

# Revision of Guidance for Integrated Software Process Management

(Development Review : For External opinion inquiry)

2021. 01.



Machinery Rule Development Team

## - Main Amendments -

(1) Effective date : 01 July 2021 (based on contract date for construction)

© Reflection of amendment of IEC/IEEE 15288 (IEC/IEEE 15288:2015 6.3.1 ~ 6.3.7.)

© Amendment of Ch.1 Sec.1 (for extending the application to software other than control system)

Present	Amendment	Reason
<p style="text-align: center;"><b>CHAPTER 1 GENERAL</b></p> <p style="text-align: center;"><b>Section 1 General</b></p> <p><b>101. Application</b></p> <p>1. This Guidance presents procedures and criteria applied by the Society through the review and survey of computer-based control systems related to software development. The purpose of this guidance is to reduce software-related incidents that can negatively affect system performance.</p> <p><i>&lt;Same as the present&gt;</i></p>	<p style="text-align: center;"><b>CHAPTER 1 GENERAL</b></p> <p style="text-align: center;"><b>Section 1 General</b></p> <p><b>101. Application</b></p> <p>1. This Guidance presents procedures and criteria applied by the Society through the review and survey of computer-based control systems related to software development. The purpose of this guidance is to reduce software-related incidents that can negatively affect system performance.</p> <p><i>&lt;Same as the present&gt;</i></p> <p><b>6. <u>Software for purpose other than control(e.g. monitoring, management), when it affects on the performance of the control system, is to be developed accordance with the procedures and criteria in this guidance.</u></b></p>	

Present	Amendment	Reason
<p style="text-align: center;"><b>CHAPTER 4 PROJECT PROCESS</b></p> <p style="text-align: center;"><b>Section 1 Project Management Process</b></p> <p><b>101. General</b>  <i>&lt;Same as the present&gt;</i></p> <p><b>102. Project planning process</b></p> <p><b>1. General</b></p> <p>The project management process:</p> <p>(1) The purpose of the Project Planning Process is to produce and communicate effective and workable project plans.</p> <p>(2) <i>&lt;Same as the present&gt;</i></p>	<p style="text-align: center;"><b>CHAPTER 4 PROJECT PROCESS</b></p> <p style="text-align: center;"><b>Section 1 Project Management Process</b></p> <p><b>101. General</b>  <i>&lt;Same as the present&gt;</i></p> <p><b>102. Project planning process</b></p> <p><b>1. General</b></p> <p>The project management process:</p> <p>(1) The purpose of the Project Planning Process is to produce and communicate effective and workable project plans.</p> <p>(2) <i>&lt;Same as the present&gt;</i></p> <p><u>(3) The strategies defined in each of the other processes provide input are integrated in the Project planning process.</u></p>	<p style="text-align: center;">- Rev. of IEC 15288</p>

Present	Amendment	Reason
<p><b>2. Activities</b></p> <p>The planning process shall implement activities in accordance with applicable organization policies and procedures as follow.</p> <p>(1) project definition</p> <p>(a) <u>Identify project objectives and constraints. Objectives and constraints include performance and other quality aspects, cost, time and stakeholder satisfaction. Each objective is identified with a level of detail that permits selection, tailoring and implementation of the appropriate processes and activities.</u></p> <p>(b) <u>Define the project scope as established in the agreement. The project includes all the relevant activities required to satisfy business decision criteria and complete the project successfully. A project can have responsibility for one or more processes in the complete system life cycle. Planning includes appropriate actions for maintaining project plans, performing assessments and controlling the project.</u></p> <p>(c) Define and maintain a life cycle model that is comprised of processes using the defined life cycle models of the organization.</p>	<p><b>2. Activities</b></p> <p>The planning process shall implement activities in accordance with applicable organization policies and procedures as follow.</p> <p>(1) project definition</p> <p>(A) Identify project objectives and constraints.</p> <p>(a) Objectives and constraints include performance and other quality aspects, cost, time and stakeholder satisfaction.</p> <p>(b) Each objective is identified with a level of detail that permits selection, tailoring and implementation of the appropriate processes and activities.</p> <p>(B) Define the project scope as established in the agreement.</p> <p>(a) The project includes all the relevant activities required to satisfy business decision criteria and complete the project successfully.</p> <p>(b) A project can have responsibility for one or more processes in the complete system life cycle.</p> <p>(c) Planning includes appropriate actions for maintaining project plans, performing assessments and controlling the project.</p> <p>(C) Define and maintain a life cycle model that is comprised of processes using the defined life cycle models of the organization.</p>	

Present	Amendment	Reason
<p>(2) <u>Plan the project resources</u></p> <p>(a) <u>Define and maintain a project schedule based on project objectives and work estimates.</u></p> <p>(b) <u>Define project achievement criteria for the life cycle process decision gates, delivery dates and major dependencies on external inputs or outputs.</u></p> <p>(c) <u>Define the project costs and plan a budget.</u></p> <p>(d) <u>Establish the structure of authorities and responsibilities for project work.</u></p>	<p>(2) <del>Plan the project resources</del> <u>Plan project and technical management</u></p> <p>(A) <u>Define and maintain a project schedule based on project objectives and work estimates.</u></p> <p>(a) <u>This includes definition of the duration, relationship, dependencies and sequence of activities, achievement milestones, resources employed and schedule reserves for risk management necessary to achieve timely completion of the project.</u></p> <p>(B) <u>Define project achievement criteria for the life cycle process decision gates, delivery dates and major dependencies on external inputs or outputs.</u></p> <p>(a) <u>The time internals between internal reviews are defined in accordance with organizational policy on issues such as business and system criticality, schedule and technical risks.</u></p> <p>(C) <u>Define the project costs and plan a budget.</u></p> <p>(a) <u>Costs are based on the schedule, labor estimates, infrastructure costs, procurement items, acquired service and enabling system estimates, and budget reserves for risk management.</u></p> <p>(D) <u>Establish the structure of authorities and responsibilities for project work.</u></p> <p>(a) <u>This includes defining the project organization, staff acquisitions, and the development of staff skills.</u></p> <p>(b) <u>Authorities includes, as appropriate, the legally responsible roles and individuals, e.g., design authorization, safety authorization, and award of certification or accreditation.</u></p>	<p>- Plan project and technical management</p>

Present	Amendment	Reason
<p>(e) Define the infrastructure and services required by the project.</p> <p>(f) Plan the acquisition of materials, goods and enabling system services supplied from outside the project.</p> <p>&lt;New&gt;</p>	<p>(E) Define the infrastructure and services required by the project.</p> <p>(a) This includes defining the capacity needed, its availability and its allocation to project tasks.</p> <p>(b) Infrastructure includes facilities, tools, communications, and information technology assets.</p> <p>(c) The requirements for enabling systems for each life cycle stage are also specified.</p> <p>(F) Plan the acquisition of materials, goods and enabling system services supplied from outside the project.</p> <p>(a) This includes, as necessary, plans for solicitation, supplier selection, acceptance, contract administration and contract closure.</p> <p>(G) Generate and communicate a plan for project and technical management and execution, including reviews.</p>	

