMS /Newspaper Magazines /Outdoor Media / Events/ TV Radio/ Others)

- A. Dashboards are an essential tool to display Key Performance Indicators (KPIs) from schematic data
- B. Mobile Apps are utilized to share data with citizens and interact with them.
- C. Social Media outlets are used to share data with citizens and interact with them.
- D. SMS used to send details regarding transaction/ process updates to users/ beneficiaries of certain schemes.
- E. Newspapers/Magazines, Outdoor Media, Events, TV/Radio are effective mass communication methods

Data System Pillar (60%) - Data Analysis, Use and Dissemination (11%) - (3/4)

- Q6 What purposes are dashboards used for by the M/D officials? Multi
 - Multi-select question
 - a. Visual presentation of KPI/KRAs with drill-down capability to lowest level to gain total visibility
 - b. Capturing trends over time and identifying preempt trends
 - c. Measure efficiencies/inefficiencies in processes
 - d. User friendly one stop access to multiple automated reports
- **Q7** What types of Data Visualizations are used?

Multi-select question

(Bar Charts/ Histograms/ Pie Charts/ Scatter plot/ Heat Maps/ Tree Maps/ Gantt Chart/ Specialized visualizations- Stripe graphics, streamgraph,

Basic visualizations (options a, b and c) include Bar Chart/Histogram, Pie charts and Scatter Plots.

Heatmap uses a system of color-coding to represent different values and helps visualize density.

Treemap helps visualize hierarchical data that helps capture relative sizes of data categories.

Gantt Charts help track progress over time and help allocate resources.

Stripe Graphs use a series of coloured stripes chronologically ordered to visually portray long term trends.

Stream Graph displays the changes in data over time through the use of flowing, organic shapes.

Q8 - Does the Dashboard visualize information on maps?

(Yes/No/NA)

Data System Pillar (60%) - Data Analysis, Use and Dissemination (11%) - (4/4) Details on GIGW gui

Q9 - Does the information system (of MIS) support multilingual features as per GIGW norms?

(Yes/No/Partially)

Details on GIGW guidelines for differently abled and multilingual features support are available in the <u>next</u> slide

Q10 - Does the information system (of MIS) support features for differently abled as per GIGW norms?

(Yes/No/Partially)

Q11 - How is the MIS data (non-sensitive data which can be shared) accessible for general population?

(Openly accessible without credentials / Accessible through credentials/ Not accessible)

To select the option most suitable based on the nature of the dashboard.

If anyone (public) can access the dashboard without any login system

If anyone can access the dashboard but only after login.

If it is not at all accessible

Q12 - Is there an option on the MIS to download bulk data (non-sensitive data which can be shared) in excel, csv, dta files (machine readable formats)?

(Yes/No/Partial data download allowed)

Q13 - Is the MIS data available on 'data.gov.in' (non-sensitive data which can be shared)?

(Yes/No)

Scheme division to select 'Yes' only if all non-personal MIS data is available on data.gov.in as per the National Data Sharing and Accessibility Policy.

Guidelines for India Government Websites (GIGW) norms explained

Guidelines for enablement of features for differently abled

- Website should be accessible to the visually impaired
- Website should be accessible to hearing impaired
- People with cognitive disability should be able to access time dependent content through pause/ extend/ back/ forward options
- Website should be accessible to the hearing/ auditory impaired people
- Website should be accessible to people with locomotor/physical disability who cannot access the whole content present on the website

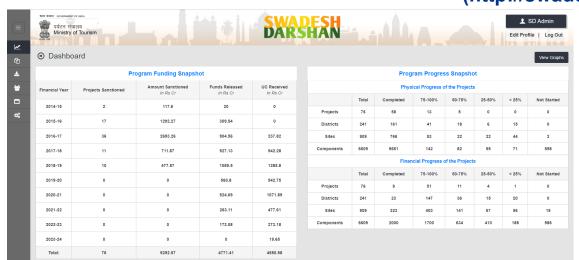
Further details on these guidelines are available at https://www.w3.org/TR/WCAG21/

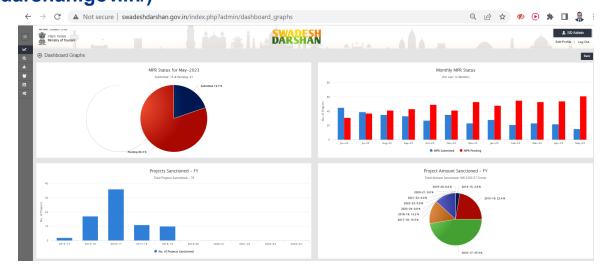
Guidelines for support to multilingual features

- Website has been tested on multiple browsers and hindi/regional language fonts have been tested on popular browsers for any inconsistency
- Documents/pages in multiple languages are updated simultaneously
- Website/app is bilingual with a prominent language selection link and uses Unicode characters
- Proper page title and language attribute along with metadata for page like keywords and description are appropriately included

Dashboard Screenshots (1/2)

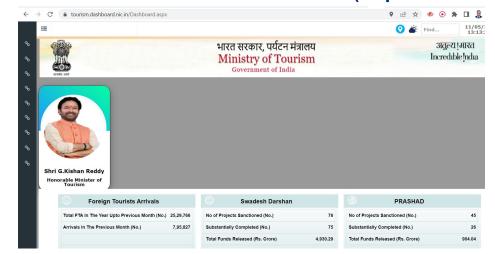
Swadesh Darshan Portal (http://swadeshdarshan.gov.in/)





PRASHAD Portal

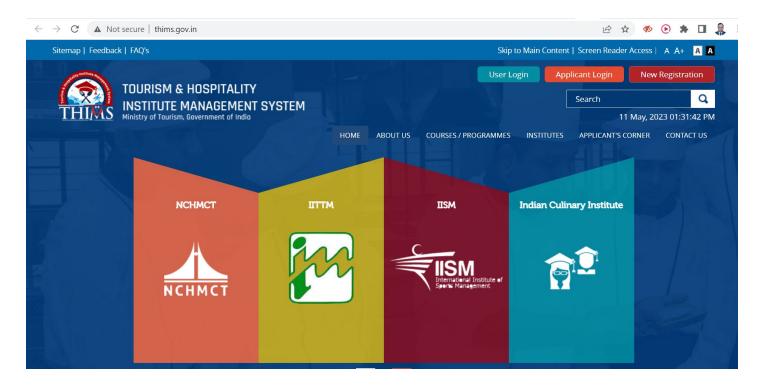
(https://tourism.dashboard.nic.in/)





Dashboard Screenshots (2/2)

CBSP & Assistance to IHMs/FCIs/IITM/NIWS (http://thims.gov.in/)



^{*} No current portal available for Other Support to Tourist Infrastructure and Domestic Promotion and Publicity Schemes | 20

Data System Pillar (60%) - Use of technology (6%) -(1/2)

Q1 - Does the MIS of the scheme have linkages with PFMS? (Yes/No/NA)

'Yes' to be selected only if PFMS and MIS system of the scheme are automatically linked to each other.

Q2 - Is PFMS integration completed till the field-level implementation agency? (Yes/No/Partially)

Q3 - Does the MIS of the scheme have linkages with:

Multi-select question

Aadhar /Mobile numbers / Bank Accounts / GSTN / Udyog Aadhar / Others.

Options a, b and c applicable to beneficiary-oriented schemes.

Options d and e are applicable to industry/firm oriented schemes.

Linkages here imply that these numbers are used as unique identifiers in the scheme MIS.

Q4 - Does the scheme use any of the following:

Remote Sensing / Night Light Data / Social Media Data / Private sector generated data / Others.

- a) Remote sensing is the process of detecting and monitoring physical characteristics of an area
- b) Night light data is the data emerging from night time lights emanating from earth captured by satellites.
- c) Data collected from social media can help understand how people are engaging with topics of interest.
- d) Alternative sources of data including data generated from the private sector may be used scheme divisions to inform decision making.

Data System Pillar (60%) - Use of technology (6%) -(2/2)

Q5 - Is the MIS compliant with Local Govt Directory (LGD)?

(Yes/No/NA)

Scheme division to select 'Yes' if they are using LGD codes as unique identifiers for storing data on geographies in their scheme MIS. Scheme MIS can use the LGD codes as mentioned in the government website: https://lgdirectory.gov.in

Q6 - Does the scheme apply/use any of the following:

(Machine Learning / Artificial Intelligence / Block Chain / Internet of Things / Big Data Analytics / Drones)

- a) Machine Learning gives computers the ability to learn and predict from data without being explicitly programmed.
- b) Artificial Intelligence (AI) refers to intelligence demonstrated by machines and can be used for enhancing the delivery of schemes.
- c) Blockchain refers to having distributed ledgers or blocks of transactional data that are linked together.
- d) Internet of Things (IoT) refers to a network of objects embedded with sensors and technologies for collecting and exchanging data over Internet.
- e) Big data analytics refers to use of advanced analytic techniques against very large and diverse data sets
- f) **Drones** can be used for monitoring various sectors like agriculture, infrastructure projects, commerce and logistics etc.

Data System Pillar (60%) - Data Security and HR Capacity (11%) - (1/3)

Q1 - Does the MIS follow regular antivirus updates? (Yes/No)

'Yes' to be selected if the scheme division uses regular antivirus updates for the MIS software/hardware as per NIC norms.

