INTOSAI

Guidance on audit of the development and use of key national indicators

GUID 5290

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ABBREVIATIONS

GUID	INTOSAI Guidance
INCOSAI	International Congress of Supreme Audit Institutions
INTOSAI	International Organisation of Supreme Audit Institutions
ISSAI	International Standards of Supreme Audit Institutions
INTOSAI-P 1	The Lima Declaration
INTOSAI-P 10	the Mexico Declaration on SAI Independence
ISSAI 100	the Fundamental principles of public sector auditing
ISSAI 300	Performance Audit Principles
ISSAI 400	Compliance Audit Principles
ISSAI 3000	Performance Audit Standard
GUID 3910	Central Concepts for Performance Audit
GUID 3920	The performance auditing process
GUID 9020	Guidelines on the Evaluation of Public Policies (pre-IFPP document)
ISSAI 4000	Compliance Audit Standard
KNI	Key National Indicators
OECD	Organization for Economic Cooperation and Development
SAIs	Supreme Audit Institutions
SDGs	Sustainable Development Goals
UN	United Nations
WGKNI	INTOSAI Working Group on Key National Indicators

1. INTRODUCTION

1. As the pace of change accelerates in every aspect of life, national governments across the world are faced with new and more complex performance and accountability challenges. To tackle these challenges means to align the programmes and policies of governments with the outcome-oriented results that citizens care about. It requires making informed decisions on strategic goals and policy targets, taking measures to ensure economy, efficiency and effectiveness of their implementation as well as expected impacts attainment.

2. Given their roles and responsibilities within nations in ensuring performance and accountability, SAIs can play a significant role in identifying ways to address key national challenges.

3. A vital tool needed to address the challenges and achieve national outcomes is the development of performance measurement and impacts evaluation systems based on key indicators. Such systems may allow to assess conditions and trends, to measure progress toward desired outcomes, to testify the successful achievement of objectives and finally to assess the direct and indirect impacts of actions taken. These results may be used to inform strategic planning, enhance performance and accountability reporting and facilitate effective policy analysis as well as public policies and programmes evaluation.

4. Performance assessment systems based on key indicators was a theme at the XIX INCOSAI in Mexico in 2007 The Mexico Accords record the five roles SAIs may take in the development and use of indicators systems:

    a.   identification of the need for KNI within the country;
    b.   contribution to selected education and promotion efforts in connection with KNI;
    c.   assessment of the process used to develop the indicators and/or systems;
    d.   audit of the quality, validity, and reliability of the indicator information;
    e.   use of indicators to assess and report on national progress.

5. In order to facilitate information sharing among its member SAIs and to ensure their success in conducting the various roles related to working with Key National Indicators (KNI) INTOSAI WGKNI was created.

6. According to UN Resolution A/Res/70/1 (paragraphs 47 and 48), the governments have the primary responsibility for follow-up and review, at the national, regional and global levels, in relation to the progress made in implementing the UN SDGs and targets. "Indicators are being developed to assist this work. Quality, accessible, timely and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind. Such data is key to decision-making". The Crosscutting Priority 2 of the INTOSAI Strategic Plan 2017-2022 focuses on contributing to the follow-up and review of the SDGs within the context of each nation's specific sustainable development efforts and SAIs' individual mandate. Setting up suitable data frameworks at national level is a key part of integrating SDGs in national context and the follow up and monitoring of implementation of SDGs.

7. The *GUID 5290 Guidance on audit of the development and use of key national indicators* is developed within the INTOSAI Framework of Professional Pronouncements (IFPP) with the basic concepts and principles outlined in ISSAI 100 Fundamental principles of public sector auditing.

2. DEFINITION OF KNI

8. <u>Definition.</u> For the purpose of this GUID KNI are defined as a set of indicators used by the government in order to set objectives, monitor progress and evaluate goals attainment as well as to measure the performance of the government activities, programmes, policies, operations or undertakings, as well as the direct and indirect impacts of public policies and programmes.

9. As defined by ISSAI 300 Performance Audit Principles, performance auditing is an independent, objective and reliable examination of whether government undertakings, systems, operations, programmes, activities or organisations are operating in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement. The principles of economy, efficiency and effectiveness being defined as follows:

  − The principle of *economy* means minimising the costs of resources. The resources used should be available in due time, in and of appropriate quantity and quality and at the best price.

  − The principle of *efficiency* means getting the most from the available resources. It is concerned with the relationship between resources employed and outputs delivered in terms of quantity, quality and timing.

  − The principle of *effectiveness* concerns meeting the objectives set and achieving the intended results.

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10. The information about the quality and quantity of the resources used, outputs delivered and outcomes achieved is presented by the means of indicators, i.e. quantitative or qualitative measures that describe an economic, environmental, social, cultural, or other condition over time. Hence, an important tool for assessing economy, efficiency and effectiveness of government undertakings, systems, operations, programmes, activities or organisations is the inclusion of a set of indicators that can inform the strategic decision-making process. Auditing the development and use of indicators becomes relevant when the executive branch makes this important step.

11. Key indicators are also essential to measure the impact and utility of public policy and programmes and determine whether there is room for improvement in particular with the application of appropriate statistical and econometric techniques.

12. Development management models and performance or impact measurement methods largely depend on the country's existing political, legal and administrative systems. These systems may be both centralized and decentralized. Economic, social, and environmental indicators may be used for current monitoring of the socio-economic development of the state or may be used as part of the strategic decision making process and refer to government activities.

13. Indicators may be arranged into hierarchical, inter-related sets which include:
– Global indicators (e.g., UN Sustainable Development Goals),
– National indicators (e.g., environmental, health, education, social welfare),
– State/public sector indicators,
– Entity/government agency indicators, and
– Service, program, or policy indicators.

14. The delegates of XIX INCOSAI agreed that SAIs could examine (and use in their performance audits) the indicators at any level as well as the inter-relationships and alignment among levels.