Present	Amendment	Reason
<p>(3) <u>Plan the project technical and quality management</u></p> <p>(a) <u>Generate and communicate a plan for technical management and execution of the project, including reviews.</u></p> <p>(b) <u>Generate a project quality plan. This includes defining and documenting project quality objectives that assure that the quality management policies and procedures of the organization are attained. Plan in accordance with ISO 9001 or other quality standards.</u></p> <p>(4) <u>activities</u></p> <p>(a) <u>Identify project goals / constraints</u></p> <p>(b) <u>Project scope definition</u></p> <p>(c) <u>Project Schedule Definition / Maintenance</u></p> <p>(d) <u>project cost definition and budget planning;</u></p> <p>(e) <u>Establishment of responsibility / authority structure</u></p> <p>(f) <u>Establishment of responsibility / authority structure</u></p> <p>3. deliverable</p> <p><i>&lt;Same as the present&gt;</i></p>	<p><del>(3) Plan the project technical and quality management</del></p> <p><del>(a) Generate and communicate a plan for technical management and execution of the project, including reviews.</del></p> <p><del>(b) Generate a project quality plan. This includes defining and documenting project quality objectives that assure that the quality management policies and procedures of the organization are attained. Plan in accordance with ISO 9001 or other quality standards.</del></p> <p>(3) <u>Activate the project</u></p> <p>(A) <u>Obtain authorization for the project.</u></p> <p>(B) <u>Submit requests and obtain commitments for necessary resources to perform the project.</u></p> <p>(C) <u>Implement project plans in order to meet the goal and requirements of the project.</u></p> <p><del>(4) activities</del></p> <p><del>(a) Identify project goals / constraints</del></p> <p><del>(b) Project scope definition</del></p> <p><del>(c) Project Schedule Definition / Maintenance</del></p> <p><del>(d) project cost definition and budget planning;</del></p> <p><del>(e) Establishment of responsibility / authority structure</del></p> <p><del>(f) Establishment of responsibility / authority structure</del></p> <p>3. deliverable</p> <p><i>&lt;Same as the present&gt;</i></p>	

Present	Amendment	Reason
<p>103. Project assessment and control process</p> <p>1. General</p> <p>(1) The purpose of the Project assessment and control process is to determine the status of the project and direct project plan execution to ensure that the project performs according to plans and schedules, within projected budgets, to satisfy technical objectives.</p> <p>(2) This process evaluates, periodically and at major events, the progress and achievements against requirements, plans and overall business objectives. <u>Information is communicated for management action when significant variances are detected. This process also includes redirecting the project activities and tasks, as appropriate, to correct identified deviations and variations from other project management or technical processes. Redirection may include re-planning as appropriate.</u></p>	<p>103. Project assessment and control process</p> <p>1. General</p> <p>(1) The purpose of the Project assessment and control process is as follow.</p> <p>(A) <u>To assess whether the plans are integrated, aligned, and feasible.</u></p> <p>(B) <u>To determine the status of the project, technical and process performance</u></p> <p>(C) <u>To ensure that the performance is according to plans and schedules, within projected budgets, to satisfy technical objectives.</u></p> <p>(2) This process evaluates, periodically and at major events, the progress and achievements against requirements, plans and overall business objectives. <u>Information is communicated for management action when significant variances are detected.</u></p> <p>(3) <u>This process also includes redirecting the project activities and tasks, as appropriate, to correct identified deviations and variations from other project management or technical processes.</u></p> <p>(4) <u>Redirection may include re-planning as appropriate.</u></p>	<p>- Changing text construction</p> <p>- Changing text construction</p>

Present	Amendment	Reason
<p><b>2. Activities</b></p> <p><u>The project shall implement the activities in accordance with applicable organization policies and procedures with respect to the Project assessment and control process as follows.</u></p> <p>(1) Assess the project  <i>&lt;New&gt;</i></p> <p>(a) <u>Assess project status against appropriate project plans to determine actual and projected cost, schedule and quality variations.</u></p> <p>(b) <u>Perform quality assurance in accordance with project plans.</u></p> <p>(c) <u>Assess the effectiveness of project team structure, roles, responsibilities, accountabilities, and authorities.</u></p>	<p><b>2. Activities</b></p> <p><del>The project process containing the Project assessment and control process shall implement the activities in accordance with applicable organization policies and procedures with respect to the Project assessment and control process as follows.</del></p> <p><u>(1) Plan for project assessment and control</u></p> <p><u>(A) Define the project assessment and control strategy</u></p> <p><u>(a) The expected Project assessment and control activities are identified including planned assessment methods and timeframes, necessary management and technical reviews.</u></p> <p><u>(2) Assess the project</u></p> <p><u>(A) Assess alignment of project objectives and plans with the project context.</u></p> <p><u>(B) Assess management and technical plans against objectives to determine adequacy and feasibility.</u></p> <p><u>(C) Assess project status against appropriate project plans to determine actual and projected cost, schedule and quality variations.</u></p> <p><del>(b) Perform quality assurance in accordance with project plans.</del></p> <p><u>(D) Assess the effectiveness of project team structure, roles, responsibilities, accountabilities, and authorities. Assess the adequacy of roles, responsibilities, accountabilities, and authorities.</u></p> <p><u>(a) Assessment includes the adequacy of personnel competencies to perform project roles and accomplish project tasks.</u></p> <p><u>(b) Objective measures are used wherever possible like efficiency of resource use, project achievement.</u></p>	<p>- Rev. of IEC 15288  (6.3.2.3. a)</p> <p>- IEC 15288  6.3.2.3. b)</p>

Present	Amendment	Reason
<p>(d) <u>Assess the adequacy and availability of the project's supporting infrastructure.</u></p> <p>(e) <u>Assess project progress using measured achievement and milestone completion.</u></p> <p>(f) <u>Conduct required management and technical reviews, audits and inspections to determine readiness to proceed to the next process of the system life cycle or project milestone.</u></p> <p>(g) <u>Monitor critical processes and new technologies.</u></p>	<p>(E) <del>Assess the adequacy and availability of the project's supporting infrastructure resources.</del></p> <p>(a) Resources include infrastructure, personnel, funding, time, or other pertinent items.</p> <p>(b) Assessment includes confirming that intra-organizational commitments are satisfied.</p> <p>(F) <u>Assess project progress using measured achievement and milestone completion.</u></p> <p>(a) <u>Assessment includes collecting and evaluating data for labor, material, service costs, and technical performance as well as other technical data about objectives, such as affordability.</u></p> <p>(b) <u>Assessment results are compared against measures of achievement.</u></p> <p>(c) <u>Conducting effectiveness assessments is included to determine the adequacy of developing system against requirements.</u></p> <p>(d) <u>The readiness of enabling systems are also included to deliver their services when needed.</u></p> <p>(G) <del>Conduct required management and technical reviews, audits and inspections to determine readiness to proceed to the next process of the system life cycle or project milestone.</del></p> <p>(a) These are conducted to determine readiness to proceed to the next stage of the life cycle or project milestone;</p> <p>(b) To help ensure that project and technical objectives are being met; or</p> <p>(c) To obtain feedback from stakeholders</p> <p>(H) <u>Monitor critical processes and new technologies.</u></p> <p>(a) <u>Identifying and evaluating technology maturity and insertion are included.</u></p>	<p>- KS X ISO IEC 15288 (2009)</p> <p>- IEC 15288 6.3.2.3. b) 6) NOTE</p> <p>- KS X ISO IEC 15288 (2009)</p>

