

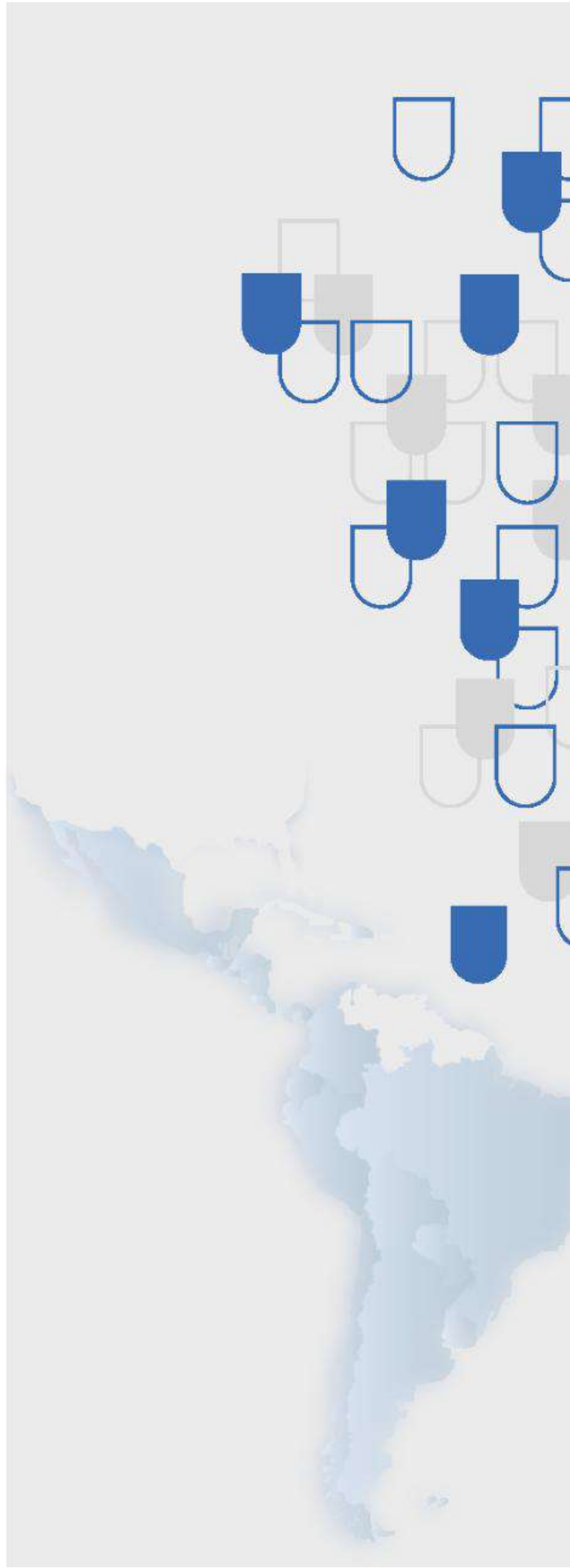
Handbook for strengthening statistical processes and tools to demonstrate effectiveness



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EU AML/CFT
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EXECUTIVE SUMMARY

1. The analysis carried out leads to the conclusion that the appropriate and systematic use of statistics in FATF evaluation processes is an essential element in ensuring the objectivity, consistency and technical quality of the assessment of the effectiveness of AML/CFT systems. Although compliance with Recommendation 33 has encouraged data collection, its true potential is realised when such information is used as strategic input for diagnosis, public policy formulation and efficient resource allocation in accordance with the risk-based approach.
2. A robust statistical system significantly strengthens institutional capacities by enabling a more accurate understanding of the threats and vulnerabilities related to money laundering and terrorist financing. It also facilitates the monitoring of institutional performance, the identification of structural gaps, and the assessment of the impact of preventive and corrective measures implemented by the competent authorities.
3. In the context of a mutual evaluation, the availability of reliable and disaggregated statistical data allows for empirical support of conclusions regarding the effectiveness of the system, as well as for the formulation of technical recommendations based on verifiable evidence. Conversely, the absence of adequate data limits the possibility of conducting a comprehensive analysis, introduces a greater degree of subjectivity into the assessment team's assessments, and reduces the operational usefulness of the final report, potentially affecting the legitimacy of the evaluation process.
4. Additionally, the lack of statistics negatively impacts the assessed country's ability to demonstrate progress, identify areas for improvement, and maintain the confidence of the international community. This situation can generate a cascade effect on the performance of the various Immediate Outcomes assessed, compromising the comprehensive view of the AML/CFT system.
5. Although neither the FATF Recommendations nor its Methodology require countries to implement a formalised process for this purpose, this handbook does not impose such an obligation either. This document proposes various options and key aspects that countries should take into account: how to ensure that entities understand the requirements and provide the necessary information; how to centralise and organise data from different sources; and how to establish effective coordination with the agencies responsible for collecting such information.
6. This document is designed to assist national authorities aiming to collect, compile and submit AML/CFT statistics, whether for mutual evaluation or other purposes.
7. One of the objectives is to present the main benefits and challenges related to the collection, analysis and presentation of quantitative AML/CFT data. It therefore offers

countries guidelines for addressing the problems associated with data collection and comparison, as well as for generating clear, accurate and replicable indicators and results, and provides information on the interaction of the different elements of their AML/CFT systems.

8. The handbook also includes sample tables and charts designed to collect data on the most relevant aspects of an AML/CFT regime. These are not mandatory for countries but are intended to serve as a reference for those developing national data collection practices that are comprehensive enough to support monitoring, evaluation, and the creation of specific policies tailored to their needs.

I. BACKGROUND AND CONTEXT

9. The Financial Action Task Force of Latin America (GAFILAT) is a regional intergovernmental organisation that brings together 18 countries from South America, Central America, North America and the Caribbean: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic and Uruguay.
10. GAFILAT supports its members in implementing the 40 Recommendations and in creating a regional anti-money laundering and counter-terrorist financing (AML/CFT) system. In this regard, GAFILAT promotes the implementation and strengthening of effective systems for the prevention, detection and prosecution of ML/TF/PF in order to contribute to regional growth, transparency and the protection of the socio-economic integrity of its member countries, under a process of continuous improvement.
11. The methodology adopted by the FATF in 2013 for the evaluation of AML/CFT systems is based on the idea that a comprehensive evaluation of such systems must consider two complementary elements: technical compliance and effectiveness. Technical compliance refers to the implementation of the specific requirements set out in the FATF Recommendations, while effectiveness covers a broader concept, related to the extent to which financial systems and economies succeed in mitigating the risks and threats associated with money laundering, terrorist financing and proliferation financing.
12. The importance of maintaining statistics is addressed in FATF Recommendation 33, which urges countries to maintain comprehensive statistics on various aspects, including statistics on STRs received and disseminated, on investigations, prosecutions and convictions for money laundering and terrorist financing, on frozen, seized and confiscated assets, as well as on mutual legal assistance and other international cooperation requests.
13. Despite the notable progress made in this area over the last decade, challenges remain. Looking forward to the 5th Round of Mutual Evaluation, GAFILAT countries face new challenges arising from changes in the Methodology, the dynamics of the international financial system and the risks that this implies in terms of AML/CFT. Statistical information is an essential tool in AML/CFT systems. Indeed, it allows the results of the system and its components, facilitates the diagnosis of problems, is relevant for the development of a national risk assessment (NRA) and resource allocation, to increase transparency, support informed decision-making, and are key to measuring the effectiveness of AML/CFT systems.
14. However, despite their significance, their processing has not met the quality standards that would be expected. In general, in most countries, little data is available exclusively on AML/CFT. In many cases, this is because the information processed by agencies is not directly related to the subject matter. On the contrary, it has other objectives that relate to the specific function assigned to that agency within the structure of the State. Undoubtedly, it is of great importance to have statistical systems for internal purposes beyond demonstrating effectiveness within the AML/CFT framework.

15. Ahead of the 5th Round of MEs, GAFILAT countries face the challenge of transforming the available data into input that can be used to reliably measure effectiveness.
16. In this context, and with the support of the EU Global Facility on Anti-Money Laundering and Countering the Financing of Terrorism (EU AML/CFT Global Facility), a project is proposed to strengthen the framework of GAFILAT countries in relation to AML/CFT statistics, which, in addition to addressing compliance with Recommendation 33, will contribute to compliance with the highest standards in this area so that the results can be used as valuable input for measuring the effectiveness of the systems with a focus on each of Immediate Outcomes.
17. The overall objective of the handbook is to train and provide tools to the main AML/CFT national institutions in GAFILAT member countries, so that they can generate, maintain, analyse and present their statistics in a consistent, up-to-date manner in compliance with the highest quality standards in this area.

II.INTRODUCTION

Objective

1. This document was prepared with the purpose of providing a handbook and model tables and charts so that the main AML/CFT national institutions in GAFILAT member countries can generate, maintain, analyse and present their statistics in a consistent, up-to-date manner and in compliance with the highest quality standards in this area.
2. This document seeks to define the set of processes necessary to produce strategic statistics and to standardise concepts that determine regulations in the design and execution of the statistics necessary to demonstrate effectiveness of the countries in the region, to be used in the framework of the mutual evaluation process.
3. The purpose of this document is to guide countries in general on the procedure to be followed in each of these stages: planning, design, execution, analysis and dissemination. The clear definition and determination of the stages of a statistical investigation allows for improved interaction between processes and work planning, control and effectiveness.
4. Ultimately, the objective of this guide is to provide countries with practical guidance to improve the statistical process; to this end, it includes good practices selected from a wide variety of countries through the FATF Global Network.

Methodology

5. A qualitative methodology was proposed, which was based mainly on primary sources of information collected through a questionnaire that was sent to GAFILAT countries and observers. In addition, a desk review was conducted of relevant documents published by GAFILAT, FATF, IMF and OSCE, among others, as well as a review of other documents in open sources.
6. The questionnaire was designed to identify challenges, opportunities for improvement and good practices with regard to the work carried out in the context of statistical data collection during the mutual evaluation process conducted by GAFILAT countries, observers and Global Network countries.
7. The processing of the responses received from the questionnaire, details of which can be found in Annex I, shows that, although there are important initiatives and advances, significant challenges remain in terms of standardisation, coordination and systematisation of data. The variability in the existence of guidelines, protocols, and data compilation systems highlights the need for a more uniform approach and the implementation of mechanisms that facilitate the integration, validation, and presentation of information to demonstrate effectiveness in AML/CFT matters.

Sources of information

8. This handbook was prepared using primary sources, compiled from the questionnaire sent to countries and their respective responses. In addition, a desk review of relevant materials published by GAFILAT, FATF, IMF and OSCE, as well as other available open sources, was conducted.
9. Information provided by MONEYVAL, which developed a standardised template to be completed by countries, was also considered. This template consisted of a series of tables in spreadsheets with annual data, based on the immediate outcomes and core issues. This information was analysed with the aim of simplifying, improving and standardising data collection processes.

III.RELEVANCE OF STATISTICS IN MUTUAL EVALUATION

A. Statistics and their relationship to the effectiveness of FATF evaluation processes

10. Over the last decade, AML/CFT data collection by national authorities has been carried out for domestic purposes or to comply with the requirements of FATF Recommendation 33, which requires countries to maintain comprehensive statistics relevant to the effectiveness and efficiency of their systems. However, focusing solely on compliance with the general requirements of Recommendation 33 may overlook the benefits that AML/CFT data collection can provide, including the ability to assess in order to identify gaps, measure effectiveness, support changes or adjustments with concrete data, and contribute to a more efficient allocation of time, budget, and personnel.
11. The systematic, accurate and regular collection of quantitative data plays a crucial role in assessing the effectiveness of the AML/CFT system. The availability of reliable statistics not only supports compliance with international standards (such as those established by the FATF), but also strengthens the analysis, planning and oversight capabilities of the competent authorities.
12. A robust AML/CFT statistical system allows for:
 - Provide a more accurate indication of the level of threat posed by ML/TF within a jurisdiction or region.
 - Improve understanding of the ML/TF phenomenon, as well as the predicate offences (e.g. corruption, drug trafficking, tax fraud).
 - Identify specific vulnerabilities, both at the institutional and sectoral levels, enabling targeted interventions, supervision or controls.
 - Guide the prioritisation of strategic actions, improving the allocation of financial, human and technological resources.
 - Support the adaptation of the legal and regulatory framework by providing concrete evidence of structural or emerging deficiencies.
 - Enrich qualitative assessments prepared by technical professionals in the AML/CFT system by providing a solid empirical basis.
 - Monitor progress over time, allowing for the evaluation of the impact of public policies, regulatory reforms and institutional improvements.

