

# **Verification Report-Final**

## **Eastern Africa Regional Statistics Program-for-Results, for the United Republic of Tanzania, April 2025**

### **United Nations Economic Commission for Africa (UNECA), Addis Ababa.**

#### **Executive Summary**

The Eastern Africa Regional Statistics Program-for-Results (EARSP-for-R) aims to support the harmonization, availability and use of core economic and social statistics in East Africa. Funds under the program are disbursed to Kenya, Rwanda, and Tanzania's national statistics offices (NSO) to accomplish specific Disbursement Linked Results (DLR) under Disbursement Linked Indicators (DLIs) requiring independent verification. UNECA is contracted as the Independent Verification Agency by the East African Community (EAC) to verify a subset of DLRs following established verification procedures.

In the first verification window (April 2025), Year 2, the National Bureau of Statistics (NBS) of Tanzania (Ref. CA.257/424/01A/259, 8<sup>th</sup> April 2025) submitted three (3) DLRs for verification through the EAC – the Regional Program Coordinating Unit (RPCU). ECA requested to verify the following DLRs:

- **DLI 1.1: Improved harmonization & quality of statistics:** DLR 1.1(c). Harmonized 4 dimensions according to applicable regional guidelines.
- **DLI 2.4: Improved availability of administrative data:** DLR 2.4 (f). Administrative data portal (ADP) for internal government data sharing for Tanzania is operational, providing access to a comprehensive integrated data set from government agencies and non-state actors.
- **DLI 2.6: Gained experience with big data and new technologies:** DLR 2.6(b). Rapid Response Phone Survey Observatory (RRPSO) completed.

The verification procedures include checking the required documents, reports, data portals, and setting up a phone survey centre availability and accessibility during both onsite and online verification. Before this report, ECA shared its initial findings and preliminary assessment report with RPCU/EAC for comment. Therefore, the final results of the April 2025 verification are:

- DLR 1.1(c) – Achieved.
- DLR 2.4(f) – Achieved.
- DLI 2.6(b) – Achieved.

# **I. Introduction**

## **1. Background**

The Eastern Africa Regional Statistics Program-for-Results aims to strengthen the harmonization, availability, and use of core economic and social statistics generated from the national statistics programs of Kenya, Rwanda, and Tanzania. The Program under the East African Community (EAC) and the African Union Commission (AUC) supports statistical activities in the implementing countries from 2022 to 2027 within the strategic themes of the Strategy for the Harmonization of Statistics in Africa (SHaSA). The World Bank finances the program through the disbursement-linked results mechanism, which focuses on the achievements of specific results.

The EARSP-for-R is structured into three result areas with Disbursement-Linked Indicators (DLI) and identified Disbursement-Linked Results (DLR). Hence, implementing agencies, particularly the national statistics offices, are expected to report their country-specific achievement of DLRs to the RPCU of EAC. These results must be independently verified to disburse the next tranche of funds.

To verify the results of the DLIs reported by national implementing agencies, the ECA through the African Centre of Statistics (ACS), has been contracted as one of the Independent Verification Agencies (IVA) by the EAC for a set of DLIs.

This Verification Report is the final main report prepared as a follow-up to the ECA submission of the initial findings and preliminary verification results of the DLRs. The report contains findings of the verification, some questions and clarifications raised in the previous ECA submissions with recommendations. NBS to address or consider these before ECA submits the final verification report.

The report is structured into four sections: introductory section (1), verification methodology (section II), detailed final findings (section III), and conclusion (section IV), which also includes the recommendations for consideration by the NBS. It also includes relevant Appendices after the concluding section.

## **2. Disbursement-Linked-Indicator**

The EARSP-for-R program is structured into three result areas (RA), in which the DLRs are linked with the respective RA. The result areas have specific DLIs. This verification focuses on:

- ***RA 1: Harmonization, quality, dissemination and use of statistics.***

- DLI 1.1. Improved harmonization and quality of statistics.
- **RA 2: Availability and New Data Sources:**
  - DLI 2.4: Improved availability of administrative data.
  - DLI 2.6: Gained experience with big data and new technologies.

### 3. Independent Verification

For the April 2025 verification window, the following DLRs were subjected to a set of verifications procedures/protocols undertaken by ECA.

- DLR 1.1(c). Harmonized 4 dimensions according to applicable regional guidelines.
- DLR 2.4 (f). Administrative data portal (ADP) for internal government data sharing for Tanzania is operational, providing access to a comprehensive integrated data set from government agencies and non-state actors.
- DLR 2.6(b). Rapid Response Phone Survey Observatory (RRPSO) completed.

## II. Methodology

The verification procedures followed by ECA:

- **DLR 1.1(c). Harmonized four Dimensions of Statistics:** NBS provided the necessary links with relevant documents and data. The methodology for checking the DLR involved ECA verifying that review assessment framework summary report, analyse the self-assessment harmonization framework Excel files; verify the declared census and survey periods from NBS's website; review reports and other publications; examine the methodology, classifications, survey coverage periods, and geographical scope; validate the compliance rate; verify dimensions meet international data quality standards and align with EAC/AU guidelines.
- **DLR 2.4(f). Administrative Data Portal:** NBS shared the necessary links with relevant documents and onsite portal inspection through demonstration. The methodology for checking the DLR involves ECA checks operational administrative data portal for internal government data sharing with different levels of access by users inside and outside the government. It also checks the Integration of the [data portal](#) with a focus on integrated data portal features , including unified access, interoperability, metadata consistency, [manual](#), linked datasets, and user-centric design.

