

METHODOLOGY
for conducting preliminary and final stages
OF THE WORLD CONSTRUCTION CHAMPIONSHIP (WCC)
within the team nomination:
Construction project management

CONTENTS

- 1. Purpose and scope**
- 2. Terms and definitions**
- 3. Regulations**
- 4. Requirements to Participants**
- 5. The order of the preliminary stage of the Championship**
- 6. The order of the final stage of the Championship**
- 7. Assignment and evaluation strategy**
- 8. Expert jury**
- 9. The procedure for determining the Finalists and Winners of the Championship**
- 10. Replacements**
- 11. Appeals**
- 12. Rights, powers and obligations**
- 13. Awards**

Annexes

Annex No.1 Example of the theoretical and practical part of the Tasks of the preliminary stage of the Championship

Annex No.2 Recommended forms of protocols for the work of the Jury

Annex No.3 Form of providing the Organizer with a list of Finalists

Annex No.4 Recommended forms of final reporting documents for the work of the Jury

1. PURPOSE AND SCOPE

These methodological recommendations (hereinafter referred to as the Methodology) determine the procedure and conditions for holding the preliminary and final stages of the World Construction Championship (WCC) (hereinafter referred to as the Championship) within the team nomination: "Construction project management".

The preliminary stage of the Championship is optional, i.e. Participant Organizations shall make their own decisions and determine the option of selecting specialists to participate in the final stage of the Championship:

- or independently organize and hold the preliminary stage in the organization using the Tasks developed for the preliminary stage of the Championship according to the Methodology,

- or conduct the selection of Participants according to the qualification criteria in accordance with Appendix No. 1 to the Methodology.

The lists of Finalists shall be sent within the terms established by Section 9 of the Methodology, in accordance with the Quotas presented in Appendix No. 3 to the General Procedure for the Championship.

The participating organization shall provide the Organizer with information about the finalists in the format in accordance with Appendix No. 6 to the Methodology and ensure their registration on the Official website of the Championship <https://pro-wcc.ru> (hereinafter - the Official website) in the section "Participants".

The Methodology of team nomination «Construction project management» is developed for revealing the level of competence and complex evaluation of knowledge, skills and abilities of specialists, carrying out activities in the field of designing of architectural and construction part of industrial construction facilities.

The Methodology of team nomination "Construction project management" is developed for revealing the level of competence and complex evaluation of knowledge, skills and abilities of specialists of 5 (five) professional roles:

1. Specialist in planning and budgeting of capital investments into construction projects;
2. Specialist in scheduling;
3. Specialist in project valuation;
4. Specialist in project cost control;
5. Specialist in project management.

2. TERMS AND DEFINITIONS

Abbreviation	Decryption
Jury/Expert jury	A group of experts evaluating the results of tasks performed by Participants on nominations
Task/Task of the Championship	Task, during performance and according to the results of which the Participants demonstrate the level of knowledge, abilities and skills on the nomination
Quotas	Number of places for specialists of Participant Organizations established by the Organizing Committee for each nomination in the final stage of the Championship

Nomination	Name of the activity (profession) on which the Championship competitions are held
Organizer	A team of diverse specialists under the direction of the Ministry of Construction of Russia and Rosatom State Corporation, responsible for organizing and holding of the Championship
Organization-participant	An Organization whose specialists take part in Championship competitions/General partner-Participant
Organizing committee	Federal Organizing Committee of the Championship
Official site	Website of the Championship containing complete, reliable, updated information about the Championship
Site	The site of the nomination, the place where the Participant /team of Participants complete the Tasks for the final stage of the Championship
Participant / Team of Participants	Specialist / Team of specialists taking part in the Championship competitions
Organization-developer	An Organization not participating in the competitions but providing methodological support for nominations
Technical expert	A representative of the Organization-developer who works on the site of the final stage of the Championship and ensures holding of the nomination competitions and the work of Expert Jury
Finalist	Specialist participating in the final competitions of the Championship
Championship	World Construction Championship (WCC) shall mean the international championship in industrial construction

3. REGULATIONS

Tasks are based on documents:

- Total Cost Management AACE - Basics of Integrated Value Management - International Association for the Development of Value Engineering;

- PMBOK® Guide ® PMI - Project management body of knowledge Project Management Institute - American National Standard ANSI/PMI;

- International Standard ISO 21500 - GUIDANCE ON PROJECT MANAGEMENT;

- ICB IPMI Competence Baseline - International Requirements for Specialist Competence IPMI International Project Management Association.

4. REQUIREMENTS TO PARTICIPANTS

Specialists who meet the requirements are allowed to participate in the Championship:

SPECIALIST IN PROJECT MANAGEMENT		
No.	Name	Content
1.	Category	SPECIALIST IN PROJECT MANAGEMENT

2.	General description of competence	Ensuring effective management of construction projects implementation, compliance with planned deadlines, costs, quality and safety requirements
3.	Requirements for Participants	<p><i>Education:</i> Higher education - Bachelor's program, Master's Degree program, or Specialist Degree program.</p> <p>If there is a non-industry-specific higher education, the obligatory requirement is complementary professional education - professional retraining program on project management.</p> <p><i>Work experience:</i> At least one year of work on planning the implementation of construction projects</p> <p><i>Requirements for the availability of special permits and documents set forth in official documents - none</i></p>
4.	Requirements to employment functions (generalized labor functions)	<ol style="list-style-type: none"> 1. Construction project progress planning 2. Construction project follow-up management 3. Construction project progress monitoring, control and regulation 4. Initiation of the construction project 5. Preparation of the contract (agreement), determination of terms of competitions (tenders) and terms of conclusion of the contract (agreement) for building of the construction project
5.	Requirements for advanced training	<p>Advanced training at least once every three years.</p> <p>Recommended: certification in project management according to (and/or):</p> <ol style="list-style-type: none"> 1. National requirements to the competence of specialists in project management 2. PMI Certification 3. IPMA Certification 4. ACCE Certification
6.	Requirements in terms of knowledge:	<p><i>Shall know:</i></p> <ul style="list-style-type: none"> – Principles and methods of building the structural decomposition of the project in accordance with the basic project management methodology – Methods of development and monitoring of capital investment project implementation management schedule using specialized software – Basic methodology for project execution period management – Principles and methods of general management and building of the organizational structure of project management in accordance with the basic project management methodology – Requirements to provide jobs for the project management team: equipment, software and space – Methods of forming the structure of divisions that perform the functions of the developer and the technical customer in the