Present	Amendment	Reason
<p>(h) <u>Analyze measurement results to identify deviations or variations from planned values or status and make appropriate recommendations for corrections.</u></p> <p>(i) <u>Provide periodic status reports and required deviation reports as designated in the agreement, policies and procedures.</u></p> <p>&lt;New&gt;</p>	<p><del>(I) Analyze measurement results to identify deviations or variations from planned values or status and make appropriate recommendations for corrections.</del></p> <p><del>(a) Measurement results are analyzed to identify deviations, variations or undesirable trends from planned values that include potential concerns, and to make appropriate recommendations for corrections or preventive actions.</del></p> <p><del>(b) Analysis includes, where appropriate, statistical analysis of measures that indicates trends, e.g. fault density to indicate quality of outputs, distribution of measured parameters that indicate process repeatability.</del></p> <p><del>(i) Provide periodic status reports and required deviation reports as designated in the agreement, policies and procedures.</del></p> <p>(J) <u>Record and provide status and findings from assesment tasks</u></p> <p>(a) <u>The materials recorded and provided are generally designated in the agreement, policies, and procedures.</u></p> <p>(K) <u>Monitor process execution within the project</u></p> <p>(a) <u>This includes the analysis of process measures and review of trends with respect to project objectives.</u></p>	<p>- IEC 15288 6.3.2.3. b) 10) NOTE</p> <p>- IEC 15288 6.3.2.3. b) 11)</p>

Present	Amendment	Reason
<p>(2) Control the project</p> <p>(a) <u>Manage project requirements and changes to requirements in accordance with the project plans.</u></p> <p>(b) <u>Initiate the corrective actions needed to achieve the goals and outputs of project tasks that have deviated outside acceptable or defined limits. corrective action may include re-planning or re-d ployment and re-assignment of personnel, tools and project infrastructure assets when inadequacy or unavailability has been detected(c).</u></p> <p>(c) <u>Initiate preventive actions, as appropriate, to ensure achievement of the goals and outputs of the project.</u></p> <p>(d) <u>Initiate problem resolution actions to correct non-conformances. This includes performing corrective actions to the implementation and execution of the life cycle processes when non-conformances are traced to them. Actions are documented and reviewed to confirm their adequacy and timeliness(f).</u></p>	<p>(3) Control the project</p> <p><del>(a) <u>Manage project requirements and changes to requirements in accordance with the project plans.</u></del></p> <p><del>(b) <u>Initiate the corrective actions needed to achieve the goals and outputs of project tasks that have deviated outside acceptable or defined limits. corrective action may include re-planning or re-d ployment and re-assignment of personnel, tools and project infrastructure assets when inadequacy or unavailability has been detected.</u></del></p> <p><del>(c) <u>Initiate preventive actions, as appropriate, to ensure achievement of the goals and outputs of the project.</u></del></p> <p><del>(d) <u>Initiate problem resolution actions to correct non-conformances. This includes performing corrective actions to the implementation and execution of the life cycle processes when non-conformances are traced to them. Actions are documented and reviewed to confirm their adequacy and timeliness.</u></del></p> <p>(A) <u>Initiate necessary actions needed to address identified issues.</u></p> <p>(a) <u>The initiation occurs when project or technical achievement is not meeting planned targets.</u></p> <p>(b) <u>This includes corrective, preventive, and problem resolution actions.</u></p> <p>(c) <u>Actions generally require replanning or reassignment of personnel, tools and infrastructure assets when inadequacy or unavailability has been detected, or when project or technical achievement exceeds targets or plan.</u></p> <p>(d) <u>The actions often impact the cose, schedule, or technical scope or definition.</u></p> <p>(e) <u>The actions sometimes require changes to the implementation and execution of the software life cycle processes.</u></p> <p>(f) <u>To confirm their adequacy and timeliness, actions are recorded and reviewed.</u></p>	<p>- Rev. of IEC 15288 6.3.2.3. c)</p> <p>(b) ~ (d) is transferred to detail content of (A)</p>

Present	Amendment	Reason
<p>(e) <u>Evolve with time the scope, definition and the related breakdown of the work to be carried out by the project in response to the corrective action decisions taken and the estimated changes they introduce.</u></p> <p>(f) <u>Initiate change actions when there is a contractual change to cost, time or quality due to the impact of an acquirer or supplier request.</u></p> <p>(g) <u>Act to correct defective provision of acquired goods and services through constructive interaction with the supplier. This may include consideration of modified terms and conditions for supply or initiating new supplier selection(C/a).</u></p> <p>(h) <u>Authorize the project to proceed toward the next milestone or event if justified.</u></p> <p>(3) <u>Close the project</u>  (a) <u>When all activities are completed, determine whether the project is complete, taking into account the criteria as specified in the agreement or as part of organization's procedure.</u>  (b) <u>Archive the results and records in a suitable environment as specified in the agreement.</u></p> <p><b>3. Output</b>  <i>⟨Same as the present⟩</i></p>	<p><del>(e) Evolve with time the scope, definition and the related breakdown of the work to be carried out by the project in response to the corrective action decisions taken and the estimated changes they introduce.</del></p> <p><del>(B) Initiate necessary project replanning</del>  <del>(a) Project replanning is initiated when project objectives or constraints have changed, or when planning assumptions are shown to be invalid.</del>  <del>(b) Changing the agreement between system integrator and supplier may be considered, if necessary.</del></p> <p>(C) <u>Initiate change actions when there is a contractual change to cost, time or quality due to the impact of an system integrator or supplier request.</u>  (a) <u>Act to correct defective provision of acquired goods and services through constructive interaction with the supplier. This includes consideration of modified terms and conditions for supply or initiating new supplier selection.</u></p> <p>(h) <u>Authorize the project to proceed toward the next milestone or event if justified.</u>  (a) <u>This process is used to reach agreement on milestone completion.</u></p> <p><del>(3) Close the project</del>  <del>(a) When all activities are completed, determine whether the project is complete, taking into account the criteria as specified in the agreement or as part of organization's procedure.</del>  <del>(b) Archive the results and records in a suitable environment as specified in the agreement.</del></p> <p><b>3. Output</b>  <i>⟨Same as the present⟩</i></p>	<p>- Rev. of IEC 15288  6.3.2.3. c)  (g) is transferred to detail content of (C)</p> <p>- Rev. of IEC 15288</p>