Q2 - Is the MIS regularly assessed by third party auditors for the online security?
(Yes/No)

'Yes' to be selected if the scheme division gets regular security audit certificate for the MIS as per NIC norms.

Q3 - Does the MIS/ website uses SSL certificate?

'Yes' to be selected if the scheme division has an SSL certificate for the MIS as per NIC norms

Q4 - Is the SSL certificate at least 2048-bit SHA 256 encryption or higher? (Yes/No)

Q5 - Does the MIS use firewalls to secure access to data? (Yes/No)

'Yes' to be selected if the scheme division uses firewalls for the MIS as per NIC norms.

Data System Pillar (60%) - Data Security and HR Capacity (11%) - (2/3)

- Q6 All external communication/ 3rd party integration/ API integration for the MIS is done through encrypted channel? (Yes/No/No external communication is established)
- Q7 What measures are undertaken to secure sensitive/personally identifiable information? Multi-select question

 (Single factor/ multi-factor authentication / Access control list is maintained / Data is encrypted / Data is anonymized / No such data)

It is crucial to safeguard personal / sensitive data using following ways:

- A. Access control ensures protection of personal data.
- B. Systematic process of defining access levels for each dataset or module in the MIS.
- C. Data Encryption is a critical component of any data protection strategy.
- D. Through **Data anonymization**, personal data is altered so that data subject can no longer be identified directly.
- **Q8** How do you protect de-identified data from re-identification risks?

Multi-select question

(No efforts made / Tighter security for databases that store anonymized information / Implementation of Differential Privacy / Generation of Synthetic Data that exhibits the statistical properties of the raw data, without allowing real individuals to be identified / Others - provide details

Protection of de-identified data can be achieved by:

- (i) instituting a stronger security system for databases that store anonymized information,
- (ii) implementation of differential privacy while sharing data for research purposes.
- (iii) generating and using synthetic data that exhibits statistical properties of raw data.

Data System Pillar (60%) - Data Security and HR Capacity (11%) - (3/3)

Q9 - Is permission taken from user to collect, store and use their personal data?
(Yes/No)

'Yes' to be selected if permission is taken from user before collecting, storing and using their personal data. Data subjects must also be informed about how their data is stored, exchanged and used.

Q10 - Is there a dedicated data quality assessment and management team for the scheme? (Yes/No)

'Yes' to be selected if there are dedicated human resources who assess data quality at regular intervals.

Q11 - Is there a dedicated data analysis team for the scheme?
(Yes/No)

'Yes' to be selected if there are dedicated human resources at the division who analyze data at regular points of time.

Data System Pillar (60%) - Data Management (3.78%) - (1/4)

Q1 - Does the M/D have data management guidelines/architecture, explaining how generated data is to be processed, stored, exchanged, archived and destroyed?

(Yes/No) 'Yes' to be selected if the ministry has prepared such a document and following aspects are considered in the document (but not limited to):

- A. Data generation
- **B.** Data Processing
- C. Data exchange
- D. Data Storage, Archival and Destruction
- Q2 Is there a dedicated senior-level officer responsible to check the compliance of the data management processes? (Yes/No)

'Yes' to be selected, if following aspects are implemented:

- A. There is a dedicated officer to check compliance against the above-mentioned data management guidelines
- B. The officer regularly checks compliance via different mechanisms
- Q3 Are data ownership norms clearly defined by the M/D?
 - (Yes/No) 'Yes' to be selected, if the ministry has prepared such a document and following aspects are considered in the document (but not limited to):
 - A. Data owner(s) are identified:
 - B. Data steward(s) are identified:
 - C. Data custodian(s) are identified:
 - D. Roles and responsibilities of data owners, stewards and custodians are clearly defined in the document.

PART A

Data System Pillar (60%) - Data Management (3.78%) - (2/4)

Q4 - Is there a framework for assessing the risk and value of all the data collected by the M/D?

(Yes/No)

'Yes' to be selected if a document has been prepared and following aspects are considered:

- A. Parameters to be used for assessing the value of any dataset collected
- B. Parameters to be used for **determining the risks** of any dataset collected
- C. Document the risks and value of all datasets collected

Q5 - Is there a framework governing the ethical use of data, including the use of predictive algorithms, machine learning etc. by the M/D?

(Yes/No)

'Yes' to be selected if a document has been created covering following aspects (but not limited to):

- A. Mechanisms for ensuring that personal data is being collected only with due consent.
- B. Data subjects must also be informed about how their **personal data** is **stored, exchanged and used**. The document must state methods by which this information will be **transparently shared with the data subjects**.
- C. Mechanisms to **safeguard data privacy**.
- D. Purposes for which **personal data** can be **collected and ethically used**.
- E. Ways to ensure that the purposes for which ML algorithms are used are shared with data subjects.

PART B

Data System Pillar (60%) - Data Management (7.02%) - (3/4)

Q1 - Where is MIS data stored?

(On separate servers for different schemes (distributed storage) / On central server which is used for all schemes)

Scheme division to select the type of server on which scheme data is stored.

Q2 - Are there mechanisms in place which can enable data sharing with other scheme divisions?

'Yes' to be selected if following aspects are implemented (but not limited to)

- A. Datasets and datapoints are identified to be exchanged with other datasets
- B. Unique identifiers are used for common fields in such datasets
- C. Data formats are harmonized in which these datasets are stored
- D. No manual exchange of data (either on paper or on e-file or email)
- E. Digital automated means are used for data sharing
- F. Tracking of data using a data exchange tracker
- Q3 How is MIS data stored?

(Physical servers / Cloud Storage / Hybrid servers)

Cloud storage are preferred over physical servers.

PART B

Data System Pillar (60%) - Data Management (7.02%) - (4/4)

Q4 - Which cloud service is being used?

Scheme division to select the type of server on which scheme data is stored as per NIC norms.

Q5 - How is historical MIS data managed?

(Data is not backed up (i.e., it is destroyed) / Data is backed up and data is archived / Data history is well maintained including retention, destruction, and audit trail details)

Scheme division to select the type of **archival strategy** used for historical data. Database should generate **audit trails** with detailed information.

Synergistic data use within M/D (6%)

Q1 - Based on data analysis, has the M/D identified data gaps at M/D level that need to be plugged in from decision making/ policy analysis perspectives?

(Yes/No) 'Yes' to be selected if following aspects are implemented:

- A. Identify and document key indicators and form in which this data is required
- B. Document the indicators for which data is available/ not available in the needed format.
- **Q2** Has the M/D made any implementation plan to overcome these data gaps to aid in decision making?

(Yes/No)

Yes' to be selected if following aspects are implemented:

- A. Ministry has identified if it can get data from some other data source where data is not available.
- B. Ministry has made timebound plan for data capturing mechanism to collect data at required granularity and frequency.
- **Q3** Has the M/D created any systems for ensuring that data systems across scheme divisions are integrated so that data from different scheme divisions is shared with each other?

(Yes/No/In-progress/NA)

- 'A. Identify datasets used by all divisions, datapoints to be exchanged among these datasets and by whom
- B. Develop and mandate use of unique identifiers for common fields in datasets, wherever necessary
- C. Harmonize the data formats in which all these datasets are stored
- D. Exchange of data among datasets via digital automated means
- E. Track data using a data exchange tracker
- F. Ensure data exchange is occurring while following MEITY's policies such as NDSAP (2012), Open API Policy, etc.

Inter-agency data collaboration (6%)

Q1 - Has the M/D collaborated with other agencies (other M/Ds, private agencies, research organizations etc.) for improving their data systems wherever possible?

(Yes/No/In-progress)

'Yes' to be selected if following aspects are documented and implemented:

- A. Identify external datasets from decision making perspective
- B. Agreements with agencies handling this external data for access to this data via digital automated means
- C. Tracking of external data using a data exchange tracker
- D. Ensure data exchange follows MEITY's policies such as NDSAP (2012), Open API Policy (2014) etc.
- Q2 Has the M/D undertaken any of the following steps to drive these inter-agency data collaboration initiatives? Multi-select question
 - a) Sol, MoU, Partnerships with agencies
 - b) API linking of MIS/Dashboards done to enable seamless data sharing between M/Ds
 - c) Multiple data collection processes aimed at same target groups replaced by single synergistic process
 - d) Integrated data storage/warehouses
 - e) Collaboration with other M/Ds to use their data for developing own systems
 - f) Collaboration with M/Ds to develop joint systems for data gathering/use of nonconventional data sources/emerging technologies
 - g) Collaboration with private agencies for use of non-conventional data sources or emerging technologies
 - h) Jointly conducting analysis using data from multiple M/Ds
 - i) Partnerships/Collaborations for data security related measures
 - j) Partnerships/Collaborations for capacity building of human resources

Prescriptive Analytics (2%)

Q1 - Has the M/D gone beyond exploratory data analysis to cross-functional prescriptive analytics?

(Yes/In-progress/No)

'Yes' to be selected only if the ministry is undertaking advanced data analysis using multiple data sources to predict future outcomes and are deciding present actions based on these predictions.

Q2 - How often is this being undertaken?

(Annually/Quarterly/Monthly)

- Q3 What is the mode in which this is being practiced?