		<ul style="list-style-type: none"> implementation of construction projects - Methodology for managing the resources required to implement construction projects - Methods of calculation and application of maximum and target cost of construction projects - Methodology and pricing procedure for construction works - Methods of determining the cost of services provided by engineering companies to the developer (technical customer) - Methods of quality assurance of construction project implementation - Labor protection rules - Procedure for environmental control and waste management during construction project implementation - Standard risk-management practices of investment projects - financial risk-management practices - Methodology for quantitative risk assessment - Possible areas of risk prevention and the degree of their impact on project implementation - Methodology for determining the requirements of the construction project stakeholders - Software tools and equipment required to create a unified information space for the construction project implementation - Composition of design, working, installation, commissioning, operational and other documentation for project construction - The procedure of transportation and customs clearance of import and export of equipment and other products to the country of construction of the construction facility - The procedure of insurance of supply of transported equipment and other products used in construction project implementation - Russian legislation on procurement of products, works and services - Requirements to the composition and content of concluded agreements (contracts) for supply, work execution and services - General procedure for project financing - Procedures, regulations and rules for managing the staff of the project implementation team - Procedures, regulations and rules on risk management in project implementation - Methods for determining the composition of works and their schedule during project implementation - Methods of conducting market research and expert assessments - Methodology of economic justification of expediency and necessity of construction of a construction facility - Requirements to the content and execution of the construction project data sheet procedure for its submission for consideration and approval - Methods of forming project data sheets
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		<ul style="list-style-type: none"> - Composition of documentation on interim results of the construction project stages implementation <ul style="list-style-type: none"> - Legislative regulatory acts and local normative acts on project management - Basic methodology for project management - Basic methodology for cost engineering <p><i>Additionally:</i></p> <ul style="list-style-type: none"> - Procedure for executing work on scheduling using Oracle Primavera P6 Professional CPMIS (corporate project management information system)
7.	Requirements for skills	<p><i>Shall be able to:</i></p> <ul style="list-style-type: none"> - Carry out construction of structural decomposition (hierarchical structure) of the construction project works - Determine the interrelationships and sequence of operations on the construction project implementation - Determine the time parameters of the construction project implementation using the existing regulatory and archival database - Develop master construction project implementation schedules - Plan to develop detailed and operative schedules of the construction project implementation - Choose the most effective organizational structure to manage the construction project - Plan interactions between stakeholders (participants) of the project - Determine and plan project team development activities - Determine resource requirements for project implementation - Use the database on previously implemented analogue projects - Determine the terms of estimation of expenses on equipment and materials supply, performance of construction, installation, testing and commissioning works and works on putting into operation of construction facilities. - Determine the terms for estimating the cost of services rendered by contractors under a contract (agreement) for the construction of the facility, as well as the cost of licensing, insurance, transportation and customs clearance of goods - Determine the maximum and target cost of project implementation - Develop schemes and determine financing conditions for project implementation - Carry out budgeting of implementation of the construction project, carry out its approval and submit it for consideration and authorization in due course - Determine a list of possible risks in the construction project implementation and quantify them - Rank the risks arising from the construction project implementation by their magnitude - Prioritize risks that arise during the construction project

		<p>implementation and require managerial decisions</p> <ul style="list-style-type: none"> - Develop a risk management program for the construction project implementation - Establish the budget required to ensure implementation of the risk management program for the construction project implementation - Formulate requirements to stakeholders (participants) of the construction project regarding communications, composition and content of information - Plan the operation of communication channels between stakeholders (participants) of the construction project implementation - Determine the terms of supply of resources necessary for the construction project implementation in accordance with the work schedule - Organize work to determine the terms of transportation (shipping) and storage of equipment and other resources required to implement the construction project - Determine the terms of competitions and signing contracts for equipment and other resources supply, transport and forwarding support, insurance, legal support in the country of construction - Ensure the implementation of actions to achieve quality in the implementation of the construction project - Control the execution of work, use of equipment and materials with increased requirements for quality assurance during the construction project implementation - Supervise the implementation of labor protection plans, environmental monitoring and waste management during the construction project implementation - Perform selection of personnel for the construction project implementation team - Provide motivation to the construction project team - Implement sets of hardware and software tools designed to create a common information space of the project, to implement all necessary actions with information on the project by project participants - Form the toolkit for operational exchange of the information and electronic documents between participants of the construction project - Prepare tender documentation, organize competitions and tenders to select suppliers of equipment and materials, select contractors of works and services required for the construction project implementation - Prepare contracts (agreements) for the supply of equipment, materials and for work execution and services required to implement the construction project - Support the work of competitive and working commissions in competitions and selection of suppliers of equipment, materials, contractors of works and services necessary for the
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		<p>construction project implementation</p> <ul style="list-style-type: none"> - Carry out the organization of work execution to determine the need for borrowed funds for the construction project implementation - Provide interaction of the stakeholders (participants) of the construction project implementation and the company management for attraction of loans for the construction project implementation - Identify and justify the need for changes in the configuration of the construction project - Identify additional financial costs associated with changes in the configuration of the construction project - Determine changes in the schedule of work on the construction project implementation associated with changes in its configuration - Determine the impact of changes introduced in other functional areas of the project on work schedules when implementing the construction project - Analyze information on a course of execution of works during the construction project implementation in comparison with planned terms of their execution and predict a situation on this basis for the coming period - Determine changes in the planned terms of execution of works during the construction project implementation based on the forecast of the situation for the coming period - Introduce corrective changes to work schedules when implementing a construction project using specialized software - Collect and analyze information on the possibility of delivery of equipment and materials for the construction project in the established planning terms, taking into account all factors affecting this situation - Evaluate and forecast the situation with manufacturing, transportation and storage of equipment and materials for project implementation - Analyze and summarize the information on the accepted requests for the introduction of changes affecting changes in the cost of implementing the construction project - Analyze and summarize the information on actual costs of the construction project implementation and determine their changes as compared to the planned indicators - Analyze the actual distribution of cash flows of the construction project implementation and actual development of the budget limit in order to determine the actual budget and the limit cost of the construction project implementation taking into account all changes - Perform justification of necessary changes in financing of the construction project implementation and prepare a request for these changes - Carry out the analysis and generalization of the information on
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		<p>the implemented planned risk events during the construction project implementation to evaluate the developed program for the risk management during the the construction project implementation.</p> <ul style="list-style-type: none"> - Generate a list of risk events that were not included in the original risk management plan for the construction project implementation - Determine the current state of the possibility to implement corrective actions to neutralize risks during the construction project implementation - Develop an updated register of risks arising from the implementation of the construction project to make additions to the risk management during the construction project implementation - Develop an updated risk management program during the construction project implementation and the risk response strategy - Control the activities of the team and the stakeholders (participants) in the construction project implementation and analyze their interaction - Collect and summarize information on the status of the construction project execution to provide it to the management and stakeholders (participants) of the construction project implementation - Organize the preparation of reporting documents for the construction project implementation - progress statements, certificates of work performed, statements of services - Carry out marketing research with preparation of proposals justifying the expediency of launching the construction project - Identify and analyze the requirements of the Developer (Customer) of the construction project for preliminary generation of the main tasks and results of the initiated construction project - Generate a consolidated list of works on the project, structure them with the allocation of milestone (key) events in comparison with the project goals and ensure the development of a directive schedule of the construction project implementation - Identify the interests of each stakeholder (participant) in the construction project and their opportunities to influence the project - Present the main provisions of the concept (presentation) of the initiated construction project in the format established for submission for consideration and approval by the management - Analyze the requirements of the Developer (Customer) of the construction project, compare them with preliminary characteristics and indicators established by the concept of the construction project and, if necessary, make adjustments and additions to them - Make necessary adjustments to the composition of works and
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		<p>milestone (key) events of the construction project established by the concept</p> <ul style="list-style-type: none"> - Make necessary adjustments to the composition of stakeholders (participants) of the project established by the concept - Determine the composition and cost of pre-project works performed during the implementation of construction project - Generate the construction project data sheet, carry out its approval for authorization in the established order - Define measures to provide the design of the facility with source data taking into account the requirements of the Developer (Customer) - Determine the composition of measures and participants to prepare the contract (agreement) for the construction of the facility - Ensure interaction between stakeholders (participants) of the construction project to prepare a contract (agreement) for its implementation - Analyze and summarize information about the scope of work on the construction project implementation, and work ready for closure and work requiring completion to fulfill contractual (agreement based) obligations - Carry out the organization of generation of the updated database and archive of the construction project for use at performance of the subsequent projects - Collect, summarize and analyze production, technical and financial information on the project - Prepare a description of the construction project progress, including all problems of design, construction, supply of equipment and materials, training of specialists, commissioning works, organization of operation - Develop proposals for improving project management processes - Prepare a final report on the project containing a description of the construction project management experience to use this experience in the implementation of subsequent projects - Determine the reasons and factors that influenced the results of the company's participation in competitions (tenders)
8.	Additional skill requirements (recommended)	<p>Professional project management skills:</p> <p>Oracle Primavera P6 Professional, CostOS, EcoSYS</p>
SPECIALIST IN SCHEDULING		
1.	Participants' Category	SPECIALIST IN SCHEDULING