- **DLR 2.6(b). Rapid response phone survey observatory.** NBS provided necessary access to the phone survey observatory setup with relevant documents and data. The methodology for checking the DLR involved ECA checks on-site set-up and testing of the infrastructure with an in-depth examination and cross-checking of its operation in data collection; and verifying documentation of audios, monitoring procedures and data quality assurance. Further, ECA checks the conduct of a Test Survey, and the survey report is produced and available online on the NBS [website](#).

### **III. Detailed Verification Results for the DLRs**

#### **3.1. Inspection/ Review**

The verification was done using a hybrid approach or a combination of onsite and online checking of the results.

#### **3.2. Findings.**

##### **a. DLR 1.1(c). Harmonized four Dimensions of Statistics.**

ECA verified the harmonization of four dimensions, specifically, National Account Statistics (NAS), External Sector Statistics (ESS), Government Finance Statistics (GFS), and Monetary Finance Statistics (MFS), in line with the procedures. ECA, referring to the PCA, indicated that the harmonization of dimensions encompasses national accounts, CPI, industrial labor market, agriculture, and trade. The NBS could not produce harmonised dimensions for labour market and agriculture statistics. *The NBS stated that the bureau produced the four dimensions, which are priorities for the EAC in general and for the country in particular, but do not necessarily align with the list of dimensions indicated in the PCA. Finally, EAC indicated in the midterm review meeting report, March 2024, except labour market, which has no guideline frameworks; agriculture and other dimensions will be included in the future harmonisation process.*

The verification findings with respect to procedures and dimensions are as follows.

##### **i. Review Assessment Framework Summary Report.**

- The verification confirmed that NBS produced the four dimensions (NAS, ESS, GFS, and MFS) of macroeconomic statistics. To verify and validate the dimensions, NBS has provided a document summarizing the main results of the production process and alignment of the dimensions. The document also highlights the methodological aspects and the approaches used by NBS to evaluate the work carried out. For each dimension,

a reminder of the main methods of the components implemented is provided, along with the overall situation regarding the performance achieved.

### **1. Government Finance Statistics**

- The summary document sets out the various chapters covered by the guideline compilation, taking care to announce the country's level of implementation. It also explains reported performance, specifically discussing the type of data used and its coverage.
- However, a review of the document reveals that the first aspect of harmonization, particularly the delineation of the Public Sector, is not effective for Tanzania. This calls into question the correct preparation of the main tables on public finances. The failure to implement the recommendation is attributable to the lack of some data sources and their coverage, particularly the subdivisions of the Government. Also, the statistics produced are available at the annual level. This means that quarterly frequency is not available, contrary to the recommendation of the guidelines. *As a result, the guide's recommendation is not effective for the country, even though working groups have already been established for its implementation.*

### **2. External Sector Statistics**

- Considering that the country implements the compilation guidelines adopted in August 2023, the implementation assessment shows an implementation rate of 70% by December 2024. However, the document refers to Annexe 1, which is not attached to this report, indicating that this rating was obtained during the February 2025 workshop. The different data sources used to produce the ESS and the compilation methods are not indicated.
- The guideline also indicates that the frequency of balance of payment statistics production for Tanzania is quarterly. However, a review of the document does not allow us to deduce any frequency or to know the approaches used, the Bank of Tanzania (BOT), which constitutes the balance of payments compilation committee, etc.

### **3. National Accounts Statistics**

- For the NAS, the document reviewed the compilation guidelines and the chapters whose recommendations must be implemented (the first four chapters). The compliance methodology is then discussed, and the final section presents the implementation rate following their assessment.
- The document does not adequately address the methodological aspects and international references used.

#### **4. Monetary and Financial Statistics**

- The report reviewed the institutional framework before addressing the data used and their coverage. It outlined the methodology used to assess the results of implementing the guidelines compilation. However, the document does not address the benchmarks used or the breakdown of the financial sector as recommended by the compilation guide.

#### **ii. Analyze the Self-Assessment Harmonization Framework Excel files.**

- The summary document highlighted some information about Tanzania's compliance. An Excel file is available to assess and analyse the various aspects of the implementation of guideline recommendations. It was explored during the consultation and supplemented by the verification mission.
- Since the details of the justifications and other comments are contained in the Excel files, we continued our review work by exploring each Excel file. Overall, it was found that compliance was clearly documented for NAS but only partially documented for GFS and MFS. The review also explored the NBS websites to confirm the periods of the surveys used, the censuses and the respect of deadlines for producing statistics used to develop macroeconomic statistics.
- Updated information was provided following the on-site mission.

##### **1. National Accounts Statistics**

- The summary report indicates the methodological approach used to assess the implementation of the guidelines compilation. The compliance is then done at the Excel file level and covers chapters 3, 4 and 5, in particular classification, data sources, valuation, price indices used, administrative data, consideration of the non-observed economy, development of a supply and use table, rebasing and dissemination. For each theme, a list of indicators is proposed.
- For the classification, the most recent international standards are used. This means that a maximum rating is obtained at this level, and the explanations are provided in the Remarks column. The only missing observations concern the sharing of the table of financial operations of the State and possibly the Household Budget Survey (HBS) to validate the rating, because the sources are not accessible from the site.
- Regarding data sources, a certain regularity of data collection operations is generally required, in particular compliance with the ten (10) year deadlines for

censuses and five (5) years for surveys. However, examination of the site's data shows that the agriculture deadline is not respected and leads us to correct its rating to 3. For other censuses (industrial production, services) and surveys, the country plans to hold them over the period 2025-2027 and consultation of the site does show a previous operations carried out in this direction (<https://www.nbs.go.tz/statistics/topic/industrial-statistics>; <https://www.nbs.go.tz/statistics/topic/preparations-of-the-census-of-industrial-production-2023-cip-2023>). However the rating is reduced to 1 or 2 depending on the degree of implementation of the methodology indicated in the guidelines.

