

Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Manila



SUBJECT: Implementation of the Quality Management System (QMS) References

In connection with the implementation of the Department's QMS, all Bureaus, Services, Unified Project Management Office Clusters, Regional Offices and District Engineering Offices are enjoined to fulfill the needs and expectations in the Relevant Interested Parties Matrix, address the identified risks in the Risk Register, and pursue the opportunities in the Opportunity Register.

Copy of the new QMS Registers shall be available on the intranet website at <u>http://dpwhweb/QMS04/</u>.

This Order shall take effect immediately.

EMIL K. SADAIN, CESO I

MARK A. VILLAR Secretary

11.1.3 NJM/NSP/BEY

Undersecretary for UPMO Operations and Technical Services Officer-In-Charge

> Department of Public Works and Highways Office of the Secretary



RELEVANT INTERESTED PARTIES MATRIX

Quality Management System References

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| | rage no. | 1015 |

| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method | | |
|--------------------------------|----------|---|--|---|------------------|---|-------------------|---|---|---|
| General Public | External | Beneficiaries of | High quality | • Legal | Risk | Core Process | High | • Risk | | |
| Motorists Pedestrians | | infrastructure project | infrastructure & services | SocialEconomic | | Support Processes | | Assessment Management | | |
| Civil Society Organizations | | | Protection of | Environment | | Core Process | | Review | | |
| organizations | | | lives and properties | | | Support Processes | | | | |
| | | Tax Payer/Road | On-time delivery | of projects and ervices Assured safety • Social • Economic • Environment | Risk | Core Process | High | • Risk | | |
| | | services Assured saf | of projects and services | | Economic | | Support Processes | | AssessmentManagement | |
| | | | Assured safety | | | Core Process | - | Review | | |
| | | | on the use of infrastructure | | | Support Processes | | | | |
| | | | Environmentally | • Legal | Risk | Core Process | High | • Risk | | |
| | | compliant projects and infrastructure | projects and infrastructure Regulatory | projects and | projects and • E | Social Economic Environment | | Support Processes | | Assessment Management Review |
| | | | | | | Core Process | 1 | | | |
| | | | Compliance | | | Support Processes | | | | |
| General Public | External | | | • Legal • Social | Mixed | Core Process | High | | | |

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|--------------------------------|----------|---|---|--|-------|---|----------|--|
| | | Beneficiaries of infrastructure project | Preferential hiring of local residents | Economic | | Human Resource Management Financial Management Information Management Legal Services Documentation Management | | Opportunity and Risk Assessment Management Review |
| Civil Society Organizations | External | "Watchdog" (refer to Ra9184) | Organization to be a "good example" locally | Legal Social Economic Environment | Risk | Core Process Support Processes | High | Risk Assessment Management Review |
| Contractors | External | Contract AwardeeBuilders | Fair competitive public bidding | Legal Social Economic Environment | Mixed | Core Process Support Processes | High | Opportunity and Risk Assessment Management Review Internal Quality Audit |
| | | | Prompt payment of claims | | Risk | Core Process Support Processes | | Risk Assessment Management Review |

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|------------------|----------|--|--|---|-------|-----------------------------------|----------|--|
| | | | | | | | | Internal Quality Audit |
| | | | Fidelity to legal norms/issuances/ contracts | | Mixed | Core Process Support Processes | High | Opportunity and Risk Assessment Management Review Internal Quality Audit |
| Consultants | External | Contract Awardee Service Provider | Fair competitive public bidding | LegalSocialEconomic | Mixed | Core Process | High | Opportunity and Risk Assessment |
| | | FIOVILLEI | | | | Support Processes | | Management Review Internal Quality Audit |
| | | | Prompt payment of claims | | Risk | Core Process | High | Risk Assessment Management |
| | | | | | | Support Processes | | Review • Internal Quality Audit |
| | | | Fidelity to legal norms/ issuances | | Mixed | Core Process | High | |

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|------------------|----------|---|--------------------------------------|---|-------|-------------------------|----------------|--|
| | | | | | | Support Processes | | Opportunity and Risk Assessment Management Review Internal Quality Audit |
| Suppliers | External | Contract Awardee Goods and Somison | Fair competitive public bidding | LegalSocialEconomic | Mixed | Core Processes | High | Opportunity and Risk Assessment |
| | | Services Provider | | | | Support Processes | High | Management Review Internal Quality Audit |
| | | | | Prompt payment of claims | | Risk | Core Processes | High |
| | | | | | | Support Processes | High | Review Internal Quality Audit |
| | | | Fidelity to legal norms/issuances | | Mixed | Core Processes | High | Risk Assessment |



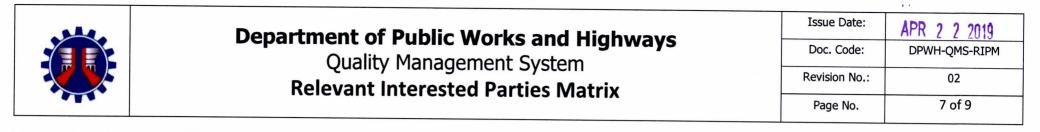
Department of Public Works and Highways Quality Management System Relevant Interested Parties Matrix

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|---------------------------|----------|--|---|--|-------|-------------------------------------|----------|---|
| | | | | | | Support Processes | High | Management Review Internal Quality Audit |
| Business Sectors | External | Encourage investments | Quality and safe public infrastructure | Legal Social Economic Environment | Mixed | Core Processes Support Processes | High | Opportunity and Risk Assessment |
| | | | Properties / businesses protected from natural disasters | | | Core Processes Support Processes | | Management Review Internal Quality Audit |
| Local Government Units | External | Recipient of products and services | Implementation of Local Projects | Legal Social Economic | Risk | Core Processes | Medium | Risk Assessment Management |
| | | | | EnvironmentPolitical | | Support Processes | | ReviewInternal Quality Audit |
| | | | Compliance with all regulations/ ordinances/ | | | Core Processes | High | Risk Assessment Management |
| | | | permits | | | Support Processes | | Review • Internal Quality Audit |

