

## LEGAL FRAMEWORKS FOR NATIONAL PROJECTS: STANDARDIZED AUDIT AS A FACTOR IN ACHIEVING SDGs

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### ABSTRACT

**Objective:** The article suggests a comprehensive (standardized) approach to the audit of national projects which are tools for countries to achieve the UN Sustainable Development Goals. The study aims at developing the main directions of the audit of national projects carried out by the control and accounting authorities of the Russian Federation.

**Methods:** The study considers Russian and foreign project audit methods used in corporate and public sectors of the economy.

**Results:** The authors conclude that it is expedient to establish not only the task of assessing the efficiency and effectiveness of the use of budgetary funds but also the task of analyzing the achievement of the UN SDGs and national development goals as the main objectives of the state audit of national projects.

**Suggestions:** To solve these tasks, the following audit methods should be used: 1) the project audit that should embrace all stages of the project life cycle; 2) the audit of national project indicators to measure the effectiveness and evaluate the impact of various results of the national project implementation, including using the project maturity model.

**Keywords:** Sustainable Development Goals. Supreme audit institutions. Audit of national projects. Project audit. Audit of national project indicators.

**Received:** 24/11/2022

**Accepted:** 26/02/2023

**DOI:** <https://doi.org/10.37497/sdgs.v11i1.259>

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## **ESTRUTURAS LEGAIS PARA PROJETOS NACIONAIS: AUDITORIA PADRONIZADA COMO FATOR PARA ALCANÇAR OS ODS**

### **ABSTRATO**

**Objetivo:** O artigo sugere uma abordagem abrangente (padronizada) para a auditoria de projetos nacionais que são ferramentas para os países alcançarem os Objetivos de Desenvolvimento Sustentável da ONU. O estudo visa desenvolver as principais direções da auditoria de projetos nacionais realizadas pelas autoridades de controle e contabilidade da Federação Russa.

**Métodos:** O estudo considera métodos de auditoria de projetos russos e estrangeiros usados em setores corporativos e públicos da economia.

**Resultados:** Os autores concluem que é conveniente estabelecer não apenas a tarefa de avaliar a eficiência e eficácia do uso dos fundos orçamentários, mas também a tarefa de analisar o alcance dos ODS da ONU e das metas de desenvolvimento nacional como os principais objetivos do estado auditoria de projetos nacionais.

**Sugestões:** Para resolver essas tarefas, devem ser utilizados os seguintes métodos de auditoria: 1) a auditoria do projeto que deve abranger todas as etapas do ciclo de vida do projeto; 2) a auditoria dos indicadores do projeto nacional para medir a eficácia e avaliar o impacto de vários resultados da implementação do projeto nacional, inclusive usando o modelo de maturidade do projeto.

**Palavras-chave:** Objetivos de Desenvolvimento Sustentável. Instituições supremas de auditoria. Auditoria de projetos nacionais. Auditoria de projetos. Auditoria de indicadores de projetos nacionais.



## MARCOS JURÍDICOS PARA PROYECTOS NACIONALES: LA AUDITORÍA ESTANDARIZADA COMO FACTOR PARA EL LOGRO DE LOS ODS

### RESUMEN

**Objetivo:** El artículo sugiere un enfoque integral (estandarizado) para la auditoría de proyectos nacionales que son herramientas para que los países alcancen los Objetivos de Desarrollo Sostenible de la ONU. El estudio tiene como objetivo desarrollar las principales direcciones de la auditoría de proyectos nacionales llevada a cabo por las autoridades de control y contabilidad de la Federación Rusa.

**Métodos:** El estudio considera los métodos de auditoría de proyectos rusos y extranjeros utilizados en los sectores corporativo y público de la economía.

**Resultados:** Los autores concluyen que es conveniente establecer no solo la tarea de evaluar la eficiencia y eficacia del uso de los fondos presupuestarios, sino también la tarea de analizar el logro de los ODS de la ONU y las metas de desarrollo nacional como objetivos principales del estado. auditoría de proyectos nacionales.

**Sugerencias:** Para resolver estas tareas, se deben utilizar los siguientes métodos de auditoría: 1) la auditoría del proyecto que debe abarcar todas las etapas del ciclo de vida del proyecto; 2) la auditoría de los indicadores del proyecto nacional para medir la eficacia y evaluar el impacto de varios resultados de la implementación del proyecto nacional, incluido el uso del modelo de madurez del proyecto.

**Palabras clave:** Objetivos de Desarrollo Sostenible. Entidades fiscalizadoras superiores. Auditoría de proyectos nacionales. Auditoría de proyectos. Auditoría de indicadores de proyectos nacionales.