B. What is the purpose of statistics in the mutual evaluation process

13. Statistics play an important role in a mutual evaluation, as they allow for the objective analysis and measurement of a country or jurisdiction's compliance with FATF recommendations.

14. Specifically, statistics are used for:

- Effectiveness analysis: quantitative data can be used to assess the effectiveness of measures implemented to prevent and detect illicit activities. This includes analysing the number of reports, investigations and sanctions, as well as the performance of the institutions responsible for supervision and law enforcement, among many others.
- Monitoring of key indicators: statistics allow for the monitoring of key performance indicators, such as the number of STRs received, the use of intelligence reports by investigative authorities, seizures of property, or the volume of related frozen assets, among others.
- Comparisons of areas, regions or provinces within the country: by collecting and analysing statistical data, assessors can make comparisons between regions or provinces within the country to see how a jurisdiction ranks in terms of compliance and effectiveness, and how this relates to the geographical risk determined in the NRA, for example.
- Informed decision-making: the collection and analysis of statistical data help decision-making bodies identify areas for improvement and direct efforts towards where additional resources or measures are most needed.

15. In short, statistics provide the tools needed to interpret and make sense of data related to the effectiveness of AML/CFT systems. Therefore, the application of advanced statistical techniques allows countries to obtain concrete data, which will enable the assessment team to draw solid conclusions about the performance of the AML/CFT system and make evidence-based recommendations. These tools help to assess the impact of policies, identify areas for improvement, and support strategic decisions.

16. Below are some approaches and practical examples of tools that can be used to make sense of data:

C. Tools for making sense of statistical data

i. *Descriptive analysis*

This allows the basic characteristics of the data to be summarised and the magnitude and distribution of the observed phenomena to be understood. Examples of application:

- Frequency of events: number of ML/TF cases detected in a given period.
- Averages or medians: average value of seizures or median of penalties imposed.
- Temporal distribution: identification of peaks or patterns in certain months or years.

👉 *This analysis helps to detect performance patterns, anomalies or deficiencies in the implementation of the effectiveness of the AML/CFT system.*

ii. *Trend analysis*

Time series analysis allows us to evaluate how the effectiveness of the system evolves over time. Examples of application:

—Growing trends: a sustained increase in the number of STRs may reflect improvements in the detection of suspicious transactions.

—Seasonality: identification of periodic or cyclical variations (e.g. increase in cases in certain months of the year).

👉 *This serves to analyse the sustained impact of the policies implemented.*

iii. *Comparison between regions or provinces*

Allows for the evaluation of territorial performance and its consistency with the geographical risk determined in the NRA. Examples of application:

—Hypothesis testing: comparing whether there are significant differences in effectiveness between different regions, provinces or areas of the same country that applied different measures.

—Regression models: identify factors associated with greater effectiveness (e.g., relationship between investment in technology and number of unusual transactions detected).

👉 *Facilitates the identification of good practices and the targeting of efforts.*

iv. *Calculation of indicators*

The indicators quantify the degree of compliance with the objectives of the AML/CFT system. Examples of indicators:

—Detection rate: investigations initiated by investigative authorities in relation to the total number of intelligence reports disseminated by the FIU.

—Sanction rate: proportion of investigations that resulted in effective sanctions.

—Seizure rate: value seized compared to the estimated value of illicit assets. For these cases, it is suggested that the statistics be standardised in both local currency and USD at the time of seizure.

👉 *This allows compliance with certain indicators to be measured in rates.*

v. *Correlation analysis*

Helps explore associations between variables that could explain the success (or failure) of certain strategies. Examples of application:

— Correlation between investment in technological monitoring and detection of STRs to be evaluated in an intelligence report disseminated to investigative authorities.

👉 *These correlations allow for the identification of factors driving institutional performance.*

vi. *Sensitivity and specificity assessment*

In the context of financial crime detection, it is important to evaluate the accuracy of alert systems. Key tool:

— ROC (Receiver Operating Characteristic) curves: These evaluate the system's ability to correctly identify positive cases (sensitivity) and avoid false positives (specificity).

👉 *They are used to calibrate detection algorithms and reduce operational errors, for example, when comparing UN lists against a regulated entity's customer list.*

D. *Difficulties caused by the lack of statistical data on AML/CFT*

17. The lack of data in the evaluation process, especially when it comes to demonstrating the effectiveness of AML/CFT systems, can create several significant difficulties. These difficulties can affect both the quality of the analysis and the accuracy of the conclusions.

i. *Difficulty in measuring effectiveness*

18. Absence of indicators: The lack of key metrics, such as the detection rate of financial crimes, the number of sanctions imposed, or the effectiveness of investigations, makes it difficult to evaluate the performance of the system. Without adequate data, it is difficult to establish objective and quantifiable criteria, which limits the ability to measure the effectiveness of the AML/CFT system.

19. Inability to assess impact: Without sufficient data—such as the number of suspicious transaction reports, intelligence reports disseminated, ML/TF investigations initiated, or the volume of assets seized—it is not possible to determine the actual scope or consequences of the policies implemented, limiting the ability to measure their impact on the AML/CFT system.

ii. *Incomplete assessment in the analysis of Immediate Outcomes*

20. Lack of visibility on actions taken: In a mutual evaluation process, without statistical data it is not possible to properly assess whether fundamental issues have been effectively addressed.

21. Difficulty in monitoring reforms: countries may claim to have adopted reforms without objective data to verify this fact. This can lead to inaccurate assessment conclusions or, in the worst case, to an underestimation of the efforts made.

iii. Inability to identify patterns and trends

22. Absence of historical data: the lack of historical data makes it difficult to identify trends over time. Not being able to see how financial crime statistics or the effectiveness of prevention measures have evolved over time prevents trend analysis or impact comparisons from being carried out.

23. Incomplete assessment of effectiveness: without data on the performance of systems over time, it is impossible to determine whether ongoing efforts are improving the situation or whether there are areas that need further attention. This is relevant input for the implementation of an EBR.

iv. Inability to make comparisons

24. Difficulty in making comparisons: if data is insufficient or of poor quality, it is difficult to make meaningful comparisons.

v. Lack of reliability in results

25. Subjectivity in interpretation: when data is limited or non-existent, assessors may resort to subjective interpretations, which can lead to biased or poorly substantiated conclusions. This can result in a less reliable evaluation report, affecting the credibility of the peer review process.

26. Erroneous conclusions about effectiveness: without clear data on the results obtained, a system may appear to be more effective than it really is or, conversely, the effectiveness of a system may be underestimated if the data does not accurately reflect the efforts made by the country's authorities.

vi. Obstacles in determining recommendations by the assessment team

27. Difficulty in guiding recommendations and the action plan: Decisions on where to focus resources and which policies to improve must be based on concrete data. Without this data, recommendations may lack substance and may not be as effective or targeted at the real problems, and therefore the action plan may not cover what the country really needs to improve its effectiveness.

28. Commitment to the report's findings: An evaluation report without sufficient data may not have the same legitimacy and may be less useful for public policy development or for improving the AML/CFT system of the country being evaluated.

vii. Inability to identify areas for improvement

29. Specific deficiencies cannot be identified: if data on system performance is unavailable or incomplete, it is not possible to accurately identify which aspects need improvement. This can result in a lack of focus on areas that require more urgent attention.
30. Little feedback for stakeholders: the lack of data also makes it difficult to provide feedback to the institutions responsible for implementing control measures, as there is no quantifiable evidence to enable them to see what they are doing well and what they need to improve.

viii. Impact on trust in the Global Network

31. Perception of opacity or lack of transparency: Countries that do not provide sufficient data may generate mistrust in the international community, as the lack of transparency can be interpreted as an attempt to hide information. This can affect international relations and cooperation.
32. The lack of data in a FATF mutual evaluation can have significant detrimental effects, ranging from the inability to measure the effectiveness of systems to the difficulty for the assessor team to make informed decisions.
33. Additionally, the lack of statistics can have a cascading effect on several immediate outcomes, affecting a country's ability to meet international expectations and improve its AML/CFT systems. The concept of a ripple effect in the context of the FATF methodology refers to how a deficiency or weakness in a specific area of the AML/CFT system can trigger a series of negative consequences or impacts in other areas of the system, affecting overall performance and, ultimately, the country's effectiveness.
34. To overcome these challenges, it is essential that countries work to improve data collection, implement robust monitoring systems, and ensure transparency in their AML/CFT efforts. This will not only strengthen assessments but also improve the effectiveness of the policies implemented.

E. Classification of statistics: descriptive statistics vs. inferential statistics

35. Descriptive statistics and inferential statistics are two fundamental branches of statistics that have different objectives and methods. Each is explained below:

i. Descriptive statistics

36. Descriptive statistics is the branch that summarises and organises data obtained from a set of observations, without making generalisations or predictions beyond the data analysed. It is characterised by being applied directly to the available data set and describes aspects such as frequencies, averages, medians, standard deviation, percentages, rates, etc. Tools such as tables, graphs, charts and statistical measures are used to present the data.

👉 The purpose is to provide a clear and orderly view of the data to facilitate its interpretation and preliminary analysis.

ii. *Inferential statistics*

- Inferential statistics is the branch of statistics that deals with making estimates, comparisons or predictions about a population based on the analysis of a sample of data. It uses probabilistic reasoning to draw conclusions beyond the available data. It is characterised by starting from a sample and seeking to infer conclusions from it, using techniques such as parameter estimation, hypothesis testing, regressions, confidence intervals and predictive models. It is therefore associated with more advanced analysis and evidence-based decision-making.

👉 *The objective is to make decisions or predictions about a population or complex phenomenon with a known margin of confidence.*



Recommendation: In the evaluation process, it is suggested to use descriptive statistics, as the data provided to the assessor team should be concrete data and not generalisations or predictions.

IV. COLLECTION AND COMPILATION OF STATISTICAL DATA

37. This chapter offers practical guidance on coordinating the processes and timelines related to the collection and compilation of data and statistics at the national level, or subnational level in the case of countries with a federal structure.
38. It is worth noting that neither the FATF Recommendations nor its Methodology require countries to implement a formalised process for collecting statistical data, so this handbook is not expected to impose such an obligation either. Instead, it proposes various options and key aspects that countries should take into account: how to ensure that entities understand the requirements and provide the necessary information; how to centralise and organise data from different sources; and how to establish effective coordination with the agencies responsible for collecting such information.

A. Common errors or inconsistencies to avoid in the collection process

Countries face several key challenges when embarking on a data collection effort:

- *Multiple stakeholders:* AML/CFT is a complex area involving various entities, such as Financial Intelligence Units (FIUs), investigative authorities (police, prosecutors, judges), supervisors and regulators, and the private sector (financial institutions, virtual asset service providers, and designated non-financial businesses and professions), among others. Relevant data is scattered and must be collected and validated by a wide variety of agencies, both governmental and non-governmental. In addition, this data may be held by national entities and subnational administrative divisions, requiring additional collection at the national level.
- *Failure to contextualise data in relation to country risk and context:* contextualising statistics in a country's risk and context analysis is essential for accurate, realistic and useful interpretations of the data. Figures alone can be misleading if presented without the appropriate framework to explain their causes, conditions and consequences.
- *Incompatible data:* Different bodies and agencies tend to develop their own definitions and methods for collecting, analysing, processing and recording information, leading to significant differences between systems. As a result, the same or related types of data are reported in different ways, making it difficult to consolidate them without losing some of the information.
- *Definition issues:* Differences between agencies are exacerbated by the lack of clear, nationally or internationally accepted definitions for indicators related to AML/CFT regimes. For example, common terms such as 'investigations' or 'prosecutions' may refer to cases in one agency and individuals in another. While one agency may record seizures by the number of orders issued, another would do so by the value of the assets actually seized.
- *System differences:* Although AML/CFT systems are primarily designed to identify money laundering and terrorist financing activities, investigate, prosecute and convict offences, and freeze/seize criminal assets, the complex and fragmented nature of the system, together with

the length of the process and differences between agencies, makes it difficult to track specific reports through the system. This means that data collection efforts in many countries are of limited use in tracking the number of investigations, prosecutions, convictions, asset freezes/seizures, and confiscations.