- For the survey on employment, the informal sector, or non-profit institutions, the deadlines were not met. However, planning is underway by NBS.
- The statistics related to price indices indicate that the recommended double deflation method is currently in use. However, the country generally lacks appropriate deflators and instead relies on proxies such as the consumer price index (CPI) or the producer price index (PPI), which are often insufficiently disaggregated.
- <https://www.nbs.go.tz/statistics/economic-statistics>
- <https://www.nbs.go.tz/statistics/topic/supply-and-use-tables>
- The main recommendations relate to sharing information on surveys already carried out or links that can provide access to information to confirm the rating.

## **2. External Sector Statistics**

- Here, it is recommended to proceed with the implementation of the 6th edition of the Balance of Payments (BPM6), the Tanzania team confirms having implemented the harmonization guidelines, and the a priori assessment shows an overall score of 70.41%. However, we noted that no justification is provided for the maximum scores as recommended by the assessment instructions. Links and comments are transmitted at the updated file level, and this has made it possible to adjust certain ratings and better ensure compliance with the recommendations of the compilation guide.
- Regarding the point on the registration of goods in general trade, the institute confirms that the balance is prepared under the guide. For the coverage of unregistered trade in particular, the recommendation to conduct a quarterly survey to estimate trade flows that transit informally between borders, particularly land borders, has not been implemented. The country relies on data from old surveys to extrapolate the data. However, neither the name of the survey nor its date of completion are communicated in the scorecard. It is therefore suggested to conduct

an annual survey on unregistered trade flows (pending the availability of human and financial resources to carry out the operation as suggested by the guide).

- The review of the updated file submitted at the end of the mission and relating to the external sector shows that the justifications have been added. During the mission, discussions took place on the processing and availability of the data. As a result, a new verification of the shared links and documents made it possible to adjust the data (A.1.2. Net exports of goods under merchanting; A.1.3 Non-monetary gold; A /2/4). Notation errors were noted in certain lines (A2.8.2; A2.12.1 ; A4.9 ). *The corrections and adjustments made have resulted in a revision of the overall rating to 66%. This validates the implementation of the recommendations of the guide for foreign trade statistics.*

### **3. Government Financial Statistics**

- The assessment of public sector data by national institutions shows an overall score of 67.94%. The themes covered included the fields, methodologies used, the data used to prepare public administration accounts, and dissemination.
- The criteria used are not indicated in the document in accordance with the guideline's recommendations. Furthermore, the social security sector should be treated as a sub-sector of public enterprises. For public enterprises, the scope of public enterprises only includes those with primarily non-market production. This aspect is not indicated in the documents and exchanges, even though they confirm that the criterion is used. It is advisable to specify the public companies that are included in the scope of the government and add the methodological aspects, helping in this sense to better understand the choice and the companies concerned.
- Debt documents are not shared, and no justification is provided. Adjustments have been made, and the score for public finance statistics is 65.98%. To support the rating with facts, it would be useful to have access to the main summary tables of public finances, the methodological documents used, and to have an idea of the main constraints. Thus, the main recommendation concerns the sharing of documents or links that allow the accounts to be confirmed.

### **4. Monetary and Financial Statistics**

- Monetary statistics are produced by the Central Bank of the Republic of Tanzania and other dedicated institutions. The use of the guide's recommendations for compiling monetary statistics is effective for 63.42% of respondents. In addition to the rating, the file indicates the institutions responsible for each component of the statistics. However, links or justifications are not shared.

- Monetary and financial statistics are prepared in accordance with the 1993 SNA. This means that it is not in line with the most recent international recommendations. However, in relation to the recommendations of the harmonization guide, the use of the 2001 Manual of Monetary and Financial Statistics (MSMF 2001) is effective.
- During discussions held during the mission, it was noted that social security is integrated into the financial sector. This treatment is not consistent with the recommendations of the harmonization guide. Furthermore, ISIC Rev. 3 is used. It is urgent for the services concerned to align with current international standards (SNA2008, ISIC Rev. 4, etc.).

### iii. Summary of the Findings.

#### 1. National Account Statistics.

- The assessment partially confirmed that statistics are produced and published according to harmonized guidelines and international standards. However, analysis of the documentation shared and reports published on the NBS's website revealed that the deadline for agriculture was not adhered to, prompting a revised rating of either 2 or 3. The country plans to conduct other censuses (industrial production, services) and surveys between 2025-2027. The previous operations of this nature were found on the website (<https://www.nbs.go.tz/statistics/topic/industrial-statistics>; <https://www.nbs.go.tz/statistics/topic/preparations-of-the-census-of-industrial-production-2023-cip-2023>).
- Regarding data sources, regularity of data collection operations is generally required, especially compliance with the ten-year interval for censuses and a five-year interval for surveys. However, the review of the website's information confirmed non-compliance with the agricultural census schedule, leading to a rating adjustment to 3. As mentioned, the absence of prior industrial production, censuses and surveys on the website supports a lower rating.
- After thorough examination of all documents, several deviations from the established recommendations have been identified, resulting in revised ratings. To this end, since the rating scale only permits integer values (0,1,2,3, or 4), any calculated decimal values have been adjusted by truncating to their integer part.
- *Thus, the national accounts statistics component achieved a revised **score of 67%**. The component is considered validated by the verification team under the procedures.*