15. A complete list of definitions used within the GUID is presented within Annex A.

3. OBJECTIVE

16. This GUID is non-mandatory guidance that is intended to support the SAIs that decide to conduct the audit of development and use of KNI..

17. This GUID is intended to enhance SAIs' operational performance in practice related to the audit of development and use of KNI. Accordingly, in the Part 5 of the GUID the ISSAI 3000 Performance Audit Standard and ISSAI 4000 Compliance Audit Standard are discussed and translated into more specific, detailed and operational guidelines.

18. This GUID contains a detailed and structured description of the audit questions relevant for the assessment of the proper functioning of performance or impact measurement systems. It may be used by SAIs while incrementally building capacities and competences needed for such an assessment.

19. This GUID also aims to support the auditors in understanding the specific subject matter of the audit of development and use of KNI as well as application of the relevant ISSAIs. This aim is achieved both via the discussion of fundamental auditing principles in the Part 5 and through the detailed description of the subject matter in the Part 6.

4. SCOPE

20. The scope of this GUID covers the audit and evaluation engagements as a key element of SAIs' efforts to ensure that relevant and reliable information is available and properly applied throughout the strategic decision-making process.

21. Elements of the audit of development and use of KNI may comprise an independent engagement or be a part of a more extensive audit that may also cover compliance, financial and performance audit aspects as well as a part of an overall evaluation. In the event of an overlap, all relevant standards should be observed. This may not be feasible in all cases, as different standards may contain different priorities. In such cases, the primary objective of the audit should guide the auditors as to which standards to apply.

22. Depending on the nature and composition of the performance measure system and corresponding indicators as well as the mandate, internal policies and results expected by the intended users of audit reports, SAIs may decide to concentrate in their efforts in audit engagements of development and use of KNI on any of the three principles (the economy, efficiency and effectiveness of government undertakings, systems, operations, programmes, activities or organisations) or any combination of the principles. SAIs may also decide to concentrate on the evaluation of the use of KNI in measurement of impacts and utility of public policies. The periodicity of such audits is determined individualy by each SAI.

23. An important special case of this GUID application is the audit of the preparedness and implementation of the UN SDGs at a national level. In particular, this GUID may be used to support the SAIs' undertaking to conduct an audit of preparedness of SDG implementation in line with the INTOSAI Development Initiative's (IDI) guidance document on "Auditing Preparedness for Implementation of Sustainable Development Goals".

24. This GUID is intended to be used during all the parts of the audit process defined in ISSAI 100.

25. In case the audit of KNI forms part of performance auditing engagements of the SAIs it's recommended to be used in line with ISSAI 300 and ISSAI 3000. It should also be read and used in conjunction with GUID 3910 and GUID 3920.

26. In case the government activities aimed to assemble and disseminate a set of KNI are explicitly regulated by parliamentary decisions, laws, legislative acts, policy, established codes or agreed upon terms the audit of the development and use of KNI may use the methods of compliance auditing, providing the intended user(s) with information on whether the audited public entities follow the relevant regulation. To allow for such cases the GUID is aligned with ISSAI 400 and ISSAI 4000.

27. This GUID provides supplementary audit guidance and does not contain any further mandatory requirements for the conducting of the audit. If the audit of the development and use of KNI is carried out on terms of other international or national standards the GUID can be used as a reference.

28. This GUID may be used by SAIs that carry out public policy evaluations with reference to GUID 9020.

29. SAIs may undertake attestation engagements aimed at enhancing the confidence in the information provided through the KNIs. Such attestation engagements are not covered by this GUID.

5. CENTRAL CONCEPTS FOR AUDIT OF DEVELOPMENT AND USE OF KNI

30. This part is intended to help the auditor interpret central concepts of the aforementioned standards while preparing and conducting the audit of development and use of KNI.

31. The part contains the requirements as they are outlined in relevant standards (indicated in bold) and comments intended to make it easier to understand and implement requirements of the standard while conducting the audit of development and use of KNI. Some of the principles of the ISSAI 300 and requirements of ISSAI 3000, such as *Confidence and assurance in performance auditing, Audit risk, Supervision, Professional judgment and scepticism, Communication, Quality control, Materiality* and *Documentation* are not mentioned in the part. If the audit of the development and use of KNI is carried out in the form of performance audit it is necessary to follow all requirements of appropriate standards.

32. In case the audit of development and use of KNI is conducted in the form of compliance audit, it is expected that organisation and conduct of the audit would in all relevant aspects follow the principles of ISSAI 400 and/or the requirements of ISSAI 4000.

5.1 Independence and ethics

33. **The auditor shall comply with the SAI's procedures for independence and ethics, which in turn shall comply with the related ISSAIs on independence and ethics (ISSAI 3000/21).**

34. **The auditor shall take care to remain independent so that the audit findings and conclusions are impartial and will be seen as such by the intended users (ISSAI 3000/23).**

35. Given their unique roles and responsibilities within nations in helping to promote transparency and ensure performance and accountability, SAIs can play a critical role in contributing to design, development, adoption, and continuous improvement of KNI. However, the Mexico Accords record that there was unanimous agreement among the delegates of XIX INCOSAI that SAIs' independence must be upheld and SAIs' credibility must be maintained regardless of the role, if any, assumed in working with KNI. Maintaining SAIs' independence is an important prerequisite for later audit the information produced by the indicators.

36. SAIs should seek to make positive contributions in this area as a way to enhance their value while managing any related independence risks. At the same time in line with Mexico Accords an SAI's decision regarding whether and how to do work related to KNI must solely be an outgrowth of its unique situation, including the SAI's mandate and capabilities, and its national needs and priorities.