- *Limited guidance:* The task of collecting accurate and useful data on AML/CFT systems is hampered by a lack of international consensus and guidance on what specific types of data should be collected.
- *Confusion between statistical units vs. statistical variables:* Statistical units and statistical variables are fundamental concepts in data collection and analysis in statistics. Although they are related, they have different meanings and roles within the data research and analysis process. The statistical unit is the "object" or "element" that is observed or measured, while the statistical variable is the "characteristic" that is measured or recorded for that unit. The statistical unit answers the question "What are we observing?" (e.g., a case of ML), while the statistical variable answers the question "What are we measuring?" (e.g., number of persons investigated, number of assets identified, number of assets seized in that case). For processes that may last longer than a single reporting period, such as investigations, prosecutions, and preliminary asset restraint measures, countries should report the action in the reporting period in which it was initiated. Additional and separate records should be kept, for example, on the number of ongoing investigations.
- *Common errors in counting and consolidating statistical data:* One of the main challenges in statistical production is inconsistency in how data is counted and recorded. There are various errors that can compromise the quality of information, including:
 - Disparate counting criteria: The same data may be recorded at different stages of the process, leading to duplication or inconsistencies. For example, sanctions may be counted at the time the offence is detected, at the start of the process, when the sanction is imposed, or when it becomes final (with no possibility of appeal). It is essential to establish a single time criterion for counting.
 - Double counting within the same agency: Certain long-term processes (such as investigations or prosecutions) should be counted only once, in the year in which they began or ended, avoiding repetition in subsequent years while they are active.
 - Inter-agency duplication: When the same investigation or proceeding involves multiple agencies (e.g., an ML/TF case involving several law enforcement agencies), it should not be counted more than once in the same period.
 - Improper accumulation of partial data: Monthly or quarterly data should not be added to annual consolidated data without clarity on their seasonality or behaviour patterns. Some indicators do not follow a regular distribution throughout the year, so averages or extrapolations can be misleading.
 - Lack of clarity in reference periods: If annual statistics are reported before the end of the year (e.g., in March 2025 for the year 2025), the cut-off date for the data should be specified precisely, and partial information should not be presented as if it were definitive.

39. Many of these challenges can be overcome by adopting a systematic approach to national AML/CFT data collection, including detailed indicators, clear definitions, and precise guidelines for all entities involved. Given that each national AML/CFT regime is unique, data collection initiatives must be tailored to the characteristics of each country's regime.
40. Based on the experience of countries, it is recommended that the data collection and compilation process be carried out in accordance with the following stages:

B. Planning the data collection process

41. It is suggested that the planning stage for data collection and compilation include an organisational chart containing the profiles, roles and responsibilities of the personnel operating the statistical process. Additionally, it is important to assign specialised technical profiles, including statisticians, data analysts and inter-institutional coordinators, who fulfil specific roles in defining objectives, key variables, data sources and methodologies. This stage involves the development of a work plan with timelines, allocated resources and coordination mechanisms between data-producing agencies.
42. At this stage, it is essential to ask: what do we want to know? And why? Here, it is important to consider each of the fundamental questions for each immediate outcome. In the case of mutual evaluations, the question is: for whom is the information intended? In principle, the obvious answer is that it will be for the assessor team, although the process reviewers will also have access to it.
43. One of the generic recommendations in statistics is that, from an early stage of the design, the user of the information should be asked about their requirements and expectations. It is therefore particularly important, especially in the advanced stages of the process, such as face-to-face meetings, to understand what data the assessors require and how best to present it.
44. As we know, in the mutual evaluation process, one of the central issues is compliance with the deadlines stipulated in the timetables drawn up by the Executive Secretaries of the FATF or the FSRBs involved in the process. Therefore, the timely and proper completion of the information requirements will make it possible to accurately establish the objectives, the presentation of results, activities, their review, and consensus among authorities and agencies in the country regarding the information presented.
45. Therefore, the recommendation is to plan chronologically what data should be collected, who will be responsible, by what date and in what format it will be delivered, and who will work on the analysis and presentation of the data and within what timeframe.
46. Below is an example of phased planning, with main activities, duration, and responsible parties:

Phase	Main Activities	Duration	Responsible parties
1. Planning	- Definition of indicators - Methodological design - Formation of the technical team	Month 1	AML/CFT National Coordination
2. Agreements and coordination	- Signing of inter-institutional agreements - Assignment of focal points	Month 2	Ministry of Finance, Public Prosecutor's Office, Police, FIU
3. Infrastructure development	- Development or adaptation of digital collection platform - Technical training	Months 3-4	FIU IT department, external suppliers
4. Pilot data collection	- Data load testing - Technical and methodological adjustments	Month 5	FIU and referring agencies
5. Initial compilation and validation	- Data integration - Preliminary analysis - Cross-validation	Month 6	Statistical team



Recommendation: Develop a statistical work schedule, with objectives and final products, in advance to achieve consensus and commitment from all parties.

C. Designation of a lead agency, an inter-agency working group or a coordination mechanism

47. As stated in the FATF Guidance¹, it is advisable to determine from the outset which national agency will lead the data collection process and to create an inter-agency working group or coordination mechanism specifically for this purpose.
48. It is also desirable for the lead agency, working group, or coordination mechanism to have adequate political support, as this high-level backing will foster more effective and timely collaboration with all other authorities and agencies involved.
49. To ensure the sustainability, consistency, and quality of the AML/CFT statistical system, it is recommended that countries establish a formal data governance model. This model should clearly define the roles and responsibilities of each institution involved in the generation, collection, validation, analysis, and presentation of data.

¹ FATF (2015), *Guidance on AML/CFT-related data and statistics*, FATF, Paris. Available at: www.fatf-gafi.org/publications/fatfrecommendations/documents/aml-cft-related-data-statistics.html

50. The lead agency should act as technical and political coordinator, but focal points with specific functions should also be established in each data-producing entity. It is also suggested that information flows be documented, exchange protocols be established, quality standards be defined, and inter-institutional review mechanisms be created to ensure data traceability, avoid duplication, improve interoperability, and facilitate the provision of information for mutual evaluation processes.
51. In the region, most countries reported that they worked with a single lead agency during the statistical data collection process. In some cases, this role was assumed by the National AML/CFT Committee; in others, by the Financial Intelligence Unit (FIU), acting as the coordinating authority for the statistical process. Other countries indicated that each agency designated an internal contact point to channel requests, which involved close inter-agency coordination and a clear definition of roles, responsibilities, and decision-making mechanisms. In addition, when asked in the questionnaire about the existence of a centralised national statistics agency for AML/CFT, seven countries responded affirmatively.
52. In order to unify a line of work and coordinate teamwork, it is suggested that countries designate a single agency, preferably the national coordinating authority for the AML/CFT regime, the inter-agency AML/CFT coordination group or another agency with experience in AML/CFT, to lead the work on statistics. Ideally, the lead agency should review and compare current definitions, reporting periods, level of granularity or disaggregation, and other specific characteristics of the data indicators used for each section and immediate outcome.
53. To do so, it is necessary to take into account the list of general and specific data collection issues identified in this manual and focus on identifying data collection issues that are not addressed in current collection, collation, and dissemination practices, differences between agencies, and areas of missing data across all or specific agencies.
54. It is also recommended that, if the lead agency has experience in AML/CFT but limited statistical capabilities, consideration be given to hiring specialised staff or external consultants to strengthen the agency's capacity and thus assume a leadership role in developing a comprehensive and useful set of statistics. Alternatively, it is suggested that basic training in statistical methodologies be provided to existing staff in order to strengthen their technical skills in this area.



Success factor: Designate a single agency with experience in AML/CFT to lead the work of collecting, analysing and presenting data.

D. Mapping of existing data

55. From the outset, it is extremely beneficial to have a clear and comprehensive overview of all the entities involved, as well as the specific type of AML/CFT-related information that each one handles. To this end, it is important to identify which institutions or public agencies have

jurisdiction in the different sectors or areas of the AML/CFT system, what type of data they can provide, and whether this covers all the activities and operations defined in the FATF glossary for financial institutions, VASP and DNFBPs, as well as the areas identified in the Immediate Outcomes. This is especially important considering the changes introduced in the FATF Assessment Methodology.

56. Countries with decentralised political structures, such as federal systems, face an additional challenge as data is often collected autonomously by regional or local authorities. In such cases, it may be necessary to establish mechanisms for a central entity to collect information from regional institutions. Alternatively, although it involves a greater operational burden, the lead agency could be directly responsible for collecting data and statistics at the sub-national level, requesting them from the relevant regional or local bodies.
57. Given the potentially large number of institutions involved, this process should also consider the possibility of data duplication due to overlapping functions or competences, as can happen between investigative authorities (police, prosecutors and courts) or supervisory bodies.
58. Additionally, in order to avoid duplication of effort, a useful strategy could be to compile an inventory of data and statistics that are already collected or managed by different agencies, either periodically or on an ad hoc basis, and that may be relevant for an assessment. These may include information from the judiciary, law enforcement agencies, FIUs, supervisory bodies, ministries, the legislature, the comptroller's office, national statistical agencies, the central bank or regulatory authorities, tax and customs services, among others.
59. Likewise, various international organisations may have statistics related to AML/CFT that are valuable for the evaluation process, especially with regard to the analysis of the national context, structural aspects or materiality issues.
60. On the other hand, there may have been processes prior to the mutual evaluation where statistical surveys were conducted in part for some of the periods covered by the evaluation. For example, the process of preparing or updating the NRA generally requires the determination of quantitative data.

i. Development of the statistical methodology to be used

61. A statistical methodology provides uniform criteria for data collection, classification and analysis. This ensures that the information obtained is consistent. In addition, it facilitates the presentation of structured and traceable national statistics, as required by the FATF Guidance² on data and statistics.
62. Below is a clear and structured explanation of the characteristics of the information collection design, including the elements that the methodology should have.

² FATF (2015), *Guidance on AML/CFT-related data and statistics*, FATF, Paris. Available at: www.fatf-gafi.org/publications/fatfrecommendations/documents/aml-cft-related-data-statistics.html

63. The methodology should take into account that statistics must be understood in terms of the political, economic, social and cultural environment in which they are produced. Furthermore, the context allows for the identification of structural factors that influence the figures. Figures alone can be misleading if presented without the appropriate framework to explain their causes, conditions and consequences.

ii. Data collection design

64. Data collection design involves planning how, when, where, by whom and with what tools the necessary information will be collected. A well-structured design ensures that the data is relevant, consistent, verifiable and useful for further analysis and avoids incomplete, duplicate or unnecessary collections. To this end, the following should be taken into consideration:

- Authoritative definition of what data is needed, from what sources and how often.
- Purpose of the information: basically, what Immediate Outcome we are focusing on.
- Material scope: it is necessary to determine whether general data or a sample will be used.
- Territorial scope: it is necessary to define whether the collection will be national/federal, regional/provincial or sectoral.
- Temporal scope: this allows for comparability between periods and entities.
- Common definitions and uniform structures (e.g. date format, currency, units of measurement).
- Define the tables and charts that each authority must complete.

65. Finally, it is recommended that the methodology and instruments be documented so that another person can replicate the process. This is good practice given the shortcomings reported by many countries with regard to changes in human resources.

■ Documentation of the information collection method

This consists of describing in detail how the data will be obtained, including:

- Sources of information: administrative records, surveys, forms, digital platforms, interviews, etc.
- Collection tools: physical or digital forms, computer systems, mobile applications, etc.
- Frequency: daily, monthly, annually, per event.
- Responsible parties: which institution or unit will carry out the collection.
- Quality protocols: validation, review, error control.

 *Practical example in AML/CFT:*

"STR collection is carried out through system X, using standardised digital forms sent by regulated entities to the Financial Intelligence Unit (FIU). The system automatically validates certain critical fields before allowing submission."