Present	Amendment	Reason
<p style="text-align: center;">Section 2 Support Process</p> <p>201. General <i>&lt;Same as the present&gt;</i></p> <p>202. Decision Management Process</p> <p>1. General</p> <p>(1) The purpose of the Decision Management Process is to select the most beneficial course of project action where alternatives exist.</p>	<p style="text-align: center;">Section 2 Support Process</p> <p>201. General <i>&lt;Same as the present&gt;</i></p> <p>202. Decision Management Process</p> <p>1. General</p> <p>(1) The purpose of the Decision Management Process is <del>to select the most beneficial course of project action where alternatives exist.</del> <u>to provide a structured, analytical framework for objectively identifying, characterizing and evaluating a set of alternatives for a decision at any point in the life cycle and select the most beneficial course of action.</u></p> <p>(A) <u>This process is used to resolve technical or project issues and respond to requests for decisions encountered during the software life cycle, in order to identify the alternative(s) that provides the preferred outcomes for the situation.</u></p> <p>(B) <u>Alternative actions are identified and selected of which are suitable for the situation of its process.</u></p> <p>(C) <u>Key study results such as assumptions and decision rationale data are maintained to inform decision-makers and support future decision-making.</u></p>	<p>- Rev. of IEC 15288 6.3.3.1 (1)~(4) is transferred to detail content of (1)</p> <p>- (B) came from the current (2) paragraph.</p>

Present	Amendment	Reason
<p>(2) <u>This process responds to a request for a decision encountered during the system life cycle, whatever its nature or source, in order to reach specified, desirable or optimized outcomes.</u></p> <p>(3) <u>Alternative actions are analyzed and a course of action selected and directed.</u></p> <p>(4) <u>Decisions and their rationale are recorded to support future decision-making.</u></p> <p><b>2. Activities</b></p> <p>The <u>project</u> shall implement the following activities and tasks in accordance with applicable organization policies and procedures <u>with respect to the Decision Management Process.</u></p> <p>(1) <u>Plan and define decisions</u></p> <p>(a) <u>Define a decision management strategy. A decision management strategy includes the identification and allocation of responsibility for, and authority to make, decisions and the identification of decision categories and a prioritization scheme.</u></p> <p>(b) <u>Decisions may arise as a result of an effectiveness assessment, a technical trade-off, a problem needing to be solved, an action needed as a response to risk exceeding the acceptable threshold, a new opportunity or approval for project progression to the next life cycle process.</u></p> <p>(c) <u>Identify the circumstances and need for a decision. Record, categorize and promptly and objectively report problems or opportunities and the alternative courses of action that will resolve their outcome.</u></p>	<p><del>(2) This process responds to a request for a decision encountered during the system life cycle, whatever its nature or source, in order to reach specified, desirable or optimized outcomes.</del></p> <p><del>(3) Alternative actions are analyzed and a course of action selected and directed.</del></p> <p><del>(4) Decisions and their rationale are recorded to support future decision-making.</del></p> <p><b>2. Activities</b></p> <p>The <u>project</u> <del>process containing the Decision Management Process</del> shall implement the following activities and tasks in accordance with applicable organization policies and procedures with respect to the Decision Management Process.</p> <p>(1) <del>Plan and define</del> Prepare for decisions</p> <p>(A) Define a decision management strategy.</p> <p>(a) A decision management strategy includes the identification and allocation of responsibility for, and authority to make, decisions and the identification of decision categories and a prioritization scheme.</p> <p>(b) Decisions may arise as a result of an effectiveness assessment, a technical trade-off, a problem needing to be solved, an action needed as a response to risk exceeding the acceptable threshold, a new opportunity or approval for project progression to the next life cycle process.</p> <p>(c) <u>The degree of rigor and formality for applying to the decision analysis complies with organization or project guidelines.</u></p> <p>(B) Identify the circumstances and need for a decision.</p> <p>(a) Record and categorize <del>and promptly and objectively report</del> problems or opportunities and the alternative courses of action that will resolve their outcome.</p>	<p>- Changing the text.</p> <p>- IEC 15288 6.3.3.3 a) 2) NOTE</p>

Present	Amendment	Reason
<p>(d) <u>Involve relevant parties in the decision-making in order to draw on experience and knowledge.</u></p> <p>(2) Analyze the decision information</p> <p>(a) <u>Select and declare the decision management strategy for each decision situation.</u></p> <p>(b) <u>Identify desired outcomes and measurable success criteria.</u></p> <p>&lt;New&gt;</p> <p>(c) <u>Evaluate the balance of consequences of alternative actions, using the defined decision management strategy, to arrive at an optimization of, or an improvement in, an identified decision situation.</u></p>	<p>(C) <u>Involve relevant parties—stakeholders in the decision-making in order to draw on experience and knowledge.</u></p> <p>(a) <u>It should need to identify the subject matter expertise for the analysis and the decision.</u></p> <p>(2) Analyze the decision information</p> <p>(A) <u>Select and declare the decision management strategy for each decision situation.</u></p> <p>(a) <u>The degree of rigor required to resolve these problems or opportunities is determined, as well as the data and system analysis needed for evaluating the alternatives.</u></p> <p>(B) <u>Identify—Determine desired outcomes and measurable success criteria.</u></p> <p>(a) <u>Weighting factors for each criterion of decision management are determined, and the desired value and the threshold values for all quantifiable criteria.</u></p> <p>(C) <u>Identify the trade space and alternatives.</u></p> <p>(a) <u>They are qualitatively screened to reduce alternatives to a manageable number for further detailed systems analysis when a large number of alternatives exist.</u></p> <p>(b) <u>The screening is based on qualitative assessments of such factors as risk, cost, schedule, and regulatory impacts.</u></p> <p>(c) <u>The trade space is to find alternatives for best performance under cost constraint, or optimized alternatives under an acceptable performance area.</u></p> <p>(D) <u>Evaluate the balance of consequences of alternative actions, using the defined decision management strategy, to arrive at an optimization of, or an improvement in, an identified decision situation. each alternative, against the criteria.</u></p>	<p>- IEC 15288 6.3.3.3 b)</p> <p>- IEC 15288 6.3.3.3 b) 3)</p> <p>- KS X ISO/IEC 15288:2015</p> <p>- IEC 15288 6.3.3.3 b) 4)</p>

Present	Amendment	Reason
<p><u>(3) Track the decision</u> &lt;New&gt;</p> <p><del>(a) Record, track, evaluate and report decision outcomes to confirm that problems have been effectively resolved; adverse trends have been reversed and advantage has been taken of opportunities.</del></p> <p><del>(b) Maintain records of problems and opportunities and their disposition, as stipulated in agreements or organizational procedures and in a manner that permits auditing and learning from experience.</del></p> <p>203. Risk management process</p> <p>1. General</p> <p><u>(1) The purpose of the risk management process is to reduce the impact of uncertain events that may result in changes in quality, cost, schedule or technical characteristics.</u></p> <p><u>(2) This process identifies, evaluates, processes, and monitors risks throughout the life cycle, and for each hazard, appropriate treatment or risk-taking.</u></p>	<p><del>(3) Track the decision</del> Make and manage decisions</p> <p><u>(A) Determine preferred alternative for each decision.</u></p> <p><u>(a) Alternatives are evaluated quantitatively, using the selection criteria.</u></p> <p><u>(b) The selected alternative generally provides an optimization of, or improvement in, an identified decision.</u></p> <p><del>(B) Record the resolution, decision rationale, and assumptions.</del></p> <p><del>(a) Record, track, evaluate and report decision outcomes to confirm that problems have been effectively resolved; adverse trends have been reversed and advantage has been taken of opportunities.</del></p> <p><del>(b) Maintain records of problems and opportunities and their disposition, as stipulated in agreements or organizational procedures and in a manner that permits auditing and learning from experience.</del></p> <p><del>(C) Record, track, evaluate and report decisions.</del></p> <p><del>(a) As stipulated in agreements or organizational procedures, problems, opportunities, and their disposition are recorded to permit auditing and learning from experience.</del></p> <p><del>(b) The organization is able to confirm that problems have been effectively resolved, the adverse trends have been reversed, and that advantage has been taken of opportunities.</del></p> <p>203. Risk management process</p> <p>1. General</p> <p><del>(1) The purpose of the risk management process is to reduce the impact of uncertain events that may result in changes in quality, cost, schedule or technical characteristics. to identify, analyse, treat and monitor the risks continually.</del></p> <p><del>(2) This process identifies, evaluates, processes, and monitors risks throughout the life cycle, and for each hazard, appropriate treatment or risk-taking. The Risk management process is a continual process for systematically addressing risk throughout the life cycle of a system product or service.</del></p>	<p>- IEC 15288 6.3.3.3 c)</p> <p>- IEC 15288 6.3.4</p>