2.	General description of competence	Ensuring the functioning and development of the scheduling system during the building of construction facilities with the use of innovative technologies for planning and control of work execution
3.	Requirements to Participants	<p><i>Education:</i> Higher education - Bachelor's program, Master's Degree program, or Specialist Degree program.</p> <p>Complementary professional education - professional development programs in the field of professional expertise</p> <p><i>Work experience:</i> At least two years in the field of scheduling.</p> <p><i>Requirements for the availability of special permits and documents set forth in official documents</i> - none</p>
4.	Requirements to employment functions (generalized labor functions)	<ol style="list-style-type: none"> 1. Development and updating of the project schedules at all phases of its life cycle when building construction facilities 2. Control over execution and management of changes in schedules of construction facility building projects 3. target-performance analysis of implementation of the schedule of the construction project and preparation of reports on the project at all phases of its life cycle
5.	Requirements for advanced training	Advanced training at least once every three years in the field of professional expertise
6.	Requirements in terms of knowledge:	<p><i>Shall know:</i></p> <ul style="list-style-type: none"> – Basics of quality management, terms and cost of projects – Methods of decomposition of construction project costs – Basics of architectural and construction and organizational and production design of capital construction projects – Methods of network planning and project management – The order of delivery of raw materials, materials and technological equipment for project implementation – Regulatory and methodical documents on project management – Main groups and types of construction works in the implementation of construction projects – Types of basic material resources used in the construction project implementation – Properties of material resources used in the project during construction of the facility – Performance of the main construction machines in the construction of the facility – Organizational and process and technical regulations, regulating the activity in the investment and construction field – Standards and best practices in construction project management – Organizational and process documentation in the field of scheduling of projects during the construction of the facility – Regulatory sources and statistical materials to determine the labor costs of material and technical resources for the

		<p>construction project work execution</p> <ul style="list-style-type: none"> - Rules for maintenance of executive and accounting documentation during construction project works - Elements of schedules for construction projects implementation - Rules for building schedules in construction projects - Rules and methods of calculation of time, labor and material resources costs for implementation of investment and construction construction projects - Rules for calculation of work parameters for schedules - Methods of cost determination for all phases of the construction project life cycle - Rules for development and approval of estimates for their use as a source for determination of parameters of work on schedules in the construction project - Mathematical methods of analysis of construction project implementation models - Information basis for determining the actual cost of work performed and resources spent in construction projects - Methods of division of responsibility and ensuring interaction of all functional divisions and construction project participants - Methods of financial, investment and economic analysis when developing construction projects - Methods of change management in the schedule of the construction project - Degree of resource limitation at any given time of construction project execution - Methods of pricing in contracts related to capital investments in construction projects - Methods of functional analysis of construction project management systems - Factors affecting the sequence and deadlines for the completion of works of the schedule of the construction project - Categories and types of risks - Risk-management practices in construction projects - Methods of identification, assessment and control of risk impact on the construction project results - How to respond to different risks in construction projects - Methods of assessing the performance of capital investment in assets and projects - Basic methodology for project management - Applied software products for the generation and calculation of schedules - Procedure of executing work on Oracle Primavera scheduling
7.	Requirements for skills	<p><i>Shall be able to:</i></p> <ul style="list-style-type: none"> - Evaluate resources for construction project works - Generate design solutions with co-contractors of the project, taking into account their possible impact on the results of the

		<p>construction project</p> <ul style="list-style-type: none"> - Predict a favorable and unfavorable scenario for the implementation of the construction project - Generate the initial plan of work performance of the construction project - Determine the technological sequence of operations in the schedule of the construction project - Mark intermediate goals of the construction project schedule - Link the budget and costs to specific works of the construction project - Analyze initial data for calculation of work parameters of the construction project schedule - Define start and finish dates for each construction project work - Use instruments of scheduling of construction projects - Use iterative approaches to estimate the duration of construction project works and allocation of resources by works - Use regulatory sources and statistical materials for calculation of work parameters of schedules in construction projects - Develop a hierarchical structure of the investment and construction construction project works - Model business processes of investment and construction construction project execution - Generate a schedule of the investment and construction construction project - Choose the methods of execution of work on the construction project implementation - Agree the target plan of the project at all levels in accordance with the established procedure of the construction project - Draw up reports based on the schedule of the construction project - Use program complexes for building and updating of schedules in construction projects - Calculate time parameters of work in schedules of the construction project - Analyze time parameters of work and resource consumption requirements for their implementation - Determine the composition of used resources and their distribution by works and terms of the construction project - Develop construction project implementation models based on scheduling methods - Determine terms and volumes of resources supply for technological, flight and installation kits of the construction project - Plan procurements - Check that the delivery plan is consistent with the construction project budget - Control the execution of project works by terms and procurements
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		<ul style="list-style-type: none"> - Take into account the actual cost of work performed and resources spent - Check the information for correctness and conformity of work execution according to the schedule of the construction project - Analyze and evaluate changes in the construction project - Update the indicators of schedules of work execution in the construction project - Apply the software for updating of network schedules of work execution in the construction project - Evaluate resource feasibility (resource availability and cost) of the construction project - Use estimated reserves of work time of schedule under time and resource constraints of the construction project - Determine the most significant indicators of work execution according to the schedule of the construction project for the effective course of its implementation - Predict future expenses of the construction project on works and resources during its life cycle - Restructure the composition of work and resources when deviations are identified - Determine the degree of influence of uncertainty factors on the construction project progress - Use a mathematical and statistical facilities for processing and analysis of data on construction project implementation - Predict a favorable and unfavorable scenario for the implementation of the construction project - Analyze and assess work execution risks in terms of construction project costs - Identify time and cost limits in a construction project - Estimate expediency of introducing changes in the hierarchical structure of the schedule works when developing construction projects - Predict the construction project progress by stakeholders on the basis of schedules
8.	Additional skill requirements (recommended)	Professional project management skills: Oracle Primavera P6 Professional, CostOS, EcoSYS
SPECIALIST IN PLANNING AND BUDGETING OF CAPITAL INVESTMENTS INTO CONSTRUCTION PROJECTS		
1.	Participants' Category	SPECIALIST IN PLANNING AND BUDGETING OF CAPITAL INVESTMENTS INTO CONSTRUCTION PROJECTS
2.	General description of	Planning, optimization, monitoring and control over the use of capital investments in the implementation of construction

	competence	projects, project portfolios and programs
3.	Requirements to Participants	<p><i>Education:</i> Higher education - Bachelor's program, Master's Degree program, or Specialist Degree program.</p> <p>If there is a non-industry-specific higher education, the obligatory requirement is complementary professional education - professional retraining program in the field of professional expertise</p> <p><i>Work experience:</i> At least one year of work on planning the implementation of construction projects</p> <p><i>Requirements for the availability of special permits and documents set forth in official documents</i> - none</p>
4.	Requirements to employment functions (generalized labor functions)	<ol style="list-style-type: none"> 1. Preparation of initial information and necessary planning and budgeting documents for capital investments in construction projects 2. Development of plans and budgets of projects, programs and portfolios of construction projects 3. Control of current execution of budgets of investment programs in the field of capital investments in construction projects 4. Keeping up to date information on financial performance of investment projects, project portfolios and programs in the field of capital investments in construction projects
5.	Requirements for advanced training	Advanced training at least once every three years
6.	Requirements in terms of knowledge:	<p><i>Shall know:</i></p> <ul style="list-style-type: none"> - Legislative regulatory acts and local normative acts and documents regulating planning and budgeting of capital investments in construction projects - Regulation on development of capital investment planning and budgeting documents - Types and purpose of construction project budgets - Consistency of business process budgets development - Procedure for developing planning and budgeting documents for capital investments in construction projects - Local normative acts on planning and budgeting of capital investments in projects and construction project portfolios - Local normative acts on organization of procurement of products, works and services during development of construction projects - Capital investment planning tasks and principles - Composition and content of project documentation during construction of the facility - Methods of allocation of resources of the construction project - Capital investment planning principles in the construction of the facility