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|---------------------|----------|------------------------------|---|---|------|-------------------------|----------|--|
| | | | On time delivery of project | | | Core Processes | High | Risk Assessment Management |
| | | | Implementation of projects that would complement their projects | ~ | | Support Processes | | Review Internal Quality Audit |
| Government Agencies | External | Recipient of products and | Compliance with all regulations | LegalSocial | Risk | Core Processes | High | Risk Assessment |
| | | services | 4 | Economic | | Support Processes | | Management Review Internal |
| | | | On time delivery of project | EnvironmentPolitical | | Core Processes | | |
| | | | | | | Support Processes | | Quality Audit |
| | | | Implementation of projects that | | | Core Processes | | |
| | | | would complement their projects | | | Support Processes | | |
| Funding Agencies | External | Source of fund | Delivery of project within | LegalSocial | Risk | Core Processes | High | Risk Assessment |
| | | the ap | the approved project cost | Economic Environment | | Support Processes | | Management Review |
| | | | On time delivery | Political | | Core Processes | | Internal |
| | | | | | | Support Processes | | Quality Audit |



| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|-------------------------|----------|---|---|--|-------------|-------------------------|----------|---|
| | | | Compliance with all guideline | | | Core Processes | | |
| | | | | | | Support Processes | · . | |
| Management Committee | Internal | Sets the policy directions and targets of the | Realization of the outcomes of the DPWH Strategy | ValuesCultureKnowledge | Mixed | Core Processes | High | Risk Assessment Management |
| | | identifie | Map 2022 and identified long term strategies | Performance | | Support Processes | | Review • Internal Quality Audit |
| | | | Compliance to | | Risk | Core Processes | | |
| | | | policies | | | Support Processes | | |
| | | | Compliance with the requirements of ISO 9001:2015 | | Opportunity | Core Processes | | |
| | | | Standards | | | Support Processes | | |
| Middle Management | Internal | Implements the policy directions and targets of the | Assured provision of adequate resources | ValuesCultureKnowledge | Mixed | Core Processes | High | Opportunity and Risk Assessment |
| | | Department | (Human Resource, Finance, Equipment, etc.) to produce the required outputs | Performance | | Support Processes | ÷ | Management Review Internal Quality Audit |

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|------------------|----------|--|---|--|-------------|-------------------------------------|----------|---|
| | | Operationalizes the core and support processes | More organized and responsive workforce | ValuesCultureKnowledge | Mixed | Core Processes | High | Opportunity and Risk Assessment |
| | | | | Performance | | Support Processes | | Management Review Internal Quality Audit |
| Personnel | Internal | Service delivery of the required output | Deliver quality performance | Values Culture Knowledge | Mixed | Core Processes | High | Opportunity and Risk Assessment |
| | | | · | • Performance | | Support Processes | | Management Review Internal Quality Audit |
| | | | Appropriate learning & development | | Opportunity | Core Processes | Medium | Opportunity Assessment Management |
| | | | programs | | | Support Processes | | Review • Internal Quality Audit |
| | | Employee engagement | On time salaries and | PerformanceKnowledge | Mixed | Core Processes Support Processes | High | Opportunity and Risk |
| | | | wages and benefits | Values | | | | Assessment |

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| Interested Party | Туре | Reason for Inclusion | Needs and Expectations | Factor | Bias | Affected Process(es) | Priority | Treatment Method |
|------------------|------|-------------------------|--|-----------|------|----------------------------------|----------|---|
| | | | Conducive environment for the operation of processes | • Culture | | Core Processes Support Processes | | Management Review Internal Quality Audit |
| | | | Sustained capacity development program | | | | | |



RISK REGISTER

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The ISO 9001:2015 Standards requires that organization shall plan actions to address risks and opportunities to (a) integrate and implement the actions into its quality management system processes; (b) evaluate the effectiveness of these actions. This shall be proportionate to the potential impact on the conformity of products and services.

LIKELIHOOD (L)

| Score | Category Name | Likelihood |
|-------|-----------------|---|
| 1 | Low/Remote | Unlikely or rare; could occur at some time in the next 6-10 years; the risk is seen as unlikely to occur within the time frame expected in the objective |
| 2 | Medium/Possible | Likely to occur at some time in the next 1- 5 years; the risk is seen as often to occur within the time frame expected in the objective |
| 3 | High/Probable | Very likely to occur in the next year, or risk is already occurring |

SEVERITY (S)

| Score | Category Name | Severity |
|-------|-----------------|--|
| 1 | Low/Remote | The risk will not substantially impede the achievement of the objective, causing minimal damage to the organization's reputation |
| 2 | Medium/Possible | The risk would cause some elements of the objective to be delayed or not to be achieved, causing potential damage to the organization's reputation |
| 3 | High/Probable | The risk will cause the objective to not be achieved causing damage to the organization's reputation |