- *Development of the collection methodology:*

This is the process of designing the technical and logical framework for data collection, which includes:

- Definition of variables: what concepts are to be measured (e.g. number of reports, amount seized, type of sanctions).
- Design of the questionnaire or form: content, order, clarity, type of questions or fields.
- Determination of the universe/sample: which universe will be analysed (STR/Intelligence Reports/Judicial Investigations/Financial Investigations/etc.) or which entities will be observed.
- Selection of the collection method: manual, digital, automated, mixed.
- Tests or pilot trials: to validate that the instruments are working correctly.
- Ethical and confidentiality protocols: especially important when collecting sensitive information.

E. Key issues to consider in the data collection process

66. Based on the experience of countries and due to the deficiencies, that have been reported in statistical matters, it is suggested that the collection methodology contain at least the following information to ensure the accuracy and reliability of the data:

- *Definition of the time frame*

67. Standardise the time frame used in data reports to a single year or smaller periods, such as quarters, and determine whether the year in use is a calendar year, a budget year, etc.

68. Generally, data should be counted in annual series, broken down by time windows of at least 5 years. The data needs to refer to recent periods. In situations where certain data can only be obtained in a different period, the reasons for such limitation need to be explained to avoid misunderstandings.

69. Additionally, countries may establish guidelines to ensure consistency in annual data compilation and avoid:

- Using different ways of counting the same data (e.g., sanctions from proceedings may be counted at different times: when the sanction was imposed, when the proceedings began, when the violation was detected, or when the sanction is final and cannot be appealed).
- Double counting of results from the same agency (e.g., processes that last a year, such as investigations or prosecutions, should be counted only once, not every year).

- Double counting by sharing results from more than one agency (e.g. an ML/TF investigation involving several law enforcement agencies should not be counted more than once in a year).
- Gross collection of partial data for a year. Partial data for a year should not be added to annual data without understanding the monthly pattern for such data (e.g. there is no monthly pattern for certain data, or there are significant variations during the year).
- It may happen that statistics for a year must be reported for which monthly data cannot be accounted for. In this case, it must be made clear what period the statistics cover (e.g., if data from 2025 is required and we are in March 2025, the cut-off date must be determined in the report).

- *Transparency in definitions*

70. It cannot be assumed that assessors will always understand what is being reported. Statistical definitions vary significantly between countries, and sometimes between agencies within a country, so common definitions should be adopted. Greater transparency about definitions and awareness of differences in definitions helps to avoid misunderstandings.

71. Jurisdictions often have different designations for the same facts. To facilitate proper understanding and evaluation of the data, it is important to explicitly provide definitions of certain terms that may have specific characteristics (e.g., the terms investigation and prosecution may require clarification depending on the legal system: investigations may refer to any LEA investigative activity, or investigation under the supervision of a judge or prosecutor; the same applies to definitions of confiscation and seizure of assets, in which case the difference with proceedings may require some clarification).

- *Definition of units of measurement*

72. On the other hand, while the meaning of common terms such as investigations, confiscations and STRs may seem obvious, they can actually refer to different aspects, such as the number of cases, reports or persons involved, or the value of assets or transactions.

1. Investigations

Possible differences depending on the context:

- May refer to cases or persons under investigation.
- Some countries count each open file, others each criminal act or each person involved.
- It may include preliminary investigations or only those that have been formally brought before the courts.

2. Seizures (or confiscations)

Possible differences depending on the context:

- Some countries count the number of confiscation orders.
- Others record the monetary value of the confiscated assets.
- May include confiscations for ML/TF or other predicate offences (drug trafficking, corruption).
- Sometimes confused with seizures.

3. STRs (Suspicious Transaction Reports)

Possible differences depending on the context:

- Some countries record STRs received, others only STRs analysed or disseminated.
- There may be a distinction between STRs by type of crime.
- The concept of "suspicious" may vary depending on the legal framework or risk threshold.

73. Therefore, clearly determining the unit of measurement is crucial to enable the aggregation of data on the same indicator from different agencies, the aggregation of data from similar indicators, and to maintain consistency that allows authorities to track changes over time.

- *Breakdown*

74. National authorities need to determine the level of breakdown necessary for an accurate assessment of the AML/CFT regime (e.g., data on ML convictions can be broken down to distinguish between ML alone, self-laundering, third-party ML, and an associated predicate offence, and in turn also broken down by type of predicate offence).

75. Within the context of mutual evaluations, the Methodology provides examples of cases where data should be detailed or disaggregated (e.g., by type of reporting entity, predicate offence or ML activity, or by country of origin).

- *Currency expression and numbering systems*

76. It is necessary to standardise the expression of currencies. In general, values are expressed in US dollars (USD) as well as in the local currency. This can be helpful in the context of international evaluations, provided that the method is transparent and consistent throughout the process.

77. Given that some countries in the region have more than one exchange rate, it is necessary to standardise the exchange rate to be used. It is suggested that, for currency conversion purposes, the official exchange rate established by the central bank of the country producing the statistics, corresponding to the date or month in which the figures were generated, be used as a reference. This practice would help to ensure the consistency and comparability of the data reported, especially in regional or international contexts.

78. The methodology should provide clear guidance to all reporting agencies on when and how to convert amounts to local or international currency, and when and how to report the estimated value of goods.

79. In addition, some countries may use regional numbering systems with which readers are unfamiliar, and certain expressions of numbers (e.g., billion or trillion) may have different meanings depending on the language. Where possible, an explanation of the numbering system used should be included, and information should be presented in more than one format to meet the needs of all users. Additionally, it is suggested that when using terms that include numbers, these should also be accompanied by their corresponding representation in digits. This will allow for clearer and more accurate verification of the definition or reference being referred to.

- *Missing Data*

80. It should be determined from the outset that it is necessary to report and clearly distinguish between unavailable data and data whose value is zero.

81. Although the distinction between reporting that no data is available (i.e., data on the specific indicator is not collected or reported, or does not apply) and zero (i.e., data is collected and reported, but the number of cases, individuals, value, etc., is zero) may seem marginal, it is important for comparing data over time, combining indicators, and performing other calculations.

82. The recommendation is to indicate "N/A" when data is not collected and when we have zero, it is recorded as the number "0".

- *Protection of personal and/or sensitive data*

83. When collecting, processing, and presenting AML/CFT data, it is important to ensure the protection of personal and sensitive data. Where appropriate, institutions should apply principles of confidentiality, anonymisation, and data relevance, especially when handling records that could identify natural or legal persons.

84. Where appropriate, it is recommended that protocols be established for the safeguarding, controlled access and limited use of information, in accordance with national data protection legislation and applicable international standards.

F. Specific issues that should be considered in each Immediate Outcome

85. **Immediate Outcome 2:** It is important that, when providing data on informal requests for international cooperation, requests received and made through informal cooperation networks such as RRAG, Interpol, Egmont and others are taken into account, as they can provide information on international investigations, intelligence sharing and collaborative efforts.

86. With regard to formal requests for international cooperation, it is necessary to consider that information from mutual legal assistance and other formal forms of international cooperation can also improve your ability to identify valuable information on the cross-border aspects of ML activities, filling gaps in the identification of predicate offences occurring abroad. Cooperation mechanisms between FIUs and law enforcement authorities can provide

information on the analysis of cross-border transactions or provide valuable information on the risks associated with the inflow and outflow of suspicious financial flows.

87. **Immediate Outcome 7 and 9:** For processes that may take several years, especially in IO 7 and IO 9 such as investigations, prosecutions and convictions, it is suggested that countries report the action in the period in which it was initiated. Additional and separate records should be kept, for example, on the number of ongoing investigations, prosecutions and convictions.
88. **Immediate Outcome 8:** It is important to provide clear guidance to all reporting agencies on when and how to convert amounts to local or international currency, and when and how to report the estimated value of assets. This guidance is important to ensure the accuracy and reliability of data on the value of transactions and seized and confiscated assets, as well as the ability to compare such data over time, and is especially crucial at times when the value of currencies and assets fluctuates significantly.



Recommendations:

- Identify gaps in data throughout the process and work on collecting this data.
- Prioritise nationally collected data sources, while also collecting data at various sub-levels.
- Invest in technological solutions to help save resources in the long term.
- Ensure that all participants have access to the necessary information.
- Use inter-institutional coordination mechanisms to facilitate information sharing.
- Establish appropriate mechanisms to securely incorporate inputs from intelligence agencies.
- Apply appropriate confidentiality protocols to facilitate candid assessment.



Success factor: explain the country's risk and context and contextualise statistics accordingly. Statistics only acquire real analytical value when interpreted in terms of the specific threats, vulnerabilities and characteristics of the country being assessed. Without this contextualisation, data can generate distorted perceptions of the degree of risk exposure or the effectiveness of the measures taken.

V. ANALYSIS AND PROCESSING OF AML/CFT DATA

89. This chapter aims to assist in the analysis and processing of the data obtained during the collection stage. It analyses the importance of processing the information obtained, providing tools for examining, indexing and transforming the data. In addition, it determines how to link quantitative and qualitative data.

A. Stages in the processing of statistical information

90. Once the data has been collected, work must be done on the design of the information processing, which involves defining and documenting the information processing methodology.

91. In practice, this stage involves the following processes:

i. *Examine the data and normalise it*

92. Once the data has been received, it is necessary to detect inconsistencies, missing values, errors and/or anomalous distributions in order to normalise the data. This involves correcting null or empty values, standardising formats (e.g. dates, names of institutions), eliminating duplicate rows and validating data types (e.g. text where there should be numbers).

For example, during this process, it is recommended to check the following:

- Are there duplicate rows?
- Are there any extreme outliers?
- Is data missing in key variables?
- Are records unnecessarily repeated?
- Are there formatting errors (e.g., commas instead of periods, inconsistent capitalisation)?
- Are there any blank or zero (0) values?
- It is important to know which countries use a comma as a decimal separator and a full stop to separate thousands, and which use the opposite format, as in our region there are countries where one format is correct and others where the other is used.

93. The most common tools used for this are:

- Excel / Google Sheets: for an initial visualisation of data in tables. They also help to identify inconsistencies; filters + functions =IF (), =ISBLANK (), =TRIM (), =CLEAN ()
- Power BI / Tableau: visual dashboards to detect patterns and outliers.
- Python (Pandas): for exploring variables.
- R (dplyr, ggplot2): enables exploratory analysis and quick graphics.
- OpenRefine: for cleaning large volumes of data (deduplicating, standardising).

ii. *Transforming the data*

94. The aim of this process is to adapt the data to a format that is useful for statistical analysis. This could involve:

- Grouping by year, entity, or type of offence.
- Grouping by predicate ML offence per investigation.
- Calculating indicators: averages, rates, proportions.
- Creating derived variables (e.g. % compliance).

95. The most commonly used tools for this are:

- Excel – Pivot tables and functions such as =VLOOKUP(), =TEXT(), =LEFT() help with restructuring.
- Python (Pandas)
- R: functions such as pivot_longer(), pivot_wider() or group_by().

iii. *Modelling the data*

96. The objective at this stage will be to apply statistical analysis or build visualisations or predictions useful for decision-making.



Recommendations:

- ✓ Document each transformation or cleaning performed.
- ✓ Save intermediate versions of the dataset.
- ✓ Always cite the original source and any modifications made.
- ✓ Accompany the results with clear visualisations + explanatory notes.

97. For the process defined above, the technological infrastructure necessary to execute the statistical operation must be taken into consideration, including data capture, digitisation, transmission, consolidation, storage, application of statistical techniques, and generation of results.

B. Tools for analysing and processing quantitative data

98. In response to the question, "Were computer technologies or tools used to organise the data?", five countries indicated that the process was carried out manually, while the rest confirmed that they had used some type of technological tool for data processing.

99. The tools used included the following, whose main characteristics were:

- Predefined Tables (AMtab)
- Tool for Generating Open Data (HGDA)
- Tool for Generating Layers for the Geovisor (HGCG)
- Python
- PC-Axis
- Table Comparators
- Countries also reported using some generic tools for interactive tabulation products or processes, and for generating and executing scripts for data processing, file conversion, and XML file review.

C. Use of emerging technologies

100.The use of artificial intelligence (AI), data mining, and advanced visualisation tools can significantly improve the efficiency and depth of statistical analysis in AML/CFT.

101.These technologies make it possible to detect complex patterns, anticipate emerging risks, reduce the operational burden on institutions, and strengthen data traceability.

102.It is recommended that countries gradually explore their incorporation, ensuring compliance with ethical principles, personal data protection, and the description of the models used. It is also suggested that technical staff be trained in these tools and that regulatory frameworks be established to govern their responsible use.