		<ul style="list-style-type: none"> - Main estimated cost methods in construction - Classification of economic information on budgeting of construction projects - Efficiency assessment of capital investment projects during construction of the facility - Primary and secondary factors affecting changes in the structure of the investment portfolio of construction projects - Mathematical and statistical methods of information processing - Basics of architectural and construction and organizational and production design during construction of the facility - Basics of accounting of capital investments in construction projects - Methods of assessment of capital investments in construction projects - Sources of receipt and expenditure of monetary funds during construction of the facility - Main parameters of asset planning and control in construction project development - Methods of identification, analysis and risk assessment of the construction project - Asset life cycle phases - Methods of response to risks in construction project development - Methods of risk management in construction projects - Methods of analysis of financial and economic activity of the company during construction of the facility - Methods for revealing deviations of actual indicators of the construction project budget from the planned ones - Methods of financing for capital investments in construction projects - Methods of generation and control of project budget and project portfolios during construction of the facility - Basic methodology for project management Basic methodology for cost engineering - Software and computer equipment for planning and budgeting of capital investments in construction projects
7.	Requirements for skills	<p><i>Shall be able to:</i></p> <ul style="list-style-type: none"> - Determine types of budgets and establish their classification - Generate documents for planning capital investments in construction projects - Receive necessary information from participants of capital investment budgeting in construction projects - Use computer programs and reference sources to generate initial information for planning and budgeting of capital investments in construction projects - Find the information necessary to solve the problems in the field of planning and budgeting of capital investments in projects and construction project portfolios

		<ul style="list-style-type: none"> - Analyze information generated for planning and budgeting of capital investments in construction projects - Use information and communication technologies in the process of information analysis for planning and budgeting of capital investments in construction projects - Substantiate the use of methods and models of capital investment planning in the construction of the facility - Develop documents on long-term, medium-term and short-term planning of investment programs in the field of capital investments in construction projects - Predict implementation of investments in construction projects - Carry out the analysis of efficiency of capital investments in construction projects - Carry out expert examination of investment projects with regard to the implementation of capital investment programs in construction projects - Perform the analysis of current deviations in execution of programs of capital investments in construction projects - Compare the effect of capital investments with their value - Process analytical information on construction projects - Assess the effectiveness of programs of capital investments in construction projects - Assess the completeness of the use of monetary funds allocated from the budget - Control budget figures at period end closing and upon request of budget executors - Determine sources of financing for capital investments in construction projects - Determine the scale of dependence on external sources of financing - Adjust specific indicators of construction projects budget - Control risks of asset development, construction projects implementation taking into account planning models - Prioritize risks that require management decisions when developing construction projects - Take into account the time factor in risk management - Determine the costs associated with risk control in construction projects - Determine the procedure for ensuring responsibility in the system of risk control and management during the construction of a facility - Exercise control over pricing in contracts related to capital investments in construction projects - Keep registers of contracts on implementation of capital investments during construction of a facility - Identify the reasons of deviation from the planned budget indicators during construction of a facility - Assess profitability as a result of capital investments in construction projects - Prepare analytical materials related to capital investments in
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		<p>construction projects</p> <ul style="list-style-type: none"> - Determine deviations from the planned indicators of the construction project - Structure and classify types of changes in construction project budgets - Assess the impact of changes on the project - Generate a forecast of execution of the building projects budget - Use specialist software when developing a construction project
8.	Additional skill requirements (recommended)	<p>Professional project management skills:</p> <p>Oracle Primavera P6 Professional, CostOS, EcoSYS</p>
SPECIALIST IN PROJECT VALUATION		
1.	Participants' Category	SPECIALIST IN PROJECT VALUATION
2.	General description of competence	Assessment of value of construction projects at all phases of the project life cycle according to the cost assessment methodology
3.	Requirements to Participants	<p><i>Education:</i> Higher education - Bachelor's program, Master's Degree program, or Specialist Degree program.</p> <p>If there is a non-industry-specific higher education, the obligatory requirement is complementary professional education - professional retraining program in the field of professional expertise</p> <p><i>Work experience:</i> At least one year of work on planning the implementation of construction projects</p> <p><i>Requirements for the availability of special permits and documents set forth in official documents</i> - none</p>
4.	Requirements to employment functions (generalized labor functions)	<ol style="list-style-type: none"> 1. Analysis of design and estimate documentation during the building of construction projects 2. Development of cost model of the construction project in accordance with the life cycle of the project 3. Pricing in contracts during the building of construction projects
5.	Requirements for advanced training	Advanced training at least once every three years
6.	Requirements in terms of	<p><i>Shall know:</i></p> <ul style="list-style-type: none"> - The legislation of the Russian Federation in the field of

	<p>knowledge:</p>	<p>construction</p> <ul style="list-style-type: none"> - Federal state information system for pricing in construction industry - Basics of architectural and construction design of buildings and housing taking into account the specifics of creating construction projects - Basics of operating design of buildings and housing taking into account the specifics of creating construction projects - Methods of development, approval and application of various groups of estimate standards according to the current classifier of estimate standards - Basics of construction management taking into account specifics of construction projects creation - Basics of construction operations organization taking into account specifics of construction projects creation - Company standards for building construction projects in the field of pricing and cost assessment - Methods of development and execution of construction project cost estimate documentation - Basics of project cost statistics and accounting - Forms of primary accounting documents and the order of filling them out as applied to the construction field during the facility construction - Foreign standards and practices in the field of pricing and cost evaluation of construction projects - Legislative regulatory acts governing investment and construction activities, including issues of pricing, cost assessment of projects and expenditure control - Basics of design of buildings and housing - Estimated cost methods and procedure for checking the reliability of the estimated cost of construction projects - Methods of identification of construction project risks - Methods and techniques for monitoring value trends in building construction projects - Basics of project and cost management during construction of the facility - Methods of monitoring project budget changes during construction of the facility - Procedure and methods of generation and accounting of cost risks in the implementation of projects in the field of construction - Methods of generating and spending budget of projects in construction with accuracy assessment at different stages of project building - Methods of identification, analysis and assessment of project risks, including those affecting the project cost during construction of the facility - Methods of response to project risks during construction of the facility - Methods of functional, investment and economic analysis
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		<ul style="list-style-type: none"> - Methods for assessing and optimizing the full cost of ownership of assets - Methods of assessment and optimization of company assets - Methods of checking the efficiency of construction projects - Methods of development of estimated cost of construction facilities creation - Methods of developing and applying aggregated project cost indicators - Methods of monitoring price indicators during construction of the facility - Current and leading indices of changes in the estimated cost of construction of the facility. Deflator indexes - Methods of project budget changes implementation during construction of the facility - Methods of conducting analysis and expert assessment of cost estimate documentation - Methods and techniques for monitoring value trends in building construction projects - Strategies and methods of price policy development - Methods of competitive assessment - Firm (contract) prices - Methods of contract price determination - Basics of antimonopoly legislation - Basic methodology for project management - Basic methodology for cost engineering - Applied software products to automate the process of calculating the scope of work in drawing up and checking the estimated costs and estimates for the construction of the facility
7.	Requirements for skills	<p><i>Shall be able to:</i></p> <ul style="list-style-type: none"> - Use the technical documentation, drawings to determine the scope of work required and prepare statements of scope of work - Find and analyze information necessary to prepare statements of work scope for their use in establishing the cost parameters of the construction project. - Apply regulatory and methodical documents contained in the federal register of cost estimate standards to determine the scope of work of the construction project under implementation - Take into account industry and territorial specifics in cost estimation of construction projects - Identify construction project risks - Find and analyze information required to verify the reliability of construction cost determination during construction of the facility - Perform comparative calculations using the information collected for analysis and assess the correctness of the chosen method of determination of the estimated cost