 Multi-select question
 - a) Mechanisms for regular prescriptive data analysis reports to be prepared and shared with decision makers at the highest level have been instated
 - b) Committee formed to hold policy review meetings/review reports at regular frequencies
 - c) Regular policy review meetings involving all scheme divisions/sections institutionalized
 - d) Emerging actionables are undertaken, documented and disseminated via a separate newsletter/report/document/order etc. and tracked regularly
 - e) Others Please specify how:

Ministry to select the modes/mechanisms by which they have **institutionalized prescriptive analytics**.

Second option to be selected if Ministry has formed a **committee of policymakers** to **review prescriptive analysis reports**.

Third option to be selected if the **committee** or any policymaker is **regularly holding meetings** to review prescriptive analysis reports Fourth option to be selected if the **policy actionables** emerging from the third point are regularly documented and disseminated

PART A

Good Practices (6%)

- Q1 Describe the problem statement faced by the M/D. (100 words)
- a) Brief context of the scheme/ programme/ project for which the good practice is being implemented/ used
- b) Challenges faced by the ministry for which technology intervention was needed
- **Q2** Describe how the M/D has used and implemented data systems and analytics to address the issue to drive smart, near real-time and granular decisions (100 words)
- a) Technology intervention used?
- b) Issue/challenge it caters to?
- c) How is the issue/challenge resolved?
- d) Who uses it and how?
- e) Its features as per relevance
- Q3 Explain the positive impact generated with supporting evidence that indicated such impact due to the solution implemented (100 words)
- a) Share the improvements in the outcome post implementation of the intervention.
- b) Overall contribution to improving scheme/departmental outcomes

Data Driven Strategy Pillar (20%) - Data & Strategy Unit(10%) - (1/2)

Q1 - Has the M/D constituted a Data & Strategy Unit (DSU) as a central unit for developing data strategy? (as per the D.O. letter from Advisor to PM dated

```
02.02.2021)
(Yes/No)
```

- Q2 Who is the head of the DSU?
 - a) AS and equivalent
 - b) JS and equivalent
 - c) Director and equivalent
 - d) Below Director
- Q3 Please select the verticals established under the DSU of your Ministry/Department. (as per the D.O. letter from Advisor to PM dated 02.02.2021)
 - a) Monitoring Unit
 - b) Statistics Unit
 - c) Technology Unit
 - d) Analytics Unit

Data Driven Strategy Pillar (20%) - Data & Strategy Unit(10%) - (2/2)

Q4 - Please provide the percentage of filled posts in DSU

Unit	Enter % of posts filled up
Monitoring Unit	
Statistics Unit	
Technology Unit	
Analytics Unit	
Total	

Q5 - Is the terms of reference (ToR) for all units within DSU well defined and documented by the M/D to lay down their scope of work?

(Yes/No/Partial)

Q6 - Have any regular review meeting mechanisms at the level of the head of DSU and/or the Secretary been established for regular review of the work undertaken by the DSU (including implementation of action plan)?

(Yes/No)

Q7 - What is the frequency of regular review meetings/review reports?

a) Daily

b) Weekly

- c) Fortnightly
- d) Monthly

e)Quarterly

f) Annually

Data Driven Strategy Pillar (20%) - Action Plan (10%)

Q1 - Has the M/D framed an action plan to improve its data preparedness levels? (as per the D.O. letter from Advisor to PM dated 02.02.2021)

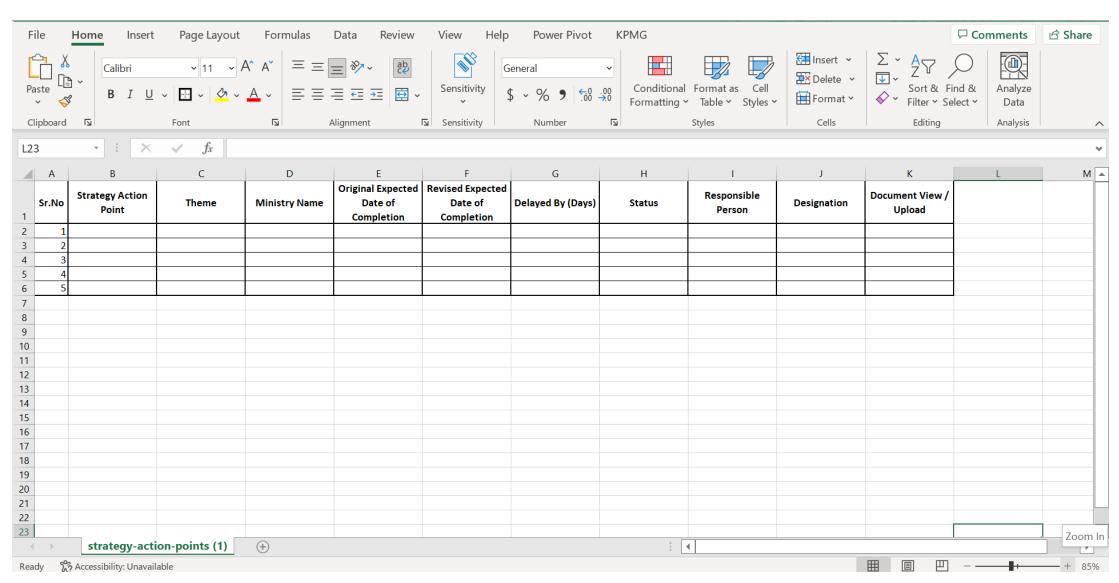
(Yes/No)

Q2 - Does the action plan have all the sections as per the outline shared with all M/Ds? (As per D.O. letter from Advisor to PM on 02.02.2021)

(Yes/No/Partially)

- Q3 Does the action plan include data strategy for all CS/CSS schemes of the M/D? (Yes/No/Partially)
- Q4 Are clear timelines for each action point identified under the strategy? (Yes/No/Partially)
- Q5 Are the responsibilities for each action point clearly allocated to respective divisions for ensuring accountability? (Yes/No/Partially)
- **Q6** Upload the action plan in PDF format.

Action plan format



Q&A and Way Ahead

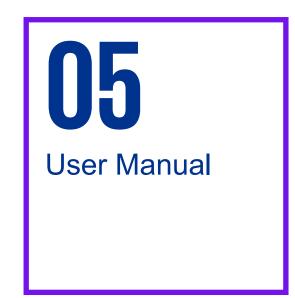
Way Forward



Key points as per current status

Below documents to be created at scheme level :-

- Data requirements document with the below defined :
 - Input, Output and Outcome data points
 - Granularity and Frequency of data collected
 - Mode and method of data collection
- Data quality document with the below protocols defined:
 - Data Validation
 - Data Filtering
 - Summary Statistics for tracking abnormalities in data
 - Data deduplication
 - Frequency of data quality assessment
 - Types of backchecks for incoming data



Links to DGQI portal and Training Videos



Link to DGQI Portal:-

Link

Training Video 1:Register and login on
DGQI Dashboard

Link





Training Video 2:DGQI Dashboard
Home page features
for viewing
performance

Link

Training Video 3:View detailed
performance on DGQI

Link





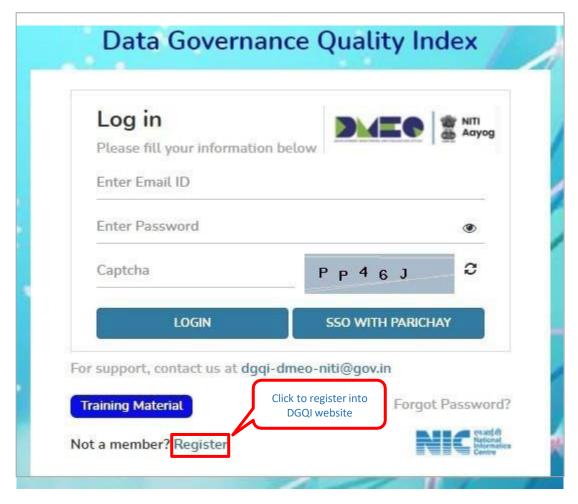
Training Video 4:Use DGQI Dashboard
Modules for filling
questionnaire, adding
schemes, adding
users, approving
requests and other
features

Link

Registration

Enter site URL https://dgqi.gov.in/ in browser press enter key.

Login screen will be displayed.



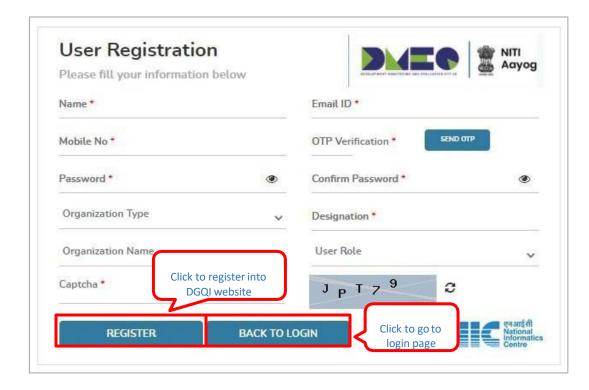
M/D Data Entry can register themselves in the system following the below process.