37. Virtually all the delegates of XIX INCOSAI agreed that SAIs must not be—nor should they be seen as being—directly involved in selecting indicators; that is for policy makers and other political leaders to decide. Two ways to mitigate the perception of a loss of independence are widely applied. SAIs could maintain their independence by providing only technical/expert advice during the development of indicators and not participating in the actual selection of indicators. In particular such advice may contain a relevant set of features used to assess the quality of indicators and/or processes applied (these issues are discussed throughout Part 6 of the GIUD). Alternatively, another way that is widely followed is to not become directly involved

during the indicator development phase (but to contribute to it indirectly through audit work) and perform an auditing role after development.

5.2 Intended users and responsible parties

38. The auditor shall explicitly identify the intended users and the responsible parties of the audit and throughout the audit consider the implication of these roles in order to conduct the audit accordingly (ISSAI 3000/25).

39. The stakeholders responsible for the development and use of a KNI system should be identified. These may include institutions responsible for the KNI system development such as state authorities, research and development institutes, institutions engaged in the issues of the accountability of public policy, statistical institutions, or a network of several of the above-mentioned structures interacting on the basis of a special agreement. When identifying stakeholders, it is necessary to take into account historical, political, institutional and cultural factors specific to the country. The roles and responsibilities of each of the stakeholders need to be clear to all participating government departments. Depending on the stakeholders' roles as well as the SAIs' mandate, the institutions responsible for accumulation and dissemination of the data as well as the ones responsible for evaluation and analysis of the information contained in the performance measurement system may be considered a responsible party in the audit of development and use of KNI.

40. The intended users of the audit of development and use of KNI may include legislative or oversight bodies, including the center of the government, those charged with governance, general public or academia.

5.3 Subject matter

41. The auditor shall identify the subject matter of a performance audit (ISSAI 3000/29).

42. Where the SAI has discretion to select the coverage of compliance audits, the auditor shall define the subject matter to be measured or evaluated against criteria (ISSAI 4000/64).

43. The subject matter of the audit of the development and use of KNI may be twofold. On the one hand, it may deal with the quality and fitness for use of performance measurement system and in particular of the KNI used by specific undertakings, systems, operations, programmes, activities, public policies or organisations. Such a selection of the subject matter corresponds with the SAIs' roles of assessment of the process used to develop the indicators and/or systems and of the audit of the quality, validity, and reliability of the indicator information identified by the XIX INCOSAI. On the other hand, the audit of development and use of KNI may be focused on assessment and reporting on national progress with the use of indicators. The subject matter of the audit of development and use of KNI may include both of the audit questions or any combination of their parts.

44. The topic of development and use of KNI may prove out to be politically sensitive because the indicators are closely connected with the government or parliament goals and priorities. The audit of development and use of KNI examines whether the performance measurement systems and indicators used are suitable for assessing the efficient and effective implementation of decisions taken and the adequate impacts that were searched for. It does not question the intentions and decisions of the legislature or the executive but examines whether there are any shortcomings in development and use of performance measurement systems and

KNI. When an audit of development and use of KNI reveals weaknesses, a SAI is encouraged to present its findings, in such a way that creates opportunities to improve the performance or impact evaluation measurement systems.

45. In particular, it is worth noting that for the stakeholders, audit reports by the SAIs may be not the only form of assurance available regarding the quality of the performance measurement framework and KNI system. For example, results of independent monitoring by international organisations may be also available. Accordingly, taking into account the resources available, the auditors may decide to devote their efforts to those indicators where such monitoring might be missing or may be considered by a SAI as insufficient. During the reporting phase, if the audit findings complement or challenge the other reports on the subject, such findings would need to be adequately highlighted in the reports.

46. In line with the principles of ISSAI 300 a subject matter of a performance audit need not be limited to specific programmes, entities or funds but can include activities (with their outputs, outcomes and impacts) or existing situations (including causes and consequences). Timely, useful, reliable, and transparent information is the single most important and powerful tool nations have to facilitate strategic planning, assess progress, inform decision-making and strengthen accountability considered from performance-based and results-oriented points of view. Accordingly, the subject matter of the audit of development and use of KNI may include all the issues connected with development and functioning of performance measurement system;

47. In case of evaluation process, the auditors will have to face the difficult issue of frequent absence of KNI to measure the undesired or unexpected impacts of the evaluated policy, which, by definition, were not set up at the beginning when the policy was launched.

5.4 Audit objective(s)

48. The auditor shall set a clearly-defined audit objective(s) that relates to the principles of economy, efficiency and/or effectiveness (ISSAI 3000/35).

49. The auditor shall articulate the audit objective(s) in sufficient detail in order to be clear about the questions that will be answered and to allow logical development of the audit design (ISSAI 3000/36).

50. If the audit objective(s) is formulated as audit questions and broken down into sub-questions, then the auditor shall ensure that they are thematically related, complementary, not overlapping and collectively exhaustive in addressing the overall audit question (ISSAI 3000/37).

51. The main objective of the audit of development and use of KNI could be a constructive promotion of the implementation of evidence based strategic decision-making processes in which relevant and reliable information is available and properly applied throughout the stages. It is not only an important prerequisite of economical, effective and efficient governance, but also contributes to accountability and transparency. Fitness for use and overall quality of performance measurement systems are to be measured against suitable criteria, and the causes of deviations from those criteria or other problems are analysed. Results of the analysis may reveal feasibility of measures taken, as well as assessment of their impacts and associated risks.

52. Audit of development and use of KNI may be conducted in a form of prospective evaluation, ongoing monitoring or follow-up analysis.

– *Prospective evaluation* is used at the stage of development of the government activities, programmes, policies, operations or undertakings. The main objectives of an audit engagement in such an engagement are to ensure that the proposed performance

measurement system does not contain significant drawbacks, i.e. to ensure that the objectives are measurable, evaluation criteria are formulated and there is a provision for monitoring to provide up-to-date information on selected key indicators. A key issue in terms of this perspective is the quality of the key indicators proposed and whether the key indicators can measure the impacts of policies, program outcomes, and results of the activities. It may also allow assessing feasibility and quality of substantiation of goals and policy targets. It is the form of audit in which risk of loss of SAI's independence is the highest. At the same time, SAI's contributions at this stage when decisions are not yet made and actors are not yet entrenched may turn out to be most relevant.