## **2. External Sector Statistics.**

- The verification team found that the ESS is produced in line with the guidelines from the 6<sup>th</sup> edition of the Balance of Payments Manual (BPM6). Examination of the updated external sector harmonization compliance Excel file revealed the inclusion of comments. During the verification mission, discussions took place on data processing and availability, resulting in additional verification of shared links and documents, which enabled necessary adjustments to the rating, specifically for the following items:
  - ✓ A.1.2. Net exports of goods under merchanting ;
  - ✓ A.1.3 Non-monetary gold; and
  - ✓ A/2/4.
- Notation errors were noted for the following rows: A2.8.2; A2.12.1, and A4.9.
- *The corrections and adjustments made resulted in a revised compliance rate of **66%** (partial compliance). This validates adherence to the recommended guidelines for foreign trade statistics.*

## **3. Government Financial Statistics.**

- The verification of GFS included the scope, methodologies used, the data used for compiling public sector accounts, and dissemination practices. To support the rating with concrete evidence, it would be useful to have access to the main summary tables of public finances, the methodological documents used, and to have an idea of the main constraints faced during data compilation. Thus, the main recommendation is to facilitate the sharing of documents or links, allowing verification and validation of the accounts. *Thus, the GFS component is validated by the verification team per the procedures, and hence, it achieved a revised **score of 65.98%**.*

## **4. Monetary and Financial Statistics**

- Monetary and Financial Statistics, including data from insurance, microfinance, pension funds, and other financial institutions compiled by the Central Bank of the United Republic of Tanzania. The use of the guideline's recommendations for compiling monetary statistics is effective for 63.42% of respondents. In addition to the rating, the file indicates the institutions responsible for each statistics component; however, supporting links or justifications were not shared.
- However, discussions held during the mission revealed that monetary and financial statistics are compiled in accordance with the 1993 System of National Accounts (SNA) and Monetary and Financial Statistics Manual (MFSM) 2000. It was further noted that social security data is included in the financial sector statistics, an approach that does not comply with international recommendations. Furthermore, the continued

use of ISIC Rev.3 was noted. It is, therefore, urgent for the departments concerned to align themselves with current international standards, specifically the 2008 SNA and ISIC rev.4. *Hence, the recommendations in the guidelines are partially implemented for the monetary and financial statistics sector (**partial compliance 60%**).*

Finally, ECA confirmed that NBS produced the harmonized four dimensions of statistics with a summary report, data sources and their compliance achieved 60% above in the rating across all macroeconomic statistics. Hence, the DLR is **achieved** by the implementing agency.

## **b. DLR 2.4(f). Administrative data portal**

### **i. *Operational administrative data portal of URT for internal government data sharing with different levels of access by users inside and outside the government.***

- The verification confirmed that an administrative data portal for internal government data sharing for URT exists and is operational with functional links providing access to a comprehensive integrated data set for eight Ministries, Departments and Agencies (MDAs), notably the Ministry of Education,(MoE), the Registration Insolvency and Trusteeship Agency (RITA), the President's Office Regional and Local Government (PO-RALG), Judiciary, Tanzania Police Force (TPF), Tanzania Revenue Authority (TRA), Ministry of Water, National Prosecution Service (NPS). The integration is facilitated by the e-Government Authority using API and the Government Electronic Service Bus (GovESB) platform for data sharing. All links are functional, dynamic, and interoperable and provide access to several datasets.
- The following verification results were noted:
  - Data Sharing Agreements (DSA) exist between institutions and data sharing is done under the following legal framework: e-Government Act 2019 (Section 48(2)), e-Government Regulation 2020 (Section 59(2) (a) on how to exchange data). The data to be shared amongst themselves (either as a producer or a consumer institution) is stipulated in the Data Sharing Agreements (DSA).
  - Each of the eight MDAs engaged in data sharing has its own data portal, and integration between these data portals is done through the Government Enterprise Service Bus (GovESB), a secure platform which uses API, HTTPS, security keys and point codes for connection to enable data exchange amongst the eight institutions. The platform ensures secure and well-managed data exchange between stakeholders.

- Each of the eight MDAs has its own data portal and an account on GovESB to manage all its connections with other government MDAs data portals, and the interface to upload Data Sharing Agreements (DSAs).
- The GovESB ensures data sharing from eight MDAs, and the data portal can be accessed by users inside and outside the government with different levels of access, ensuring anonymization.
- Evidence of the existence and operation of data sharing via the GovESB is given in the links shown in Table 1 below.

**Table 1. List of MDAs with administrative data sharing portal links.**

| Institution (MDA)                                | Link                                                                              |
|--------------------------------------------------|-----------------------------------------------------------------------------------|
| Ministry of Education                            | <a href="https://temis.elimu.moe.go.tz">https://temis.elimu.moe.go.tz</a>         |
| Registration Insolvency and Trusteeship Agency   | <a href="https://erita.rita.go.tz">https://erita.rita.go.tz</a>                   |
| President's Office-Regional and Local Government | <a href="https://sis.tamisemi.go.tz">https://sis.tamisemi.go.tz</a>               |
| Judiciary                                        | <a href="https://cms.judiciary.go.tz/login">https://cms.judiciary.go.tz/login</a> |
| Tanzania Police Force (TPF)                      | <a href="https://mimis.tpf.go.tz/">https://mimis.tpf.go.tz/</a>                   |
| Tanzania Revenue Authority (TRA)                 |                                                                                   |
| Ministry of Water                                | <a href="https://maji.gov.go.tz/auth/login">https://maji.gov.go.tz/auth/login</a> |
| National Prosecution Service                     | <a href="https://cmis.nps.go.tz/login">https://cmis.nps.go.tz/login</a>           |
| GovESB                                           | <a href="https://govesb.gov.go.tz/">https://govesb.gov.go.tz/</a>                 |
| TISP                                             | <a href="https://tisp.nbs.go.tz/">https://tisp.nbs.go.tz/</a>                     |

- *Thus, the administrative data portals of URT support internal government data sharing with different levels of access by users inside and outside the government is operational.*
- ii. **The administrative data portal provides access to a comprehensive integrated data set for eight MDAs and Non-State Actors (NSAs), in line with the agreed procedures.**
  - The verification confirmed that NBS has developed and manages the Tanzania Integrated Statistical Portal (TISP), which is a stand-alone portal accessible on <https://tisp.nbs.go.tz/>. The portal is the central platform that connects the Bureau with the eight MDAs data portal for real-time data collection and sharing through the GovESB.
  - The portal provides one dynamic platform that allows for the integration of various administrative datasets, making it possible to generate customised analyses on cross-sectoral data by integrating social indicators sourced from administrative agencies' data

systems. The portal features modules for visualizing trends, charts, maps, and various indicators, providing a comprehensive tool for data-driven decision-making in Tanzania.