### INTRODUCTION

In 2015, the UN proclaimed a program aimed at achieving peace and prosperity for all the people of the planet, within which 17 Sustainable Development Goals (SDGs) were set stimulating economic growth, social inclusion, and environmental protection. As a tool for achieving the SDGs, nation-states are adopting a project-based approach that involves adapting the goals set out in the Sustainable Development Agenda (Resolution 70/1, adopted by the General Assembly, September 25th, 2015) to the implementation of national development projects. Supreme audit institutions (SAIs) play a strategic role in assessing the countries' achievement of the SDGs (Strategic plan 2017–2022, 2016). The practice of public



administration and scientific research (Fotina, 2017) confirm that the achievement of national goals and SDGs is impossible without an effective system of public audit, including financial control, control over the activities of public authorities, and performance audit. This approach is used by the SAIs of 169 countries that participated in the 23rd International Congress of SAIs held in Moscow, Russia in September 2019 (Congress of the International Organization, 2019). As a result of the Congress, 10 directions for the development of public audit were proclaimed, one of the key areas was stated as “the need to ensure the independent audit of the achievement of goals agreed at the national level, including SDGs” (The XXIII INTOSAI Congress, 2019). According to the Moscow Declaration, the Accounts Chamber of the Russian Federation monitors the implementation of national goals and national projects (Department of Research and Methodology, 2022). However, there is no unified methodology for auditing national projects, and there is no standardized approach. The study aims at developing an integrated approach to the audit of national projects to define and standardize the main directions and issues of auditing national projects. To achieve this objective, the study analyzes the Russian and foreign practices and methodologies of auditing projects used in the corporate and public sectors of the economy.

## LITERATURE REVIEW

Within the framework of this study, we considered scientific articles that address the audit (control) of project activities. A review of scientific literature has shown that most works are concerned with the issues of project management in both commercial and public sectors of the economy (Ribeiro, 2022). Many scientific works highlight the need to control the quality of planning projects and their targets. There is no doubt about the need to evaluate the effectiveness and achieve the final results of projects. However, not many works describe the standardization of audit (control) methods used in relation to national projects. We consider certain aspects and features of project management in the public sector, emphasize the need to assess the quality of project implementation, apply performance evaluation criteria and achieve targets. While analyzing the standards of project activities, S. Matos and E. Lopes (2013) noted the need to use the PMBoK and PRINCE2 methodologies generally accepted in international practice. Despite some fundamental differences in individual project stages, they contain requirements for monitoring its implementation and the need to know all risk factors. The prescriptive PRINCE2 methodology regularly reviews the ground and commitment to project deliverables, especially those that are resource constrained, contractual, and have a high-risk



profile. The setting of specific goals and objectives, the implementation of consistent and effective project management, as well as the involvement of end users and the observance of appropriate quality standards at various stages are also established by the APMBok standard. These provisions are consistent with the practice of implementing national projects and can be considered when developing audit (control) standards for project activities in the public sector.

O.S. Famuwagun (2020) singled out quality planning and consistent monitoring at all stages of project implementation as key success factors for project activities. S. Gasik (2016) pointed out the need for a high-quality selection of projects during their initiation. The importance of good planning as an analytical basis for evaluating the results of each project was emphasized by B.M. Belcheretal (2019). The authors proposed a model that allocates project stakeholders and includes a methodology for evaluating the project results.

F.H. Abanda et al. (2022) noted that public projects have a complex structure and involve too many criteria that sometimes contradict each other, which cannot but create difficulties in assessing their implementation and achievement of final goals. In addition, the authors emphasized the need to determine the contribution of a particular project to the achievement of national development goals.

## METHODS

Within the framework of this study, we analyzed the practice of auditing projects in the public administration sector, the corporate sector of foreign countries and the Russian Federation, and international organizations, which allowed us to determine common methodological approaches to its implementation.

To analyze project audit methods used in the public administration sector of international organizations, we studied the experience of countries that have developed a documented rationale for public audit methods that provide for the integration of the SDGs into national projects. The results of the analysis conducted are presented in Table 1.



**Table 1.** The analysis of project audit methods applied in the public administration sector by international organizations

Country	Documentation of the methods used to audit the readiness of public administration systems for the implementation of the SDGs	Experience implementation
Canada	2018 Spring Reports of the Commissioner of the Environment and Sustainable Development INTOSAI Development Initiative: Auditing Preparedness for Implementation of SDGs – Guidance for SAIs (2017) OAG’s Environment and Sustainable Development Audit Guide (2017) OAG performance audit training: Fundamentals of E&SD adapted to the SDGs (2017) OAG Sustainable Development Strategy integrates the SDGs (2018)	Testing a seven-stage model that allows mapping the key steps in the field of public administration aimed at integrating the SDGs. Each of the steps is presented in the form of a criterion, whose assessment would make it possible to conclude the public administration system and its compliance with the set goals. Accordingly, the process of preparing for the implementation of the SDGs is effective.
Ghana	INTOSAI Development Initiative: Auditing Preparedness for Implementation of SDGs – Guidance for SAIs (2017) Performance Audit Report of the Auditor-General – Government of Ghana’s Preparedness for Implementation of SDGs (2017)	Developing the approach proposed by IDI-KSC through adapting each of the proposed areas to the national specifics.
Latin American countries (coordinated audit exercise)	Coordinated audit on the preparedness of Latin American governments to implement the SDGs (2017) TCU’s Guidelines for Governance Assessment of the Center of Government (2016) IDB’s Governing to Deliver: Reinventing the Center of Government in Latin America and the Caribbean (2014) TCU’s Framework for Evaluating Governance of Public Policies (2014)	Consolidating several states within one region, when conducting an audit. The model aims at assessing the measures to implement national policies and ensure their compliance with national goals. As part of this assessment, 11 criteria are proposed that reflect each level of public administration systems.
Indonesia	INTOSAI Development Initiative: Auditing Preparedness for Implementation of SDGs – Guidance for SAIs (2017) Interim Reference Guide to UN Country Teams – Mainstreaming the 2030 Agenda for Sustainable Development-Reference Guide ISSAI 300 Fundamental Principles of Performance Auditing ISSAI 3000 Standard for Performance Auditing ISSAI 3100 Guidelines on Central Concepts for Performance Auditing ISSAI 3200 Guidelines for the performance auditing process and Indonesian Public Sector Audit Standards of 2017	Adapting the model proposed by IDI-KSC to the objectives of the audit. Presenting each of the areas in the context of the proposed measures taken by the government to integrate the SDGs into the national specifics.