RISK PRIORITIZATION/FACTOR (RF)

| | | | SEVERITY | and the second second | Category Name | Priority Description |
|-----------|---|-----------------|-----------------|-----------------------|-------------------------|--|
| | | 1 | 2 | 3 | | No additional controls are required. Monitoring is |
| 9 | 1 | Tolerable (1) | Tolerable (2) | Substantial (3) | Tolerable (Low) | required to ensure current control is maintained to prevent risk from manifesting. |
| IKELIHOOD | 2 | Tolerable (2) | Substantial (4) | Extreme (6) | Substantial (Medium) | Efforts and actions are required to reduce risk. Controls need to be implemented within a specified time. Considerable resources are required. |
| | 3 | Substantial (3) | Extreme (6) | Extreme (9) | Extreme (High) | Process or project shall not be started or continued until the risk has been reduced. If reduction is not possible, the activity shall be prohibited. |

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LEADERSHIP

| Process | Risk Event | L | s | RF | Action Plan | Responsible |
|-----------------------------------|---|---|---|----|---|---|
| Management Commitment | Non-compliance to ISO 9001:2015 standards and re-implementation of the DPWH Quality Management System Manual due to inadequate documentation of the management meetings. | 1 | 3 | 3 | Ensure that a secretariat is present in all the management meetings to do proper and sufficient documentation and follow-up. Identify offices with audit findings particularly those with potential Non-Compliance (NCs) to call their attention and issue stern warnings. Conduct advocacy initiatives to these identified offices to instill strict adherence to the ISO 9001:2015 standards. | Executive Committee, Head Executive Assistant/ Secretariat Internal Quality Audit (IQA) Team ISO Core Team |
| Policy and Program Development | Non-compliance to D.O. 33, s. 2011 which mandates adherence to the DPWH Policies and Procedures Manual and pass several tests/ requirements prior to approval resulting to confusion and/or contradicting policies. | 2 | 3 | 6 | Supersede D.O. 33, s. 2011 to incorporate functions of CPMD as secretariat to assist the TWG in reviewing policies All Draft Special Order/Department Order must accompanied by a Policy Impact Analysis and be submitted to the Corporate Planning and Management Division (CPMD) for review prior to routing to the concerned Assistant Secretaries and Undersecretaries before final endorsement to Secretary. The Head Executive Assistant should ensure that all documents signed by the Secretary bear proper initials of concerned | Management Committee Records Management Division, Human Resource and Administrative Service (RMD, HRAS) CPMD |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|---------------------------------|--|---|---|----|--|---|
| | | | | | Management Committee Members as indicated in the D.O. re- delegated authority. Records Management Division to ensure that the signed policy is final and compliant with D.O. 33, s. 2011 prior to dissemination and posting in the intranet and internet websites | |
| Responsibility and Authority | Non-implementation of outlined Action Plans in the Risk Register resulting to recurrence of risks. | 1 | 2 | 2 | Management to delegate the monitoring of the implementation of these Action Plans to be indicated in the reportorial requirements. Provide sanctions to those Offices not implementing these Action Plans. | Office of the Secretary Concerned Undersecretaries, Assistant Secretaries and Heads of Offices |
| Communication and Awareness | Release of news and other write-ups with erroneous / unverified data resulting to low customer satisfaction of the media and other stakeholders | 1 | 3 | 3 | Issuance of a directive ensuring that written content are cleared from the office of origin prior to approval and other reference materials properly cited with source and date. Draft/revisit D.O. 234, s. 2016, Creation of the Build, Build, Build Committee | Public Information Division (PID), Stakeholders Relations Service (SRS) Regional and District Public Affairs and Information Office |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
|--------------------------------|--|---|---|----|---|--|
| Communication and Awareness | Delay in the dissemination of information (news, social media post, web data, etc.) resulting to low customer satisfaction of the media and other stakeholders | 2 | 3 | 6 | Conduct market research on average timeline / time and motions study on information dissemination using different channels such as: emailing to media contacts, posting of information on the DPWH intranet and internet websites, social media accounts, etc. Recommend/refer to appropriate offices for possible solutions to the delay. | PID, SRS Regional and District Public Affairs and Information Office |
| | Delay in the production/publication of institutional reports due to late submission of accomplishments and other significant reports of other offices resulting to low customer satisfaction of the media and other stakeholders | 3 | 3 | 9 | Issuance of policy requiring the timely, accurate and complete submission of final reports, data, photos and other requirements from key offices for the Department's annual accomplishment report. | |

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PLANNING

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|--------------------|--|---|---|----|---|---|
| Strategic Planning | Failure to align goals and objectives due to organizational changes in leadership, structure, executive and legislative policies leading to ineffective organizational outcomes and ultimately, the loss of relevance of the Performance Governance System (PGS) to operations. | 3 | 2 | 6 | Review Medium-term Plan vs Organizational Direction Form teams to prepare the Change Management Plans Conduct organizational assessment and revise strategies (e.g. Catch-up plans) | CPMD Performance Governance System (PGS) Committee, PGS-Technical Working Group (TWG) |