– *Ongoing monitoring* is conducted during the implementation of the government activities, programmes, policies, operations or undertakings. It is aimed to assess the quality of ongoing monitoring that provides key information about the value of key indicators as well as keeping alignment of indicators as objectives may have changed. It may also include an assessment of whether it is still possible to attain the policy targets as well as to provide recommendations on changes to be made in order to achieve the goals and provoke the expected impacts.

– *Follow-up analysis* is conducted after the government activities, programmes, policies, operations or undertakings were fully implemented. It's not only intended to assess whether the goals were achieved and no undesired impacts were observed but also to make sure that necessary lessons were learned.

5.5 Audit approach

53. The auditor shall choose a result-, problem- or system-oriented audit approach, or a combination thereof (ISSAI 3000/40).

54. Audit of development and use of KNI may follow any of the three approaches outlined in ISSAI 300 and ISSAI 3000 (i.e., a system-oriented approach, a result-oriented approach, or a problem-oriented approach). In a case when questions on development and use of indicators form a part of a broader audit engagement the approach applied for these questions should be in line with the approach used for the engagement as a whole. If the audit of development and use of KNI is conducted independently or lies in the focus of the engagement the system-oriented approach, i.e. examination of proper functioning of performance measurement systems appears to be most appropriate. Still the selection of approach to be applied is solely up to the auditor. The structured description of the subject matter for the audit of development and use of KNI as well as sample sets of criteria outlined in Part 6 of this GUID are options on how to approach the audit, which is left to the auditor to decide.

55. It is important during the audit for the auditor to obtain a good understanding of the relevant internal control systems and examine whether there are any signs of irregularities that could hamper reporting of KNI (ISSAI 3000/74 and ISSAI 4000/131). The auditor should also understand any role an internal audit function has in relation to KNIs.

5.6 Audit criteria

56. The auditor shall establish suitable audit criteria, which correspond to the audit objective(s) and audit questions and are related to the principles of economy, efficiency and/or effectiveness (ISSAI 3000/45).

57. The auditor shall, as part of planning and/or conducting the audit, discuss the audit criteria with the audited entity (ISSAI 3000/49).

58. Where the SAI has discretion to select the coverage of compliance audits, the auditor shall identify relevant audit criteria prior to the audit to provide a basis for a conclusion/an opinion on the subject matter (ISSAI 4000/110).

59. In the audit of development and use of KNI audit criteria are the benchmarks used to evaluate the fitness for use and quality of performance measurement system as well as to measure the progress in attainment of strategic goals and policy targets. The audit objectives, questions and approach determine the relevance and the type of suitable criteria. Users' confidence in the findings and conclusions of a performance audit depends largely on the criteria. Thus, it is crucial to select reliable, objective, relevant, complete and understandable criteria.

60. There exist several pronouncements of international organisation on the matter of development and use of indicators sets that may be interpreted as KNI. Such documents describe the desirable features of the indicators used. The auditors may use such publications in order to obtain a deeper understanding of the methods applied in such issues as measuring the performance and impacts of programmes and policies as well as measurement of the progress of societies and peoples' well-being. A list of the relevant publications of international organisations is provided at the Knowledge base of KNI (http://kniknowledgebase.org/). The most important of publications presented in the Annex B.

5.7 Skills

61. The SAI shall ensure that the audit team collectively has the necessary professional competence to perform the audit (ISSAI 3000/63).

62. In order to be successful in conducting the audit of development and use of KNI SAI need to significantly expand the knowledge, skills, and abilities of their staff. Auditors working on KNI should have the analytical ability to look across the various issue areas, provide detailed perspectives on individual indicators and related data, such as data quality issues. It requires skills and knowledge in a number of technical areas important for work on indicators including statistics, data science, information technology, economics, and accounting, public administration, public policies and political science and other relevant areas as well as subject matter knowledge of key economic, environmental, social, cultural and political issues. The public policy evaluation process especially requires gathering a multidisciplinary team whose members will be skilled at handling and understanding a wide range of KNI belonging to many different fields.

63. SAIs also increasingly need to consider whether to contract for the specialized skills they need and how contract employees and permanent staff can be brought together to form effective partnerships. SAIs working with other SAIs (through INTOSAI or in another way) should strive to provide and encourage staff training and professional development. Such initiatives could help realize staff potential and inform staff of new concepts, techniques, and methods to fulfil the various roles associated with the design, development, adoption, continuous improvement, and auditing of KNI.

6. CRITERIA STRUCTURE FOR THE AUDIT OF DEVELOPMENT AND USE OF KNI

64. Pursuing a system-oriented audit approach, this part seeks to provide a structured description of the audit or evaluation questions relevant for the assessment of the proper functioning of performance and impacts measurement systems and KNI as their core part. The criteria and corresponding questions are arranged in six broad categories (domains), namely:

– assessment of the legal and methodological framework for the performance and impacts measurement system;

– assessment of sufficiency and relevance of the indicators set;

– assessment of the quality of the indicators set;

– assessment of coherence of the performance and impacts measurement system with other activities;

– assessment of feasibility and soundness of indicators values;

– assessment of adequacy of monitoring and evaluation procedures applied within the performance and impact measurement system.

65. Within each of the categories, the audit or evaluation questions are arranged into a hierarchical structure, a maturity model. As a result, the quality of the performance and impact measurement system in each of the domains is described in terms of discrete levels. Each level has one or several specific features that may be described with a corresponding audit or evaluation question. To be assessed as having a certain level of maturity in a domain the performance measurement system needs to satisfy all the requirements of this level as well as of all of the lower levels.