There are two type of registration, that can be done in the system as below:

- 1. Normal Registration
- 2. Registration through Parichay

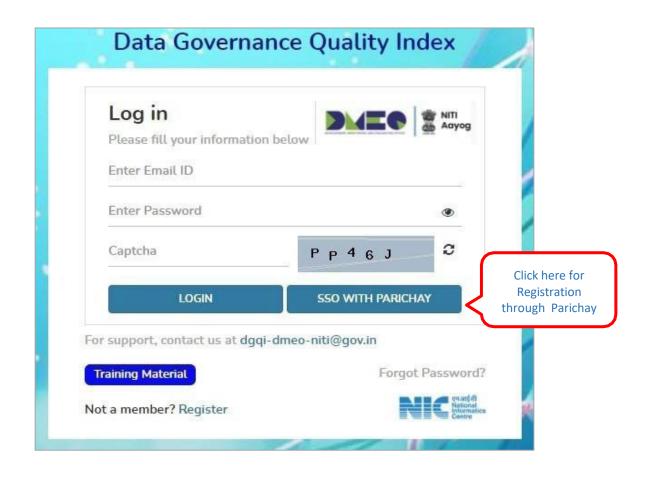
For **Normal Registration**, below process will have to be followed.

Click Register (as shown in the below image) to register into DGQI website.



- Name: Enter name
- Email ID: Enter email address
- Mobile No: Enter mobile number
- OTP Verification: Enter OTP received on your mobile number
 - O Click send OTP
- Password: Enter password
- Confirm Password: Enter confirm password
- Organization Type: Select organization type from dropdown
- Designation: Select designation from dropdown
- Organization Name: Select organization name
- User Role: Select user role from dropdown
- Enter Captcha ode as displayed
- Click
- Click
 BACK TO LOGIN to go to login page

For **Registration Through Parichay**, below process will have to be followed.

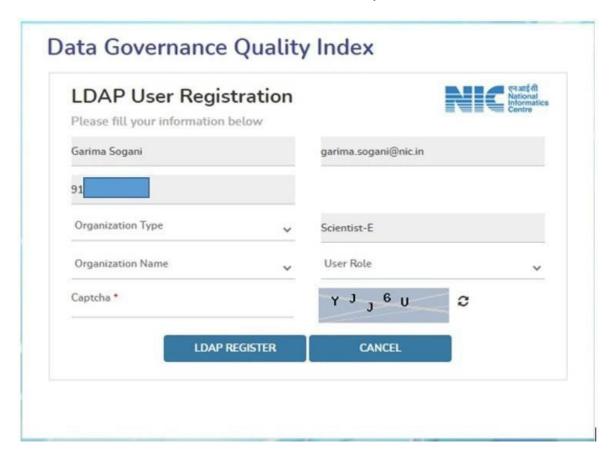


- Provide NIC email id (.nic/.gov/.govcontractor) and password in the below screen.



Select details from the below screen:

- Organization Type: Select organization type from dropdown
- Organization Name: Select organization name
- User Role: Select user role from dropdown

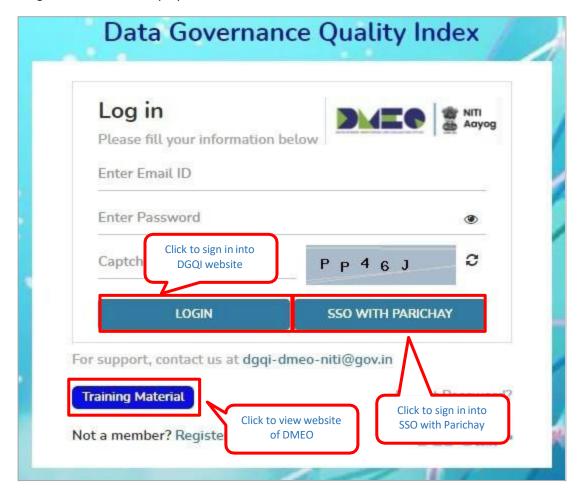


- Click
 LDAP REGISTER
- Registration request will be sent to Ministry of Tourism **Admin** for approval.

Login

Enter site URL- https://dgqi.gov.in/ in browser press enter key.

Login screen will be displayed.



- Enter user ID and password
- Enter CAPTCHA code as displayed
- Click Forgot Password? link in case of forgotten password.
- Click to sign in into DGQI
- Click Training Material to view the website of DMEO

Note: The above log-in process will be same for all users (M/D Admin, M/D Data Entry) who have done Normal Registration.

For all users who have Registered Through Parichay, users may follow below steps:

- Users will be redirected to the Parichay log-in screen as below



• User will use their NIC email ids (.nic/.gov/. govcontractor) and password to log-in to the DGQI Dashboard.

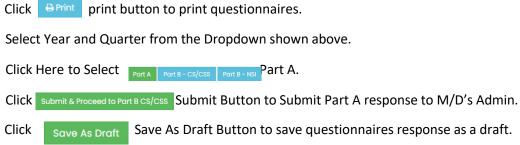
5 Questionnaires

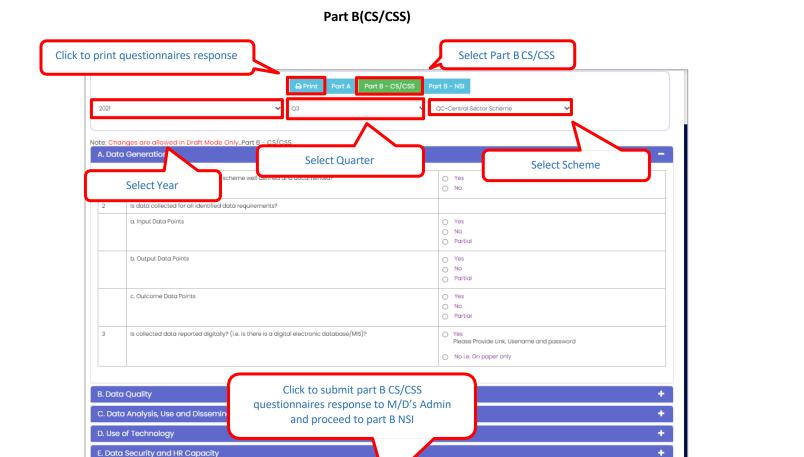
5.1.1 Part A & B Questionnaires Response: The questionnaires response filled by M/D's Data Entry User for Part A and B will go to M/D's Admin for review and approval / rejection.

Path: Dashboard >> Questionnaires

Part A.







Click Print print button to print questionnaires response.

F. Data Management

Click Submit Submit button to send Part B (CS/CSS) questionnaires response to M/D's Admin.

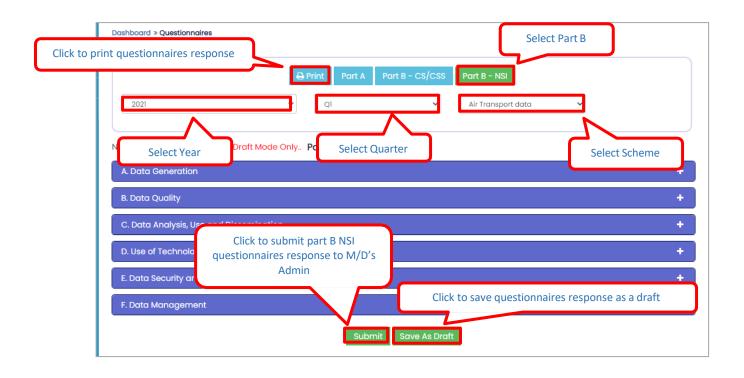
Save As Draft

Click Here to Save Questionnaires response as Draft

lick Save As Draft Save As Draft Button to save questionnaires response as a draft.

Note: Once M/D data entry user submit the questionnaires response, he/she would not be able to change it. Changes in the responses are allowed in draft mode only.

Part B(NSI)



Click print button to print questionnaires response.

Click Submit Submit button to send Part B (NSI) questionnaires response to M/D's Admin.

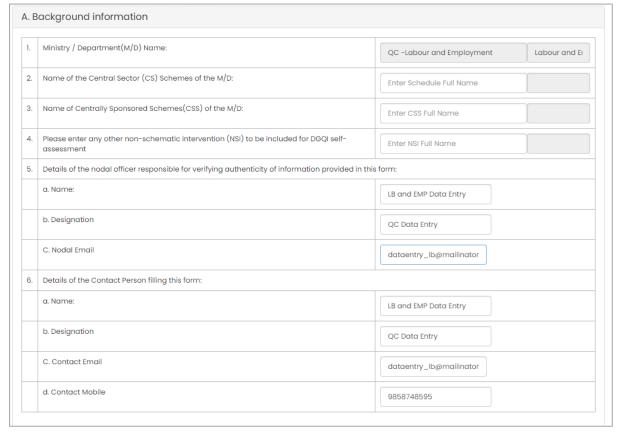
Click Save As Draft Save As Draft Button to save questionnaires response as a draft.

Note: Once M/D data entry user submit the questionnaires response, he/she would not be able to change it. Changes in the responses are allowed in draft mode only.