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OPERATIONS

| Process | Risk Event | L | s | RF | Action Plan | Responsible |
|--|---|---|---|----|--|---------------------------------|
| Data Gathering | Insufficient and/or inaccurate data input due to: a. lack of manpower, b. untrained personnel c. failure to calibrate survey equipment d. Peace and order problem e. Lack of cooperation by different concerned agencies f. External interference leading to project modification, reversion of funds, and incorrect project prioritization | 2 | 3 | 6 | Hire additional technical staff under Contract of Service. Prepare a template for Contract of Service of engineers to include a provision allowing training Request for an additional budgetary position through Institutional Strengthening Conduct coaching/ training/ capacity enhancement of engineers assigned in data gathering Coordinate with the proper authorities (LGUs, PNP, AFP, etc.) Conduct information dissemination to gain the trust and support of the concerned agencies | Implementing Offices (IOs) |
| Project Identification and Preparation | Reversion of funds due to non- implementation of committed projects resulting to non-attainment of targets | 2 | 3 | 6 | Include Preliminary Right-of-Way Acquisition Program (RAP) and Environmental Impact Assessment (EIA) during the preparation of Feasibility Study (FS) and include these in the Terms of Reference (TOR) Conduct of Detailed Engineering Design (DED) prior to inclusion of the project to the Annual Infrastructure Program (AIP) for the whole stretch of the continuing projects Conduct of Final validated RAP during DED prior to inclusion of the project to the AIP | Planning Service (PS) IOs |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|-----------------------------------|---|---|---|----|---|--|
| Project | Reversion of funds due to fragmented | 3 | 3 | 9 | IO to request in advance tree cutting permit from DENR Issue policy on the implementation of guidelines, procedure and manuals on project identification, prioritization, modifications and other activities in the formulation of the AIP (i.e. Manuals) Introduce Performance Evaluation Rating for Planning Processes Conduct workshop among DPWH project implementors and Regional Development Council (RDC) prior to budget call by DBM Finalize budget proposal based on the result | PS |
| Identification and Preparation | budget proposals and overlapping of committed projects resulting to disputed implementation | | | | of the workshop as basis of National expenditure Program (NEP) to be submitted to DBM | Planning and Design Division (Regional Office) |
| Project Preparation | Funding of projects without feasibility study resulting to implementation of projects that are not viable | 1 | 3 | 3 | Issue a policy requiring FS for: projects costing Php 1B and above road opening projects included in the existing road network masterplan flood mitigation program included in the existing river basin masterplan Issue a policy requiring Rapid Impact Assessment (Economic Evaluation) for projects costing below Php 1B Capacitate Implementing Offices in the conduct of FS and RIA | Project Preparation Division (PPD), PS Development Planning Division, PS UPMO – Flood Control Management Cluster |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|--|---|---|---|----|--|---|
| | | | | | Initiate the updating of existing road network and river basin improvement master plans Allocate funds for the conduct of FS Outsource conduct of FS through consultancy Ensure adherence to existing policies regarding Flood Control and Drainage Projects such as preparation of Project Impact Analysis | |
| Project Preparation | Impeded finalization of project alignment caused by social and political influences resulting to late implementation of the project | 2 | 3 | 6 | Continuous and close coordination with the concerned LGUs and stakeholders to introduce the project, its alignment, the benefits to be realized and the project's effect to the stakeholders in order to seek their endorsement/ support of the project. | Project Development Division (PDD), PPPS |
| | Hindered evaluation and approval of unsolicited proposal due to delayed compliance of the proponent with the requisite documents, thus, affecting the timelines for project implementation. | 2 | 2 | 4 | Conduct Market Sounding with prospective proponents Conduct regular meeting with the proponents | PDD, PPPS |
| Formulation of Project Proposals and Investment Program | Non-inclusion of Official Development Assistance (ODA) funded projects in the Medium-Term Public Investment Program (MTPIP) due to low priority given during the development planning resulting to low output and non- responsiveness to the current Philippine Development Plan | 3 | 3 | 9 | Develop a more comprehensive and integrated masterplan and conduct feasibility studies for proposed projects for possible inclusion in the ODA fund | Unified Project Management Office (UPMO) |

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| Risk Register | | |

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|---|--|---|---|----|---|---|
| Public Consultation | Failure to conduct public consultation during project identification resulting to: a. Unseen RROW issues b. Unacceptance/objection of stakeholders to the proposed project. c. Non endorsement of the project by RDC and LGUs | 1 | 3 | 3 | Conduct public consultation in all projects to inform Project Affected Persons (PAPs) on ROW acquisition process and legal frameworks for compensation | Environmental and Social Safeguards Division, PS IOs |
| | Unacceptance/objection of Project Affected Families (PAFs) to the proposed project due to the government's offered price during negotiation | 3 | 2 | 6 | Identification and implementation of simultaneous and parallel activities to speed up project completion Conduct massive information campaign to update property owners to be affected by the project especially during the planning stage Indicative acquisition cost should be part of proposal and feasibility study | Project Implementation Supervision Division, PPPS |
| Public Consultation (Master Plan and/or Feasibility Study (FS)) | Lack of support from the LGUs due to political conflicts and issues resulting to non-inclusion in the list of NEDA approved projects | 1 | 3 | 3 | Obtain the endorsement of RDC by presenting the economic benefits and the necessity of the project in simple language and in a diplomatic way | IOs |
| Engineering Surveys and Investigation | Failure to meet the planned schedule for engineering survey and investigation due to: a. Insufficient number of survey/investigation | 2 | 3 | 6 | Ensure to meet the planned schedule for the conduct of surveys and investigation through the following: Prioritize urgent fieldworks or request for additional funds to purchase needed | Surveys and Investigation Division, Bureau of Design (SID,BOD) |

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| | instruments and equipment, personnel, and funds b. Inadequate number of competent survey and investigation personnel | 2 | 3 | 6 | instruments/ equipment and augment manpower • Attend seminar/workshop/ training on engineering survey and investigation for continuous learning | Planning and Design Division, Regional Offices |
| | c. Complex topography, geography and geology of the area d. Poor coordination with local and private entities | 3 2 | 3 | 9 | Conduct desk study and prepare program of work and cost estimate prior to the conduct of survey and investigation Prompt, proper, and close coordination with the concerned LGU and private entity | |
| 1 | resulting to: longer duration for data collection, and delayed design plan preparation and analysis | | | | | |
| Engineering Surveys and Investigation | Failure to meet the quality of survey and investigation data due to: a. Non-usage of Department of Environment and Natural Resources - National Mapping and Resource Information Authority (DENR-NAMRIA) | 3 | 3 | 9 | Ensure quality of survey and investigation data thru: Adoption of DENR-NAMRIA Ground Control as reference in survey | |
| | Ground Control as reference in survey b. Non-compliance with the prescribed surveys and investigation requirements stipulated in the DPWH Design | 2 | 3 | 6 | Strict compliance to DPWH-DGCS | |