66. Such a structuring of the audit or evaluation questions and criteria appears to be advantageous from a number of points of view:

– first, it allows to limit the number of questions to be investigated during the conducting stage of the audit or evaluation. Usually, the questions corresponding to the lower level of maturity can be excluded from the scope of investigation during the planning stage of the audit or evaluation as being obviously satisfied. If during the conducting stage, criteria of a certain level are found to be unsatisfied, the questions corresponding to the higher levels of maturity may not be investigated since the overall assessment would not be affected.

– second, structuring of the questions in terms of maturity model enhances the recommended by ISSAI 300 formulation of constructive recommendations that are likely to contribute significantly to addressing the weaknesses or problems identified by the audit or evaluation. If the maturity of a KNI system in a certain domain is assessed at a certain level then the criteria of the next level that are found to be unsatisfied indicate the aspects in which the improvement would result in better functioning of the system as a whole.

– third, it allows for the natural structuring of questions focusing on what should be according to laws, regulations or objectives, could be given better conditions or is expected according to sound principles, scientific knowledge and best practice. Laws and regulations provide are generally a source of criteria corresponding to lower levels of maturity. Questions regarding what could be under better conditions, for example including laws and regulations used for other government activities, programmes, policies, operations or undertakings would form middle levels of a maturity model. While the sound principles, scientific knowledge and best practice provide criteria for the highest levels of maturity.

67. The questions in the maturity models below as well as their distribution between the levels are mainly illustrative and are expected to be adjusted according to the relevant laws,

regulations and practice during the planning stage of the audit. Alternatively, the audit team may decide not to stick to the structuring of the criteria in form of a maturity model. In this case, the models below may serve as a pool of questions that can be used to assess the quality of performance measurement systems. It is also worth noting that according to the SAI's mandate, internal policies or other considerations the audit or evaluation team may decide to limit the scope of their work to only some of the levels of the maturity model or only some of the domains.

6.1 Analysis of the legal and methodological framework

68. Analysis of the legal and methodological framework that regulates development, use and reporting on KNI is the first crucial step while conducting an audit or evaluation engagement. The framework may be outlined in a federal law or special regulatory documents reflecting the sphere of responsibility of all parties involved in the development and use of KNI. The use of KNI and reporting on them can also be regulated by the countries' strategic development documents or by the budget law as a part of the budgeting process. For some public policies supported by law, the law may itself fix the list and definition of KNI, which will be used for further evaluating the impact of its implementation.

69. Such a framework may establish formal procedures to develop KNI identify specific stages of the KNI system development as well as responsibility for each stage. It may also specify requirements that the indicators need to comply with to be included into the set of KNI. Another possible element of such a regulatory framework is an effective control mechanism that ensure compliance with the rules introduced and the adopted methodology. Finally, the framework may establish the roles and responsibility for the efforts to assemble and disseminate the KNI.

70. It is worth noting that the more mature and detailed framework provides better possibilities for SAIs to execute oversight over the processes of development and use of KNI. Accordingly, it allows for the use of compliance auditing approach for assessment of the other domains. In case such an approach is applied, it needs to be conducted in line with the principles of ISSAI 400 and requirements of ISSAI 4000.

71. On the contrary, the lower levels of maturity of the legal framework are a source of risk of spontaneous and arbitrary organisation of the performance and impact measurement system and its elements. At the same time the lack of direct requirements to how the development, use and reporting on KNI should be conducted means that while conducting the engagement auditors would need to rely primarily on the deep understanding of sound principles and best practice rather than on the direct regulatory requirements

72. The suggested maturity model for the domain of analysis of the legal and methodological framework:

Maturity levels	Definitions
Level-0: **No requirements**	No regulation or regulation does not contain any requirements concerning the use of KNI system.
Level 1: **Framework in Place**	The regulation contains only general requirements for the existence of the KNI

Level 2: **Detailed** **Framework**	The regulation contains a detailed description of requirements for the composition of the indicators set, the quality of indicators, the procedures to be followed while applying the KNI for monitoring and evaluation purposes as well as mechanisms to ensure compliance with the rules introduced and the adopted methodology. This is particularly common in public policies established by law defining its own future evaluation process.
Level 3: **Harmonized** **Framework**	The regulation requirements for the KNI system are harmonized with the national and international best practice of performance measurement

6.2 Analysis of sufficiency and relevance of the indicators set

73. A set of KNI is a tool intended to measure progress toward national outcomes, assess conditions and trends, and help communicate complex issues. It can inform strategic planning, enhance performance and accountability reporting, and facilitate effective policy analysis and program and public policy evaluations. In order to be successful in these roles a performance and impact measurement system needs to contain a set of indicators that capture all the relevant aspects of the problem in question. For example, in the context of the UN Agenda for Sustainable Development, it is important to assess whether the reliable disaggregated data needed to ensure that no one is left behind, mentioned in the UN Resolution A/Res/70/1, is available and used in the decision-making process.

74. The simplicity, breadth of coverage and the scale of the KNI system can vary widely. In general, given the optimal level of disaggregation, it is preferable to have a small number of indicators of good quality that address all the important issues. As there is no "right" number of indicators, the analysis of sufficiency of the indicators set does not need to mechanically concentrate on the number of indicators. On the contrary, it is expected, based on a careful textual analysis of proposed policies, systems, operations, programmes and activities, to clarify whether the set of indicators contains all the relevant information. Such an analysis may require an in depth understanding of the socio-economic processes underlying the policies in question on the side of the audit or evaluation team. It also requires a deep knowledge of the methods used in data assembly and processing.