Present	Amendment	Reason
<p>&lt;New&gt;</p> <p>(3) <u>This process describes the overall risk management of SDLC, and detailed activities of risk management follow the requirements of each process.</u></p> <p><b>2. Plan risk management</b></p> <p>(1) <u>Define risk management policies.</u></p> <p>(2) <u>Document the risk management process to be implemented.</u></p>	<p>(3) <u>This process applied to risks related to the acquisition, development, maintenance or operation of a system.</u></p> <p><del>(3) This process describes the overall risk management of SDLC, and detailed activities of risk management follow the requirements of each process.</del></p> <p><b>2. Activities</b></p> <p><u>The process containing the Risk Management Process shall implement the following activities and tasks in accordance with applicable organization policies and procedures.</u></p> <p>(1) <u>Plan risk management</u></p> <p>(A) <u>Define risk management policies.</u></p> <p>(a) <u>Risk management policies includes the risk management process of all supply chain suppliers and describes how risks from all suppliers will be raised to the next level(s) for incorporation in the project risk process.</u></p> <p>(B) <del>Document the risk management process to be implemented.</del> <u>Define and record the context of the Risk management process.</u></p> <p>(a) <u>Record includes a description of stakeholders' perspectives, risk categories, and a description of the technical and managerial objectives, assumptions and constraints.</u></p> <p>(b) <u>The risk categories include the relevant technical areas of the system and facilitate identification of risks across the life cycle of the software.</u></p> <p>(c) <u>The aim of this activities is to generate a comprehensive list of risks</u></p> <p>(d) <u>The list of risks may be capable to create, enhance, prevent, degrade, accelerate or delay the events related achievement of objectives.</u></p> <p>(e) <u>Opportunities, which are one type of risk, provide potential benefits for the system or project.</u></p> <p>(f) <u>Pursuing each opportunity has associated risks that detract from the expected benefit.</u></p>	<p>- IEC 15288 6.3.4.3 a)</p>

Present	Amendment	Reason
<p>(3) Identify the responsible parties and their roles and responsibilities.</p> <p>(4) Provide the responsible parties with adequate resources to perform risk management.</p> <p>(5) Define the process for evaluating and improving the Risk Management Process.</p> <p><b>3. Manage the risk profiles</b></p> <p><u>(1)</u> Define and document the context of the Risk management process.</p> <p><u>(2)</u> Define and document the risk thresholds and conditions under which a level of risk may be accepted.</p> <p><u>(3)</u> Establish and maintain a risk profile.</p> <p><u>(4)</u> Periodically communicate the relevant risk profile to stakeholders based upon their needs.</p>	<p><u>(g)</u> This includes the associated risks not only with pursuing an opportunity but also not achieving the effects of the opportunity.</p> <p><del>(3) Identify the responsible parties and their roles and responsibilities.</del></p> <p><del>(4) Provide the responsible parties with adequate resources to perform risk management.</del></p> <p><del>(5) Define the process for evaluating and improving the Risk Management Process.</del></p> <p><u>(2)</u> Manage the risk profiles</p> <p><del>(1) Define and document the context of the Risk management process.</del></p> <p><u>(A)</u> Define and document the risk thresholds and conditions under which a level of risk may be accepted.</p> <p><u>(B)</u> Establish and maintain a risk profile. <u>The risk profile consists of as follows.</u></p> <p><u>(a) Risk management context</u></p> <p><u>(b) a record of each risk's state including its likelihood of occurrence, consequences, and risk thresholds</u></p> <p><u>(c) the priority of each risk based on risk criteria supplied by the stakeholders</u></p> <p><u>(d) risk management action requests along with the status of their treatment</u></p> <p><u>(e) The risk profile is updated when there are changed in an individual risk's state.</u></p> <p><u>(f) The priority in the risk profile is used to determine the application of resources for treatment.</u></p> <p><u>(C)</u> Periodically communicate the relevant risk profile to stakeholders based upon their needs.</p>	<p>- IEC 15288 6.3.4.3 b)</p>

Present	Amendment	Reason
<p>4. Analyze risks</p> <p>(1) Identify risks by categories described in the risk management context.</p> <p>(2) Estimate the probability of occurrence and consequences of each identified risk.</p> <p>(3) Evaluate each risk against its risk thresholds.</p> <p>(4) For each risk that is above its risk threshold, define and <u>document</u> recommended treatment strategies and measures <u>indicating the effectiveness of the treatment alternatives.</u></p>	<p>(3) Analyze risks</p> <p>(A) Identify risks by categories described in the risk management context.</p> <p>(a) <u>Risks are commonly identified through various analyses, readiness assessment and trade studies.</u></p> <p>(b) <u>Risks may be identified early in the life cycle and continue into the utilization, support, and retirement of the system.</u></p> <p>(c) <u>In addition, risks may be identified through the analysis of the measures of the system.</u></p> <p>(B) Estimate the probability of occurrence and consequences of each identified risk.</p> <p>(C) Evaluate each risk against its risk thresholds.</p> <p>(D) For each risk that is above its risk threshold, define and <u>document</u> recommended treatment strategies and measures <u>indicating the effectiveness of the treatment alternatives.</u></p> <p>(a) <u>Risk treatment strategies include eliminating the risk, reducing its likelihood of occurrence or severity of consequence, or accepting the risk, but are not limited.</u></p> <p>(b) <u>Treatments include taking or increasing risk in order to pursue an opportunity.</u></p> <p>(c) <u>Measures provide information about the effectiveness of the treatment alternatives.</u></p>	<p>- IEC 15288 6.3.4.3 c)</p> <p>- IEC 15288 6.3.4.3 c) 4)</p> <p>- KS X ISO IEC 15288 6.3.4.3 c)</p>