\*Compiled by the authors

To develop common approaches to the methodology for auditing national projects, the methods of auditing projects used in the corporate sector of foreign countries and the Russian





Federation were studied. This allows us to adapt the methods of auditing commercial projects, which have proven their effectiveness, to the conditions and requirements of the public sector (Table 2).

**Table 2.** The analysis of project audit methods used in the corporate sector of foreign countries and the Russian Federation

Country/methodology	Documentation of the methods used to audit projects in the corporate sector of foreign countries and the Russian Federation	Experience implementation
USA	PMBok, A Guide to the Project Management Body of Knowledge (the last edition of July 2021)	Formulating issues that determine the success of national projects. Forming a database of the best practices (disadvantages) for the implementation of national projects to use and consider in future implementation. Conduct individual risk audits of national projects. Conducting a quality audit of the project implementation to determine the compliance of the process with the established procedures and rules, as well as deviations.
Great Britain	PRINCE2 – Projects in Controlled Environments (the last edition of 2017)	Improving the rationale for the need to implement national projects. Accumulating experience by highlighting the best/worst practices for the implementation of national projects in the reporting documents based on the audit results. Taking into account specific features of individual projects. Requirements for the quality of results and the need for project risk assessment.
Japan	The Guidebook for Project and Program Management for Enterprise Innovation (P2M)	The completeness of national strategic documents in national projects considered, as well as compliance with them. The non-duplication and non-contradiction of actions taken by participants in national projects.
Germany	Series of standards for multi-project management – DIN 69909 “Management of several projects – management of project portfolios, programs and projects”/GPM Deutsche Gesellschaft für Projektmanagement	The synergy effect from the implementation of a set of national projects. The openness and transparency of the results achieved, current achievements, and future plans for the implementation of national projects for study by the parties involved. The identification and assessment of risks and opportunities, possible consequences of their



		implementation, and preventive measures. The periodic analysis and control of deviations and threats to the implementation of national projects.
Kazakhstan	National standards of the Republic of Kazakhstan from 2012: - ST RK ISO 21500-2014 Project management guidelines; - ST RK 2831-2016 Project management. Project management requirements; - ST RK ISO 21504-2016 Portfolio management guide; - ST RK 21503-2018 Program management guidelines; - ST RK 21505-2018 Project, program, and portfolio management – general management guidance	Implementation control (types of control, frequency of data collection to ensure proper control).
Russia	GOST R ISO 21500-2014 “Project Management Guide”; GOST R 54869-2011 “Project management. Requirements for project management”; GOST R 54870-2011 “Project management. Requirements for project portfolio management”; GOST R 54871-2011 “Project management. Program management requirements”	A mechanism for auditing the quality of planning the needs of national projects in accordance with the strategic development goals. Reporting is not so much about the project implementation, but about the achievement of planned results and benefits. National project risk audit methodology. A mechanism for monitoring the implementation of national projects using the performance evaluation indicator. These consider not only the achievement of key indicators but also their impact on the achievement of national goals.
Corporate methods of foreign countries		
UNIDO	United Nations Industrial Development Organization (UNIDO) is an organization supporting developing countries	Significant attention to the pre-investment phase with the objective of the most accurate and complete assessment of all project costs.
Theory of change	Based on the ideas of Harvard professor C. Weiss, 1995	Determining cause-and-effect relationships between elements in the constructed chain of changes based on modeling the behavior of agents (executors and beneficiaries of the project).
Cobb-Douglas production function	A two-factor mathematical model demonstrating the dependence of the volume of production (Q) on the factors of labor (L) and capital (K) that create it	Determining the effect of the implementation of national projects on economic growth. The possibility of determining the multiplier effect in the economy, which should arise in the process of implementing national projects.