5.1.2 Part A



5.1.2.1 A. Background information



- Year: Select year from dropdown
- Quarter: Select quarter from dropdown

- Ministry / Department(M/D) Name will be displayed automatically
- Name of the Central Sector (CS) Schemes of the M/D: Enter scheme full name
- Name of Centrally Sponsored Schemes(CSS) of the M/D: Enter CSS full name
- Please enter any other non-schematic intervention (NSI) to be included for DGQI self- assessment: Enter NSI full name
- Details of the nodal officer responsible for verifying authenticity of information provided in this form:
- Name will be displayed automatically
- Designation will be displayed automatically
- Nodal Email will be displayed automatically
- Details of the Contact Person filling this form:
- Name will be displayed automatically
- Designation will be displayed automatically
- Contact Email will be displayed automatically based on the information you have filled at the time of registration
- Contact Mobile will be displayed automatically based on the information you have filled at the time of registration

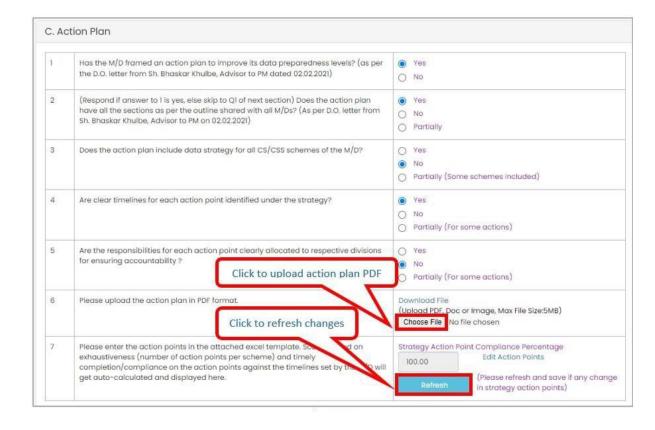
5.1.2.2 B. Data & Strategy Unit

Has the M/D constituted a Data & Strategy Unit (BSU) as a central unit for developing data strategy? (as per the D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM dated 02.02.2021)	O No
(Respond if answer to 1 is 'yes', else Constitution refers to establishing the unit, hence, even if its staffing is ongoing, WDs can select 'yes' if they have established the admin structure of the unit and some members have	AS JS Director Below Director
Please select the verticals establish been assigned to ft. update Please select the verticals establish been assigned to ft. update	Monitoring Unit Statistics Unit Technology Unit Analytics Unit
Please provide the percentage of filled posts in DSU (number of posts filled up/ number of posts created by the Ministry/Department for the DSU) in the below provided table:	Monitoring Unit 50 Statistics Unit 0.00 Technology Unit 0.00 Analytics Unit 62 Total 37.33
Is the terms of reference (ToR) for all units within DSU well defined and documented by the M/D to lay down their scope of work?	Yes No Partial (to be selected if ToR development is in progress)
Have any regular review meeting mechanisms at the level of the head of DSU and/or the Secretary been established for regular review of the work undertaken by the DSU ?	Yes No
(Respond if answer to 6 is yes, else skip this question) What is the frequency of regular review meetings/review reports?	Oally Weekly Fortnightly Monthly Quarterly Annually

- Has the M/D constituted a Data & Strategy Unit (DSU) as a central unit for developing data strategy? (as per the D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM dated 02.02.2021)
 - o If you click Yes radio button, then further questionnaires will be displayed
 - If you click No radio button, then no further questionnaires will be displayed
- (Respond if answer to 1 is 'yes', else skip to Q1 of next section) Who is the head of the DSU?
 - O Click o radio button to select your answer AS, JS, Director, or Below Director
- Please select the verticals established under the DSU of your Ministry/Department. (as per the D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM dated 02.02.2021)
 - Check checkbox to select Monitoring Unit, Statistics Unit, Technology Unit, or Analytics Unit
- Please provide the percentage of filled posts in DSU (number of posts filled up/ number of posts created by the Ministry/Department for the DSU) in the below provided table:
- Monitoring Unit: Enter monitoring unit
- Statistics Unit will be displayed automatically
- Technology Unit will be displayed automatically
- Analytics Unit will be displayed automatically
- Total will be displayed automatically
- Is the terms of reference (ToR) for all units within DSU well defined and documented by the M/D to lay down their scope of work?
 - Click o radio button to select Yes, no, or Partial (to be selected if ToR development is in progress)
- Have any regular review meeting mechanisms at the level of the head of DSU and/or the Secretary been established for regular review of the work undertaken by the DSU?
 - o If you click Yes radio button, then further questionnaires will be displayed
 - o If you click № radio button, then no further questionnaires will be displayed
- (Respond if answer to 6 is yes, else skip this question) What is the frequency of regular review meetings/review reports?

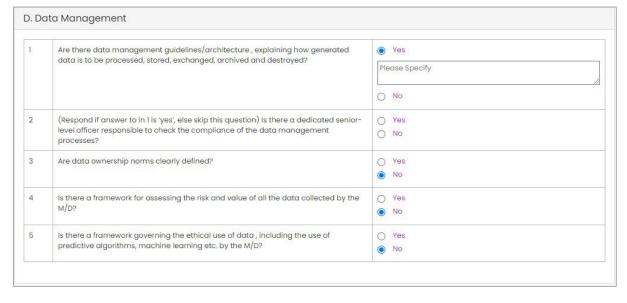
 53
 - Click o radio button to select Daily, Weekly, Fortnightly, Monthly, Quarterly, or Annually

5.1.2.3 C. Action Plan



- Has the M/D framed an action plan to improve its data preparedness levels? (as per the D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM dated 02.02.2021):
 - o If you click Yes radio button, then further questionnaires will be displayed
 - o If you click № radio button, then no further questionnaires will be displayed
- (Respond if answer to 1 is yes, else skip to Q1 of next section) Does the action plan have all the sections as per the outline shared with all M/Ds? (As per D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM on 02.02.2021):
- Click or radio button to select Yes, No, or Partially
 - o If you select partially, you need to specify it
- Does the action plan include data strategy for all CS/CSS schemes of the M/D?
 - o Click o radio button to select Yes, No, or Partially (Some schemes included)
 - o If you select partially, you need to specify it
- Are clear timelines for each action point identified under the strategy?
 - Click o radio button to select Yes, No, or Partially (For some actions)
- Are the responsibilities for each action point clearly allocated to respective divisions for ensuring accountability?
 - O Click o radio button to select Yes, No, or Partially (For some actions)
- If you select partially, you need to specify it
- Please upload the action plan in PDF format:
 - Click Choose File to upload action plan PDF
- Please edit the action points by clicking on <u>Edit Action Points</u> link and update the status of action points listed under the M/D as applicable.
 - Click Refresh to refresh all changes

5.1.2.4 D. Data Management



- Are there data management guidelines/architecture, explaining how generated data is to be processed, stored, exchanged, archived and destroyed?
 - o If you click o Yes radio button, then you need to specify it
 - Click No radio button to select answer no
- Are data ownership norms clearly defined?
 - O Click Yes radio button to select answer yes
 - O Click o No radio button to select answer no
- Is there a framework for assessing the risk and value of all the data collected by the M/D?
 - o If you click Yes radio button, then you need to specify it
 - Click No radio button to select answer no
- Is there a framework governing the ethical use of data, including the use of predictive algorithms, machine learning etc. by the M/D?
 - o If you click Yes radio button, then you need to specify it
 - Click No radio button to select answer no

5.1.2.5 E. Synergistic data use within the M/D

. Syr	nergistic data use within the M/D	
1	Based on data analysis, has the M/D identified data gaps at M/D level that need to be plugged in from decision making/policy analysis perspectives?	O Yes No
3	Has the M/D created any systems for ensuring that data systems across scheme divisions are integrated so that data from different scheme divisions is shared with each other?	○ Yes ○ No ○ In progress ○ N/A Please Specify

- Based on data analysis, has the M/D identified data gaps at M/D level that need to be plugged in from decision making/policy analysis perspectives?
 - o If you click o Yes radio button, then you need to specify it
 - Click No radio button to select answer no
- (Respond if answer to 1 is yes, else skip this question) Has the M/D made any implementation plan to overcome these data gaps to aid in decision making?
 - o If you click Yes radio button, then you need to specify it
 - Click № radio button to select answer no
- Has the M/D created any systems for ensuring that data systems across scheme divisions are integrated so that data from different scheme divisions is shared with each other?
- Click radio button to select Yes, No, In progress, or N/A
 - o If you select Yes or N/A, you need to specify it

5.1.2.6 F. Inter-Agency Data Collaboration

		-	
	Has the M/D collaborated with other agencies (other M/Ds, private agencies, research organizations etc.) for improving their data systems wherever possible?	0	Yes
		0	In progress
	(Respond if answer to 1 is yes, else skip this question) Has the M/D undertaken any of the following steps to drive these inter-agency data collaboration initiatives?	Z	Sol, MoU, Partnerships with agencies
			API linking of MIS/Dashboards done to enable seamless data sharing between M/Ds
			Multiple data collection processes aimed at same targe groups replaced by single synergistic process
			Integrated data storage/warehouses
			Collaboration with other M/Ds to use their data for developing own systems
			Collaboration with M/Ds to develop joint systems for data gathering/use of non-conventional data sources/emerging technologies
			Collaboration with private agencies for use of non- conventional data sources or emerging technologies
			Jointly conducting analysis using data from multiple M/Ds
			Partnerships/Collaborations for data security related measures
			Partnerships/Collaborations for capacity building of human resources
			Others - Please specify:

- Has the M/D collaborated with other agencies (other M/Ds, private agencies, research organizations etc.) for improving their data systems wherever possible?
 - o If you click Yes radio button, then further questionnaires will be displayed
 - o If you click № radio button, then no further questionnaires will be displayed
- (Respond if answer to 1 is yes, else skip this question) Has the M/D undertaken any of the following steps to drive these inter-agency data collaboration initiatives?
 - \circ Check \square checkbox to select your answer
 - If you check Others □ checkbox, then you need to specify it