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| | Guidelines Criteria and Standards (DGCS) c. Non-calibration of survey and investigation instruments/equipment resulting to: • assumed/ erroneous ground control point • inaccurate/ erroneous survey and investigation data, and • erroneous design plans, | 2 | 3 | 6 | Check and monitor the calibration schedule of all survey and investigation instruments/ equipment before usage | |
| Plan Preparation | Delayed plan preparation due to: a. Lack or incomplete design parameters b. Inadequate knowledge of design engineers on design guidelines, specifications and existing laws, policies and procedures related to design c. Non-availability of latest version of software/s for design and analysis d. Urgency of some unexpected project | 2 2 2 2 | 3 3 3 3 | 6 6 6 | Ensure prompt plan preparation thru: Conduct of survey and investigation prior to design Finalize and implement Design Management Application (DMA) Conduct seminar/workshop/training on current design guidelines, specifications and existing laws, policies and procedures related to design Conduct inventory of engineering software of all planning & design offices and request for the procurement of the needed engineering software with compatible hardware. Assign additional personnel and conduct overtime in the preparation of design | BOD Planning and Design Division, Regional Offices Planning and Design Section, District Engineering Offices |

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|------------------|--|---|---|----|---|--|
| | e. Resistance of stakeholders to the approved project alignment resulting to: delayed completion of design plans, procurement, project implementation | 1 | 2 | 3 | Strengthen the information advocacy campaign | |
| Plan Preparation | Delayed plan review resulting to delayed approval of plans (Detailed Engineering Design, As-Staked, Revised) and project implementation, due to: a. Non-compliance with the checklists and non-submittal of the required supporting documents necessary as reference in the review of plans b. Inconsistencies in the submitted documents and non- conformity with the current design guidelines, criteria, specifications, department policies and regulations c. Inappropriate design | 2 | 3 | 6 | Ensure prompt plan review: Enforce strict compliance with checklist and submission of required documents for plan review Conduct Design Audit annually Establish a mechanism to determine the competence of IOs Finalize and Implement the DMA Continuous conduct of design-related seminars/ workshops using the current codes and specifications with the use of computer applications Training of Design Engineers on new design methodologies and technologies Conduct the necessary surveys and investigation prior to design. Perform design analysis | BOD Planning and Design Division, Regional Offices Planning and Design Section, District Engineering Offices |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
|--|--|--------|--------|--------|---|--|
| Cost Estimation (POW, ABC, DUPA, Variation Order) | Inconsistency with the existing laws, regulations, and department policies (i.e., R.A. 9184, Cost Estimation Manual, CMPD, ACEL Guidebook, Contract Duration, Standard Labor Rates, etc.) due to: | | | | Enforce strict compliance with existing laws, guidelines, and procedures on Cost Estimation | Construction Support Services Division, Bureau of Construction (CSSD, BOC) |
| | a. Incomplete Documents b. Non-adherence to Cost Estimation Manuals and other related issuances | 3 3 | 3 3 | 9 9 | Conduct annual Cost Estimation Audit | Pre-Construction Division (PCD), BOC |
| | c. Use of non-standard pay items d. Inaccurate Plans resulting to: | 3 3 | 3 3 | 9 9 | Conduct Seminar/workshop on preparation of cost estimates (POW, ABC, DUPA) and establishing of quarterly Construction Materials Price Data (CMPD) | PCD,BOC CSSD, BOC PCD, BOC |
| | Delayed procurement and project implementation Unrealistic Cost Estimates COA Audit observation memorandum/ disallowance | | | | Ensure that IO shall: Strictly comply with the cost estimation manual, CMPD and other related issuances Adhere to Variation Order guidelines on costing. Closely coordinate with BOD and Bureau of Research and Standards (BRS) to facilitate the approval of non-standard pay items | Implementing Office |
| | | | | | Monitor strict compliance to the existing rules and regulations and cost estimation/variation order-related issuances and policies of the DPWH. | BOC IOs Other Concerned Agencies |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| Project Implementation | Delayed delivery of targets due to: a. Right-of-Way Issues (i.e. land acquisition, presence of obstructions) b. Defective/deficient design plans c. Plans not suitable/ appropriate on actual site condition and latest requirement d. Delayed finalization of Design Plans, MOA, Procurement and Contracts e. Delayed acquisition of necessary permits (i.e. MMDA, LGU, DENR, BFP, etc.) f. Request of the other agency for additional works not covered in the original design plans g. Poor monitoring and supervision due to insufficient DPWH technical/accredited | 3 3 3 3 3 3 3 | 3 3 3 3 3 3 3 | 9 9 9 9 9 9 9 | Monitor strict compliance with R.A. 9184, relevant issuances and special provision of General Appropriations Act (GAA). Close coordination with concerned offices during pre-construction and construction phases Ensure strict compliance and observance of laws, policies and procedures, particularly on procurement and issuance of calibrated actions on contracts with negative slippages. Ensure complete and comprehensive Detailed Engineering Design is provided by other agency prior to commencement. Strictly comply with the existing DPWH Standard Specifications. Closely monitor/ supervise construction work. Require the contractor for immediate rectification or removal and replacement of defective works. Require the contractor to immediately apply for work suspension and corresponding time extension and revise the construction schedules. | CSSD, BOC IOs |