VI. INTERPRETATION OF AML/CFT DATA


103. It is important to note that, although data and statistics are relevant, they represent only part of the evidence, and their value is limited without the appropriate context. Therefore, this chapter seeks to provide tools to assist in better interpreting the data, which means making it understandable.

104. As is well known, the purpose of an effectiveness assessment is to analyse the overall functioning of a jurisdiction's AML/CFT system. In the context of a mutual evaluation, the country being assessed is responsible for demonstrating the effectiveness of its AML/CFT system. It is therefore particularly important to note that one of the major challenges of mutual evaluation is to make the data understandable to assessors who are unfamiliar with the idiosyncrasies and functioning of the country.

A. Common errors in the interpretation of data in the mutual evaluation process


- *Confusing quantity with effectiveness*

Example: "We have received 5,000 STRs this year, therefore the system is effective."

 Problem: Many reports do not imply quality, nor that cases are investigated or prosecuted. What is important is how many of those reports led to useful actions (investigations, seizures, convictions). Another common problem is confusing a high number of STRs with the proper functioning of the system, as there may be a high volume of STRs, but they may be of poor quality (known as defensive STRs). In such situations, these indicators could reflect effectiveness issues, such as a lack of understanding by reporting entities of their obligations.


- *Failure to take into account the risk and context of the country*

Example: the application of simplified CDD policies by regulated entities can be alarming if the risk assessment carried out by the country, which allows for the application of this type of due diligence in lower-risk sectors, is not taken into account.

 Problem: Without this context, there is a risk of making inappropriate comparisons or incorrect judgements about the real situation in the country. Statistics must be understood in the context of the political, economic, social and cultural environment in which they are produced.

- *Lack of data disaggregation*

Presenting aggregate figures without explaining by type of crime, year, entity, jurisdiction.

 Problem: Assessors cannot identify patterns, vulnerabilities, or the country's operational approach. In addition, traceability between stages of the process is lost (e.g., from STR → Intelligence report → Criminal investigation → Sentence).

- *Inconsistencies between agencies on the same unit or variable*

The Public Prosecutor's Office reports 100 investigations and the police report 180 for the same period.

- 🔍 Problem: There is no common basis or data reconciliation mechanisms. This undermines credibility and shows a lack of coordination. Therefore, in this situation, it is best to establish a working group between the reporting institutions to unify data.

- *Poorly defined or inconsistent indicators*

"Successful cases are determined" without defining what is considered "successful".

- 🔍 Problem: Lack of standardisation; clarity is expected in definitions, sources, calculation methods, and inter-annual or inter-institutional consistency.

- *Use of old or irrelevant data*

Presenting data from more than 5 years ago to justify current effectiveness.

- 🔍 Problem: Effectiveness is measured in real time, not historically. Assessors value up-to-date and useful data to understand the current functioning of the system. This is defined by the evaluation methodology.

- *Underestimating or ignoring predicate offences or reporting cases of predicate offences that are not linked to ML/TF.*

Only reporting cases linked to drug trafficking and not including other types of crimes that are predicate to ML, such as corruption, trafficking, smuggling, etc.

Another common mistake is to report investigations into predicate offences without correctly linking them to ML/TF offences.

- 🔍 Problem: The national risk dimension is lost, and a biased or incomplete view of the ML phenomenon is projected.

- *Failure to link data to FATF Immediate Outcomes*

Presenting "loose" data without demonstrating how it contributes to the 11 Immediate Outcomes.

- 🔍 Problem: FATF assesses effectiveness under a logical framework. If the data does not support the narrative of the outcome (e.g. IO7 on investigations or IO8 on seizures), it loses value.

- *Ignoring qualitative data*

Focusing only on figures without including narratives, legal context, notable operations, or institutional changes.

- 🔍 Problem: Effectiveness is also demonstrated with qualitative evidence: how data is interpreted, used, and leveraged.

It is important that the narrative and figures complement each other in a coherent manner. In some cases, there may be an apparent lack of quantitative data or low figures; however, these can be contextualised and justified through narrative explanations that account for the measures taken or the particularities of the environment. A classic example of this situation is the absence of matches with the United Nations Security Council (UNSC) sanctions lists on ML/TF/PF.

- *Technical errors*

Duplication of data, lack of metadata, inappropriate formats. Same case reported by several institutions without filtering or validation.

- 🔍 Problem: This reduces reliability and hinders comparative analysis. In addition, assessors cannot reproduce or validate the results.

- *No narrative accompanying the data*

Sending Excel spreadsheets without explanation or interpretation.

- 🔍 Problem: The assessor team needs to understand what the figure means, how it was constructed, and what it demonstrates. Without context, the data is "empty."

B. Cascading incidence of statistics for different Immediate Outcomes

105. Cascading impact refers to when the same source of information or set of statistics is used to demonstrate effectiveness in more than one Immediate Outcome, due to the logical connection between the different components of the AML/CFT system.

Practical example of cascading impact:

A statistic: *"Number of STRs that led to judicial investigations"*

- IO 6: Relates to the use of financial intelligence by authorities to initiate investigations.
- IO 7: Demonstrates that these investigations led to criminal cases related to ML.
- IO 8: If the investigations result in convictions and confiscations, that same line of data demonstrates concrete results against crime.
- IO 3: It also supports the implementation of preventive measures and effective supervision (if the source is a supervised entity that reported an STR).

👉 Data flows can partially validate the country's operational effectiveness.

Another example: *"ML convictions with asset forfeiture"*

- IO 7: Evidence of effective investigation and criminal prosecution.

- IO 8: Shows the tangible result of the criminal process: asset recovery.
- IO 2: If it is demonstrated that international cooperation (passive/active) was involved in the identification, freezing or confiscation of assets, this is an indicator that also demonstrates effectiveness in international cooperation.
- IO 5: If the confiscated assets were correctly identified and recorded, this is linked to the availability of basic information and information on final beneficiaries.

Why is it important to take advantage of this impact?

- It avoids duplication of effort: A good statistical system can feed multiple indicators without the need to create new data.
- It allows for the construction of a coherent narrative: (e.g., demonstrating that intelligence is used → investigated → convicted → assets recovered).
- It facilitates the traceability of the entire case.
- It maximises the value of already available data.



Recommendations:

- ✓ Design a matrix linking statistical variables and Immediate Outcomes in order to identify correlations between data and its use in more than one Immediate Outcome.
- ✓ Establish traceability systems (e.g., with a case code that follows from the Financial Intelligence Report to the conviction).
- ✓ Include metadata in statistics: source institution, date, link to previous crime, etc.
- ✓ Use integrated visualisations (*dashboards* or heat maps showing how one figure feeds into several Immediate Outcomes).
- ✓ Train technical teams to recognise the potential of the data they generate.

VII. PRESENTATION OF DATA TO THE ASSESSOR TEAM

A. General considerations

106. The FATF methodology provides clear guidelines on how to use available information and data to assess the effectiveness of a country's AML/CFT system. This methodology not only identifies the most relevant sources of information, but also emphasises the importance of contextualising the data, as its interpretation may vary depending on the circumstances of the country being assessed. Assessors should be critical and cautious when using comparative data from other countries due to differences in legal systems, institutional capacities and local contexts, which may affect the relevance of direct comparisons.
107. It should be noted that the method of presenting information also depends on each evaluation process. The structure presented below is voluntary, not necessary or mandatory. Although formalisation of the process is not mandatory according to the FATF, a structured and systematic approach is recommended.
108. In addition to the above, it should be noted that the assessment of effectiveness is not based solely on statistical data, but also on qualitative information that helps to understand how results are achieved in practice. Data should be interpreted within the specific context of the country and should not be considered as the sole source of evidence. It is essential to avoid relying on raw data without proper analysis, as this can lead to erroneous conclusions. Effectiveness should be analysed through a holistic approach that combines quantitative and qualitative data to provide a clear and accurate picture of the system's achievements.
109. The approach should not be based on raw data, which can be interpreted in a wide variety of ways and even lead to contradictory conclusions, but rather on the information and analysis it provides in the context of the country being evaluated.
110. To strengthen governance and the responsible use of statistical information, it is recommended that countries classify the data collected according to their level of access: public, restricted or confidential.
111. This classification should be based on criteria such as the sensitivity of the information, the risk of undue exposure, the public interest, and the usefulness for the mutual evaluation. The classification should be documented and accompanied by protocols for access, publication, and safeguarding.
112. Inappropriate publication or dissemination of statistical data can create significant risks, such as the exposure of strategic information, the compromise of ongoing investigations, or the undermining of institutional security.
113. Therefore, it is recommended that an assessment of the potential risks be carried out before disclosing data, especially those related to sensitive operations, specific regulated entities, or financial intelligence measures.



Success factor: It is not advisable to make direct comparisons between countries, as data may be influenced by very different contextual factors (risks, legal systems, institutional capacity, etc.).

B. Contextualisation of the risk and context of the country being assessed

114. When preparing an assessment under the FATF methodology, it is essential to understand that the assessors, who come from other countries, do not have in-depth knowledge of the country's institutional, legal and operational system. Therefore, it is necessary to present all information in a detailed and clear manner, without assuming that certain aspects are "self-evident." Everything must be explained with evidence, context, and internal logic, from the structure of the financial system to the operations of the competent authorities and the way in which statistics are generated and used.

115. In this context, contextualising statistics is not only advisable but essential. Numbers alone do not convey risks, priorities or institutional capacities. Unless clearly explained, an assessor will not know why certain indicators are low or high in relation to the threats facing the country. For example, a low conviction rate for ML could raise questions unless it is properly contextualised: perhaps the country faces low risks, has effective preventive measures in place, or investigations focus on more prevalent underlying crimes. These nuances must be accurately detailed, and this is where the risk and context of the assessment process comes in.

116. Additionally, it is important to understand that the process by which assessors come to understand the characteristics of the country being evaluated is not immediate. It is a technical exercise that requires time and constant support from national authorities. For this reason, the report presented should facilitate that understanding, anticipating possible misinterpretations and supporting each statement with data, analysis, and specific references to the identified risk.

117. Finally, the risk-based approach, which is central to the FATF methodology, requires that all analysis—including the use of statistics—be linked to a thorough understanding of risk and context. If this is not clearly communicated, the country runs the risk of receiving an unfavourable assessment not because of actual deficiencies, but because it has failed to adequately demonstrate its level of understanding and response to risk.

C. Recommended structure for a statistical report for the assessment team

118. Before defining the recommended structure, it should be noted that the FATF assessment methodology does not establish the submission of a single, formal statistical report as a mandatory requirement. Its preparation is voluntary and depends on the strategy adopted by the assessed country to organise and present the information.

119. In some cases, such a report may be useful as a support tool to facilitate general understanding of the system, the use of key statistics, and the contextualisation of risk and context. However,

in other cases, the Executive Secretariat may require that statistics be presented in a disaggregated and documented form in specific folders, organised by each Immediate Outcome, in accordance with the needs of the evaluation process.

120. A statistical report is a technical document that presents, analyses, and interprets quantitative data in a structured and systematic manner. To the extent that the steps previously described in this handbook have been completed, significant progress will have been made in the preparation of the report, thus ensuring the soundness and consistency of its content.

121. The previous chapter highlighted the importance of not presenting "isolated" data without demonstrating how it contributes to the eleven Immediate Outcomes. In addition, it emphasised the importance of not focusing solely on figures without including narratives, legal context, notable operations or institutional changes.

122. It is essential that the assessor acquires a comprehensive understanding of the risk and the specific context of the country, as this understanding forms the basis for an accurate interpretation of the statistics and an objective assessment of the adequacy and effectiveness of the measures adopted in this area.

123. It is important for assessors that the country itself indicate how the statistical data produced by its authorities should be interpreted. Only in this way will they be able to use the data and take advantage of the work carried out in the collection, processing and interpretation of the statistical data.

124. The statistical report should have a cover page that includes the title of the report, the name of the institution responsible for its preparation, and the corresponding date. The latter element is particularly relevant, given that multiple versions of the document may be generated during the mutual evaluation process. It is then recommended to include a table of contents, preferably automatic, to facilitate navigation through the different chapters, tables, and annexes of the report.