Present	Amendment	Reason
<p>5. Treat risks</p> <p>(1) <u>Provide stakeholders with recommended alternatives for risk treatment in risk action requests.</u></p> <p>(2) Implement risk treatment alternatives for which the stakeholders determine that actions should be taken to make a risk acceptable.</p> <p>(3) When the stakeholders accept a risk that exceeds its threshold, consider it a high priority and monitor it continuously to determine if any future risk treatment actions are necessary.</p> <p>(4) Once a risk treatment is selected, ensure management actions in accordance with the assessment and control activities in <b>103. 2</b> of this standard.</p> <p>6. Monitor risks</p> <p>(1) Continuously monitor all risks and the risk management context for changes and evaluate the risks when their state has changed.</p> <p>(2) Implement and monitor measures to evaluate the effectiveness of risk treatments.</p> <p>(3) Continuously monitor for new risks and sources throughout the life cycle.</p>	<p>(4) Treat risks</p> <p>(A) <del>Provide stakeholders with recommended alternatives for risk treatment in risk action requests.</del> <u>Identify recommended alternatives for risk treatment.</u></p> <p>(B) Implement risk treatment alternatives for which the stakeholders determine that actions should be taken to make a risk acceptable.</p> <p>(C) When the stakeholders accept a risk that exceeds its threshold, consider it a high priority and monitor it continuously to determine if any future risk treatment actions are necessary.</p> <p>(D) Once a risk treatment is selected, ensure management actions in accordance with the assessment and control activities in <b>103. 2</b> of this standard.</p> <p>(5) Monitor risks</p> <p>(A) Continuously monitor all risks and the risk management context for changes and evaluate the risks when their state has changed.</p> <p>(B) Implement and monitor measures to evaluate the effectiveness of risk treatments.</p> <p>(C) Continuously monitor for new risks and sources throughout the life cycle.</p>	<p>- Rev. of IEC 15288 6.3.4.3. 1)</p>

Present	Amendment	Reason
<p><b>7. Evaluate the risk management process</b></p> <p><u>(1) Throughout the life cycle, collect risk information for purposes of improving the Risk Management Process and generating lessons learned.</u></p> <p><u>(2) The risk information includes the risks identified, their sources, their causes, their treatment, and the success of the treatments selected.</u></p> <p><u>(3) Periodically review the Risk Management Process for its effectiveness and efficiency.</u></p> <p><u>(4) Periodically review risk information on the risks identified, their treatment, and the success of the treatments for the purposes of identifying systemic project and organizational risks.</u></p> <p><b>204. Configuration management process</b></p> <p><b>1. General</b></p> <p><u>The purpose of the Configuration Management Process is to establish and maintain the integrity of all identified outputs of a project or process and make them available to concerned parties.</u></p>	<p><del>7. Evaluate the risk management process</del></p> <p><del>(1) Throughout the life cycle, collect risk information for purposes of improving the Risk Management Process and generating lessons learned.</del></p> <p><del>(2) The risk information includes the risks identified, their sources, their causes, their treatment, and the success of the treatments selected.</del></p> <p><del>(3) Periodically review the Risk Management Process for its effectiveness and efficiency.</del></p> <p><del>(4) Periodically review risk information on the risks identified, their treatment, and the success of the treatments for the purposes of identifying systemic project and organizational risks.</del></p> <p><b>204. Configuration management process</b></p> <p><b>1. General</b></p> <p><del>The purpose of the Configuration Management Process is to establish and maintain the integrity of all identified outputs of a project or process and make them available to concerned parties.</del> <u>manage and control system elements and configurations over the life cycle. CM also manages consistency between a product and its associated configuration definition.</u></p>	<p>- Rev. of IEC 15288 Deleted in 6.3.4</p> <p>- IEC 15288 6.3.5</p>

Present	Amendment	Reason
<p><b>2. Activities</b></p> <p>The <u>project</u> shall implement the following activities and tasks in accordance with applicable organization policies and procedures <u>with respect to the Configuration management process.</u></p> <p>(1) Plan Configuration management</p> <p>(a) <u>Define a configuration management strategy. this includes defining authorities for the disposition of, access to, release of and control of changes to configuration items</u></p>	<p><b>2. Activities</b></p> <p>The <del>project</del> <u>process</u> containing the Configuration management <del>process</del> shall implement the following activities and tasks in accordance with applicable organization policies and procedures with respect to the Configuration management process.</p> <p>(1) Plan Configuration management</p> <p>(A) <del>Define a configuration management strategy. this includes defining authorities for the disposition of, access to, release of and control of changes to configuration items</del></p> <p>(a) <u>Configuration management includes details as follows:</u></p> <p>(i) <u>Roles, responsibilities, accountabilities, and authorities</u></p> <p>(ii) <u>Disposition of, access to, release of and control of changes to configuration items.</u></p> <p>(iii) <u>The necessary baselines to be established.</u></p> <p>(iv) <u>The locations and conditions of storage, the storage media and their environment, in accordance with designated levels of integrity, security and safety.</u></p> <p>(v) <u>The criteria or events for commencing configuration control and maintaining baselines of evolving configurations.</u></p> <p>(vi) <u>The audit strategy and the responsibilities for assessing continual integrity and security of the configuration definition information.</u></p> <p>(vii) <u>Change management, including any planned configuration control boards, regular and emergency change requests; and procedures for change management.</u></p> <p>(b) <u>The configuration management strategy needs to identify how configuration management will be coordinated across the set of system integrator, supplier, and supply chain organizations.</u></p>	<p>- IEC 15288 6.3.5.3 a)</p>

Present	Amendment	Reason
<p>(b) <u>Identify items that are subject to configuration control. Items are distinguished by unique, durable identifiers or markings, where appropriate. The identifiers are in accordance with relevant standards and product sector conventions, such that the items under configuration control are unambiguously traceable to their specifications or equivalent, documented descriptions.</u></p> <p>&lt;New&gt;</p>	<p><del>(B) Identify items that are subject to configuration control. Items are distinguished by unique, durable identifiers or markings, where appropriate. The identifiers are in accordance with relevant standards and product sector conventions, such that the items under configuration control are unambiguously traceable to their specifications or equivalent, documented descriptions. Define the archive and retrieval approach for configuration items, configuration management artifacts and data.</del></p> <p>(2) <u>Perform configuration identification</u></p> <p>(A) <u>Identify the system elements and information items that are configuration items.</u></p> <p>(a) <u>Configuration items receive special attention.</u></p> <p>(b) <u>The items are assigned unique identifiers and are the subject of reviews and monitoring.</u></p> <p>(c) <u>Items generally include requirements, product and system elements, information items, and baselines.</u></p> <p>(B) <u>Identify the hierarchy and structure of system information.</u></p> <p>(C) <u>Establish system, system element, and information item identifiers.</u></p> <p>(a) <u>Identifiers are traceable to their specifications or equivalent, recorded descriptions.</u></p> <p>(D) <u>Define baselines through the life cycle.</u></p> <p>(a) <u>Baselines capture the evolving configuration states of system elements at designated times or under defined circumstances.</u></p> <p>(b) <u>Baselines form the basis for the next change.</u></p> <p>(E) <u>Obtain system integrator and supplier agreement to establish a baseline.</u></p> <p>(a) <u>The project assessment &amp; control process is used to reach agreement.</u></p>	<p>- IEC 15288 6.3.5.3 b)</p>