\*Compiled by the authors





The comparison of project audit methods used in international organizations, the public administration sector, the corporate sector of foreign countries, and the Russian Federation allows implementing the best practices of the corporate sector and foreign experience in the methodology for auditing national projects of the Russian Federation.

## RESULTS

The following methods have been identified as priorities, which can be used during the audit of national projects.

### 4.1 Project audit

The use of this type of audit is justified by the high level of management and the importance of the tasks that are planned to be solved using such a mechanism as a national project. A project audit aims at evaluating projects and is supposed to be carried out at all stages of the project life cycle: from auditing the need for its initiation to summing up the results. In this case, a project audit should be not so much an audit of the results and resources used, whose assessment can also be based on the existing and widely used forms of audit, but rather an audit of project management or an audit of the implementation of a portfolio of projects.

Based on the specifics of the tasks, the following areas should be regarded as priorities of the methodology for organizing and conducting an audit of national projects from the viewpoint of project management: content audit, audit of project architecture management (integration and communication), audit of information resources, audit of cost management, audit of time management, and risk audit.

#### 4.1.1 Audit of national project content management

The audit of national project content management should begin with an assessment of the description of the final product, the specification of its development requirements, its comprehensive understanding by the project organizers and executors, and its ultimate goals and compliance of the final product with these goals. The content (set of properties) of the created product determines the composition of measures for its implementation, relations between the participants, and the resources necessary for implementation. In relation to national projects, the concept of content includes the expected results of federal projects.



The application of project management methods to the audit of national project content management requires the identification of its results in relation to the improved system. Such an assessment must be made not only in relation to all the generalized indicators of the national project included in its design passport but also in relation to the driver objects identified as the project's calling card and declared as public obligations.

If it is challenging to assess a significant increase in sectoral natural indicators due to the national project implementation, then additional information should be requested from the responsible executors to substantiate the selected indicators and form solutions for the national project. If the final products meet all modern requirements and ensure movement toward the declared national goals, an assessment of the results is required in relation to the existing system of indicators. It is necessary to assess the share of resources allocated to obtain the results of the national project, i.e. the results as a whole and the resources within the state program. The analysis of the project's content should answer questions related to the uniqueness of its product and results and, consequently, the validity of the project form of management.

#### **4.1.2 Audit of national project architecture management**

The audit of national project architecture management includes an assessment of the conformity of the adopted forms of project management with the socio-economic development goal of the state to be achieved in the course of its implementation. The objects of this audit comprise the organizational structure of the national project management; composition and completeness of regulatory documents; the procedure for interaction and consideration of the requirements of all project stakeholders; the procedure for obtaining and structuring information on the planned and actual state of the project.

Since one of the essential and distinctive features of any project is the creation of a new unique product, management should provide a prompt response to emerging changes, redistribute resources, inform the executors about targets, and specify product requirements in conformity with the customer's feedback. National projects are being developed and implemented over a significant time interval (2018-2024), therefore the requirements for their final products on the part of individual participants might change.

The audit of national project architecture management should also assess the information exchange of all project participants, the procedure for collecting reports on the current execution of projects, and the complete coverage of all performers and activities. One of the tasks of this audit is to identify conflicts between the requirements of documents for the formation and



implementation of a national project as a whole and the specifics of its sectoral or regional activities. In this regard, the assessment of management architecture can also include the results of an audit of information resources and systems used in the management of a national project.

#### **4.1.3 Audit of information resources**

The most important element of any audit is the choice of information sources and methods of obtaining data for the audit of a national project with due regard to various types of audits. The types of information obtained during this audit determine the specific methods of its analysis and processing and presentation of results. Information and analytical support of the audit is part of the methodological support for the activities of control and accounting bodies and includes cumulative knowledge in the field of audit that embraces the best audit practices.

Information and analytical support includes resources of the information and telecommunication system of the Accounts Chamber of the Russian Federation: databases, directories, classifiers, software complexes, hardware and software systems, etc. Methods for obtaining and processing information can be improved both in terms of volume and nomenclature of information exchange and in terms of technologies for the exchange and use of information. The efficiency of the audit of a national project can be increased through 1) obtaining and using information from other control and accounting bodies; 2) receiving and using information from internal audit units; 3) improving the methods of obtaining and processing information through the introduction of digital technologies, including:

1. Using digital technologies in an audit, which requires the development of special tools for searching, obtaining, and analyzing information for these purposes.
2. Improving the methods of auditing the processes of spending budgetary funds aimed at creating products in the field of digital technologies.
3. Developing new approaches to auditing the effectiveness of information technologies introduced into the public administration system by a national project, which leads to the improvement of audit methods with due regard to the use of digital methods.

#### **4.1.4 Time management audit**

A time management audit includes an assessment of the formation and execution of the national project schedule. Certain project deadlines, after which the results are either greatly devalued for individual project participants or become completely irrelevant, are a significant



project-forming factor.