- It was, however, noted that only government institutions were connected to the portal. *There was no evidence of an integrated dataset for Non-State Actors (NSAs).* This was not observed, and neither did they feature in the list of either a producer or consumer institution in the document provided by the NBS. There is therefore no NSA involved in data sharing at this stage. *NBS staff informed the mission that there are plans to integrate on the portal other government systems that produce statistical information, thereby moving closer to achieving the milestone of improved availability of administrative data. This will be done in a phased approach and will depend on the IT infrastructure and level of preparedness, and the status of digitalization of the remaining institutions.*

### **iii. In summary,**

- Technical integration is done with the GovESB. This Service Bus uses API to fetch and update data from predetermined dataset(s), according to the Data Sharing Agreements (DSAs). The data is updated either in real-time or at regular intervals, depending on the DSA. *The verifying team was later informed that metadata is only available between the institutions sharing the data, and that NBS is implementing SDMX on TISP. It is important for NBS, as coordinator of the National Statistical System, to review the metadata to ensure alignment with agreed standards.*
- Due to the nature of datasets from the eight MDAs engaged in data sharing, ontology mapping is not effective (the datasets cannot be meaningfully compared or merged). The verifying mission did not get evidence that common terminologies are used across the MDAs (data elements using shared definitions and taxonomies). *NBS requested further elaboration on the common terminologies that are used across MDAs (data elements using shared definitions and taxonomies).* Thus, ECA explained that it refers to whether different government agencies (MDAs: Ministries, Departments, and Agencies) use the same language, definitions, and classifications when collecting, storing, and exchanging data. When common terminologies are used across MDAs, it means that:
  - Data elements (like "household", "region", "employment status", "GDP", "school enrollment", etc.) have the same meaning in every MDA.
  - All MDAs use the same formats, codes, and classification systems

(taxonomies).

- Shared standards or a data dictionary exist that define how each data element should be used and interpreted.
  - This ensures that data can be compared, linked, and aggregated across agencies without confusion or misinterpretation.
  - NSSs usually produce a manual of concepts and definitions and build the capacity of MDAs to use it efficiently. NSO monitors their use as well and agrees on standards and classifications.
- Also, a data dictionary or glossary available for users would be helpful.
  - A strong Governance and Policy Integration is in place with the e-Government Act 2019, the e-Government Regulation 2020 and Data Sharing Agreements, and integrated and standardized data security protocols.
  - Data Quality is ensured by the owner of the data portal. Validation of datasets for accuracy and completeness is encouraged and will be helpful.
  - TISP is the only data portal accessible to users outside the government.

Lastly, ECA confirmed that the administrative data portal is operational and facilitates the exchange of data between the government MDAs over GovESB. [TISP](#) connects the Bureau with the eight MDAs data portal for real-time data collection and sharing comprehensive datasets through the GovESB and is accessible for public users. Hence, the DLR is **achieved** by the implementing agency.

### **c. DLR 2.6(b). Rapid Response Phone Survey Observatory**

#### **i. Checking the Set-up of the Rapid Response Phone Survey Infrastructure with an In-depth Examination and Cross-checking of its Operation in Data Collection.**

- The onsite verification confirmed that NBS has a Call Centre in 2023 at Dodoma. According to a report, the Centre is equipped with 22 Dell computers, each paired with a headset and running 3CX software. On average, each station handles roughly 19 calls in a day, so collectively, the Centre can process between 400 and 480 calls daily across all workstations. ECA raised on Headset-to-Desktop Ratio: Clarify why there are only 22 headsets for 22 desktops and how this influences operations. *NBS clarified that the call centre infrastructure currently accommodates a maximum of 20 desktop computers. This limitation directly affects the number of operators that can work concurrently, regardless of the total number of headsets or enumerators available. For future scalability, infrastructure expansion or flexible workspace will be considered to align physical capacity with operational demands. However, NBS is*

*in the process of establishing a data centre that will accommodate the expansion of the call centre and infrastructure.*

- Regarding software licensing, the verifying team is required to confirm whether the free 3CX software has limitations (e.g., scalability, compatibility) that could affect future upgrades. *NBS explained that the free license software has no user limitation as it is now accommodating 22 desktop computers, and the installation can be expanded to more computers. However, the essential features, such as AI-assisted call routing, advanced analytics, and multi-level authentication, can be activated when the need arises for technological enhancements and process automation.*
- The system is designed to make large-scale data collection more efficient, and all the data gets backed up on servers located in Kigoma and Eringor. However, the security measures on the encryption standards and access controls for servers in Kigoma and Iringa are not detailed, but 3CX's free version supports SFTP/FTPS for encrypted data transmission. Access is restricted to supervisors and IT administrators. *NBS explained that the off-site servers are comprehensively configured and detailed to ensure data security is intact, since they handle all the data from NBS. They are managed by NBS and eGA. The server that holds 3CX is hosted in-house, which is different from the Kigoma and Iringa off-site servers.*
- The sources of telephone numbers are the Tanzania Revenue Authority (TRA) and the Tanzania Investment Centre (TIC). Surveys from individuals are sourced from the National Panel Survey (NPS). The verification of samples is considered reliable and sent to the Call Centre for the operation of data collection. ECA asked how often these datasets are updated and validated to avoid outdated contact information. NBS indicated that the report does not specify the update frequency for TRA/TIC datasets. However, the TRA 6<sup>th</sup> Corporate Plan emphasizes automated data-sharing protocols, suggesting periodic updates to minimize outdated information.
- The telephone numbers used for the surveys are linked to geographic coordinates. The business datasets from the 2023 Statistical Business Register (SBR) and household survey data from the National Panel Survey (NPS) sampled during the survey are linked to telephone numbers having the geographic coordinates collected from previous censuses and surveys, as well as other administrative sources. As noted, the integration of geospatial and statistical data has been done successfully, and this information is vital for planning and decision support systems. The upcoming statistical business register survey will consider both the Call Centre and Field Operations.