75. The suggested maturity model for the domain of analysis of sufficiency of the indicators set:

Maturity levels	Definitions
Level-0: **No Indicators**	Goals attainment is not characterized by indicators or only amount of budgetary resources applied is used
Level 1: **Single Indicator**	Each goal or policy target is characterized by at least one indicator

Level 2: Multivariate assessment	- Each goal or policy target is characterized by a balanced set of indicators - All the indicators contain relevant information concerning the goal attainment - Indicators set contains measures of inputs, outputs and outcomes of goals attainment
Level 3: Inequalities and subjective assessment	- Indicators set provides relevant information about the inequalities in peoples' well-being in the sphere of programmes and activities implementation - Indicators set provides relevant information about the subjective assessments of outcomes and impacts

6.3 Quality of the indicators set

76. Another important group of questions concerning the quality of the performance measurement system deals with the quality, validity, and reliability of the indicators information. It includes a number of attributes that contribute to the usefulness of the data from the user's perspectives, i.e. it is fitness for use. While assessing an indicator fitness for use several aspects should be examined, such as accuracy, credibility, continuity, timeliness, accessibility, interpretability, coherence, validity, comparability and methodological soundness. The UN Resolution A/Res/70/1 emphasizes the need for "quality, accessible, timely and reliable disaggregated data".

77. The main characteristics used to assess the fitness for use of an indicator or indicators system outlined below are generally consistent with the recommendations of the international organisations. The auditors or evaluators may select a set of relevant features used to assess the quality of indicators taking into account state of development of the KNI system and its intended application. A generic set of characteristics include:

− *Accessibility* reflects the ready ability to locate and access data, including the suitability of the form in which the data are available, the media of dissemination, and the availability of metadata and user support services.

− *Accuracy* is the degree to which the data correctly estimate or describe the characteristics that they are designed to measure. It refers to the closeness between the values provided and the (unknown) true values and lack of bias. In general, the accuracy of the data is measured or described in terms of the error or the potential significance of the error.

− *Coherence* of data reflects the degree to which they are logically connected and mutually consistent. This implies that the same term should not be used for different concepts or data items without explanation. It also implies that variations in methodology that might affect data values should likewise not be made without explanation. Moreover, the methods used for data processing should also be consistent with indicators definitions, etc.

− *Comparability* of data reflects the degree to which it can be used both for international comparisons and for long-term inference.

− *Continuity* means that information that helps to determine the evolution of the issue being measured should be available.

− *Credibility* of data refers to the confidence that users place in data products based on their perceptions about the producer of the data. One important aspect is trust in the objectivity of the data, which must be perceived as professionally produced in accordance with appropriate statistical standards, having transparent policies and practices, and free of

manipulation or political pressure that implies the independence of the institutions that define the indicators, as well as those that measure progress towards the goals. As a result, such indicator is able to reflect both positive and negative results of policies, programmes or activities implementation.

−   *Interpretability* reflects the ease with which the user may understand and properly use and analyze the data. The degree of interpretability is largely determined by the adequacy and unambiguity of definitions of concepts, target populations, variables, and terminology underlying the data.

−   *Methodological soundness* implies endorsement and ready availability of the methodology for computation of the indicators values, which is expected to be coherent with the best practice and rely on up-to-date technologies.

−   *Timeliness* of data reflects the length of time between their availability and the event or phenomenon they describe, considered in the context of the time period that permits the information to be of value and still acted upon. It is also connected with the time schedule of the decision-making processes based upon the KNI. Accordingly, the values of timely indicators are expected to be available by the time the decisions need to be taken.

78. *Validity* is the extent to which a measure adequately represents actual performance and have a strong correlation with the objectives of the programmes, policies and activities. The relative importance of the aforementioned characteristics is defined by the purpose for which the KNI system is intended to be used. If the indicators are used within a monitoring of policy, programme or activity implementation as a measure of effectiveness and efficiency of the process in question within a certain time frame, then the most important features are the ones that ensure that the information is available and can be used for the monitoring purposes. On the contrary, if the indicators are used to assess the current position of a nation and, possibly, to outline the desired position, then the questions of comparability and methodological soundness become most important. Whatever the case the audit teams are encouraged to obtain during the preparation stage of the audit or evaluation a deep understanding of the purpose of the KNI system development and, consequently, to assess the relative importance of the characteristics. Based on this understanding, the characteristics of indicators fitness for use may be arranged into a maturity model.

79. In a special case of a KNI system used for the purposes of ongoing monitoring of a policy, programme or activity implementation an approximate maturity model of the indicators fitness for use may be compiled as follows.

Maturity levels	Definitions
Level-0:	No Indicators or no properties satisfied
Level 1:	The set of indicators satisfy the properties of timeliness, accessibility and credibility
Level 2:	The set of indicators also satisfy the properties of validity, comparability and methodological soundness
Level 3:	The set of indicators also satisfy the properties of coherence, interpretability and continuity

80. In a special case of a KNI system used for the purposes of situation analysis and international comparisons, such as a composite well-being index provided by supranational

organisations (i.e. UN Human Development Index or OECD Better Life Index), approximate maturity model of the indicators fitness for use may be compiled as follows.

Maturity levels	Definitions
Level-0:	No Indicators or no properties satisfied
Level 1:	The set of indicators satisfy the properties of comparability, validity and methodological soundness
Level 2:	The set of indicators also satisfy the properties of accessibility, credibility and interpretability
Level 3:	The set of indicators also satisfy the properties of coherence, continuity and timeliness

6.4 Coherence of the KNI system with other activities

81. Many outcomes cannot be achieved by ministries, government departments and agencies working in isolation. A whole-of-government approach recognizes the crosscutting nature of goals and related national sustainable development efforts, especially regarding complex public policies. It seeks to shift the focus of government performance toward the results and impacts that government seeks to achieve rather than the operations of any single programme or agency. Correspondingly, a whole-of-government approach shifts the unit of analysis of management, performance and impact measurement, reporting, and evaluation — from a single, stand-alone effort to a more general outcome attainment issues. It thereby maps the related contributions of different programmes and initiatives and poses questions about the degree to which these related efforts are aligned and coordinated. It implies considering the interconnections between institutional arrangements, programmes and initiatives.