In the context of a wide range of activities of individual national projects, it is impossible to develop a unified sequence of the key project stages but some groups of projects should be considered in terms of passing the stages of their life cycle. The Project Office of the Government of the Russian Federation has done significant work to unify the control points for standard results included in federal programs, which proves the importance of a time management audit (Methodological guidelines on the application of types of results and standardized benchmarks of federal projects, 2019). When auditing time management in infrastructure projects (a significant part of all national projects in terms of money), it is necessary to use certain types of control points for project stages. In this regard, a time management audit should assess the timing of obtaining the key results of a national project and the ability of management bodies to change (reduce) the timing of certain stages of projects.

The experience of project implementation shows that the failure to meet the deadlines for obtaining the planned results always leads to additional resource costs. Since national projects are part of state programs, time deviations (putting new infrastructure facilities or new equipment into operation, training the required number of specialists, and the development and implementation of new information services) reduce effectiveness and other derived indicators. While auditing timing management through the assessment of the final results of a national project or the forecast of these indicators, it is necessary to evaluate the impact of the final results (total results of federal programs) on the achievement of strategic priorities and national development goals.

#### **4.1.5 Risk audit**

The general methodology of project management provides for mandatory risk analysis in the project and the development of possible response measures to adverse events associated with their implementation. Risk management processes are an integral part of such project activities as project management, which is enshrined in the methodological recommendations for organizing project activities by federal executive authorities (Methodological recommendations on the organization of project activities in the federal executive bodies, 2018). These recommendations for risk management comprise project risk assessment, risk and opportunity (positive risk) planning, risk mitigation, risk monitoring, and risk analysis. However, the passports of national projects do not contain a predictive risk assessment. However, in the context of the ongoing geopolitical and sanctions pressure on the Russian



economy, project executors should consider possible adverse situations and develop and implement countermeasures within a risk audit.

In relation to national projects, a risk audit includes the analysis of possible risks at the planning stage and the assessment of response measures taken by the project team, including the volume of budgetary and extra-budgetary funding, as well as ways to hedge possible risks through the legal and regulatory support plan for their implementation.

#### **4.2 Audit of national project indicators**

The Guidance on the audit of the development and use of key national indicators (GUID 5290 (2019) Guidance on the audit of the development and use of key national indicators (hereinafter referred to as the Guidance) will define a wide range of indicators that can be ordered into hierarchically interrelated sets:

- global indicators (for example, the SDGs);
- national indicators (for example, related to the environment, health, education, and welfare);
- state/public sector indicators;
- indicators of state bodies and organizations;
- indicators of the implementation of services, programs, or policies.

Different results of national projects (Methodological guidelines on the application of types of results and standardized benchmarks of federal projects, 2019) can be characterized by different types of indicators. An indicator is a quantitative or qualitative measure (characteristic) that describes economic, environmental, social, cultural or other categories over time. Table 3 shows the types of results and their corresponding indicators.



**Table 3.** Types of results and corresponding indicators

Contribution (indicators of the resources used)	Resource utilization metrics reflect the level of resource consumption (materials, energy, effort, and money) used to obtain immediate results.
Immediate results (indicators characterizing immediate results) (including intermediate results)	Output indicators reflect changes in the volume of goods or services supplied, such as the number of decisions to stop a process or ensure their enforcement. These metrics are important because products are usually made to influence the final result or outcome.
Final results and effects (the indicators of outcomes and effects)	The indicators of achieved results and effects reflect changes that are important for society (for example, the level of education).
Assessment (public policy)	The assessment of public policy is a study aimed at identifying its usefulness in relation to the national projects being implemented. In the course of assessing the usefulness of such a policy, there is a systemic analysis of the fulfillment of its tasks (goals), implementation, immediate results, and final results and effects. Such an assessment becomes more and more important for public discussions since public authorities shall make decisions based on verified data.

\*Compiled by the authors based on the analysis of GUID 5290 (2019)

When auditing national project indicators, concepts are used that relate to the functioning of systems for measuring effectiveness and evaluating effects connected with the evaluation of various results of a national project. The components of this audit can be independent tasks or constituent elements of a broader audit, including elements of financial, performance, and strategic audits, and also be part of a comprehensive assessment. In case of overlapping, all applicable auditing standards should be considered. However, this might not be feasible in all cases as different standards contain different priorities. In such cases, when choosing a standard to apply, auditors should be guided by the primary audit objective.

An audit of the development and formation of national project indicators can be carried out in the form of a preliminary assessment, current monitoring, and subsequent analysis.

A preliminary assessment is used at the formation stage of government activities, programs, policies, operations, or initiatives.

The current monitoring is carried out during the implementation of programs, policies, operations, initiatives, or government activities.

The subsequent analysis is conducted after a government activity, program, policy, operation or initiative has been fully implemented. It is intended not only to assess whether goals have been achieved and whether undesirable consequences have been present but also to ensure that the necessary conclusions have been drawn.

The system for measuring effectiveness and evaluating influence is formed by a set of regulatory and methodological documents that determine the formation, implementation, and assessment of the final effects and consequences of a national project. The latter should be evaluated using a system of relevant indicators.