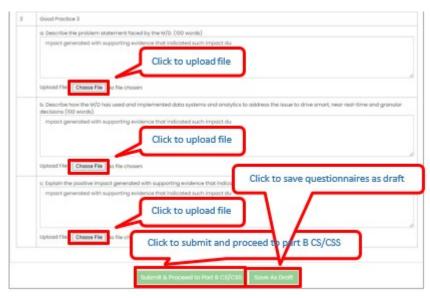
5.1.2.7 Prescriptive Analytics

G. Prescriptive Analytics				
1	Has the M/D gone beyond exploratory data analysis to cross-functional prescriptive analytics ?	○ Yes⑥ No○ In progress		

- Has the M/D gone beyond exploratory data analysis to cross-functional prescriptive analytics?:
 - o If you click Yes radio button, then further questionnaires will be displayed
 - o If you click № radio button, then no further questionnaires will be displayed
 - o If you select on progress, then you need to specify it
- (Respond if answer to 1 is yes, else skip this question) How often is this being undertaken?
 - o Click oradio button to select Annually, Quarterly, or Monthly
- (Respond if answer to 1 is yes, else skip this question) What is the mode in which this is being practiced?
 - Check Mechanisms for regular prescriptive data analysis reports to be prepared and shared with decision makers at the highest level have been instated checkbox to select answer
 - Check□Committee formed to hold policy review meetings/review reports at regular frequencies checkbox to select answer
 - Check
 □ Regular policy review meetings involving all scheme divisions/sections
 institutionalized checkbox to select answer
 - Check
 Emerging actionables are undertaken, documented and disseminated
 via a separate newsletter/report/document/order etc. and tracked regularly to
 select answer
 - o Check □ Others Please specify how: to select answer
 - If you check □ Others checkbox, you need to specify it

5.1.2.8 Good Practices





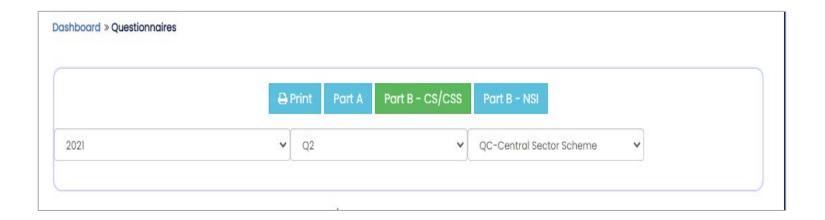
Enter following details:

- Good Practice 1: Enter good practices 1
 - Click Choose File to upload file
- Good Practice 2: Enter good practices 2
 - Click Choose File to upload file
- Good Practice 3: Enter good practices 3
 - O Click Choose File to upload file
- Click Submit & Proceed to Part B CS/CSS to submit and process part B CS/CSS
- Click Save As Draft to save questionnaires as a draft

Note: You can only save form in draft mode

Note: Similarly Part B questionnaire Response will be submitted as per the options available

5.1.3 Part B-CS/CSS



- Year: Select year from dropdown
- Quarter: Select quarter from dropdown
- Scheme Name: Select scheme name from dropdown

5.1.3.1 A.Data Generation

Are the data requirements of the scheme well defined and documented?	Yes
	O No
Is data collected for all identified data requirements?	
a. Input Data Points	Yes
	○ No
	O Partial
b. Output Data Points	Yes
	O No
	O Partial
c. Outcome Data Points	Yes
9.0-033.0-03.0-0310.000.0000.	O No
	O Partial
Is collected data reported digitally? (i.e. is there is a digital electronic database/MIS)?	Yes Please Provide Link, Usename and password
	line.
	Link: Username:
	Password:

- Are the data requirements of the scheme well defined and documented?

 - Click No radio button, to select answer as no
- Is data collected for all identified data requirements?

 - Click No radio button, to select answer as no
 - O Click O Partial radio button to select answer as partial
- Is collected data reported digitally? (i.e. is there is a digital electronic database/MIS)?
 - o If you click Yes radio button, then you need to enter following details:
 - Link: Enter link
 - Username: Enter username
 - Password: Enter password
 - o Click oradio button to select answer as No i.e. On paper only

4	(Respond if answer to 3 is Yes', else skip to 1 of Q1 of data quality section) At what granularity is data reported digitally for the scheme?	
	a. At the M/D (National)	Yes No NA
	b. State	Yes No NA
	c. District / City	Yes No NA
	d. Sub-District / Tehsil	Yes No NA
	e. Block	Yes No NA
	f. Village	Yes No NA
	g. Individual	Yes No NA
	h. Project	Ves. No NA

- (Respond if answer to 3 is 'Yes', else skip to 1 of Q1 of data quality section) At what granularity is data reported digitally for the scheme?
 - O Click Yes radio button to select answer as yes
 - Click № radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable

5	At what frequency is data reported digitally for the scheme?	
	a. Realtime or near realtime	O Yes
		○ No
		■ NA
	b. Daily	Yes
		O No
		O NA
	c. Weekly/Fortnightly	Yes
		O No
		O NA
	d. Monthly	Yes
		O No
		O NA
	e. Quarterly	Yes
	0701771000 *	O No
		O NA
	f. Half-yearly	Yes
		O No
		O NA
	g. Yearly	Yes
		O No
		O NA

6	How is this data collected at the ground level ?	Collected on paper by human resources and then fed on digital systems Collected using digital modes (tablets/phones etc.) by human resources Transactional data
7	Respond if answer to 6 is 'second/third option', else skip this question) Are any of the following technologies used?	
	a. CAPI Surveys	O Yes O No NA
	b. Geotagged information	○ Yes ○ No ○ NA
	c. Geofenced information	○ Yes ○ No ○ NA
	d. Others - Please specify which technology	

- At what frequency is data reported digitally for the scheme?
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable
- How is this data collected at the ground level?
 - Click are radio button to select your answer
- Respond if answer to 6 is 'second/third option', else skip this question) Are any of the following technologies used?

 - Click № radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable
- Others Please specify which technology: Specify technology name

5.1.3.2 B. Data Quality

	Are there pre-defined documented mechanisms to assess quality of incoming data		Yes No
	How is data quality assessment done?	0	Automatically Manually Hybrid Not done
	(Respond if answer to 2 is not "not done", else skip to Q1 of next section) Are following protocols followed during data quality assessment?		
	a. Incoming data is filtered/cleaned after checking for missing values, logical flaws in data, incorrect values etc.	_	Yes No
	b. Summary statistics of incoming data are generated and checked for errors/abnormalities	0	Yes No
	c. Existence and accuracy of metadata for all the scheme's data is periodically checked (Schema is well defined)	0	Yes No
	d. There is a system for identifying duplicate data and removing redundancies	1	Yes No
	e. There is a system to ensure data is accurate, consistent and traceable to origin/source, whenever it is reproduced by any agency (data integrity)	0	Yes No
1	Are following feedback mechanisms/backchecks also leveraged for data quali ty control?		
	a. Social audits	0	Yes No NA
	b. Telephonic backchecks/verification with beneficiaries	0 0	Yes No NA
	c. Multimedia data – citizen voice, video, images as evidence	000	Yes No NA
	d. Sample inspections based on data	0	Yes No NA
	e. Third party data verification/ data audits	0	Yes No

- Are there pre-defined documented mechanisms to assess quality of incoming data
- How is data quality assessment done?:
 - O Click ves radio button to select answer as yes
 - Click № radio button, to select answer as no
- (Respond if answer to 2 is not "not done", else skip to Q1 of next section) Are following protocols followed during data quality assessment?:
 - O Click Yes radio button to select answer as yes
 - Click № radio button, to select answer as no
- Are following feedback mechanisms/backchecks also leveraged for data quality control?
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable

5.1.3.3 C. Data Analysis, Use and Dissemination

	What types of data analysis is undertaken on collected data?	
	white types of data distribute to an object of confected datas	
	a. Descriptive data analysis (e.g. basic cross tabulation, frequency distribution, mean,	Yes
	median etc.)	O No
	b. Exploratory data analysis (e.g. correlation etc.)	Yes
		O No
	c. Inferential data analysis (Using a small sample of data to infer about a larger	Yes
	population)	O No
	d. Predictive analysis (Using historical or current data to find patterns to make	Yes
	predictions about the future)	O No
	e. Causal analysis (Looks at the cause and effect of relationships between variables,	Yes
	focused on finding the cause of a correlation)	O No
	f. Mechanistic Analysis (Understand exact changes in variables that lead to other	O Yes
	changes in other variables)	No
	g. Others - Please specify the name and the type of data analysis	
2	(Respond if answer to any of the options in 1 is "yes", else skip to Q5) Is cross-	• Yes
	schematic/sectoral data also analysed, wherever needed?	O No
		O NA
3	How often is this data analysis well-documented (in reports/notes/publications)?	Real-Time on a dashboard
		O Quarterly
		O Half-yearly
		○ Annually
		O Never

- What types of data analysis is undertaken on collected data?:

 - Click № radio button, to select answer as no
- (Respond if answer to any of the options in 1 is "yes", else skip to Q5) Is crossschematic/sectoral data also analyzed, wherever needed?:
 - O Click Yes radio button to select answer as yes
 - Click № radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable
- How often is this data analysis well-documented (in reports/notes/publications)?:
 Click oradio button to select answer as Real-Time on a dashboard, Quarterly, Half-yearly, Annually, or Never