| | Project Engineers/Inspectors h. Non-receipt on time of Notice to Proceed (NTP) by Contractors | 3 | 3 | 9 | Require the contractor for immediate replacement of unqualified key personnel. Ensure strict compliance and observance of laws, policies and procedures related to | * |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| | Slow performance of contractor due to insufficient equipment, materials, and manpower resources as well as unqualified key personnel. | 3 | 3 | 9 | Traffic Management, Environmental Safety and Health requirements.Closely coordinate with concerned offices and/or other government agencies | |
| | j. Non-compliance with Traffic Management, Environmental Safety and Health requirements | 3 | 3 | 9 | | |
| | k. Late identification of convergence projects | 3 | 3 | 9 | | |
| | I. Unfavorable weather and peace and order concerns | 3 | 3 | 9 | | |
| | resulting to: Cost overruns Desired output will not be achieved as planned Deprivation of early/timely benefits to the public Substandard works and poor | | | | | |
| | workmanship Safety of public is compromised Increase in project life cycle cost Bad perception from the public | | | | | · |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
|---------------------------|--|---|---|--------------------------------------|---|--|
| Project Implementation | Delay in the completion of the project resulting to low absorptive capacity and delayed realization of project benefits, due to: a. Scarcity/shortage of materials b. Adverse weather conditions beyond pre-determined number of unworkable days c. Peace and order d. Unforeseen ROW issues e. Unsatisfactory performance of contractor f. Late approval of Variation Orders g. Long processing of progress billings h. Untimely completion of tender documents due to limited consultants i. Geotagging | 1 3 2 1 1 1 2 2 3 | 1 2 3 3 2 3 3 3 3 3 3 | 2 6 3 2 3 6 6 9 | Ensure project readiness (ROW, Social-political acceptance, environmental clearances) prior to procurement Monitor and comply strictly with the existing laws, rules and regulations and policies of the government and lending institutions Procure materials from other approved sources and accredited suppliers Request the concerned Regional/ District Offices for an updated and accurate materials source map Issue time suspension and extension of contract time Request security through MOA with the DND, OPAP, and LGU Payment of additional legal claims Conduct of due diligence in the post qualification to ensure selection of highly capable civil works contractors and construction supervision consultants Issue calibrated action Coordinate closely with the reviewing offices | IOs |
| | Change in the project alignment due to social and political interventions which affected the project schedule and timelines | 3 | 3 | 9 | Provide further technical justifications and study to justify and keep the original alignment | Project Implementation Supervision Division, PPPS |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| | Non-compliance of the Concessionaire to the Minimum Performance Standard and Specification (MPSS) during construction resulting to delayed implementation | 2 | 2 | 4 | Strict monitoring and supervision of the construction activities | |
| Project Implementation (Inland Channel Dredging Project by Administration) | Delayed completion of inland dredging by administration resulting to: a. Continuous sedimentation which lowers the channel carrying capacity due to insufficient: Budget required resources Crew/Manpower Fleet Size (lack of dredges and support equipment) Stakeholders' coordination Spoil Sites Resulting to damage to loss of lives and properties. Delayed start of inland dredging by administration resulting to continuous sedimentation which lowers the channel carrying capacity due to lack/absence of dredging plan | 3 2 2 3 | 3 3 3 3 | 9 6 6 9 | Institutional Strengthening of Bureau of Equipment (BOE) (creation of Major River Basin Engineering Offices – additional plantilla positions, improvement of shops and allocation required resources) and Regional Office – Equipment Management Division Establish a Program to Address the Impact of Climate Change to DPWH Water-Based Equipment Fleet and Personnel Ensure coordination and consultation with concerned Stakeholders before, during and post operations Prepare Long, Medium and Short Term Strategic Dredging Program and Management Plans to include: Study for the Purchase of Land for Spoil Sites and Right-of-Way 5-Year Medium Term Drydocking Plan Extension the 5-Year Re-fleeting Program (started on CY 2013) for another 5-Year (until 2023) Continuous Institutional and Capability Development Program | MANCOM BOE IOs |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|---|--|-------------|-------------|-------------|--|---|
| | Delayed completion Misallocation to loss of resources | 3 3 | 3 3 | 9 9 | | |
| | Low utilization of dredging fleet | 2 | 3 | 6 | | |
| | Insufficient to wrong dredging approach and strategy | 2 | 3 | 6 | | 4 |
| | Leading to potential damage to loss of lives and properties | | | | | |
| Project Implementation (Project Documentation) | Incomplete submission of required documents in accordance with the existing laws, regulations and department policies (i.e. IRR of RA 9184, Procurement Manual, etc.) due to: a. Delayed finalization/approval of Contracts/MOAs, Original/As- staked/Revised/As-Built Plans b. Late issuance/approval of time suspension/extension and variation orders c. Delay in processing of progress billings/final payment | 3 3 3 | 3 3 3 | 9 9 9 | Regular monitoring and reporting of compliance with the existing rules and regulations and policies of the DPWH. Conduct Seminar/workshop on project documentation as necessary. Closely coordinate with concerned offices and/or other government agencies. | CRD, BOC CSSD, BOC IOs BOC IOs Other Concerned Agencies |