125. The introduction should detail the purpose of the report, its time frame (e.g., 2021–2025) and, if any period is incomplete, specify the cut-off date up to which the data have been collected. It is also essential to clearly identify the sources of information used, specifying whether the data come from a single source or were compiled from multiple sources. A brief description of the methodology used should also be included, defining key concepts (e.g., STR, confiscation, investigation), the units of measurement used (number of cases, amounts in USD, persons, among others), the frequency and period of the data (annual, quarterly, etc.), limitations or unavailable data, and the agencies responsible for generating and validating the information (such as the FIU, the prosecutor's office/public ministry, law enforcement authorities, or the judiciary). Relevant issues regarding the country's risk and context should be determined here.

126. Each chapter of the report should present tables with accurate data, charts summarising the main messages, graphs allowing comparisons or trends to be visualised, and footnotes including definitions and references to data sources.

127. Finally, the report should include a section of appendices containing a glossary of technical terms used and the forms or instruments used for data collection, as well as the complete tables if abbreviated versions of them have been used in the body of the report.

128. Once consolidated, the draft result can be shared with all the agencies and institutions involved to receive their comments and observations. It is advisable to include a reference to the sources of each data set or graph. In addition, identifying the least cooperative institutions at this stage could be a tool for increasing the level of participation.

129. The following is a suggested structure for the report:

Section	Recommended Content
Cover	<ul style="list-style-type: none">- Title of the report.- Name of the responsible institution.- Date of preparation or presentation (important if there are multiple versions during the peer review).
Table of contents	<ul style="list-style-type: none">- Preferably automatic.- Must allow for easy navigation between chapters, tables and annexes.
Introduction	<ul style="list-style-type: none">- Purpose of the report.- Time frame (e.g. 2021–2025); if the period is not complete, indicate the cut-off date for the data.- Sources of information used (specify whether one or more).- Brief mention of the methodology, including:<ul style="list-style-type: none">• Country risk and context.• Definition of key concepts (e.g. STR, confiscation, investigation).• Units of measurement (number of cases, amounts, persons, etc.).• Frequency and period of data (annual, quarterly, etc.).• Limitations or unavailable data.• Agencies responsible for generating and validating data (FIU, prosecutor's office, LEA, judiciary, etc.).
Chapter contents	<ul style="list-style-type: none">- Tables with exact data.- Charts

	- Illustrative graphs - Footnotes with definitions and data sources.
Appendices	- Glossary of technical terms. - Methodological data sheets for indicators. - Forms or instruments used. - Complete tables, if summarised versions have been used in the body of the report.

D. The use of tables, charts and graphs

130. Tables, charts and graphs are essential tools for presenting statistical data, as they allow quantitative information to be conveyed in a structured and understandable way. Although they are often used in a complementary manner, each of these resources fulfils specific functions and is adapted to different contexts depending on the type of information to be communicated.

i. Tables

131. Tables are characterised by presenting numerical or categorical information in a row and column format. This format facilitates the presentation of accurate and detailed data, allowing for the inclusion of multiple variables, subtotals and totals. Tables are particularly useful for making accurate comparisons and for specialised technical consultation.

132. In terms of organisation, it is recommended that tables and charts be laid out according to each Immediate Outcome, in accordance with the FATF methodology. Each table should be explicitly linked to at least one IO, ensuring that the data remains consistent, especially when a variable impacts several results. In addition, each table should have a clear heading identifying the IO number, the objective assessed, and the indicators included. For example: "Immediate Outcome 7: Money laundering offences are effectively investigated and prosecuted. Table 1: Number of investigations, prosecutions, and convictions by type of offence, 2019–2023."

133. Tables can be classified according to their level of complexity. Simple tables, which present a single variable (such as the number of STRs per year), are useful for summaries and basic data. It is recommended to include a grand total or average when relevant and to use descriptive headings. Complex tables, on the other hand, relate two or more variables (e.g., STRs by type of reporting entity and year) and allow for the analysis of patterns and distributions. It is advisable to add totals by rows and columns and to divide the information when it becomes excessive, such as separating by type of reporting entity (financial, VASP, and DNFBPs).

134. Another relevant type are time series tables, which show the evolution of a variable over time (years, semesters or months) and are especially useful for analysing trends and historical changes. In these cases, regular intervals should be maintained and, if the data is partial, an

explanatory note should be included. Likewise, tables showing associations between variables allow relationships to be explored (such as supervised entity vs. type of infringement), providing input for more complex analyses, such as correlations or regressions. In such cases, it is advisable to include percentages to facilitate interpretation and to accompany them with analytical notes if trends are detected.

135. There are also recommended best practices for the preparation of statistical tables. A clear and consistent structure is essential: tables should follow a uniform format across institutions and be maintained over time. Columns and rows should be clearly labelled, including data type, year, responsible entity, among others. It is important to present annual or multi-year data, covering at least three to five years to allow for trend analysis. If another period is used (such as half-yearly or cumulative), this should be adequately justified.

136. In addition, adequate disaggregation of data is recommended, distinguishing between type of reporting entity, type of activity (such as investigations, sanctions, STRs), type of crime (trafficking, corruption, fraud, human trafficking, environmental crimes, etc.) and geographical jurisdiction, if applicable.

137. All tables should be accompanied by clear definitions, either in a glossary or in footnotes, specifying each indicator, the calculation method and the unit of measurement used.

138. Consistency in formats is also crucial. Avoid changing calculation methods without prior explanation, maintain the use of the same currency (ideally USD or EUR along with the local currency), and do not automatically project partial data to a full period. Likewise, special attention should be paid to avoid double counting, especially in inter-institutional or lengthy processes, recording each event only once and, if necessary, accompanying it with an explanatory note.

139. Finally, explanatory notes play a key role, as they allow the reader to be informed of any methodological changes, gaps or missing data, as well as the presence of estimates or indirect calculations. These practices ensure an accurate, transparent and useful presentation for the technical evaluation of AML/CFT systems.

140. Tables, charts and graphs are key tools in the presentation of data. Although they are often used together, each serves different functions and is used in different contexts depending on the type of information to be communicated.

Tables

Characteristics

- They present numerical or categorical information in rows and columns.
- They allow exact data to be shown, even in great detail.
- They can include multiple variables, subtotals and totals.
- Easy to use for accurate comparisons and technical reading.

Layout of tables and charts by immediate result

- Thematic organisation: each table must be explicitly linked to an Immediate Outcome (IO 1 to IO 11 of the FATF), ensuring consistency of variables with an impact on several Immediate Outcomes.
- Clear heading: indicate the name of the result, the objective it seeks to evaluate, and the indicators included.
- Heading example: Immediate Outcome 7: ML offences are effectively investigated and prosecuted. Table 1: Number of investigations, prosecutions and convictions by type of offence, 2019–2023.
- Grouping by category: group by type of data (e.g., international cooperation: active/passive received/sent).

Simple tables (single variable)

- These show a single characteristic (e.g. amount of STR per year).
- They are useful for presenting basic figures or summaries.

Tips: Include grand totals or averages if relevant. Use descriptive headings.

Complex tables (with two or more variables)

- These relate two or more dimensions (e.g., STR by type of reporting entity and by year).
- They allow for the analysis of patterns and distributions.

Tips: Add totals by row and/or column. Avoid overloading with too many rows; divide by category if necessary.

Time series

- Show the evolution of a variable over time (years, semesters, months).
- Recommended for measuring trends, changes, and historical analysis.

Tips: Maintain regular time intervals. If the data is partial, include an explanatory note.

Tables of association between variables

- Used to explore relationships between two or more variables (e.g., supervised entity vs. type of violation).
- They can feed into more advanced analyses (correlations, regressions).

Tips: Accompany with analytical notes if a trend is detected. Use percentages to facilitate interpretation.



Recommendations: Below are several recommendations to consider when preparing statistical tables

- *Clear and consistent structure:*
 - ✓ Use a consistent format across institutions and over time.
 - ✓ Include precise labels for columns and rows (type of data, year, responsible entity, etc.).
- *Annual and multi-year data:*
 - ✓ Present information in annual series with a minimum coverage of 3 to 5 years for trend analysis.
 - ✓ Justify and explain the use of other periods (half-yearly, cumulative, others).
- *Appropriate disaggregation:*
 - ✓ Separate data by relevant categories, such as:
 - Type of reporting/supervised entity, always separating between FIs, VASPs and DNFBPs.
 - Type of activity (investigations, sanctions, suspicious transaction reports – STRs, convictions).
 - Type of crime (trafficking, corruption, fraud, etc.).
 - Geographical jurisdiction (where applicable).
- *Visible or attached definitions:*
 - ✓ Accompany each table with a glossary or footnote that includes:
 - Exact definition of each indicator.
 - Explanation of the calculation method.
 - Unit of measurement (number of cases, monetary amounts, etc.).
- *Consistency of formats:*
 - ✓ Avoid changes in calculation methods without providing the corresponding clarification.

- ✓ Unify the currency used (preferably USD or EUR together with the local currency).
- ✓ Do not automatically round or project partial data to the full year.
- *Avoid double counting:*
 - ✓ Pay attention to processes involving multiple entities or long-term processes (e.g., judicial investigations).
 - ✓ Record each event only once and, if there was joint participation, include an explanatory note.
- *Explanatory notes:*
 - ✓ Include brief comments at the bottom of each table in the event of:
 - Methodological changes.
 - Gaps or absence of data.
 - Estimated or indirectly calculated data.

ii. Charts

141. Charts are tools used to present textual or mixed summaries—i.e., combining text with figures—of key information. Unlike tables, which focus on exact numerical data, charts often include qualitative descriptions, interpretations, or classifications. Their use is particularly useful for contextualising figures, synthesising institutional information, or presenting relevant regulatory and methodological aspects in a clear and orderly manner.
142. The use of charts is recommended for presenting explanatory or qualitative information. For example, they can be used to describe inter-institutional coordination mechanisms, present relevant success stories, or highlight observations on gaps, challenges, or ongoing reforms. These elements are not always expressed numerically, but they are essential to complement statistical analysis.
143. The information contained in the tables should be organised in a clear and understandable manner. It is essential that each table has an explanatory title indicating what it represents, the period to which it refers, and the unit of measurement used. Likewise, rows and columns should be properly labelled, and units (such as US dollars, number of cases, or percentages) clearly specified.
144. Whenever possible, data should be arranged chronologically, ideally in annual series covering at least three to five years. Where other periods are used, such as half-yearly or cumulative periods, the choice should be justified and explained in the corresponding table.

145.To avoid confusion, it is essential to eliminate any duplication. Particular attention should be paid to avoiding double counting, especially in joint processes between different institutions, and refraining from making aggregates that lack a solid technical basis.

146.All tables must be consistent both internally and externally. This means that the counting or measurement method must be uniform in all tables presented. If there is any change in the methodology or measurement method, this must be clearly indicated in an explanatory note.

147.It is also recommended that the information be supplemented with explanatory notes that define key concepts, point out limitations in the data, or detail any methodological changes. If acronyms or technical terminology are used, it is useful to include a supporting glossary.

Tables

Characteristics:

- These are textual or mixed (text + figures) summaries of key information.
- They often include qualitative descriptions, interpretations or classifications.
- They are used to contextualise figures or summarise institutional, regulatory or methodological information.

What information should be included in a table?

Tables are recommended for explanatory or qualitative information, such as:

- Description of coordination mechanisms.
- Success stories.
- Observations on gaps, challenges or ongoing reforms.

iii. Graphs

148.Graphs are visual tools that allow data to be represented in a clear and understandable way. Through different formats—such as bars, lines, circles, among others—they convert numerical information into visual representations that facilitate rapid interpretation of the data. One of their main strengths is that they allow the identification of relationships, patterns, or distributions between variables, especially when it comes to observing changes over time or comparisons between categories.

149. There are different types of graphs, each with a specific purpose: bar and column graphs are ideal for comparisons; line graphs for trend analysis; pie charts for showing proportions; and other more technical ones such as histograms or scatter plots for more detailed statistical analysis.