		<p>method of building construction facilities</p> <ul style="list-style-type: none"> - Verify the reliability of determining the estimated cost of construction facilities - Apply software products to automate the process of making and checking estimates (cost estimates), cost assessment of construction facilities - Use the technical documentation, drawings, specifications to collect information required for post-investment analysis - Classify and group data on process-related and engineering supervision of project implementation during building of construction facilities - Identify, analyze and assess the risks of work on pricing and cost evaluation in the construction industry during the construction of the facility - Carry out post-investment analysis of the cost dynamics of the construction project during its implementation - Plan measures to reduce cost risks of the construction project - Receive and provide necessary information in communications with colleagues and companies for post-investment analysis - Calculate the value indicators of the construction project values: full net benefit, marginal net benefit, discount rate, payback period of the project (taking into account discounting), return on investments, net present project cost, modified internal profitability of the project - Carry out alternate calculations of construction project values under various scenarios (net marginal benefit, return on investments), check the performed calculations - Assess investment projects for the construction of objects for efficiency of budget funds use - Assess the cost of company assets - Assess the full cost of ownership of the asset - Choose the methods and ways to perform professional tasks - Assess possible consequences of decisions made during development of financial model of construction projects - Use information and reference and legal systems - Find and assess the information required to identify individual cost elements, types of work and costs in the estimate documentation in search of an effective cost option - Search for aggregated cost indicators by analogue facilities when assessing the cost of construction projects - Generate project cost, including by types of work, by cost items and elements with application of aggregated indicators - In case of absence of estimate standards for certain types of works, initiate the development of new industry and (or) individual estimate standards required for the construction of the facility - Find, analyze and assess information that meets the established requirements for initial data in order to assess capital investments cost
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		<ul style="list-style-type: none"> - Perform calculations of the full project cost by items and cost elements at the current price level - Use scenario conditions in the calculation of cost assessment - Perform calculations using aggregated standards, including the data bank on the cost of previously built or projected analogue facilities - Create an opinion and an explanatory note on the assessment conducted - Carry out a comparative analysis of the project cost with the cost of the analogue project - Analyze changes and updates in regulatory legal acts, methodical documents on pricing, estimated rationing and cost assessment - Assess the information required to verify the reliability of cost determination of construction facility creation projects - Perform comparative calculations using the information collected for analysis and assess the correctness of the chosen method for determination of the estimated cost method for the facility construction - Verify the reliability of determining the estimated cost of construction facility creation projects - Apply software products to automate the process of making and checking estimates, assess the cost of capital investments - Analyze pricing policies of potential competitors - Analyze electricity markets - Identify, analyze and assess project risks - Plan and monitor risk management activities - Justify the initial (maximum) price of the contract - Organize professional activities, determine methods and ways of task execution, assess their efficiency and quality - Collect and analyze data on legislative, regulatory and methodical documents used to generate the cost of construction facility creation projects, record the changes introduced to them - Find, analyze and assess the information required to determine the estimated cost of construction and verify the reliability of determining the cost of construction facility creation projects - Use information and communication technologies in professional activities when monitoring prices for construction resources - Use software tools to process and analyze information - Complete, store and record the information received - Systematize the collected information, make changes in it
8.	Additional skill requirements (recommended)	Professional project management skills: Oracle Primavera P6 Professional, CostOS, EcoSYS

SPECIALIST IN PROJECT COST CONTROL

1.	Participants' Category	SPECIALIST IN PROJECT COST CONTROL
2.	General description of competence	Assessment of value and control of cost of construction projects at all phases of the project life cycle according to the cost assessment methodology
3.	Requirements to Participants	<p><i>Education:</i> Higher education - Bachelor's program, Master's Degree program, or Specialist Degree program.</p> <p>If there is a non-industry-specific higher education, the obligatory requirement is complementary professional education - professional retraining program in the field of professional expertise</p> <p><i>Work experience:</i> At least one year of work on planning the implementation of construction projects</p> <p><i>Requirements for the availability of special permits and documents set forth in official documents - none</i></p>
4.	Requirements to employment functions (generalized labor functions)	<ol style="list-style-type: none"> 1. Valuation (budget) of construction projects 2. Project budget changes monitoring during the building of construction facilities 3. Assessment of project implementation progress during the building of construction facilities
5.	Requirements for advanced training	Advanced training at least once every three years
6.	Requirements in terms of knowledge:	<p><i>Shall know:</i></p> <ul style="list-style-type: none"> - Legislative regulatory acts governing investment and construction activities, including issues of pricing, cost assessment of projects and expenditure control - Construction standards and regulations, governing and methodical documents in construction industry - Construction resource classifier - Procedure for keeping the federal register of cost estimate standards - Federal state information system for pricing in construction industry - Methods of development, approval and application of cost estimate standards - Basics of architectural, construction and operating design taking into account the specifics of construction projects - The legislation of the Russian Federation in the field of construction - Design rules and standards - Company standards during the facility construction in the field

		<ul style="list-style-type: none"> of pricing, estimation of cost and control over them – Estimated cost methods in construction, including the construction of the facility – Tax legislation in the field of construction, accounting of tax payments when generating the cost of construction projects – Methods of development and execution of estimate documentation during construction of the facility – Methods of conducting analysis and expert assessment of estimate documentation during construction of the facility – Foreign standards and practices in the field of pricing and cost control in construction, including the construction of the facility – Basics of statistics and accounting of expenses on projects during construction of the facility – Methodological documents in the field of pricing, cost assessment and cost control during construction of the facility – Forms of primary accounting documents and the order of filling them out as applied to the construction field – Methods for calculating material, technical, labor and other resources required for project implementation during construction of the facility – Methods of generating and spending the project budget during the construction of the facility with an accuracy assessment at different stages – Methods and techniques for monitoring value trends in the construction of a facility – Methods of conducting the monitoring of cost indicators during the construction project implementation to identify compliance with the planned data – Methods of analysis for project budgets – Methods, means and technologies to control costs in construction – Methods of financial, investment and economic analysis – Methods of project identification, analysis and risk assessment – Project risk-management and monitoring practices – The method of earned value – Methods of post-investment project analysis in terms of project cost dynamics during construction of the facility – Methods of project progress assessment – Methods of project content decomposition – Mathematical and statistical methods of information processing – Methods for assessing and optimizing the full cost of ownership of assets – Methods of project efficiency assessment during construction of a facility – Foreign standards and practices in the field of pricing, budgeting and valuation of construction projects – Basics of project management – Basics of investment analysis and business planning
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		<ul style="list-style-type: none"> - Basics of economics and management at construction, engineering, industrial, transport enterprises - Labor economics, labor and wages organization - Basics of scheduling - Basic methodology for project management - Basic methodology for cost engineering - Applied software products to automate the process of making and checking estimates, as well as controlling costs - Applied software products to automate the process of calculating the scope of work in drawing up and checking the estimated costs and estimates for the construction of the facility
7.	Requirements for skills	<p><i>Shall be able to:</i></p> <ul style="list-style-type: none"> - Analyze the current regulatory and methodological documents governing the procedure for determining the estimated cost of construction during the construction of a facility for their updating - Estimate various estimated cost methods in order to select the most optimal estimated cost method for projects during the construction of a facility - Analyze the feasibility of the initial data for the reliability of the estimated cost during the construction of a facility based on the study of information about the construction facility - Analyze costs in the context of the structure of works and cost structure during construction of the facility - Analyze the information required to control project costs during construction of the facility - Apply software products to automate the process of making and checking estimates, as well as controlling costs during construction of the facility - Use information and communication technologies in professional activities - Find, check and assess information required for cost analysis and control of a construction project expenditures - Analyze cost data and natural indicators on: labor costs; materials and other, direct and indirect costs in the construction of the facility - Apply software products to automate the process of making and checking construction cost estimates, as well as to control costs - Analyze resource and financial feasibility of the project - Assess and control project value indicators taking into account cost behavior and resource use during project implementation - Identify, analyze and assess project risks in terms of costs - Generate indicators to assess the project performance - Apply performance assessment methods for different stages of project implementation - Generate reports on the fact, deviations, development,