| | resulting to: | | | | | |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|---|--|--------|---|----|--|--|
| | Delay in procurement and project implementation Low absorptive capacity Delay in issuance of Certificate of Completion COA Audit observation memorandum | | | | | • |
| Project Implementation (Project Monitoring) | Failure to comply with PCMA requirements due to insufficient number of accredited Project Engineers, Materials Engineers, and Project Inspectors resulting to inaccurate project status report. | 2 | 2 | 4 | Facilitate trainings and seminars for accreditation of qualified engineers | IOs HRAS |
| | Inability to provide quality information and real time status of projects due to: a. Failure to update project status in the PCMA on time b. Incomplete and inaccurate | 3 3 | 3 | 9 | Conduct training on the PCMA users. Coordinate with IOs on PCMA Implementation issues (i.e. CWA, MYPS, PIS, etc.) Monitor compliance of IOs on PCMA usage. Issue memorandum to the concerned implementing Office on the non-compliance | PMD, BOC PMD, BOC PMD, BOC PMD, BOC |
| | project information reported in the PCMA c. Incomplete project documents (i.e. Time Suspension/Extension, Variation Order) d. Late receipt/approval of revised implementation schedule | 3 | 3 | 9 | to DO No. 6, series of 2016 and D.O. 193, series of 2016 Regularly conduct integration meeting with Authorized User Coordinators (AUCs) of CWA, MYPS, and Information Management Service (IMS) on the resolution of issues encountered by Implementing Offices Ensure IO to observe timely updating of project information in PCMA | PMD, BOC IMS PS PrS IOs |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| | e. Unfamiliarity of some users to PCMA | 3 | 3 | 9 | | |
| | f. Poor network connection g. Insufficient computer hardware resulting to: Poor decision-making by Management Negative perception from the | 3 3 | 3 3 | 9 9 | | |
| Post Project Evaluation of Completed Projects | public Failure to address problems encountered during the whole project cycle and non-measurement of level of success (relevance, effectiveness, efficiency, impact and sustainability) of the completed project due to insufficient Post Project Evaluation, resulting to: • Repetition of same problems encountered • Implementation of less beneficial projects. • Inefficient allocation of funds | 2 | 3 | 9 | Outsource the conduct of Post Project Evaluation through consultancy Revisit existing criteria and craft policy in identifying projects to be subjected to Post Project Evaluation Prepare a Post Evaluation Report to determine the effectiveness and efficiency of the completed projects. Feedback lessons learned from the implementation of the project | PS IOs |
| Infrastructure Asset Maintenance | Inappropriate maintenance activities applied to identified defects on the national roads and bridge leading to their recurrence, resulting to: | | | | Provide assistance to the DEOs in identifying the appropriate maintenance activities corresponding to the identified road and bridge maintenance needs, and provision of corresponding fund in the AMWP | BOM IOs |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| | a. Potential hazard to pedestrian and motorists b. Slowdown of traffic flow c. Increased maintenance cost Failure to validate the nature of work | 2 3 3 | 3 3 3 | 6 9 9 | Train maintenance personnel and crews on proper maintenance and repair methodology Coordinate with the BOE to include in their Procurement Plan the requirements of DEOs for basic highway maintenance equipment and tools Monitor the performance of the DEOs and evaluate the impact of the above measures on the condition of the road. Maintain regularly an updated inventory of all | |
| | and urgency of the proposed projects prioritized under the Other Public Buildings (OPB) and Flood Control Structures (FCS) Maintenance Program, leading to modification or realignments resulting to delayed project implementation. | | | | OPB and FCS Conduct annual validation of OPB and FCS proposed for repair and maintenance including previously funded and completed projects. Establish a database of all completed projects funded under the OPB and FCS Maintenance Program for use in the succeeding evaluation for prioritization of projects. | |
| Inspectorate and Monitoring | Failure to recommend appropriate measures to address identified maintenance deficiencies/ improvement needs due to non- completion of assessment process leading to non-improvement or decline in the implementing offices' level of compliance to maintenance standards | 1 | 3 | 3 | Plan the schedule of assessment of DEOs' compliance to policy guidelines on the maintenance of national roads and bridges to ensure completion of the activity and the collection of data needed for the performance evaluation/analysis and identification of problem areas. | BOM |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| | | | | | Closely monitor the ROs/DEOs progress on the implementation of Development/Action Plan to address identified problem areas. Evaluate the effectiveness of the instituted measures and their impact to the DEOs level of compliance to maintenance standards as well as to the maintenance service delivery target level. | • |
| | Failure to provide on time a complete consolidated situational report to NDRRMC and other NGA's for possible response operations, due to communication and reporting issues resulting to delayed dissemination of information and incomplete data on passable/unpassable roads. | 2 | 2 | 4 | Improve the current Emergency Operation Center (EOC) specifically for the purpose of Disaster Preparedness, Response and Recovery, complete with all the required communication and monitoring tools and equipment. Automate the reporting system utilizing web or mobile application in coordination with the IMS. Monitor the efficiency of the reporting system upon completion of the web/ mobile application. | |