150.There are multiple types of graphs, each adapted to different analytical needs. Bar graphs allow you to compare quantities between different categories:

- *Column charts*: similar in purpose, they are used vertically and are especially useful for time series.
- *Line charts*: these stand out for their ability to show the evolution of an indicator over time, making them ideal for trend analysis.
- *Pie charts*: show how a total is divided into different parts, expressed as proportions or percentages.
- *Area charts*: used to represent cumulative volumes and their variation over time.
- *Histograms*: *these* allow you to visualise the frequency distribution of a quantitative variable, which is useful for understanding the dispersion or concentration of data.
- *Scatter plots*: show the relationship between two variables, which is key to detecting associations or correlations.
- *Flowcharts or Sankey diagrams*: useful for illustrating process flows, such as the transit of reports from the financial intelligence unit to other actors in the system, such as the police or the prosecutor's office.

151. The choice of chart type is a key decision that should be based on the specific objective of the analysis to be communicated. A graph is not simply an aesthetic illustration; it is a visual interpretation tool that should facilitate understanding of the data and reinforce the message to be conveyed. Therefore, before selecting a graph format, it is necessary to be clear about what type of information you want to highlight: a comparison? A trend over time? A distribution? A relationship between variables? A percentage composition?

152. For example, if the objective is to compare quantities between different categories—such as the number of reports received by different types of financial institutions—a bar or column chart is most appropriate. On the other hand, if the aim is to show how an indicator evolves over time, such as the annual growth in investigations for financial crimes, a line chart will be more effective in allowing trends to be visualised clearly.

153. When the purpose is to show the proportion of each component within a total, such as the percentage distribution of offences by type of entity, pie charts allow the relative share of each segment to be visualised. If what is required is to show how a variable accumulates and varies over time, for example, the total value of frozen assets per year, area charts are the best option.

154. For more technical or statistical analyses, such as examining the distribution of a quantitative variable (e.g., the duration of legal proceedings), histograms are ideal. And when the interest is in analysing the correlation between two quantitative variables—for example, the number of convictions in relation to the total amount seized—a scatter plot is most appropriate.

155. Finally, if the objective is to show the flow of information or sequential processes, such as the transit of suspicious reports from their generation to their prosecution, flowcharts or Sankey

diagrams allow you to clearly visualise the connections, transitions and volumes between stages or actors.

156. In short, a well-chosen graph not only embellishes a report or presentation but also enhances the ability to communicate and analyse data. Choosing the right type is essential to ensure that the message is conveyed clearly, accurately and relevantly.

Types of graphs

Type of chart	Brief description
Bar chart	Represents quantities and comparisons between categories.
Column chart	Similar to a bar chart, but in a vertical orientation. Ideal for annual series.
Line chart	Shows the evolution of an indicator over time. Perfect for trends.
Pie chart	Represents proportions or percentages of a total.
Area chart	Shows the total volume and its variation over time.
Histograms	Represents the frequency distribution of a quantitative variable.
Scatter plot	Shows the relationship between two variables (associations).
Flowcharts / Sankey diagrams	Visualise processes or flows, such as the passage of reports between FIUs, police and prosecutors.



Recommendations:

- ✓ Graphs should not replace tables but rather complement them visually.
- ✓ Each graph should have:
 - A clear and complete title
 - Data source
 - Correctly labelled axes and visible units.
 - Explanatory note if there are assumptions, estimates or changes.
- ✓ Avoid excessive use of 3D graphics, very bright colours or unnecessary decorations.

E. Relevance of footnotes and sources

157. Footnotes and sources play a fundamental role in any technical or statistical report, as they ensure the transparency and traceability of the information presented. Including them allows users to understand the origin of the data, which is crucial for verifying its validity, updating figures in the future, or understanding the logic behind certain indicators. This practice strengthens accountability and allows for more rigorous analysis.

158. In addition, these notes prevent misunderstandings and misinterpretations, especially in relation to methodological aspects. They serve to clarify definitions, units of measurement, regulatory changes, statistical assumptions, or changes in recording systems. Their use is essential when, for example, the counting system has been modified, new regulations affecting the data collected have been implemented, or when there are discrepancies between different institutional sources—as can happen between figures reported by a FIU and those reported by a prosecutor's office.

159. Furthermore, the credibility of the report depends, to a large extent, on the support of the sources. The absence of references can raise doubts about the reliability of the data, while a correctly attributed figure reinforces its legitimacy and technical value. It is a sign of rigour and seriousness that supports the content of the document.

160. Finally, footnotes also serve to provide context, allowing for the explanation of external or exceptional factors that influence the data. For example, a footnote may indicate that an increase in investigations in a given year was due to a legal reform, or that a decrease in reports was the result of a health emergency. In this way, interpretations are enriched, and superficial or misleading analyses are avoided.

Examples of useful footnotes:

Note 1: The increase in STR in 2024 is due to the mandatory inclusion of new reporting entities in accordance with Decree X/2023.

Note 2: The definition of "final conviction" includes only sentences that have not been appealed or confirmed by a higher court.

Source: Financial Intelligence Unit, Annual Report 2023. Data processed by the Strategic Analysis Directorate.



Recommendations:

- ✓ Use explanatory notes in all tables or charts with sensitive or complex data.
- ✓ Accompany graphs and tables with the primary source (e.g., FIU, Public Prosecutor's Office, Central Bank, Ministry of Justice, etc.).
- ✓ Do not assume that readers share the same technical or legal understanding of the country. The note helps to standardise interpretation.
- ✓ The lead agency should include some clarifications and interpretative notes on the consolidated data and associated graphs in the results or statistical reports.

VIII. CONCLUSIONS

161. The analysis carried out leads to the conclusion that the appropriate and systematic use of statistics in the FATF and Global Network evaluation processes is an essential element in ensuring the objectivity, consistency and technical quality of the assessment of the effectiveness of AML/CFT systems. Although compliance with Recommendation 33 has encouraged data collection, its true potential is realised when such information is used as strategic input for diagnosis, public policy formulation and efficient resource allocation in accordance with the risk-based approach.
162. A robust statistical system significantly strengthens institutional capacities by enabling a more accurate understanding of the threats and vulnerabilities related to money laundering and terrorist financing. It also facilitates the monitoring of institutional performance, the identification of structural gaps, and the evaluation of the impact of preventive and corrective measures implemented by the competent authorities.
163. Mutual evaluation should be seen not only as a diagnostic exercise, but also as an opportunity to strengthen the national statistical system. It is recommended that countries establish a mechanism to address the limitations of their national statistical system identified in the mutual evaluation process, including the development of an improvement plan, the implementation of corrective actions, staff training, and periodic monitoring of progress. This process should be coordinated by the leading agency of the AML/CFT statistical system.
164. In the context of a mutual evaluation, the availability of reliable and disaggregated statistical data allows for empirical support of conclusions regarding the effectiveness of the system, as well as for the formulation of technical recommendations based on verifiable evidence. Conversely, the absence of adequate data limits the possibility of conducting a comprehensive analysis, introduces a greater degree of subjectivity into the assessment team's assessments, and reduces the operational usefulness of the final report, potentially affecting the legitimacy of the evaluation process.
165. Additionally, the lack of statistics negatively impacts the capacity of the evaluated country to demonstrate progress, identify areas for improvement, and maintain the confidence of the international community. This situation can generate a "cascade effect" on the performance of the various Immediate Outcomes assessed, compromising the comprehensive vision of the AML/CFT system.
166. In view of the above, it is strongly recommended that countries strengthen their mechanisms for collecting, processing, and analysing statistical data, prioritising descriptive statistics in the evaluation processes, as these allow for the presentation of concrete, verifiable, and relevant information for assessing the effectiveness of the system in operational, regulatory, and institutional terms.
167. Adequate coordination of the processes and deadlines for the collection and compilation of AML/CFT statistical data is essential to ensure the efficiency, consistency and usefulness of the information generated at the national or subnational level. Although neither the FATF

Recommendations nor its Methodology require a formalised process, it is recognised that the implementation of clear guidelines, accompanied by strategic planning, enables countries to overcome the most common obstacles and significantly improve the quality of their statistics.

168. Among the most recurrent challenges are the dispersion of data among multiple entities, the incompatibility of formats and definitions, the lack of specific guidance, and conceptual confusion between statistical units and variables. These difficulties can seriously limit the system's ability to generate useful and reliable information, negatively affecting evaluation processes and evidence-based decision-making.
169. Overcoming these challenges requires a systematic approach that includes detailed planning, harmonised definitions, well-structured work schedules, and a clear outline of responsibilities. Early identification of data collection objectives and information users (particularly in the context of mutual evaluations) allows statistical processes to be adjusted to actual requirements and avoids unproductive efforts.
170. Another critical success factor is the designation of a lead agency or inter-institutional coordination mechanism, preferably with experience in AML/CFT and political support, to ensure effective coordination among the various actors involved. This agency should be responsible for standardising definitions, systematising procedures and, where necessary, strengthening its technical capacities by bringing in external specialists or consultants.
171. In short, a comprehensive data collection strategy, based on planning, standardisation and institutional leadership, is a key tool for optimising the performance of the AML/CFT system and strengthening the technical quality of the evaluation processes.
172. Mapping existing data, developing statistical methodologies, and considering key issues in the collection of information in the AML/CFT context are steps that should be followed. First, it is essential to have a clear and comprehensive overview of all entities involved in the AML/CFT system, as well as the type of information each one manages. This initial mapping ensures adequate coverage of the sectors defined by the FATF, avoids omissions and duplications, and facilitates the identification of gaps in the available information.
173. In contexts where the political structure is decentralised, such as in federal countries, there is the additional challenge of coordinating data collection between national, regional and local levels. In these cases, it is essential to establish mechanisms to centralise information or, alternatively, to provide the main authority with the necessary tools to request and consolidate data from the different subnational levels.
174. There is a particular need to prevent data duplication, especially when there is overlap between the functions of different agencies, such as law enforcement agencies, prosecutors and judicial authorities. An effective strategy for this is to compile an inventory of data already collected by different agencies, including both domestic and international sources, which can be extremely useful for contextual and structural analysis of the country.

175. Another key aspect is the adoption of a uniform statistical methodology, which must be properly documented. This methodology provides standardised criteria for the collection, classification and analysis of information, ensuring consistency, traceability and replicability in the process. A structured data collection design, which takes into account those responsible, the sources, the instruments used, and the material, territorial and temporal scope, contributes significantly to avoiding inconsistencies, incomplete data or unnecessary efforts.
176. In terms of technical aspects, it is necessary to establish a standardised time frame, adopt clear and common definitions, specify the units of measurement used, and break down the data according to relevant criteria such as the type of crime, reporting entity or country of origin. In addition, monetary expression should be standardised to facilitate international comparison, and a clear distinction should be made between missing data and data with a value of zero in order to avoid misinterpretation.
177. Once the data has been collected, it must be processed appropriately, which requires a clear methodology, appropriate technological tools, and a solid infrastructure to ensure the accuracy and reliability of the results, thus facilitating informed decision-making.
178. Adequate technological infrastructure is key to executing these operations efficiently, and emphasis is placed on the need to document each stage of processing to ensure transparency and reproducibility.
179. Data alone is not enough; it needs to be contextualised so that assessors can understand and analyse it properly. A major challenge is to make the data understandable to those who are not familiar with the local context, which underlines the importance of clear and contextualised presentation.
180. One of the most common mistakes in interpreting data is confusing quantity with effectiveness. The number of reports or other indicators does not necessarily reflect the quality or impact of the actions taken, so it is crucial to disaggregate the data and ensure that it is presented in detail, avoiding generalisations. It is also essential to avoid presenting outdated or irrelevant data and to ensure that indicators are well defined to avoid misunderstandings and biases in assessments. Coordination between different institutions is also key to avoiding inconsistencies in data reporting, which can undermine confidence in the results.
181. Furthermore, the cascading effect of statistics, where one set of data can feed into several FATF Immediate Outcomes, shows the importance of making the most of the available information. This approach avoids duplication of effort and allows for a coherent narrative that demonstrates the effectiveness of the AML/CFT system. The traceability of data from the beginning to the end of a case is essential to validate operational effectiveness. To optimise this process, it is recommended to design cross-referencing matrices between variables and Immediate Outcomes, establish traceability systems, and include metadata in statistics, in addition to promoting the use of visualisations that facilitate data analysis and understanding.