		<p>forecast, changes in project content</p> <ul style="list-style-type: none"> - Monitor the project cost indicators during its implementation to detect budget deviations - Determine deviations of indicators by cost and timing, identify deviations of forecast upon completion from budget upon completion - Identify deviations from the project budget during the construction of the facility - Systematize information obtained as a result of constant monitoring of project cost parameters during the construction of the facility - Take into account and control changes in the project cost within the corresponding project life cycle period - Identify, analyze and assess project risks - Control the project cost during the construction of construction facilities under specific contracts in terms of expenditures, manage risks - Develop an action plan necessary to keep the project within the approved limit - Control costs during the building of construction facilities - Analyze controlled costs of construction projects, compare them - Estimate and compare budget and actual project costs for works and resources during construction of the facility in order to develop a forecast of future costs - Monitor the trends of changes in the cost of design expenditures of works and resources in order to calculate the optimal size of expenditures in the construction of a facility - Predict the future project cost during the construction of a facility for works and resources during its life cycle - Collect and analyze indicators characterizing the efficiency of construction projects implementation - Assess investment projects for the construction of facilities for efficiency of investment use - Assess the economic efficiency of construction projects - Develop and implement measures aimed at optimizing support and development costs for assets
8.	Additional skill requirements (recommended)	<p>Professional project management skills:</p> <p>Oracle Primavera P6 Professional, CostOS, EcoSYS</p>

5. THE ORDER OF THE PRELIMINARY STAGE OF THE CHAMPIONSHIP (if applicable)

5.1 The purpose of the preliminary stage of the Championship is to identify and select the Finalists who are able to demonstrate a high knowledge and skill level that meet international requirements.

5.2. The preliminary stage of the Championship is held within the terms established by the Organizing Committee: from 03 August to 11 December 2020.

5.3. Participant Organizations shall independently organize and hold the preliminary stage using the Tasks developed for the preliminary stage of the Championship and the Methodology.

5.4 Operating mode of the preliminary stage of the Championship: full-time, on an on-the-job basis in the Organization-participant.

5.5 The Organizer does not provide any clarifications about the Task for the Participants during the organization and conduct of the preliminary stage of the Championship.

5.6 The Organizer communicates on the issues of holding the preliminary stage of the Championship only with persons officially authorized and responsible in the Organization-participant for organizing and holding the Championship (hereinafter - Responsible person (s)).

5.7 For additional information and clarifications on the preliminary stage of the Championship, the Participants may contact only the Responsible Persons in their organization.

5.8 The Responsible Person provides organizational and technical support to the Participants during the preliminary stage of the Championship.

5.9 The Participant Organizations shall choose the time and place of the preliminary stage and organize workplaces for the Participants. The organizer shall neither go to the site where the Task is executed, nor participate in the organization and execution of the preliminary stage.

5.10 Holding the the theoretical and practical part of the preliminary stage of the Championship

5.10.1 The tasks of the theoretical and practical part of the preliminary stage of the Championship is either posted on the information and educational resource of the Private institution of State Atomic Energy Corporation "ROSATOM" "The Branch center of the capital construction" (hereinafter-the Resource), or provided by the Organizer in electronic form at the official request of the Participant Organizations (indicating the contact details of the Responsible person(s)).

5.10.2 Participant Organizations can independently choose a tool for testing Participants: either a Resource, or the organization's own electronic resource, or another tool. Information about selecting a tool to test the Participants shall be sent to the Organizer.

5.10.3 In case a Resource is selected as the tool to conduct the test part of the Task, the Organizer shall only perform the following works for Participant Organizations:

- shall confirm the registration of Participants and provide Participants with access to the Resource from a personal computer and to the Task from a mobile device,

- shall publish Tasks of the preliminary stage,

- shall generate uploads with the results of completion the task by Participants for those responsible in Organization-participants, but no more than 1 (one) time in 3 (three) business days,

- in case of errors in the Resource, the Organizer shall fix them no later than 2 (two) business days.

5.10.4 The Organizer does not provide Participants with an Internet connection (hereinafter referred to as the Internet) and in case of Internet failures the Organizer shall not be responsible for the result of performance of the theoretical tasks by the Participants.

5.11 At the site where the preliminary stage is executed (if applicable):

5.11.1 Becoming familiar with the workplace and Task

Participants are allowed to perform the Task only after passing the briefing on labor protection and safety at the workplace.

Immediately before the beginning of the Task, the Jury experts (if applicable) or the Responsible Person shall conduct an induction briefing for the Participants regarding the work regulations at workplaces, and acquaint the Participants with the Task content and the evaluation criteria.

No more than 30 minutes are allotted to conduct an induction briefing and provide explanations on the work regulations, which are not included in the total Task execution time.

No more than 30 minutes are allotted for familiarization with a workplace and study of the Task, which are not included in the total Task execution time. Based on the results, a protocol shall be prepared (Annex No. 2, Form 1, 2, 3).

5.11.2 Beginning and completion of work

The Participant shall wait for the instructions of the Responsible Person or the Jury expert (if applicable) to start and finish the work. If, for reasons beyond the control of the Participant, he/she had to interrupt the Task, then he/she shall immediately report the forced stop to the Jury expert (if applicable), or to the Responsible Person. In this case, the start and end time of the stop shall be recorded.

After confirmation by the Jury expert (if applicable), or by the Responsible Person, the Participant shall have the right to receive additional time equal to the time of forced stop. The amount of extra time shall be determined individually and shall be recorded in the Protocol of an emergency situation (Annex No. 2, form 4).

5.11.3 Abnormal situations

Any deviations from this Methodology and the provisions of the General Procedure for the Championship shall be considered as an abnormal situation. The decision on an abnormal situation shall be made by the Jury experts (if applicable) by voting or by the Responsible person with the execution of the corresponding protocol (Annex No. 2, form 4).

5.11.4 Communication and contacts by Participants

The Participants may not legally communicate with unauthorized persons during the official time of the preliminary stage of the Championship, including contacts of Participants with each other are prohibited. Time periods (15-30 minutes) allocated for official communication of Participants can be held before the start of the Task and after the end of work on the site. Using any equipment for personal communications (mobile phones, electronic devices) is prohibited.

5.13.8 Illness or accident

If any of the Participants gets sick, or falls victim to an accident, the Responsible Person or the Chairman of the Jury (if applicable) shall be immediately notified of this, and shall decide whether to award points to the Participant for the amount of work performed.

5.13.9 Labor Protection

All Participants on the site shall comply with labor protection and safety requirements.

In order to support the measures to prevent the spread of the novel coronavirus infection inside the Russian Federation, all people that are present at the Championship site shall comply with a complex of protective measures to help combat the COVID-19 infection.

6. THE ORDER OF THE FINAL STAGE OF THE CHAMPIONSHIP

.1 The Organizing Committee shall establish the dates and venue of the final stage of the Championship annually and publish them on the official website of the Championship.

6.2 The form of participation in the Championship is full-time, with a day release.

6.3 The Participants shall arrive at the venue of the final stage of the Championship no later than 1 (one) day before the start of the competition.

6.4 Prior to the start of the Championship competitions, the Participants shall receive registration badges, undergo a General labor protection and safety briefing, and participate in a General organizational meeting in the Championship region. The time and place shall be determined by the Organizer and notified additionally no later than 5 (five) days before the start of the Championship competitions.

6.5 At the site of conducting the final stage:

6.5.1 Becoming familiar with the workplace and Task

Participants are allowed to perform the Task only after passing the briefing on labor protection and safety at the workplace.

Immediately before the beginning of the Task, the Technical Experts conduct an induction briefing of the Participants regarding the work regulations at workplaces, and acquaint the Participants with the Task content and the evaluation criteria.