- The newly installed call centre at the NBS in Dodoma was tested for its ability to handle large volumes of calls, including the Tanzania High Frequency Welfare Monitoring Phone Survey (THFWMPs).
- The call centre successfully handled the peak concurrent call requirements observed during the twelfth (12th) survey round, with no major bottlenecks or technical challenges reported. The system demonstrated effective scalability for the current survey size and duration. However, further scaling to accommodate larger samples or tighter deadlines would necessitate additional resources and, potentially, greater automation. Based on the available documentation and 3CX platform best practices, here is an assessment of the data security measures, specifically authentication methods, access control policies for interviewers and supervisors, and the protection of saved call records.

## ii. **Verify Documentation of Audios, Monitoring Procedures, and Data Quality Assurance**

- The verification confirmed that all phone interviews are automatically recorded using the 3CX platform, with recordings securely stored in designated directories and backed up to remote servers.
- Access to these recordings is restricted via role-based permissions, with only supervisors and administrators authorized to review, download, or delete files. The system supports multi-step authentication for sensitive actions and enforces storage quotas and retention policies to ensure compliance with data protection regulations.
- **Monitoring Procedures:** Supervisors monitor calls in real time through the 3CX dashboard and CRM-integrated tools. They can listen to live interviews, provide immediate feedback, and intervene directly if procedural or technical issues arise. After each interview, data is reviewed for completeness and accuracy, with supervisors empowered to approve, reject, or request corrections before finalization. This centralized supervision ensures adherence to standardized protocols and rapid error correction.
- **Data Quality Assurance:** A multi-layered quality assurance (QA) system is in place:
  - Enumerators undergo rigorous training and certification, including practical exercises and mock interviews.
  - Data collection protocols require consistent respondent verification and use of pre-loaded assignments to minimize errors.
  - Automated validation and consistency checks are embedded in the Survey Solutions software, flagging errors in real time.

- Daily uploads allow supervisors to promptly review and address inconsistencies. Multi-stage data cleaning involves both automated and manual review, with only supervisor-approved data marked as final. Regular feedback, debriefings, and mock interviews reinforce best practices and address emerging issues.
- The integration of CRM software with the 3CX phone system further streamlines monitoring, assignment management, and quality control. All respondents receive mobile credit as an incentive, which helps maintain high response rates and reduce non-response bias.
- ECA asked about how mistakes or errors identified during calls are logged, addressed, and prevented in future surveys. NBS justified that errors are detected during calls and flagged in real time via Survey Solutions' validation checks. Supervisors review recordings, request corrections, and update training protocols to prevent recurrence.
- THFWMPS employed a robust, multi-layered QA system combining technology, supervision, training, and workflow controls to ensure the highest possible data quality throughout the phone survey process. These procedures systematically addressed risks of error, inconsistency, and unreliability, resulting in credible and actionable survey data.

### iii. Checking the Conduct of a Test Survey

- The call centre infrastructure was tested during the twelfth round of the THFWMPS, where all 22 enumerators (19 from the mainland, 3 from Zanzibar) operated simultaneously over 10 days. Each enumerator conducted interviews from morning to evening, demonstrating the system's capacity to handle at least 22 concurrent calls. The survey aimed to complete approximately 3,000 household interviews, achieving 2,489 complete cases within the targeted timeframe.
- **Overall Response Rates:** THFWMPS achieved consistently high response rates across multiple rounds of telephone-based data collection from 2022 to 2024. The percentage of households that completed interviews ranged from 81.6% in June–July 2022 to 74.7% in October–November 2024. This indicates a gradual but modest decline in respondent acceptance over time.
- The test survey confirmed the robustness of the infrastructure, with no major technical failures, call drops, or system outages reported. The transition from decentralized mobile-based operations to a centralized call centre reduced the enumeration period

from 14 to 10 days, improving throughput and efficiency. The successful completion of the test survey validated the call centre's ability to handle large-scale data collection efficiently and with high data quality.

#### iv. **Verify the Survey Report Produced and Available Online**

- The verification checked that the official analytical report for the Tanzania High Frequency Welfare Monitoring Phone Survey, covering rounds six to twelve, is publicly available and provides comprehensive documentation of the survey's methodology, infrastructure, and results. The report confirms the integration of the 3CX phone system with CRM software, the implementation of rigorous QA procedures, and the achievement of high response rates (ranging from 74.7% to 81.6% across rounds).
- **Survey data**, including call records and microdata, are accessible via the NBS and EAC websites, ensuring transparency and compliance with verification requirements. The report details the system's performance, data security measures, and respondent acceptance, highlighting the strengths and challenges encountered during implementation. The availability of this report online meets the verification criteria for documentation and dissemination of survey results.
- **Report verification link**: ECA verifies that the analytical report for the THFWMPs, Rounds Six to Twelve, is produced using the phone call infrastructure and is available on the NBS [website](#).