4	How often is this data analysis being used by the M/D officials	
	a. To re-design the schemes or activities undertaken under the scheme at the end of	Real-Time on a dashboard
	the tenure?	O Quarterly
		O Half-yearly
		○ Annually
		O Never
	b. To do mid-course corrections through design or implementation changes ?	Real-Time on a dashboard
		O Quarterly
		O Half-yearly
		O Annually
		O Never
	c. To guide intra-scheme funding decisions like inter-state allocations, inter-	Real-Time on a dashboard
	component allocations, etc.?	O Quarterly
		O Half-yearly
		O Annually
		O Never
	d. To guide inter-scheme budgetary allocations?	Real-Time on a dashboard
		O Quarterly
		O Half-yearly
		O Annually
		O Never
	e. To decide quarterly releases to implementing agencies?	Real-Time on a dashboard
		O Quarterly
		O Half-yearly
		O Annually
		O Never
	f. For fraud management and analysis	Real-Time on a dashboard
		O Quarterly
		O Half-yearly
		O Annually
		O Never
	g. Day to day delivery and monitoring of implementation/ performance of the	Real-Time on a dashboard
	scheme	O Quarterly
		O Half-yearly
		O Annually
		O Never

- How often is this data analysis being used by the M/D officials:
 - o Click oradio button to select answer as Real-Time on a dashboard, Quarterly, Half-yearly, Annually, or Never

5.1.3.3 C. Data Analysis, Use and Dissemination

5	What other modes are used to disseminate the MIS/ paper-based data and related data analysis?	
	a. Dashboard	Yes
		○ No
		O NA
	b. Mobile App	Yes
		O No
		O NA
	c. Social Media	Yes
		O No
		O NA
	d. SMS	Yes
		O No
		O NA
	e. Newspapers/ Magazines	Yes
		O No
		O NA
	f. Outdoor media (signages/ billboards	Yes
		O No
		O NA
	g. Events	Yes
		O No
		O NA
	h. TV/ Radio	Yes
		O No
		O NA
	i. Others - Please mention the mode	
6	(Respond if 'Yes' in 5a, else skip to 9) What purposes are dashboards used for by the M/D officials?	
	a. Visual presentation of KPI/KRAs with drill-down capability to lowest level to gain	Yes
	total visibility	O No
		0 .10
	b. Capturing trends over time and identifying preempt trends	Yes
		O No
	c. Measure efficiencies/inefficiencies in processes	Yes
		O No
	d. User friendly one stop access to multiple automated reports	Yes
	a. 555. menary one stop access to mattiple datornated reports	○ No
		0 110

- What other modes are used to disseminate the MIS/ paper-based data and related data analysis?:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable
- (Respond if 'Yes' in 5a, else skip to 9) What purposes are dashboards used for by the M/D officials?:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no

5.1.3.3 C. Data Analysis, Use and Dissemination

7	What types of Data Visualizations are used?		
	a. Bar chart/Histogram	0	Yes
		0	No
	b. Pie charts	0	Yes
		0	No
	c. Scatter plot	0	Yes
		0	No
	d. Heat maps	0	Yes
		0	No
	e. Treemaps	0	Yes
	110	0	No
	f. Gantt chart	0	Yes
		0	No
	g. Specialized visualizations- Stripe graphics, streamgraph, etc.	0	Yes
		0	No
	h. Others - please mention data visualizations used		
		-	
8	Does the Dashboard visualize information on maps?	0	Yes
		0	No
		0	NA
9	(Respond if 'Yes' in 3 of Data Generation section, else skip to Q6 of next section) Does	0	Yes
	the MIS support multilingual features as per GIGW norms?	0	No
		0	Partially (some norms followed but not all)
10	Does the MIS support features for differently abled as per GIGW norms?	350	Yes
		0	No
		0	Partially (some norms followed but not all)
11	How is the MIS data accessible for general population?	0	Openly accessible without credentials
		0	Accessible through credentials
		0	Not accessible
12	Is there an option on the MIS to download bulk data in excel, csv, dta files (machine	0.5	Yes
12	readable formats)?	0	No
		0	Partial data download allowed
13	Is the MIS data available on 'data.gov.in' ?	0	Yes
		0	No
		1	

- What types of Data Visualizations are used?:
 - O Click Yes radio button to select answer as yes
 - Click № radio button, to select answer as no
- Does the Dashboard visualize information on maps?:
 - O Click radio button to select answer as yes
 - Click № radio button, to select answer as no
 - O Click o radio button to select answer as partially
- (Respond if 'Yes' in 3 of Data Generation section, else skip to Q6 of next section) Does the MIS support multilingual features as per GIGW norms?:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - Click o radio button to select answer as partially
- Does the MIS support features for differently abled as per GIGW norms?
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
 - Click o radio button to select answer as partially
- How is the MIS data accessible for general population?
 - Click a radio button to coloct answer as Openhy
 - Click radio button to select answer as Openly accessible without credentials, Accessible through credentials, or Not accessible
- Is there an option on the MIS to download bulk data in excel, csv, dta files (machine readable formats)?
 - Click Yes radio button to select answer as yes
 - o Click No radio button, to select answer as no
 - o Click o radio button to select answer as Partial data download allowed
- Is the MIS data available on 'data.gov.in'?
 - O Click ves radio button to select answer as yes
 - Click No radio button, to select answer as no

5.1.3.4 D. Use of Technology

. US	e of Technology		
1	(Respond if 'Yes' in 3 of Data Generation section, else skip to Q6) Does the MIS of the scheme have linkages with PFMS?		Yes No
2	(Respond if answer to 1 is yes) Is PFMS integration completed till the field-level implementation agency ?	0	Yes No Partially
3	Does the MIS of the scheme have linkages:		
	a. Aadhaar	0	Yes No NA
	b. Mobile numbers	_	Yes No NA
	c. Bank accounts	0	Yes No NA
	d. GSTN		Yes No NA
	e. Udyog Aadhaar	0	Yes No NA
	f. Others – please specify		
4	Does the scheme use any of the following:		
	a. Remote sensing data	0	Yes No NA
	b. Night light data		Yes No NA
	c. Social media data		Yes No NA
	d. Private sector generated data	0	Yes No NA
	e. Others – please specify		

- (Respond if 'Yes' in 3 of Data Generation section, else skip to Q6) Does the MIS of the scheme have linkages with PFMS? :
 - o If you click Yes radio button, then further questionnaires will be displayed
- (Respond if answer to 1 is yes) Is PFMS integration completed till the field-level implementation agency?
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
 - Click o radio button to select answer as partially
- Does the MIS of the scheme have linkages:
 - Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable
- Does the scheme use any of the following:
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
 - Click NA radio button to select answer as not applicable
- Is the MIS compliant with Local GOVT. Directory (LGD)?
 - O Click radio button to select answer as yes
 - o Click № radio button, to select answer as no

5.1.3.4 D. Use of Technology

5	Is the MIS compliant with Local Govt Directory (LGD)?	Yes
		○ No
		O NA
6	Does the scheme apply/use any of the following:	
	a. Machine Learning	Yes
		○ No
		O NA
	b. Artificial Intelligence	Yes
		○ No
		O NA
	c. Blockchain	○ Yes
		No
		O NA
	d. Internet of Things (IoT)	Yes
		O No
		O NA
	e. Big Data analytics	Yes
		○ No
		O NA
	f. Drones	Yes
		○ No
		O NA

- Is the MIS compliant with Local GOVT. Directory (LGD)?
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable
- Does the scheme apply/use any of the following:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
 - O Click NA radio button to select answer as not applicable

5.1.3.5 E. Data Security and HR Capacity

	(Respond if Yes' in 3 of Data Generation section, else skip to Q9) Does the MIS follow regular antivirus updates?	Yes No
2	Is the MIS regularly assessed by third party auditors for the online security?	Yes No
3	Does the MIS/ website uses SSL certificate?	○ Yes ● No
4	If "Yes" in previous question, is the SSL certificate at least 2048 bit SHA 256 encryption or higher?	○ Yes ○ No
5	Does the MIS use firewalls to secure access to data?	O Yes No
6	All external communication/ 3rd party integration/ API integration for the MIS is done through encrypted channel?	Yes No No external communication established
7	What measures are undertaken to secure sensitive/personally identifiable information? (Multiselect)	Single-factor/ Multi-factor authentication Access control list is maintained Data is encrypted Data is anonymized No such data
В	(If anonymization is selected in previous question) How do you protect de-identified data from re-identification risks?	No efforts made Tighter security for databases that store anonymized information Implementation of Differential Privacy Generation of Synthetic Data that exhibits the statistical properties of the raw data, without allowing real individuals to be identified Others - provide details
9	(Respond if answer to 7 is any option other than "no such data", else skip to Q10) Is permission taken from user to collect, store and use their personal data?	Yes No
10	Is there a dedicated data quality assessment and management team for the scheme?	Yes No
1	Is there a dedicated data analysis team for the scheme?	Yes No