No more than 30 minutes are allotted to conduct an induction briefing and provide explanations on the work regulations, which are not included in the total Task execution time.

No more than 30 minutes are allotted for familiarization with a workplace and study of the Task, which are not included in the total Task execution time. Based on the results, the Technical Expert shall execute a protocol (Annex No. 2, Form 1, 2, 3).

6.5.2 Beginning and completion of work

The participant must wait for the instructions of the Technical Expert to begin and complete the work. If, for reasons beyond the control of the Participant, he/she had to interrupt the Task, then he/she shall immediately report the forced stop to a Jury expert. In this case, the start and end time of the stop shall be recorded.

After confirmation by the Jury Expert, the Participant shall have the right to receive additional time equal to the time of forced stop. The amount of extra time shall be determined individually and shall be recorded in the Protocol of an emergency situation (Annex No. 2, form 4).

6.5.3 Abnormal situations

Any deviations from this Methodology and the provisions of the General Procedure for the Championship shall be considered as an abnormal situation. The decision on an abnormal situation shall be made by the Jury experts (if applicable) by voting or by the Responsible person with the execution of the corresponding protocol (Annex No. 2, form 4).

6.5.4 Communication and contacts by Participants, Technical experts, and the Expert jury

Any communication during the period of Task completion by Participants shall be regulated by the General Procedure for the Championship.

6.5.5 Illness or accidents

In case of an accident or sudden illness, the Participant shall first report the incident to the Jury Expert on the site, who shall provide first aid measures to the victims, call an ambulance, and, if necessary, send the victim to the nearest medical facility.

The Jury Expert shall make a collective decision on whether it is possible to compensate for lost time. If a Participant has to withdraw from further participation in the Championship, he/she receives points for the amount of work performed.

6.5.6 Labor Protection

All Participants on the site shall comply with labor protection and safety requirements.

In order to support the measures to prevent the spread of the novel coronavirus infection inside the Russian Federation, all people that are present at the Championship site shall comply with a complex of protective measures to help combat the COVID-19 infection.

7. TASK AND EVALUATION STRATEGY

7.1 Preliminary stage (if applicable)

7.1.1 The task of the preliminary stage contains a theoretical and practical part and shall be conducted in the testing format. In total, the test contains 51 (fifty one) questions. The total time for completing the Task is no more than 120 (one hundred and twenty) minutes without a break.

7.1.2 The tasks of the theoretical part are 50 (fifty) test questions with multiple choice answers, of which 1 (one) can be correct. Time to complete the methodical block is 60 minutes

7.1.3 The block of practical tasks (cases) includes 1 (one) calculation case for each section of the nomination in the form of text and/or graphic tasks. The Participants are given 60 minutes without breaks to complete the case.

7.1.4 The Tests are performed individually by each Participant according to their role.

7.1.5 Tests may contain both text and graphical questions.

7.1.6 During the preliminary stage Task execution, each Participant shall answer all theoretical questions and solve the practical case.

7.1.7 The Task Assessment is on a 70 point scale.

7.1.8 Each correct answer of the theoretical part of the Task corresponds to 1 (one) point.

7.1.9 The maximum number of points for the theoretical part of the Task is 50 (fifty) points.

7.1.10 The practical case is estimated at 20 (twenty) points.

7.1.11 Calculation of the total number of correct answers to the Task shall be performed either automatically (if the Resource or the Participant Organization's own electronic resources are used as a testing tool), or manually by the Responsible Person or the Jury.

7.1.13 The results of performance of the tasks by the Participants shall be drawn up in the final report in accordance with Annex 4 (from 3) to the Methodology.

7.2 Final stage

7.2.1 The Task of the final stage is a simulation of the construction project management processes and consist of five conceptual gates of the conditional construction project implementation.

During the final stage of the Championship, the Participant teams will have to execute crosscutting case Tasks. The list of approximate tasks to be solved by the Participants of the final stage of the Championship:

- Team building. Choice of strategy;
- Generation of project content - Decomposition of results;
- Identification of stakeholders. Generation of the integrated Project OBS;
- Generation of multilevel calendar and network schedule of the project using Oracle Primavera P6 Professional PMIS (project management information system);
- Assessment of value at the initial stage before contracting (including using specialized software);
- Clarification of project cost taking into account concluded contracts and new information about the project. (including with the use of specialized software);
- Identification of project risks. Qualitative analysis of risks. Mitigating measures development. Assessment of value of anti-risk measures. Generation of APC (schedule) of anti-risk measures;
- Project budgeting. Reserve assessment;
- Generation of the monthly and daily schedule;
- Input of actual data on executed works of the project;
- Generation of the report on actual project implementation;
- Generation of forecast on terms and cost of project implementation using EVM methodology;
- Generating suggestions of teams on achieving the Project PT (performance targets) using the tools and methods of schedule compression, resource alignment and redistribution;
- Introducing approved changes to the APC;
- Closing of the project. Summing-up. Work with lessons learned. Final report.

When performing a Task, the Teams of Participants need to make flexible and timely decisions in the face of uncertainty and resource constraints, collect missing information, and complete the tasks in accordance with unexpected “Customer” requirements.

7.2.2 The time allowed to complete the Task is no more than 20 hours within two days, including a lunch break.

7.2.3 The Task and assessment criteria for the final stage of the Championship are verified in accordance with the Verification Procedure.

7.2.4 The Tasks shall be executed by the Participants in digital format, i.e. without the use of paper media.

7.2.5 The purpose of the crosscutting Task of the final stage:

- to simulate the building of a construction project with the use of modern tools, to assess and maintain the value of the project throughout all stages of project implementation and to implement the conditional project within the agreed and approved project schedule with minimal deviations from the budget.

- in the process of execution of tasks, competently and effectively distribute roles of team specialists according to available professional skills and confirm the declared level of professional competence.

7.2.6 The results of the Task completed by the Participants shall be evaluated by the Jury in accordance with the assessment criteria within 2 (two) days of the final competition. The Jury shall provide the participants with final results and valuation sheets for review. Participants confirm that they have familiarized themselves with the results by signing the valuation sheets.

7.2.6 The Jury's Decisions on the results of the Tasks completed by the Participants shall be drawn up in the final report sheet in accordance with Annex 4 to the Methodology. The report form sheet can be supplemented by a decision made by the Organizer.

8. EXPERT JURY

8.1 Preliminary stage (if applicable)

8.1.1 In order to assess the performance of the Tasks of the preliminary stage, the Participant Organizations can independently create an Expert Jury on team nomination "Construction project management". Assessment of Tasks performed by the Participants may also be carried out either automatically (if the Resource or the Participant Organization's own electronic resources are used as a testing tool), or manually by the Responsible Person.

8.1.2 The Jury for team nomination "Construction project management" consists of the Chairman and 2 (two) Jury members.

8.1.3 The Chairman of the Jury shall be determined by a simple drawing method - a random selection of a conditional subject from a variety of similar subjects.

8.2 Final stage

8.2.1 In order to assess the performance of the Tasks of the Final Stage by the Participants, a Jury of the team nomination "Construction project management" consisting of experts of the Participant Organizations is formed.

8.2.2 The requirements for the Expert jury and the principle of forming the personal composition of the Jury in the final stage of the Championship are established by the Regulations on the work of the Expert jury.

8.2.3 The activities of the Expert Jury is regulated by official documents: the General Procedure for the Championship, the Regulations on the work of the Expert Jury, and the Methodology.

9. THE PROCEDURE FOR DETERMINING THE FINALISTS AND WINNERS OF THE CHAMPIONSHIP

9.1 Procedure for determining the Finalists (if applicable)

9.1.1 The winners of the preliminary stage of the Championship are determined for each role on a basis of the maximum score received by the Participants. The final scores of the Participants for each role are compared, and the overall rating of the Participants by roles is generated.