Finally, ECA confirmed that the rapid response phone survey observatory centre is set up with the necessary infrastructure; a test survey was conducted, audio records are well documented, and a report was produced and is available online on the NBS website. Hence, the DLR is **achieved** by an implementing agency.

## IV. **Conclusions**

ECA, as an IVA, has successfully conducted the verification of three (3) DLRs under the procedures. The process proceeded smoothly during the verification period. Below, we provide some advantages, challenges, lessons learned, and recommendations. The summary of the verification of the DLRs for NBS of the URT in April 2025 is included in Annexe 1.

### 4.1. **Advantages and Challenges during the Implementation.**

- **DLR 1.1(c), DLR 2.4(f) and DLR 2.6(b).**

- **Resources for verification.** NBS provided the necessary links and documents for DLR verification. They are instrumental in completing the assignment on time. The harmonized frameworks and reports are easily available; databases and a phone survey centre are accessible.
- **Coordination of the Verification.** The NBS assigns responsible personnel and coordinates the result verification to be completed on time.
- Slow or intermittent connection interrupts or affects accessing the reports and datasets related to the DLRs.
- **The advantages related** to collecting phone surveys include:
  - **Scalability Assessment: Peak Concurrent Call Requirements.** The system was designed to support at least 22 simultaneous calls of concurrency, and the infrastructure included specialized technology and customer relationship management (CRM) software to facilitate efficient call and data management.

#### 4.2. Lessons Learned and Recommendations

- **DLR 1.1(c).**
  - NBS should provide relevant documentation that supports ratings in the harmonization compliance Excel files, including Household Budget Survey (HBS) reports used, to help verifiers validate the initial compliance findings.
  - A comprehensive survey of the informal sector covering the whole country would allow getting quality benchmark statistics for estimating specific national accounts aggregates.
  - Publish the results of the rebasing of National Accounts Statistics conducted for the reference year of 2019, and under established guidelines and recommendations.
  - Support migration to the SNA 2008 for the central bank to support the production of quality Monetary and Financial Statistics.
  - Adhere to the recommended five-year compilation cycle for Supply and Use Tables (SUT).
  - Adopt the NADABAS (National Accounts Database System) or ERETES software package to assist in compiling National Accounts compliant with international standards. Accelerate the implementation of scheduled surveys to comply with established production timelines.

- Develop disaggregated balance-of-payments statistics and use mirror statistics to improve the accuracy and reliability of estimates, particularly of registered cross-border trade in external sector statistics.
- Exclude social security from Monetary and Financial Statistics.
- Produce disaggregated Monetary and Financial Statistics in line with current recommendations (2008 SNA, ISIC rev.4, etc.).
- Regarding Government Finance Statistics, share the latest available data and adopt international recommendations recommending calendar-year compilation aligned with the concepts outlined in the 2008 SNA.
- Provide clear justification of compliance for GFS and ensure access to the balance of payments statistics along with the underlying data used for its compilation.

- **DLR 2.4(f).**

- Mechanisms should be in place to verify the quality and integrity of the data that is published on the TISP.
- Mechanisms should be in place to ensure the quality of MDAs' datasets involved in data sharing.
- Mechanisms should be in place to ensure that comprehensive and standardized metadata is available in each data portal and the GovESB.
- A data dictionary or glossary is compiled and made available for users.
- Increased the number of MDAs sharing administrative data.
- The coverage of administrative data sharing should include non-governmental institutions or *non-state actors*.
- A detailed project document that explains the results and outcome of the DLR should be produced to ensure that all stakeholders have the same understanding and guidance on the project implementation.

- **DLR 2.6(b).**

### **1. Infrastructure and Scalability**

- Expand hardware capacity: Increase the number of desktops and headsets to match operational needs, ensuring seamless scalability for larger surveys.
- Adopt cloud-based solutions: Use hybrid cloud infrastructure to handle data storage and processing demands, reducing reliance on physical servers in Kigoma and Eringo.

### **2. Data Security and Privacy**

- Implement encryption protocols: Secure sensitive data (e.g. phone numbers, addresses) with end-to-end encryption for storage and transmission.
- Conduct regular audits: Perform compliance checks with data protection regulations (e.g. GDPR-inspired frameworks) to mitigate breach risks.

### **3. Technology Integration**

- Deploy AI-driven tools: Introduce chatbots for initial data collection and automated error detection to reduce manual workload.
- Upgrade software: Develop integrated interviewer software for tablets/desktops to streamline data entry and minimize errors.

### **4. Data Quality and Verification**

- Automate validation checks: Use AI to flag inconsistencies in survey responses during calls, enabling real-time corrections.
- Partner with TRA/TIC/NPS: Establish automated data-sharing protocols to ensure updated contact lists and reduce outdated information.

### **5. Operational Efficiency**

- Digitize workflows: Replace manual tablet data entry with voice-to-text AI tools to accelerate information logging.
- Train staff: Provide regular training on new technologies (e.g. 3CX software updates) and data collection best practices.

### **6. Coordination and Monitoring**

- Centralize communication: Use a unified dashboard for supervisors to monitor field operations and call center activities in real time.
- Implement GPS tracking: Enhance geospatial data accuracy by integrating GPS-enabled devices for field teams.

### **7. Big Data and Analytics**

- Build a dedicated data centre: Design a scalable facility with robust backup systems to manage growing datasets.
- Leverage predictive analytics: Use historical survey data to optimize call timing, survey design, and resource allocation.

### **8. Geospatial-Statistical Integration**

- Standardize data formats: Ensure compatibility between geospatial coordinates and survey datasets for seamless integration.
- Collaborate with agencies: Work with police, migration officials, and planners to refine data-sharing frameworks for decision-making.