Present	Amendment	Reason
<p>⟨New⟩</p>	<p>(3) <u>Perform configuration change management</u>  <u>Configuration change management establishes procedures and methods for managing change to a baseline once it is established.</u>  (A) <u>Identify and record Requests for Change and Requests for Variance.</u>  (B) <u>Coordinate, evaluate, and disposition Requests for Change and Requests for Variance.</u>  (a) <u>Impact assessment of proposed changes including impact on project plans, risks, and quality is to be carried out.</u>  (b) <u>A decision is made on whether to implement or close the change request.</u>  (C) <u>Track and manage approved changes to the baseline, Requests for Change, and Requests for Variance.</u>  (a) <u>This includes tracking, scheduling, and closing changes.</u>  (b) <u>Any changes and rationales are recorded.</u></p>	<p>- IEC 15288 6.3.5.3 c)</p>
<p>⟨New⟩</p>	<p>(4) <u>Perform configuration status accounting</u>  (A) <u>Develop and maintain the configuration management status information, for system elements, baselines, and releases.</u>  (a) <u>Configuration status accounting provides the data on the status of controlled products needed to make decisions regarding system elements throughout system life cycle.</u>  (b) <u>Configuration information permits forward and backward traceability to other configuration states.</u>  (B) <u>Capture, store and report configuration management data.</u></p>	<p>- IEC 15288 6.3.5.3 d)</p>



Present	Amendment	Reason
<p><b>3. Perform configuration management</b></p> <p>(1) <u>Maintain information on configurations with an appropriate level of integrity and security. This includes taking into account the nature of the items under configuration control. Configuration descriptions conform, where possible, to product or technology standards.</u></p> <p>(2) <u>Ensure that changes to configuration baselines are properly identified, recorded, evaluated, approved, incorporated, and verified. Consolidate the evolving configuration states of configuration items to form documented baselines at designated times or under defined circumstances. Record the steps of configuration, the rationale for the baseline and associated authorizations in configuration baseline data. Maintain configuration records through the system life cycle and archive them according to agreements, relevant legislation or best industry practice. Manage the recording, retrieval and consolidation of the current configuration status and the status of all preceding configurations to confirm information correctness, timeliness, integrity and security. Perform audits to verify conformance of a baseline to drawings, interface control documents and other agreement requirements.</u></p>	<p><del>3. Perform configuration management</del></p> <p><del>(1) Maintain information on configurations with an appropriate level of integrity and security. This includes taking into account the nature of the items under configuration control. Configuration descriptions conform, where possible, to product or technology standards.</del></p> <p><del>(2) Ensure that changes to configuration baselines are properly identified, recorded, evaluated, approved, incorporated, and verified. Consolidate the evolving configuration states of configuration items to form documented baselines at designated times or under defined circumstances. Record the steps of configuration, the rationale for the baseline and associated authorizations in configuration baseline data. Maintain configuration records through the system life cycle and archive them according to agreements, relevant legislation or best industry practice. Manage the recording, retrieval and consolidation of the current configuration status and the status of all preceding configurations to confirm information correctness, timeliness, integrity and security. Perform audits to verify conformance of a baseline to drawings, interface control documents and other agreement requirements.</del></p>	<p>- Rev. of IEC 15288 6.3.5.3</p>

Present	Amendment	Reason
<p>205. Information management process</p> <p>1. General</p> <p>(1) The purpose of the Information Management Process is to <u>provide relevant, timely, complete, valid and, if required, confidential information to designated parties during and, as appropriate, after the system life cycle.</u></p> <p>(2) <u>This process generates, collects, transforms, retains, retrieves, disseminates and disposes of information.</u></p> <p>(3) <u>It manages designated information, including technical, project, organizational, agreement and user information.</u></p> <p>2. Activities</p> <p>The project shall implement the following activities and tasks in accordance with applicable organization policies and procedures with respect to the Information management process.</p> <p>(1) <u>Information management plan</u>  <i>&lt;New&gt;</i></p>	<p>205. Information management process</p> <p>1. General</p> <p>(1) The purpose of the Information Management Process is to <u>provide relevant, timely, complete, valid and, if required, confidential information to designated parties during and, as appropriate, after the system life cycle: generate, obtain, confirm, transform, retain, retrieve, disseminate and dispose of information, to designated stakeholder.</u></p> <p>(2) <u>This process generates, collects, transforms, retains, retrieves, disseminates and disposes of information: Information management plans, executes, and controls the provision of information to designated stakeholders that is unambiguous, complete, verifiable, consistent, modifiable, traceable, and presentable.</u></p> <p>(3) <u>It manages designated information, including includes technical, project, organizational, agreement and user information. Information is often derived from data records of the organization, system, process, or project.</u></p> <p>2. Activities</p> <p>The <u>project-process containing the Information management process</u> shall implement the following activities and tasks in accordance with applicable organization policies and procedures with respect to the Information management process.</p> <p>(1) <u>Prepare for Information management plan</u>  (A) <u>Define the staragety for information management.</u>  (a) <u>Information about the same topic can be developed in different ways at different points in the life cycle and for different audiences.</u></p>	<p>- IEC 15288 6.3.6</p>

Present	Amendment	Reason
<p>(a) <u>Define the items of information that will be managed during the system life cycle and, according to organizational policy, agreements, or legislation, maintained for a defined period beyond.</u></p> <p>(b) <u>Designate authorities and responsibilities regarding the origination, generation, capture, archiving and disposal of items of information.</u></p> <p>(c) <u>Define the rights, obligations and commitments regarding the retention of, transmission of and access to information items.</u></p> <p>(d) <u>Define the content, semantics, formats and medium for the representation, retention, transmission and retrieval of information. The information may originate and may terminate in any form (e.g., verbal, textual, graphical, numerical) and may be stored, processed, replicated and transmitted using any medium (e.g., electronic, printed, magnetic, optical). Pay due regard to organization constraints, e.g., infrastructure, inter-organizational communications, distributed project working.</u></p> <p>⟨New⟩</p>	<p><del>(B) Define the items of information that will be managed, during the system life cycle and, according to organizational policy, agreements, or legislation, maintained for a defined period beyond.</del></p> <p><del>(a) Information includes that will managed during the software life cycle and possibly maintained for a defined period beyond.</del></p> <p><del>(b) When define the items is done according to organizational policy, agreements, or legislation.</del></p> <p>(B) Define the items of information that will be managed, during the system life cycle and, according to organizational policy, agreements, or legislation, maintained for a defined period beyond.</p> <p>(a) Information includes that will managed during the software life cycle and possibly maintained for a defined period beyond.</p> <p>(b) When define the items is done according to organizational policy, agreements, or legislation.</p> <p>(C) <del>Designate authorities and responsibilities regarding the origination, generation, capture, archiving and disposal of items of information. for information management</del></p> <p>(a) <del>Information is identified accordingly, where restrictions or constraints due to legislation, security and privacy.</del></p> <p>(b) <del>People having knowledge of such items of information specified in (a) are informed of their obligations and responsibilities.</del></p> <p>(c) <del>Define the rights, obligations and commitments regarding the retention of, transmission of and access to information items.</del></p> <p>(d) <del>Define the content, semantics, formats and medium for the representation, retention, transmission and retrieval of information. The information may originate and may terminate in any form (e.g., verbal, textual, graphical, numerical) and may be stored, processed, replicated and transmitted using any medium (e.g., electronic, printed, magnetic, optical). Pay due regard to organization constraints, e.g., infrastructure, inter-organizational communications, distributed project working.</del></p> <p>(D) <u>Define the content, formats and structure of information items.</u></p>	<p>- Rev. of IEC 15288 6.3.6.3 a) (a) is transferred to detail content of (B)</p> <p>- IEC 15288 6.3.6.3 a) 3) NOTE</p>