9.1.2 Participant Organizations shall form and approve the final Protocol as per Annex 4 to the Methodology based on the results of the preliminary stage of the Championship.

9.1.3 The Team of Finalists in the "Construction Project Management" nomination is formed by the Organization-participant independently from the winners by roles in accordance with the Quota according to the general Championship Procedure.

9.1.4 In case several Participants by roles have scored the same number of points, the winners shall be determined by the time of completion of the Task, the Participants who completed the Tasks faster go to the final stage of the Championship.

9.1.5 All finalists shall register on the official website of the Championship and fill out a Participant questionnaire in the "For Participants" section.

9.1.6 The Participant Organizations shall send an official email to the Organizer's email address with the list of Finalists approved by the organization's director, or an authorized representative (main and reserve members), for the nominations in the form prescribed as per Appendix No. 6 to the Methodology, in both PDF and Excel format, within the period established by the Organizer and published on the Official website of the Championship.

9.2 Procedure for determining the winners of the Championship

9.2.1 The Jury shall sum up the results of the Championship in the nomination and determine the winners in the final stage of the Championship.

9.2.2 The Participant who has received the highest point count based on the results of Tasks and has taken the 1 (first) place in the overall rating of the Participants shall be named the winner in the nomination.

9.2.3 In case several Participants have scored the same number of points, the winners shall be determined by the introduction of an additional assessment criterion, which the Technical expert and the Jury shall announce to the Participants before the start of the competition.

9.2.4 The Jury shall create a list of winners of the final stage of the Championship and draw up the final Protocol, which shall be submitted to the Organizer along with the Protocols and rating sheets with the results of Tasks.

10. REPLACEMENTS

10.1. Participant Organizations shall ensure a reserve team of Participants for the nomination to replace Finalists in the event of unforeseen circumstances and forced cancellation of participation of Participants from the first team in the final stage of the Championship.

10.2. The number of reserve Participants shall be equal to the number of the main Participants.

10.3. Participants of the reserve team shall meet the qualification criteria specified in the Methodology.

10.4. Reserve team participants shall register on the official website of the Championship, and fill out a Participant questionnaire in the “For Participants” section.

10.5. Participants can be replaced no later than 2 (two) weeks before the start of the final stage of the Championship. The date of replacement shall be the date when the Organizer sends a response to the Participant Organizations with confirmation of the replacement.

10.6. The Organization participating in the Championship shall replace the Participant from the reserve team of Participants by sending an official notification to the Organizer indicating the reason for the replacement, indicating data about the Participants of the main and reserve teams and receiving a response from the Organizer confirming the replacement.

11. APPEALS

11.1 Within the framework of the final stage of the Championship, the Participants may appeal against the quality of the evaluation of the results and Jury work on the evaluation and summing up procedure.

11.2 The appeal is filed on the terms and conditions established by the Regulation on the appeal commissions for nominations.

11.3 Appeals are reviewed by the Appeals Commission according to the nomination.

12. RIGHTS, POWERS AND OBLIGATIONS

The rights, powers and obligations of the Participants, Expert Juries, Technical Experts, the Organizer are established in the General Procedure for the Championship.

13. AWARDS

The winners and laureates of the Championship are provided with awards and prizes in accordance with the General Procedure for the Championship.

1. Example of a theoretical task.

1. You are the project manager, working on an internal project and are at the beginning of the planning process. You noticed that some employees were named as members of the project team during the review of the project charter. Which of the following is most suitable for the described situation?

- 1) Resource requirement, output for "Resource Planning";
- 2) "Pre-assignments", tools and methods "Assignment of personnel";
- 3) Personnel requirements, input for "Organizational planning";
- 4) Description of the resource fund, input for "Resource Planning".

2. Your project is going according to plan. One of the key deliverables of your project will be developed by an external organization and your organization does all other work related to the project. The end of this key product development is scheduled for the end of the project design phase. After the design phase, the project has two more phases to go through. Does the final process have to be completed, and if so, which one?

- 1) Completion of contracts and administrative closure;
- 2) Administrative closure only;
- 3) Completion of contracts only;
- 4) No completion processes shall be performed at this stage because the project is not yet completed.

3. The customer of the project shall be responsible for:

- 1) Approval of project contracts and selection of contractors;
- 2) Identifying the personnel of the Project Steering Committee;
- 3) Approval of project disbursement and financing budgets;
- 4) Determining the project results and accepting them.

2. Example of a practical task.

Here is the data of the conditional construction project based on ___ works. The project works start on the first day and linked by different types of technological dependencies; some dependencies have positive or negative delays in the execution starting.

Using the data from the network diagram (Fig.1) and the work table (Table 1), you need to:

1. Determine the duration of the project in days;
2. Determine the number of works that belong to the critical path;
3. ...

Write down the obtained results of calculations in blank cells of Table 1.

Figure

Fig.1

Table 1.

Title of work	Duration	Work - successor: type of dependency delay	Work - predecessor: type of dependency ...	Full reserve	...	Lies on a critical path (yes/no)
Work A	10	...				
Work B	7	Work C: FS -3, Work O: SS	Work A FS 5			
Work C
Work D
Work E
Work F
Work G
Work H
Work I
Work J
Work K
...

Recommended forms of protocols for the work of the Jury

Form 1

**Report sheet on familiarization of the Participants with
the workplaces**

Nomination _____.

Chairman of the Jury _____

We, the undersigned, confirm that we have been given the opportunity to fully familiarize ourselves with the the workplaces on the site.

No.	Participant's Full Name	Comments on information received	Signature

Date _____ 2021

Chairman of the Jury _____

Form 2

Report sheet on familiarization of the Participants with the Task and assessment criteria

Nomination _____.

Chairman of the Jury _____

We, the undersigned, confirm that we have been given the opportunity to fully familiarize ourselves with the Task and the assessment criteria.

No.	Participant's Full Name	Comments and misunderstanding on information received	Signature

Date _____ 2021

Chairman of the Jury _____

Form 3

Report sheet on familiarization of the Participants with safety and labor protection rules

Nomination _____ .

Safety and labour protection briefing was conducted by _____

Chairman of the Jury _____

No.	Participant's Full Name	Comments	Signature

Date _____ 2021

The briefing was conducted by _____ / _____ /

Form of providing the Organizer with a list of Finalists

First team of Finalists:

No.	Full Name	Position	Organization	E-mail	Contact phone	Specialty within the nomination (if applicable)	Registration mark on the Official website (yes / no)
Nomination							
Nomination							
...							

Reserve team of Finalists:

No.	Full Name	Position	Organization	E-mail	Contact phone	Specialty within the nomination (if applicable)	Registration mark on the Official website (yes / no)
Nomination							
...							

Head of organization (authorized person)

_____ / _____ /

Responsible employee:

_____ / _____ /

Recommended forms of final reporting documents for the work of the Jury

Form 1

LIST**of Championship Participants**

Nomination « _____ ».

Period of conducting: _____.

Place of conducting: _____.

No.	Participant's Full Name	Position	Organization	Contacts
1.				
2.				
3.				
4.				
...				

Form 2
LIST
of Jury members

No.	Full name	Position	Organization	Contact details/e-mail	Nomination
1.					
2.					
3.					
4.					
5.					
6.					
...					

Form 3

Final Report sheet
The Jury

Date _____2021

Nomination «_____».

Period of conducting: _____.

Place of conducting: _____.

No.	Participant's Full Name	Position	Point count for completing the Task	Final score (point count)	Place
1.					
2.					
3.					
4.					

5.					
6.					
...					

Jury Members:

1.	Full name	Position	Organization	Signature	Date
2.	Full name	Position	Organization	Signature	Date
...					

Chairman of the Jury:

1.	Full name	Position	Organization	Signature	Date
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Head of organization (authorized person)

_____ / _____ /

Responsible employee:

_____ / _____ /