## 9. Futureproofing

- Develop a 5-year roadmap: Outline phased upgrades for hardware, software, and AI tools to stay ahead of technological trends.
- Allocate contingency budgets: Reserve funds for unplanned tech disruptions or cybersecurity incidents.
- **Coordination and communication of the verification team.** The engagement and communication of the ECA team (onsite/physically present and online verifying team) with the NBS were good in meeting the mission objectives. This should be strengthened in the subsequent verification of DLR.
- **Conducting onsite verification for the DLR.** The mission recognizes that some DLRs strongly require onsite verification. ECA and NBS deem onsite verification as necessary for effective verification of the DLRs, and for creating an open discussion that could further improve the verification of the overall DLIs of the United Republic of Tanzania.
- **Advance submission of DLRs for verification.** The early submission of DLRs for verification has an advantage for better coordination, team arrangement and logistics preparation of the verifying team. Besides, the 21-day travel policy of ECA has become effective and getting travel approval for the team is mandatory. Thus, ECA would like to request DLRs submissions be made 30 days before the actual verification window.
- **Overall Observation.**
  - The collaboration, support, and action of the NBS and the RPCU/EAC in clarifying and providing feedback on issues related to the DLRs, as well as taking appropriate actions on the comments, were critical in the timely completion of the DLRs verification.

## Annexes.

### Annexe 1: Summary Table. Verification of DLRs, United Republic of Tanzania, April 2025

| Disbursement-Linked-Indicator                                      | Disbursement-linked- Result                                                                                                                                                                       | Remark                                                                                                                                                                                                                 | Evidence of attachment                                                                                                                         | DLI Verification Procedure                                                                                                                                           | Code | UNECA Verification procedure                                                                                                                                                                                           | Result of Verification                                                                                                                | Scalable | Links                                                                                                                                          | Comments / Questions                                                                                                                      |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DLI 1.1: Improved harmonization &amp; quality of statistics</b> | DLR 1.1(c)<br>Harmonized 5 dimensions according to applicable regional guidelines                                                                                                                 | Adoption of EAC guidelines for compilation of Statistics has attained the minimum requirement of 60% for National accounts, External sector statistics, Government finance statistics and Monetary finance statistics. | Harmonized reports enclosed:<br><br>EAC assessment frameworks for NA, ESS, GFS and MFS are enclosed with this report:                          | Verification that has been produced in at least four statistical dimensions that are aligned with relevant AU and EAC technical guidelines on standards and methods. | C(i) | ECA checks 5 statistical dimensions aligned with AU and EAC technical guidelines on standards and methods for URT and Zanzibar (NatAcc, CPI in year 3, and industrial, labor market, agriculture, and trade in year 4. | Yes, the four statistical dimensions are aligned with AU and EAC technical and meet international data quality standards and methods. | Yes      | Assessment frameworks for NA, ESS, GFS and MFS are shared for verification. Harmonized Excel files are also shared.                            | Provide documents used to establish compliance rates; methodology documents that supported the classification and disaggregation for all. |
| <b>DLI 2.4: Improved availability of administrative data</b>       | DLR 2.4(f)<br>Administrative data portal for internal government data sharing for URT is operational, providing access to a comprehensive integrated data set for 8 MDAs Non-State Actors (NSAs). | Eight administrative data portals have been linked to facilitate internal government data sharing.                                                                                                                     | The Data Sharing report is provided. Assessments of data portals were conducted physically in Dodoma, involving demonstration of MDAs portals. | Verification that the portal data can be accessed by users inside and outside the government with different levels of access, ensuring anonymization.                | F(i) | ECA checks that the administrative data portal is operational, sharing data of eight MDAs, NSAs, researchers and the public.                                                                                           | Yes, the administrative data portal is operational & enables data sharing in 8 MDAs, and TISP, for the public.                        | Yes      | The Data Sharing report is provided. Assessments of data portals were conducted physically in Dodoma, involving demonstration of MDAs portals. | Integrate non-state actors into the data sharing system.                                                                                  |

| Disbursement-Linked-Indicator                                         | Disbursement-linked- Result                                | Remark                                                                                        | Evidence of attachment                                                                                                                                                                                                                                                               | DLI Verification Procedure                                                                                                               | Code | UNECA Verification procedure                                                                                                           | Result of Verification                                                                                                                                 | Scalable | Links                                                                                                                                                                                                                                                                                | Comments / Questions     |
|-----------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>DLI 2.6: Gained experience with big data and new technologies.</b> | 2.6 (b) Rapid Response Phone Survey Observatory completed. | The phone call centre has been installed, and a test survey has been conducted and published. | <p>The call centre was checked physically in Dodoma:</p> <p>Link to the report: en-1744377720-Phone survey analytical report- R6 to R12.pdf .<br/> <a href="https://www.nbs.go.tz/search?q=phone+survey&amp;button=">https://www.nbs.go.tz/search?q=phone+survey&amp;button=</a></p> | Verification that infrastructure for a rapid response phone observatory has been set up, a test survey conducted, and a report produced. | B(i) | ECA checks the set-up of infrastructure for the rapid response phone observatory, and a phone survey report is produced and available. | Yes, NBS has set up infrastructure for a rapid response phone observatory and a survey was conducted, and the report is produced and available online. | No       | <p>The call centre was checked physically in Dodoma:</p> <p>Link to the report: en-1744377720-Phone survey analytical report- R6 to R12.pdf .<br/> <a href="https://www.nbs.go.tz/search?q=phone+survey&amp;button=">https://www.nbs.go.tz/search?q=phone+survey&amp;button=</a></p> | Digitalize the workflow. |