Within the framework of a system-oriented audit approach, the criteria and related issues are proposed to be divided into six categories:

1. The assessment of the legal and methodological base of the measurement system.
2. The assessment of the sufficiency and relevance of a set of indicators.
3. The assessment of the quality of a set of indicators.
4. The assessment of the consistency of the measurement system with other activities.
5. The assessment of the feasibility and validity of indicators.
6. The assessment of the sufficiency and consistency of monitoring procedures, as well as the measurement system.

Within each category (subject area), the issues of audit or evaluation can be organized into a hierarchical structure called a maturity model. Under this approach, the quality of the measurement system is described using levels. Each level has one or more specific features that can be described using an appropriate issue of audit or evaluation. To be assigned a certain level of maturity in the relevant area, the performance measurement system should satisfy all the requirements of this level, as well as those of lower levels.

This structure of audit issues or evaluation criteria seems to be the most appropriate from several viewpoints.

Firstly, it limits the number of issues to be examined during the audit or evaluation phase. As a rule, matters corresponding to a lower level of maturity can be excluded from the list at the planning stage since the relevant requirements are met. If during the audit or evaluation phase, some criteria are not met, the issues corresponding to higher levels of maturity might not be investigated since this will not affect the overall assessment.

Secondly, structuring issues into levels of the maturity model helps formulate constructive recommendations that can address weaknesses identified during audits or assessments. If the maturity of indicators in some area is assessed at a certain level, those criteria of the next level that are not met will indicate the aspects in which adjustments will improve the functioning of this system as a whole.

Thirdly, it is possible to structure issues based on compliance with laws, regulations, or goals, whether better conditions can be provided or those that are expected in accordance with common sense, scientific knowledge, and best practice. Laws and regulations are usually the sources of criteria corresponding to lower levels of maturity. Middle levels of the maturity model contain issues related to a more favorable environment, for example, laws and regulations used for other government activities, programs, policies, operations, or initiatives.



Criteria for the highest levels of maturity are based on sound principles, scientific knowledge, and best practices (Sarker, Sharma, 2022).

A set of national project indicators is a tool designed to measure progress toward the achievement of results and effects, assess conditions and trends, and facilitate the exchange of information when solving complex issues. It can be a source of information for strategic planning that improves communication on performance and accountability and contributes to public policy performance analysis and assessment of all stages of a national project. To be successful in these areas, the system for measuring performance and evaluating its impact should contain a set of indicators that cover all the relevant aspects of the issue under consideration.

Since there is no right number of indicators, the analysis of their sufficiency should not focus on their number. On the contrary, it is necessary to find out whether the set of indicators contains all the related information based on a thorough text analysis of the proposed policies, systems, operations, programs, projects, and activities included in them. This analysis might require an in-depth understanding of the socio-economic processes underlying the policy under consideration by the audit or evaluation team. They also need deep knowledge of the methods used in data collection and processing.

To qualitatively assess the implementation of a national project, maturity models can be used to evaluate various activities and get a general idea of different stages in the evolution of maturity. The maturity model is a hierarchical structure of audit or evaluation issues within each subject area. To be assigned a certain level of maturity in the relevant area, the performance measurement system should satisfy all the requirements of this level, as well as those of all lower levels. In relation to the subject of national projects, there are the following models of maturity:

1. The strategic management maturity model.
2. The risk management maturity model.

The issues of these maturity models and their tiering are illustrative and should be adjusted in accordance with laws, regulations, and practices during the planning phase of an audit. Alternatively, the audit team might decide not to structure criteria in the form of a maturity model. In this case, these models can serve as a source of issues that can be used to assess the quality of performance measurement systems. According to the mandate, internal policies, or assessment, the control body might decide to limit the review to only some levels of the maturity model or only some of the subject areas.



Table 4 shows a possible maturity model for analyzing the legal and methodological framework for the formation and implementation of a national project.

**Table 4.** A possible maturity model for analyzing the legal and methodological framework for the formation and implementation of national projects

Maturity levels	Definitions
Level 0: the lack of requirements	The legal and methodological framework is absent or does not contain any requirements regarding the use of the system of indicators.
Level 1: there is a legal and methodological basis	The legal and methodological framework contains only general requirements for the availability of indicators.
Level 2: detailed legal and methodological framework	The legal and methodological framework contains a detailed description of the requirements for the set of indicators, the quality of the indicators, the procedures to be followed when using the indicators for monitoring and evaluation purposes, as well as the mechanisms for ensuring compliance with the introduced rules and adopted methodology. This is especially common in public policies, where their evaluation is predetermined by law.
Level 3: harmonized and consistent legal and methodological framework	The requirements for the system of indicators contained in the legal and methodological framework are fully consistent with the best national and international practices for measuring performance.

\*Compiled by the authors based on the analysis of Clause 2 of GUID 5290 (2019)

Table 5 demonstrates a possible maturity model for analyzing the sufficiency and relevance of a set of indicators.