182. It is suggested that a statistical report accompany the evaluation, and a clear and detailed structure is recommended. This report should include information on the purpose of the report, the methodology used, the data sources, and a rigorous analysis of the data. It is crucial that the report not only present figures, but also link them to the FATF Immediate Outcomes, providing a contextual analysis that allows for the correct interpretation of the data.
183. Providing the evaluator with a clear and detailed explanation of the country's risk and context is essential for them to be able to interpret the statistics correctly, understand the strategic decisions taken, and issue a fair assessment that is in line with the national reality, especially considering that they do not have in-depth knowledge of the system being evaluated.
184. The appropriate use of tables, charts, and graphs is essential in the presentation of data, as these elements allow information to be communicated in a clear and understandable manner. Each of these resources has specific functions: tables provide detailed and comparative data, charts summarise key messages, and graphs visualise trends or relationships between variables. It is important that tables and graphs are well structured, following a consistent format and ensuring that the information is properly disaggregated to facilitate analysis. Explanatory notes are essential to ensure the transparency and comprehensibility of the data presented.

A. Recommendations

Below are several recommendations that countries should consider when strengthening the statistical process to demonstrate effectiveness:

- Effective coordination in the collection and compilation of AML/CFT data is essential for generating useful and timely statistics at the national or subnational level.
- Providing the evaluator with a clear and detailed explanation of the country's risk and context is essential for them to properly interpret the statistics, understand the strategic decisions made, and issue a fair assessment that is aligned with the national reality, especially considering that they do not have in-depth knowledge of the system being evaluated.
- Although formalisation of the process is not mandatory according to the FATF, a structured and systematic approach is recommended.
- There are common challenges such as the dispersion of data among multiple actors, incompatibilities in definitions, lack of clear international guidance, and confusion between key statistical concepts.
- Overcoming these difficulties requires strategic planning, definition of objectives, and clarification of institutional roles and responsibilities.
- Developing a work schedule with clear objectives and defined outputs facilitates meeting deadlines and improves the quality of the process.
- The designation of a lead agency with experience in AML/CFT and political support is a key factor in achieving effective coordination among the parties involved.
- This body should unify criteria, review definitions, identify information gaps and, if necessary, strengthen its technical capacity with specialists.

- The harmonisation of concepts, methodological clarity and inter-institutional cooperation are fundamental pillars for strengthening the national statistical system in the area of AML/CFT.
- It is essential to have a clear and comprehensive overview of all entities involved in the AML/CFT system from the outset, as well as the specific type of AML/CFT-related information that each one handles. This allows all activities and operations defined in the FATF glossary to be covered, avoiding omissions or duplications in the data collected.
- In countries with decentralised political structures, such as federal systems, mechanisms need to be established to coordinate data collection between national and regional authorities. This may involve the creation of a central entity to collect data from local authorities or the delegation of collection to the main agencies.
- Particular attention should be paid to the possibility of data duplication due to overlapping functions or competences between different agencies, such as police, prosecutors and judicial authorities. A useful strategy is to compile an inventory of data and statistics already collected by both national and international agencies.
- The adoption of a uniform statistical methodology is crucial to ensure the consistency and traceability of the data collected. This methodology should be clearly documented so that others can replicate the process and ensure consistency in the analysis.
- The design of data collection should consider key aspects such as those responsible, sources of information, instruments used, and material, territorial, and temporal scope. This prevents incomplete or unnecessary data collection and ensures that the information is consistent and verifiable.
- It is necessary to establish a standardised time frame and adopt common definitions to avoid confusion. Clarity in units of measurement and the breakdown of data by relevant categories (such as type of crime or reporting entity) are essential for the correct interpretation and comparison of data.
- Currency expressions should be standardised and clear criteria established for converting amounts into local or international currencies. It is also important to avoid confusion between missing data and data with a value of zero, and to make the appropriate distinctions.
- It is recommended to identify gaps in data availability from the outset and work on collecting them. In addition, priority should be given to the use of national and subnational data sources, investing in technological solutions that optimise resources, and ensuring access to information for all stakeholders.
- It is essential to strengthen inter-institutional coordination mechanisms, establish appropriate confidentiality protocols, and ensure that intelligence agencies can securely provide input to facilitate effective and transparent assessment.
- The data processing stage includes examination and standardisation to correct inconsistencies, transformation to adapt the data to formats useful for analysis, and modelling through statistical analysis or visualisations to facilitate interpretation and decision-making.
- It is essential to have adequate technological infrastructure to capture, process, store, and apply statistical techniques to the data.
- The tools used include Excel, Python, and other specialised tools such as AMtab and PC-Axis.

- To ensure data accuracy and reliability, it is necessary to document each transformation performed and save intermediate versions of the databases.
- Proper data processing depends on a clear methodology, effective technological tools, and a solid infrastructure, which facilitates informed decision-making.
- Context is essential for correctly interpreting data: Data without context does not provide a complete picture and can lead to erroneous conclusions about the effectiveness of the AML/CFT system.
- Incorrect interpretation of data can distort results: Errors such as confusing quantity with effectiveness, failing to properly disaggregate data, or using poorly defined indicators can affect the validity of the assessment.
- Inconsistencies between institutions undermine data reliability: Differences in reports from different agencies, such as prosecutors and police, can damage the credibility and coordination of the system.
- Effectiveness must be measured using current and relevant data: Using outdated or irrelevant data to assess the current effectiveness of a system is inappropriate, as the analysis must be based on recent information.
- It is essential to consider all types of crime: Ignoring certain crimes or focusing only on a specific type (such as drug trafficking) can lead to a biased and incomplete view of the problem.
- Linking data to the FATF's Immediate Outcomes is crucial: data must be aligned with key issues in order to be useful and support effectiveness assessments.
- Qualitative data is as important as quantitative data: narrative and institutional context are also essential to understanding the impact of the data, not just the figures.
- Technical errors affect the validity and reliability of data: data duplication, lack of metadata, or incorrect formats hinder analysis and comparison, reducing the accuracy of the assessment.
- The narrative accompanying the data is essential: data without clear interpretation and explanation of its origin loses value, as the assessment team needs to understand its context and relevance.
- Leveraging the cascading impact of data improves efficiency: a single data set can support multiple Immediate Outcomes, maximising its usefulness and avoiding duplication of effort in information gathering.
- Properly designed matrices and traceability systems optimise analysis: creating matrices that cross-reference statistical variables and Immediate Outcomes, together with systems that track data from its origin to the final results, improves consistency and traceability in the evaluation process.
- The report should be clear and structured, linking data to Immediate Outcomes and providing context in line with the risk determined by the country and an explanation for its correct interpretation.
- Use of tables, charts and graphs: tables should present detailed and comparative data, charts should summarise, for example, regulatory changes or success stories, and graphs should visualise trends. All of these should have explanatory notes to ensure transparency.

IX. BIBLIOGRAPHY

FATF (2015), *Guidance on AML/CFT-related data and statistics*, FATF, Paris. Available at: www.fatf-gafi.org/publications/fatfrecommendations/documents/aml-cft-related-data-statistics.html

FATF (2012), *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation* ('The FATF Forty Recommendations'), FATF, Paris. Available at: www.fatf-gafi.org/recommendations.html

FATF (2013a), *Methodology for Assessing Technical Compliance with the FATF Recommendations and the effectiveness of AML/CFT Systems* ('The Methodology'), FATF, Paris. Available at: www.fatf-gafi.org/publications/fatfrecommendations/documents/fatfissuesnewmechanismstostrengthenmoneylaunderingandterroristfinancingcompliance.html

FATF (2013b), *Guidance on National Money Laundering and Terrorist Financing Risk Assessment*, FATF, Paris. Available at www.fatf-gafi.org/publications/methodsandtrends/documents/nationalmoneylaunderingandterroristfinancingriskassessment.htm

Organisation for Security and Co-operation in Europe (OSCE) (2012), *OSCE Handbook on Data Collection in Support of Money Laundering and Terrorism Financing National Risk Assessment*, Vienna, www.osce.org/eea/96398

Organisation for Security and Co-operation in Europe (OSCE) (2012), *Handbook on Data Collection in Support of Money Laundering and Terrorism Financing / National Risk Assessments* (2012), OSCE, Vienna, Austria, www.osce.org/eea/96398

MONEYVAL, "Template for 6th round assessment".

ANNEX I: QUESTIONNAIRE RESULTS

Centralised national statistics agency for AML/CFT

- **Answer "Yes":** A significant number of respondents indicated that their country has a centralised body; examples mentioned included entities such as the "Information and Statistics Unit" or the "National AML/CFT/CPF Council".
- **"No" response:** Other countries state that no such centralised body exists.

Key finding: The existence or absence of a centralised body varies considerably, which may influence the coordination of data at the national level.

Statistical compilation system outside of mutual evaluation

- **Answer "Yes":** Several countries report having an internal system (either operational or in the process of being implemented) for collecting and compiling AML/CFT data, independently of the mutual evaluation process.
- **Answer "No":** Others do not yet have such a system in place.

Key finding: Approximately half of the countries have made progress in developing data compilation processes, suggesting potential areas for improvement in others.

Working methods in the peer review process

Responses regarding the organisation of work were grouped into different models:

- **Inter-institutional coordination or creation of working groups:** Some countries established teams or working groups to coordinate the process.
- **Designation of a lead agency or contact points:** Other responses mentioned that a lead agency was designated or contact points were assigned within each institution.

Key finding: There is a diversity of approaches, but all share the need for coordination among multiple actors to consolidate information.

Statistical guidance or protocol on AML/CFT

- **Response "Yes":** A few countries have guidelines or protocols, and links to documents were even provided.
- **'No' response:** Most responses indicate the absence of a formal protocol.

Key finding: The implementation of specific guidelines or protocols is not systematic, which could lead to differences in the definition and quality of the data collected.

Process for identifying existing statistics

- **Answer "Yes":** Most respondents indicated that, before beginning the collection process, a diagnosis of existing statistics was carried out.
- **Answer "No":** A minority indicated that this process was not carried out.

Key finding: This step is essential for understanding the "state of play" and improving data integration; most recognise it as part of the process.

Data collection mechanisms

- Various mechanisms have been mentioned:
 - **Use of traditional tools:** Such as Excel or manual forms.
 - **Proprietary systems or applications:** For example, internally developed tools or modules within compliance systems (such as SICTERR or SIGAP).

Key finding: Tools vary, but the trend is towards automation and database integration to improve quality and consistency.

Presentation of data to the assessor team

- **Common formats:** Most submit charts, tables, and graphs.
- **Additional visual tools:** Some countries supplemented the presentation with PowerPoint presentations, interactive dashboards, or even videos.

Key finding: Presentation varies, although the common basis remains the use of tables and graphs.

Documentation of post-evaluation information needs to demonstrate effectiveness

- **"Yes" vs. "No" response:** Approximately half of the participants documented and prioritised information needs to support the effectiveness of the system; in other cases, this was not done or not formally documented.

Key finding: Documentation of needs is key to continuous improvement, and although several countries implement it, there is still room to standardise this process.

Performance improvements and aspects incorporated into the post-evaluation process

The comments in this section highlight several aspects:

- **Implementation of dashboards and automated reports:** Improving visualisation and access to real-time data.
- **Strengthening inter-institutional coordination:** Through the formation of working groups and information exchange protocols.
- **Continuous review and feedback:** Through management reports and inter-institutional meetings.

Key finding: Countries have undertaken various actions to improve the quality and efficiency of data collection and processing, demonstrating a process of continuous learning and adjustment.

Main difficulties during the mutual evaluation process

The challenges identified include:

- **Fragmentation and dispersion of data:** Different institutions collect information in a heterogeneous manner, leading to duplication and inconsistencies.
- **Lack of inter-institutional coordination:** The absence of a standardised exchange of information hinders consolidation.

- **Technical and formatting issues:** Different formats (manuals, Excel, etc.) and limitations in automation.
- **Staff turnover:** This affects continuity and consistency in data collection.

Key finding: Standardisation and centralisation of processes are critical to mitigating these difficulties.

Success factors and good practices

Among the practices highlighted by respondents are:

- **Inter-institutional working groups:** Facilitating coordination and unifying criteria.
- **Appointment of technical liaisons or points of contact:** Ensures continuity and systematisation of information.
- **Use of technological tools and automation:** With dashboards, proprietary systems, and validation processes.
- **Continuous training and feedback:** which allow for the adjustment and improvement of indicators and data quality.

Key finding: The combination of inter-institutional coordination, the use of technology, and ongoing training are essential factors for strengthening the statistical system in AML/CFT.