82. From a point of view of indicators systems, the whole-of-government approach includes assessment of coordination and alignment of the KNI system audited with indicators used in different government policies, programmes or activities. Such a coherence includes the use of corresponding indicators and similarity of their definitions. The government policies, programmes and activities are expected to use the same basic assumptions and be developed within the same scenarios. Coherence of policy indicators needs to be based on the analysis of the relationship of public policies. For instance, policies are opposite, complement each other or policies can duplicate activities. Accordingly, the values of corresponding indicators need also to be harmonized. As all the countries and all stakeholders, acting in collaborative partnership, agreed upon the implementation of the 2030 Agenda for Sustainable Development the KNI system used needs to be consistent with the relevant SDGs and targets both in terms of indicators definitions and target values.

83. It is worth noting that the assessment of coherence of the KNI system with other activities does not necessarily require that all of the activities of the government are analysed within a single audit engagement. Such an extension of the audits scope may be found unpractical. In this regard, the assessment of coherence is aimed to find out if the performance and impact measurement system in question is properly functioning as an integral part of a strategic decision-making and implementation process. A corresponding maturity model may be formalized as follows.

Maturity levels	Definitions

Level-0: **No Indicators or connections**	Goals attainment is not characterized by indicators or goals are not aligned with the goals of other government activities or programmes
Level 1: **Coherent assumptions**	Different government activities, programmes, policies etc. have the same underlying assumptions
Level 2: **Coherent Definitions and Values**	- KNI related to different government activities, programmes, policies etc. have the same names and definitions - KNI related to different government activities, programmes, policies etc. have the same values
Level 3: **Coherence with SDGs**	- Designation of a responsible committee/entity to ensure coherence of the KNIs of different programs contributing to a goal or SDG - The degree to which related efforts are aligned and coordinated in line with a goal/SDG is determined - KNI related to different government activities, programmes, policies etc. are coherent with the relevant SDGs in definitions of indicators and their target values

6.5 Feasibility and soundness of indicators target values

84. One of the crucial questions in the assessment of government undertakings, systems, operations, programmes, activities or organisations is whether the country has set realistic targets. The same results attained would be considered too low in case of optimistic targets and very high with conservative ones.

85. The set of questions within the domain seeks to clarify whether the assumptions used while selecting that targets were explicitly outlined. It also seeks to ensure the existence of baseline data for identified indicators and a link between the actions implemented and the intended results. An important tool in analysis of feasibility and soundness of policy target is a comparison of the expected yearly changes in indicators values with similar cases in national and international practice. Finally, a sound rationale of the target values need to include the assessment of the indicators values in different possible situations (contingencies), including the external conditions, macroeconomic situation, different course of government undertakings, systems, operations, programmes, activities realization, etc. It may also include analysis of relevant risks. A corresponding maturity model may be formalized as follows.

Maturity levels	**Definitions**
Level-0: **No Indicators or Basis**	Goals attainment is not characterized by indicators or indicators have no target values or no underlying rationale is provided for indicators target values
Level 1: **Explicit Assumptions**	The assumptions used in the underlying rationale are explicitly outlined The statistical data used is adequate and reliable Incomplete baseline data for indicators
Level 2: **Feasible Assumptions and**	The assumptions used in the underlying rationale are feasible The methods used for projection are sound (for example the expected changes of indicators values are directly computable or consistent with

Sound Methods	national or international benchmarks)
Level 3: Managed Contingencies	Contingencies are adequately taken into account in the underlying rationale
	The most relevant risks are properly identified, assessed and managed

6.6 Adequacy of monitoring and evaluation procedures

86. In order to be an effective management tool the KNI need to be incorporated into the strategic decision-making process. Reporting is the compulsory element of KNI systems. It could be provided by government or other responsible institutions. The availability of the information is also very important. These reports should be available to the public and can be published on official websites of state institutions. The development and proper functioning of a KNI system (paying attention to control environment, risk assessment, control activities, information, communication and monitoring) can prompt a healthy national dialogue among citizens and government decision makers to reach a reasonable degree of agreement on measures of current performance, national progress and relative position. A corresponding maturity model may be formalized as follows.

87. Meanwhile cost-benefit analysis can be measured by comparing costs against output and outcomes.

Maturity levels	Definitions
Level-0:	The monitoring and evaluation are not conducted or are conducted informally and/or irregularly
Level 1:	- Roles in the monitoring process, information flows and data sources are explicitly described
	- Reports are regularly presented and contain a predetermined set of information
Level 2:	- There exists a formal procedure for performance measurement that explicitly takes into account quality of indicators (indicator value, accuracy of measurement etc.)
	- There exists a formal procedure for decision-making in case of problems encountered
Level 3:	Procedures used are harmonized with the national and international best practice of performance measurement.

6.7 Evaluation of goals attainment

88. One of the SAI's Roles Related to Working with KNI identified in the Mexico accords is the use of indicators to assess and report on national progress. SAIs can use the relevant information contained in KNI to provide a "report card" of the nation's position and progress, in a particular area or overall. Over time, SAIs could also use this information to assess trends and compare the nation's performance to those of others. In this regard, SAI's use of information on KNI may be considered as different from, but nonetheless a natural next step for many SAIs that are increasingly undertaking performance audits.

89. If a SAI decides to conduct an evaluation of goals attainment it may rely on the set of indicators used within the existing performance measurement system or on a built for a purpose

set of indicators. In the first case all the risks associated with the drawbacks in the functioning of the KNI system described in the previous sections need to be taken into account. In the latter case the suggested set of indicators need to be reviewed using the same questions as an existing KNI system. In any case the set of indicators and their values used to evaluate the goals attainment need, in line with the principles of ISSAI 300, and the requirements of ISSAI 3000 and GUID 9020, to be communicated with the audited or evaluated entities and, if necessary, with the intended users of the audit or evaluation reports. In line with GUID 9020, appropriate statistical and econometric methods may also be needed in order to account for possible confounding factors, when evaluating the attainment of policy goals.