Present	Amendment	Reason
<p>(e) Define information maintenance actions. <u>This includes status reviews of stored information for integrity, validity and availability and any needs for replication or transformation to an alternative medium.</u></p> <p><b>3. Perform information management</b></p> <p>(1) <u>Obtain the identified items of information. This may include generating the information or collecting it from appropriate sources.</u></p> <p>(2) <u>Maintain information items and their storage records according to integrity, security and privacy requirements.</u></p>	<p>(E) Define information maintenance actions. <del>This includes status reviews of stored information for integrity, validity and availability and any needs for replication or transformation to an alternative medium.</del></p> <p>(a) <u>Information maintenance includes status reviews of stored information for integrity, validity and availability.</u></p> <p>(2) Perform information management</p> <p>(A) <del>Obtain, develop, or transform the identified items of information. This may include generating the information or collecting it from appropriate sources. Obtain, the identified items of information</del></p> <p>(a) <u>Reviewing, validating, and editing information are included per information standards.</u></p> <p>(B) <del>Maintain information items and their storage records, and record the status of information, according to integrity, security and privacy requirements.</del></p> <p>(a) <u>Items are maintained according to integrity, security and privacy requirements.</u></p> <p>(b) <u>The status of information items is maintained such as version description, data of issue or validity date, record of distribution, security classification.</u></p> <p>(c) <u>The source data and tools used to transform information, along with the resulting documentation is placed under configuration control in accordance with the Configuration management process.</u></p>	<p>- IEC 15288 6.3.6.3 b)</p>

Present	Amendment	Reason
<p>(3) Retrieve and distribute information to designated parties as required by agreed schedules or defined circumstances. <u>Information is provided to designated parties in an appropriate form.</u></p> <p>(4) Provide official documentation as required.</p> <p>(5) Archive designated information, <u>in accordance with the audit, knowledge retention.</u></p> <p>(6) Dispose of unwanted, invalid or unverifiable information according to organization policy, and security and privacy requirements.</p>	<p><del>(C) Retrieve and distribute information to designated parties as required by agreed schedules or defined circumstances. Information is provided to designated parties in an appropriate form. Publish, distribute or provide access to information and information items to designated stake holders.</del></p> <p><del>(a) Information is provided to designated stakeholders parties in an appropriate form, as required by agreed schedules or defined circumstances.</del></p> <p><del>(4) Provide official documentation as required.</del></p> <p><del>(D) Archive designated information, in accordance with the audit, knowledge retention:</del></p> <p><del>(a) Archive is done in accordance with the audit, knowledge retention, and project closure purposes.</del></p> <p><del>(b) The media, location and protection of the information are selected in accordance with the specified storage Information is provided to designated stakeholders</del></p> <p><del>(E) Dispose of unwanted, invalid or unverifiable information, according to organization policy, and security and privacy requirements:</del></p> <p><del>(a) This is done in accordance with organization policy, and security and privacy requirements.</del></p>	

Present	Amendment	Reason
<p><b>206. Measurement Process</b></p> <p><b>1. General</b></p> <p>The purpose of the Measurement process is to collect, analyze, and report <u>data relating to the products developed and processes implemented within the organization, to support effective management of the processes, and to objectively demonstrate the quality of the products.</u></p> <p><b>2. Activities</b></p> <p>The project shall implement the following activities and tasks in accordance with applicable organization policies and procedures with respect to the Measurement process.</p> <p>(1) <u>Plan measurement</u>  <i>&lt;New&gt;</i>  (a) Describe the characteristics of the organization that are relevant to measurement.  (b) Identify and prioritize the information needs.  (c) Select and document measures that satisfy the information needs.  (d) Define data collection, analysis, and reporting procedures.  (e) Define criteria for evaluating the information products and the Measurement process.</p> <p>(f) Review, approve, and provide resources for measurement tasks.  (g) Acquire and deploy supporting technologies.</p>	<p><b>206. Measurement Process</b></p> <p><b>1. General</b></p> <p>The purpose of the Measurement process is to collect, analyze, and report <u>data relating to the products developed and processes implemented within the organization, to support effective management of the processes, and to objectively demonstrate the quality of the products, services, and processes.</u></p> <p><b>2. Activities</b></p> <p>The <del>project process containing the Measurement process shall</del> implement the following activities and tasks in accordance with applicable organization policies and procedures <del>with respect to the Measurement process.</del></p> <p>(1) <del>Plan</del> <u>Prepare for measurement</u>  (A) <u>Define the measurement strategy.</u>  (B) Describe the characteristics of the organization that are relevant to measurement.  (C) Identify and prioritize the information needs.  (D) Select and <del>document</del> <u>specify</u> measures that satisfy the information needs.  (E) Define data collection, analysis, and reporting procedures.  (F) Define criteria for evaluating the information products and the Measurement process.  (G) <u>Identify and plan for the necessary enabling systems or services to be used.</u></p> <p>(f) <del>Review, approve, and provide resources for measurement tasks.</del>  (g) <del>Acquire and deploy supporting technologies.</del></p>	<p>- IEC 15288 6.3.7.</p>

Present	Amendment	Reason
<p>(2) Perform measurements</p> <p><u>(a) Integrate procedures for data generation, collection, analysis and reporting into the relevant processes.</u></p> <p><u>(b) Collect, store, and verify data.</u></p> <p><u>(c) Analyze data and develop information products.</u></p> <p><u>(d) Document and communicate results to the measurement users.</u></p> <p>(3) Evaluate measurement</p> <p><u>(a) Evaluate information products and the Measurement Process.</u></p> <p><u>(b) Identify and communicate potential improvements.</u> ↓</p>	<p>(2) Perform measurements</p> <p><u>(A) Integrate procedures for data generation, collection, analysis and reporting into the relevant processes.</u></p> <p><u>(B) Collect, store, and verify data.</u></p> <p><u>(C) Analyze data and develop information products.</u></p> <p><u>(D) Document and communicate results to Record results and inform the measurement users.</u></p> <p><u>(a) The measurement analyses results are reported to relevant stakeholders in a timely, usable fashion to support decision making and assist in corrective actions, risk management, and improvements.</u></p> <p><del>(3) Evaluate measurement</del></p> <p><del>(a) Evaluate information products and the Measurement Process.</del></p> <p><del>(b) Identify and communicate potential improvements.</del></p> <p>↓</p>	<p>- IEC 15288 6.3.7.3 b)</p>