**Table 5.** A possible maturity model for analyzing the sufficiency and relevance of a set of indicators

Maturity levels	Definitions
Level 0: the lack of indicators	The achievement of goals is not described using indicators or only the amount of budgetary resources used is taken into account.
Level 1: the only indicator	Each goal or objective of a program or policy is characterized by at least one indicator.
Level 2: multivariate evaluation	<ul style="list-style-type: none"> <li>- Each goal or objective of a program or policy is characterized by a balanced set of indicators;</li> <li>- All indicators contain information that is directly related to the achievement of the goal;</li> <li>- A set of indicators reflects the amount of resources used, immediate results and final results and effects obtained in the process of achieving the goals.</li> </ul>
Level 3: inequality and survey scores	<ul style="list-style-type: none"> <li>- A set of indicators contains information directly related to the inequality of human well-being in the area of program and policy implementation;</li> <li>- A set of indicators contains relevant information obtained from surveys on the results and effects achieved.</li> </ul>

\*Compiled by the authors based on the analysis of Clause 75 of GUID 5290 (2019)

The third-level requirement that a set of indicators contains information directly related to inequality in human well-being during the implementation of programs and policies is conditioned by the requirements of the SDGs.

The requirement that a set of indicators contains the relevant information obtained as a result of surveys on the final results achieved and the effects of a national project is significant as it ensures communication between the organizers of a national project and the consumers of



its results. The question might arise about the formation of additional indicators for assessing the use of the final results of national projects and the effects of their mutual influence through expert assessments and surveys. The methodology for measuring additional indicators involves the use of expert assessments and surveys of the users involved.

Let us consider a possible maturity model of the feasibility and validity of the target indicators.

One of the most important issues in the assessment of government initiatives, systems, operations, programs, activities, or organizations is the question of whether national goals are realistic. They also need to be assessed in relation to a certain national project. The choice of a starting point is crucial since the same results achieved will be considered too low in the case of optimistic goals and very high in the case of conservative ones. A set of issues within this subject area is intended to clarify whether the assumptions used in selecting these targets have been clearly stated. This set should also provide a starting point and a business-as-usual scenario for the set of indicators and serve as a link between the actions taken and the intended results. An important tool for analyzing the feasibility and validity of goals is to compare the expected annual changes in the indicators with similar cases in national and international practice. Finally, a rationale for target values should include an assessment of such indicators in possible situations (unforeseen circumstances), including external and macroeconomic conditions, various government initiatives, systems, operations, programs, and activities. The corresponding maturity model can be formalized in Table 6.

**Table 6.** A possible maturity model for the feasibility and validity of target values

Maturity levels	Definitions
Level 0: the lack of indicators or initial data	The achievement of goals is not characterized by indicators or indicators do not have target values, or there is no justification for the possibility of achieving the target values.
Level 1: explicit assumptions	- The assumptions used in the justification are clearly stated; - Acceptable and reliable statistical data are used; - Starting points and inertial scenarios are available only for some indicators.
Level 2: realistic assumptions and substantiated methods	- The assumptions used in the justification are realistic; - The methods used for forecasting are reasonable (in particular, expected changes in indicators are calculated directly or follow national or international examples).
Level 3: manageable unforeseen conditions	There is a plan of action in case of risks. The most significant risks are correctly identified, assessed, and managed.

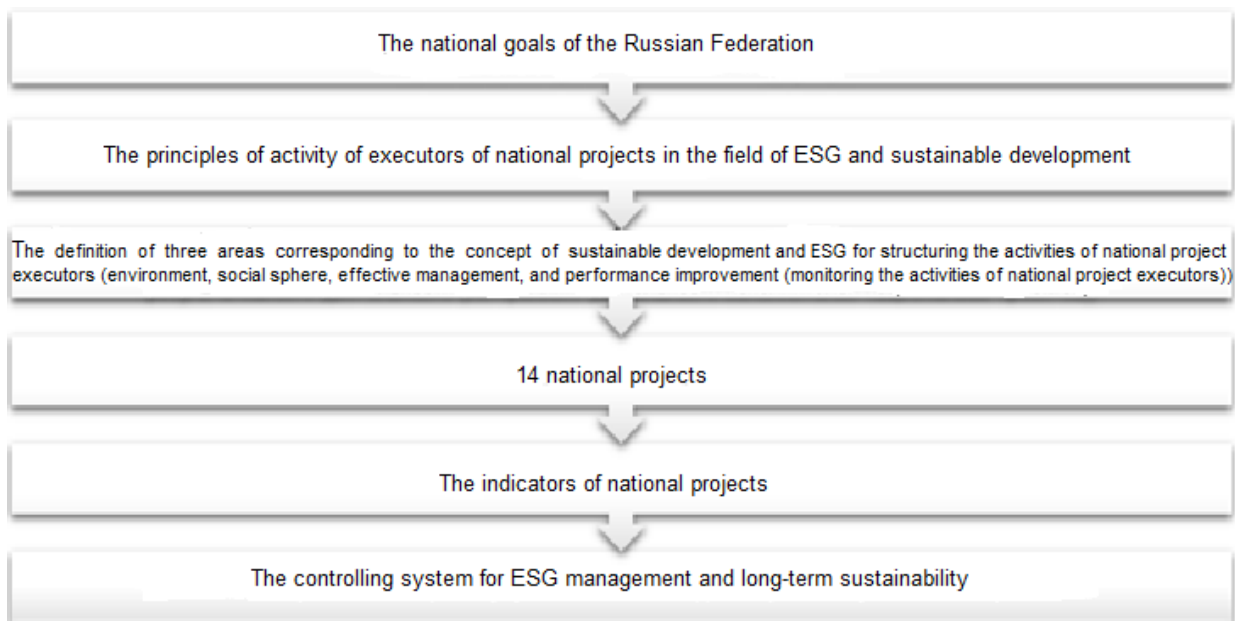
\*Compiled by the authors based on the analysis of Clause 85 of GUID 5290 (2019)