90. In some cases, defining targets and assessing progress towards them may be considered to be outside SAI's mandate and to be more properly the role of elected officials and programme managers. Should this be the case, the SAI could limit its involvement to synthesizing and summarizing indicator information to provide an overview of the nation's performance, allowing decision makers to use this information make judgments about national position and progress. In any case, SAI's decision regarding whether and how to do work related to KNI must solely be an outgrowth of its unique situation, including the SAI's mandate and capabilities, and its national needs and priorities.

ANNEX A - Definitions

Compliance auditing   Compliance auditing is the independent assessment of whether a given subject matter is in compliance with applicable authorities identified as criteria. Compliance audits are carried out by assessing whether activities, financial transactions and information comply, in all material respects, with the authorities which govern the audited entity. (according to ISSAI 400)

Economy   The principle of *economy* means minimising the costs of resources. The resources used should be available in due time, in and of appropriate quantity and quality and at the best price. (according to ISSAI 300)

Effectiveness   The principle of *effectiveness* concerns meeting the objectives set and achieving the intended results. (according to ISSAI 300)

Efficiency   The principle of *efficiency* means getting the most from the available resources. It is concerned with the relationship between resources employed and outputs delivered in terms of quantity, quality and timing. (according to ISSAI 300)

Evaluation   Public policy evaluation is an examination aiming at assessing the utility of this policy. It analyses its objectives, implementation, outputs, outcomes and impacts as systematically as possible, measures its performance in order to assess its utility. Evaluation is therefore becoming increasingly important for the public debate insofar as political leaders need to make decisions based on evidence. (according to GUID 9020)

Indicator   An indicator is a quantitative or qualitative measure that describes an economic, environmental, social, cultural, or other condition over time.

Inputs (input indicators)   Input indicators represent the level of resources-material, energy, effort and money-used to produce an output.

Key national indicators   A set of indicators used by the government in order to set objectives, monitor progress and evaluate goals attainment as well as to measure the performance of the government activities, programmes, policies, operations or undertakings.

Outcomes (outcomes indicators)   Outcome indicators measure change that matters directly to a society, such as educational attainment levels.

Outputs (output indicators)   Output indicators measure change in the volume of products or services delivered, such as the number of arrests or enforcement actions taken. These types of indicators are important because outputs are usually produced in the hope of changing an outcome.

Performance Auditing	Performance auditing is an independent, objective and reliable examination of whether government undertakings, systems, operations, programmes, activities or organisations are operating in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement.
Progress	Progress means that life getting better for a society, as defined by members of that society. Progress may also be defined as success in attaining or nearing the goals that are established through a political process or other type of civic engagement. Progress is multi-dimensional and typically includes economic, social and environmental factors along with other areas that people see as important to life (for example, culture, or the quality of governance). Although progress implies change for the better, any assessment of progress must also include assessment of regress.
Relevance	Relevance of a policy is the adequacy of its objectives regarding the social, economic, or environmental needs that the policy wanted to meet. (according to GUID 9020)
Utility	Utility deals with the question of knowing whether the policy was worthwhile, taking into account all its direct effects (outcomes) and indirect effects (impacts), even unintended or unexpected, on the one hand, and the needs that this policy wanted to meet, on the other hand. (according to GUID 9020)

ANNEX B – Authoritative Sources

1. The UN efforts in organizing the SDGs attainment set a benchmark in development and use of KNI at international and national levels. Global indicator framework for the Sustainable Development Goals and targets for the 2030 Agenda for Sustainable Development was agreed upon at the 48th session of the UN Statistical Commission held in March 2017.

2. A substantial progress in development of methodology for measuring the progress of societies and peoples' well-being was achieved within the Organization's for Economic Co-Operation and Development Well-Being Initiative. The key concepts are outlined in:

- Hall, J. et al. (2010), "A Framework to Measure the Progress of Societies", OECD Statistics Working Papers, 2010/05, OECD Publishing.
- OECD/EU/JRC (2008), Handbook on Constructing Composite Indicators: Methodology and User Guide, OECD Publishing, Paris.
- OECD (2013), OECD Guidelines on Measuring Subjective Well-being, OECD Publishing, Paris,
- OECD (2016), Supreme Audit Institutions and Good Governance: Oversight, Insight and Foresight, OECD Public Governance Reviews, OECD Publishing, Paris.
- Exton, C. and M. Shinwell (2018), "Policy use of well-being metrics: Describing countries' experiences", OECD Statistics Working Papers, No. 2018/07, OECD Publishing, Paris.

3. Important insights on the topics of macroeconomic and financial stability as well as the use of indicators to assess the stability at national level may be drawn from International Monetary Fund's research on macroprudential regulation. Notable documents include

- "Macroprudential Policy: an Organising Framework" (2011).
- "Key Aspects of Macroprudential Policy-Background Paper" (2013).

4. Different sets of criteria are developed to assess the quality of indicators for policy implementation monitoring, including RACER indicators presented in the European Commission's Better Regulation Toolbox (2017).

5. Apart from above-mentioned publications, there are several tools which are of help to auditors mainly in setting audit criteria and identifying good practice. These tools are implemented for all audit topics and therefore can be used for development and use of KNI as well. The most used tools include:

- EUROSAI database of audits containing audit reports on various topics from EUROSAI Members (https://www.eurosai.org/en/databases/audits/).
- Experience in development of KNI systems can be shared within the Benchmarking International Exchange Project - BIEP (https://biep.nku.cz/). This tool may serve as a platform enabling easy cooperation and communication among auditors worldwide".
- The knowledge base on key national indicators. Information source of the INTOSAI Working group on key national indicators (kniknoweledgebase.org).