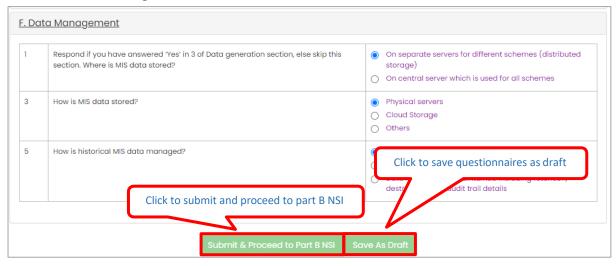
- (Respond if 'Yes' in 3 of Data Generation section, else skip to Q9) Does the MIS follow regular antivirus updates?:
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
- Is the MIS regularly assessed by third party auditors for the online security?:
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
- Does the MIS/ website uses SSL certificate?:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
- If "Yes" in previous question, is the SSL certificate at least 2048 bit SHA 256 encryption or higher?:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no
- Does the MIS use firewalls to secure access to data?
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
- All external communication/ 3rd party integration/ API integration for the MIS is done through encrypted channel?:
 - O Click radio button to select answer as yes
 - Click № radio button, to select answer as no
 - Click radio button to select answer as No external communication established

5.1.3.5 E. Data Security and HR Capacity

1	(Respond if 'Yes' in 3 of Data Generation section, else skip to Q9) Does the MIS follow regular antivirus updates?	Yes No
2	Is the MIS regularly assessed by third party auditors for the online security?	Yes No
3	Does the MIS/ website uses SSL certificate?	O Yes No
4	If "Yes" in previous question, is the SSL certificate at least 2048 bit SHA 256 encryption or higher?	O Yes O No
5	Does the MIS use firewalls to secure access to data?	O Yes No
6	All external communication/ 3rd party integration/ API integration for the MIS is done through encrypted channel?	No No external communication established
7	What measures are undertaken to secure sensitive/personally identifiable information? (Multiselect)	Single-factor/ Multi-factor authentication Access control list is maintained Data is encrypted Data is anonymized No such data
8	(If anonymization is selected in previous question) How do you protect de-identified data from re-identification risks?	■ No efforts made ■ Tighter security for databases that store anonymized information ■ Implementation of Differential Privacy ■ Generation of Synthetic Data that exhibits the statistical properties of the raw data, without allowing real individuals to be identified ■ Others – provide details
9	(Respond if answer to 7 is any option other than "no such data", else skip to Q10) is permission taken from user to collect, store and use their personal data?	Yes No
10	Is there a dedicated data quality assessment and management team for the scheme?	Yes No
11	Is there a dedicated data analysis team for the scheme?	Yes No

- What measures are undertaken to secure sensitive/personally identifiable information? (Multiselect)
 - Check checkbox to select answer as Single-factor/ Multi-factor authentication Access control list is maintained, Data is encrypted, Data is anonymized, or No such data
- (If anonymization is selected in previous question) How do you protect de-identified data from re-identification risks?:
 - Check checkbox to select answer as No efforts made, Tighter security for databases that store anonymized information, Implementation of Differential Privacy, Generation of Synthetic Data that exhibits the statistical properties of the raw data, without allowing real individuals to be identified, or Others provide details
- (Respond if answer to 7 is any option other than "no such data", else skip to Q10) Is permission taken from user to collect, store and use their personal data?:
 - O Click ves radio button to select answer as yes
 - Click No radio button, to select answer as no
- Is there a dedicated data quality assessment and management team for the scheme?:
 - O Click radio button to select answer as yes
 - Click No radio button, to select answer as no
- Is there a dedicated data analysis team for the scheme?:
 - O Click Yes radio button to select answer as yes
 - Click No radio button, to select answer as no

5.1.3.6 F. Data Management



- Respond if you have answered 'Yes' in 3 of Data generation section, else skip this section. Where is MIS data stored?:
 - Click radio button to select answer as on separate servers for different schemes (distributed storage) or on central server which is used for all schemes
- How is MIS data stored?:
 - Click radio button to select answer as Physical servers, Cloud Storage, or Others
- How is historical MIS data managed?:
 - Click radio button to select answer as Data is not backed up (i.e., it is destroyed) Data is backed up and data is archived, or Data history is well maintained including retention, destruction, and audit trail details
- Click Submit & Proceed to Part B NSI to submit and proceed to part B
- Click Save As Draft to save questionnaires as a draft

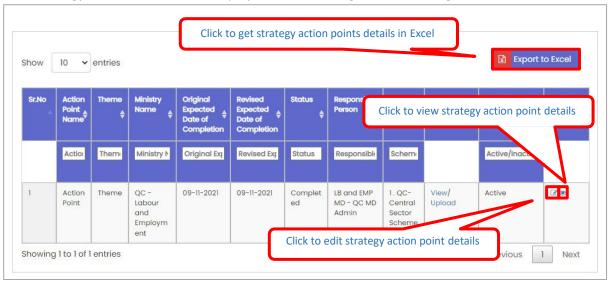
6 Strategy Tracking Module

1. Strategy Action Points

Path: Strategy Tracking Module >> Strategy Action Points

Click Export to Excel to get strategy action points details in Excel Select ministry name from dropdown;

Strategy Action Points will be displayed with following column headings:



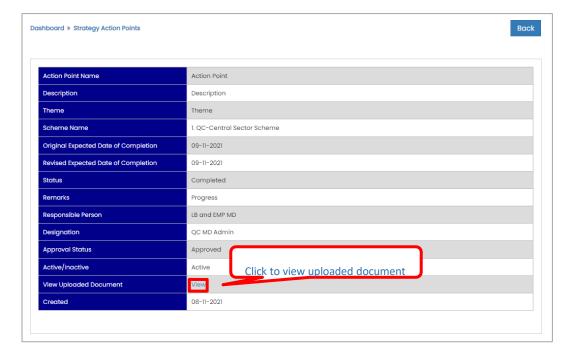
- Sr. No
- Action Point Name
- Theme
- Ministry Name
- Original Expected Date of Completion (It is a date consider when first time M/D Admin add data)
- Revised Expected Date of Completion (If M/D Admin changes original expected date of completion, then the date is considered as revised expected date of completion)
- Status
- Responsible Person
- Scheme Name
 - o Document View / Upload
 - Active/Inactive
- Actions:
 - Click to edit strategy action point details
 - Click to view strategy action point details

6.2 View strategy action point



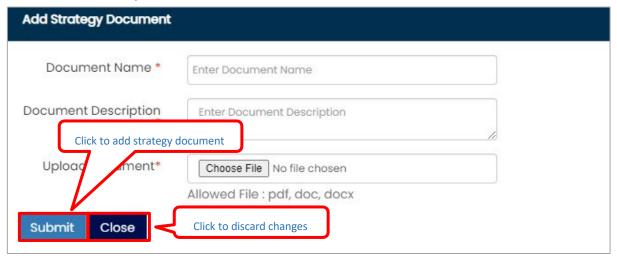
Click to view strategy action point details

Strategy Action Points details will be displayed with following column headings:



- Action Point Name
- Description
- Theme
- Scheme Name
- Original Expected Date of Completion
- Revised Expected Date of Completion
- Status
- Remarks
- Responsible Person
- Designation
- Approval Status
- Active/Inactive
- View Uploaded Document
 - Click View to view uploaded document
- Created

6.2.1 Document Upload



Enter following details:

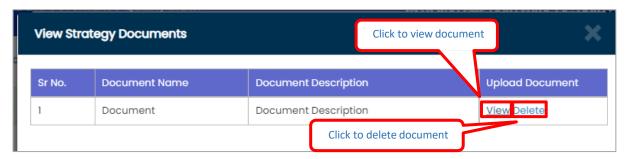
- Document Name: Enter document name
- Document Description: Enter document description
- Upload Document: Click Choose File to choose file
- Click Submit to add strategy document
- Click Close to discard changes

On successful upload of strategy document, system will display following message:

The Strategy document has been uploaded

6.2.2 Document View

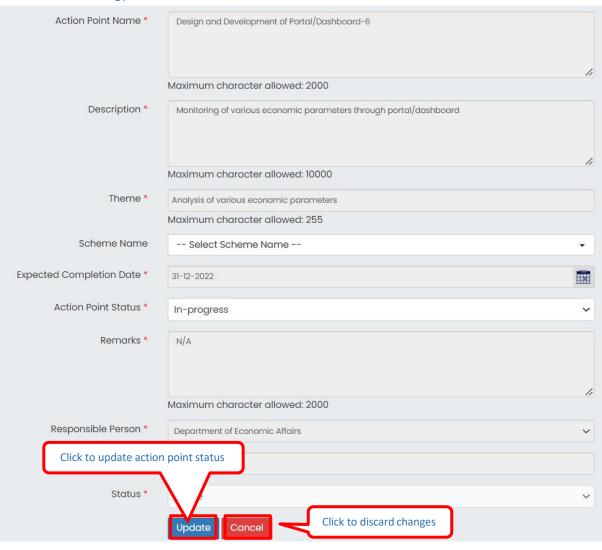
Strategy documents details will be displayed with following column headings:



- Sr. No.
- Document Name
- Document Description
- Upload Document
 - Click View to view document
 - Click Delete to delete document

Note: M/D data entry user can only be able to view or upload strategy action point documents. He/she would not be able to add or delete strategy action points and uploaded documents.

6.2.3 Edit Strategy Action Points



- Action Point Name will be displayed automatically
- Description will be displayed automatically
- Theme will be displayed automatically
- Scheme Name: Select scheme from dropdown
- Expected Completion Date will be displayed automatically
- Action Point Status: Select action point status Yet to be initiated, In-progress, or Completed from dropdown
- Remarks will be displayed automatically
- Responsible Person will be displayed automatically
- Designation will be displayed automatically
- Status will be displayed automatically
- Click Back to go to previous screen
- Click Update to update action point status
- Click Cancel to discard changes

Thank you!