This method of auditing the indicators of national projects based on the formation and use of maturity models can be recommended to improve the efficiency of public audits. A level-



based maturity model represents a criteria scale for an audit or evaluation and can be used to form approaches and tools for conducting an audit of a national project. The results obtained with this method can be a significant addition to the outcomes of other audits, especially sound recommendations regarding the justification, formation, and implementation of national projects.

In addition to the above-mentioned approaches, we believe that the evaluation of the project progress should include an assessment of ESG (environmental, social, governance) factors based on the principles of environmental and social responsibility to achieve the SDGs and other socially significant values. The main task of assessing ESG factors is to determine the long-term ESG priorities that are crucial for national project implementation. In this regard, the project implementation should be characterized by a systemic approach to integrating ESG factors and sustainable development aspects into all areas of activity and reflected in a structure that includes elements for the effective implementation of national goals and SDGs (Figure 1).



Compiled by the authors based on the analysis of data from the ESG Aspirations section of the Sberbank official website (ESG Aspirations, 2023)

**Figure 1.** The structure of the national project implementation in the field of ESG and sustainable development

The structure reflects a new approach to the definition of socially significant goals for the integration of social, environmental, and managerial responsibility with due regard to the SDGs and crucial areas, i.e. the national goals of the Russian Federation. The activities of national project executors should be built over ESG principles for national project implementation.



## DISCUSSION

In the course of the study, we have concluded that it is expedient to develop unified approaches to the audit (control) of national projects. In the context of limited public resources and the importance of the tasks to be solved, the methodology for auditing (controlling) national projects should be comprehensive and assess the effectiveness and efficiency of the implementation of national projects, whose targets should achieve national development goals and be integrated with the UN SDGs.

The lack of consensus on ways to assess the quality of projects is pointed out by I. Prochner and D. Godin (2022). They also highlighted the need for more informed and transparent planning. S. Gasik emphasized the need to oversee the implementation of public projects (2016). The scholar believed that public project portfolio management in each country should be responsible for selecting, initiating, and changing the set of public projects. One of the ways to improve the implementation of national projects is the need to audit their quality.

According to H. Fernandes (2013), it is necessary to measure the achievement of strategic and operational goals within the audit of performance. This statement is quite consistent with our conclusions about the advisability of auditing the impact of national projects on the achievement of national development goals and the UN SDGs.

While noting the need to audit the effectiveness of national projects, F.H. Abanda et al. (2022) recommended using multi-criteria decision-making in the evaluation of national projects. B.M. Belcheretal (2019) identified the relationship between the quality of interdisciplinary research and its effectiveness. To solve complex problems of sustainable development, it is proposed to use a transdisciplinary approach to project audit. These statements are consistent with our conclusions about the possibility of using maturity models to analyze the sufficiency and relevance of a set of national project indicators.

## CONCLUSION

As the main objectives of the state audit of national projects, it is proposed to define not only tasks for assessing the effectiveness and efficiency of the use of budgetary funds, but also tasks for analyzing the achievement of the UN SDGs and national development goals. To solve these tasks, the following audit methods have been identified as priorities:

1. A project audit should embrace all stages of the project life cycle from the need to initiate it to sum up the results. The following areas should be regarded as priorities for





organizing and conducting an audit of national projects: content audit, audit of project architecture management (integration and communication), audit of information resources, audit of cost management, audit of time management, and risk audit.

2. The audit of national project indicators allows measuring the effectiveness and evaluating the impact of various results of the national project implementation. It might include elements of financial, efficiency, and strategic audits, and also be part of a comprehensive assessment. To improve the effectiveness of the audit of national projects, maturity models can be used, which are a criteria scale for auditing or evaluating the performance of national projects.

The audit of national projects should be its focus on assessing the ability of each project to make a significant contribution to the achievement of the UN SDGs and the national development goals of the Russian Federation for the period up to 2030 and identifying the risks of not achieving them. The further article will cover the formation of a system of indicators and the methodology for evaluating each project in achieving the SDGs and national goals.

## ACKNOWLEDGMENTS

The article is based on the studies conducted at the expense of budgetary funds under the state assignment of the Financial University on the topic “Development of a new methodology for auditing national projects”.

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