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PERFORMANCE EVALUATION

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|--|---|---|---|----|--|--|
| Quality and Safety Assurance (Quality Audit) | Unmet expected design life of projects due to unaddressed causes of defects resulting to losses of government resources | 2 | 3 | 6 | Conduct survey and investigation and analyze possible causes of defects Undertake analysis on the defects with high frequencies of occurrence Conduct further study through research and pilot projects and recommend appropriate corrective measures Monitor the implementation of the 5-year QA program Increase the number of accredited Project Engineers and Inspectors to improve supervision. | Bureau of Quality and Safety (BQS) BRS BOC BOD |
| Quality and Safety Assurance (Implementation of Accident Blackspot treatment projects) | Delayed implementation of blackspot treatment projects due to lack of clear funding source resulting to high safety risk to road users | 3 | 3 | 9 | Include identified blackspot treatment projects recommended by BQS study as a GAA line item Monitor compliance of the inclusion of Road Safety Features on all DPWH road and bridge projects (including treatment of blackspots) either under off-carriageway improvement or road widening projects of IOs | BQS PS BOD IOs |
| | Delayed conduct of investigation on all identified blackspots due to limited manpower capable of conducting accident blackspot investigation | 2 | 3 | 6 | Develop a Rationalized Road Safety Engineering Training Program for DPWH Recommend inclusion of Road Safety Engineering Course in the regular training calendar of the Department | BQS |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
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| | resulting to high safety risk to road users | | | | | |
| Quality and Safety Assurance (Implementation of Traffic Engineering and Management Programs for Critical Intersections) | Traffic engineering and management programs not being implemented due to non-inclusion of regular line item in the GAA resulting to traffic congestion and increased frequency of crashes | 3 | 3 | 9 | Recommend to update the existing DPWH business process to include intersection improvement as one of the line item in the GAA Recommend inclusion of Traffic Engineering Programs in all DPWH road projects either under off-carriageway improvement or road widening projects of IOs | BQS PS HRAS |
| | Traffic engineering and management programs not being implemented due to insufficient capacity of IOs in preparing TMPs resulting to traffic congestion and increased frequency of crashes | 2 | 3 | 6 | Develop a Rationalized Traffic Engineering and Management Training Program for DPWH Recommend inclusion of Traffic Engineering Course in the regular training calendar of the Department | BQS HRAS |
| Monitoring and Measurement (International Roughness Index (IRI) Survey) | Delayed conduct of road roughness survey due to limited resources (i.e. manpower, equipment) resulting to delayed final payment of completed projects along national primary roads | 3 | 3 | 9 | Request for inclusion of RSPs in the preventive maintenance program of BOE Request funds for the engagement of service provider for the maintenance of RSP units Request procurement of additional RSP units Train additional personnel from BQS who will conduct IRI surveys Maximize use of existing road surface profilometers (RSPs) to cover more regions/ | BQS BOE |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
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| Monitoring and Measurement | Delayed compliance of the Concessionaire to the Minimum Performance Standard and Specification (MPSS) during project operation. | 3 | 2 | 6 | Strict monitoring of Operation and Maintenance (O and M) activities and compliance. | Project Operation and Maintenance Management Division, Public- Private Partnership Service (PPPS) |
| Internal Audit | Audit observations may not be consistent due to different interpretations of existing policies leading to ineffective evaluation of existing controls | 2 | 2 | 4 | Conduct regular brainstorming Standardize interpretation of new policies Seek clarification from concerned offices for a more authoritative stand, opinion or interpretation of recent policies | All Auditors |
| | Negative perception towards auditors leading to non-disclosure of actual scenarios in the field | 2 | 2 | 4 | Constant reiteration that function of internal audit is not fault-finding | |
| Feedback Management | Delay in resolution of complaints resulting to:Low Customer Satisfaction | 3 | 3 | 9 | Develop criteria in defining high risk issues that will necessitate the conduct of complaint validation / proper escalation process to management Issuance of policy on setting timelines among DPWH offices on resolution of complaints | Stakeholders Affairs Division(SAD), SRS Regional and District Public Affairs and Information Office |
| | Non – compliance to existing laws, rules and regulations | 3 | 3 | 9 | Submit monthly monitoring reports to concerned Undersecretaries for inclusion in their respective Operations Meeting | Information Management Service (IMS) |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| | Disruption of operations due to CFMC database / outlook mailing downtime resulting to: Late transmittal of documents to concerned office / person/s Negative image of the Department | 3 2 | 3 3 | 9 | Devise alternative implementation approach in transmitting documents Coordinate with concerned office to address the concern through issuance of Memorandum Develop incident / monitoring report system | SAD, SRS Regional and District Public Affairs and Information Office IMS |
| External Stakeholders Relations | Accreditation of bogus CSO resulting to questionable integrity of CSO engagement during procurement process | 2 | 2 | 4 | Re-validate with SEC and CDA the authenticity of CSOs submitted requirements | SAD, SRS |

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RESEARCH AND DEVELOPMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| New Product/ Technology/ Evaluation and Accreditation | Non-accreditation of new construction materials and technologies due to lack of advanced testing equipment and reference materials resulting to limited utilization of the same in the implementation of DPWH projects. | 2 | 3 | 6 | Procure advanced laboratory testing equipment and additional reference materials. | BRS |
| New Product/ Technology/ Evaluation and Accreditation (Construction of Small/Full-scale Pilot Trials) | Difficulties in finding/ selecting appropriate sites/locations resulting to delayed adoption of new products and technologies. | 3 | 3 | 9 | Inform and closely coordinate with the DPWH Implementing Offices in identifying/selecting the most appropriate site within the 4th quarter of the year prior to the fiscal year Ensure the availability of service vehicle to be utilized in the supervision/ inspection/monitoring of the pilot project(s). Select nearby project sites/locations when necessary for accessibility purposes. | BRS IOs Product Proponent |
| Naturally Occurring Materials Evaluation | Outdated materials sources map due to lesser priority given by the concerned Implementing Office resulting to inclusion of materials sources not meeting the specification requirements. | 2 | 3 | 6 | Re-validate naturally occurring materials sources every other year. Revisit and amend Department Order No. 46, series of 2006 to include sanctions to erring officials | BRS IOs |

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| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| Standard Specifications Formulation | Difficulty in the formulation of new standard specifications due to: Limited access to international references (e.g. ASTM, AASHTO, ACI, ISO, etc.) Delayed/non-submission and/or incomplete submission of generic specifications by the requesting office resulting to delayed implementation of projects | 2 3 | 3 | 6 9 | Use in the Bidding Documents the "current exchange rate" in the procurement of international reference materials. Strengthen and expedite the review and approval process in reviewing submitted documents. Possible outsourcing of services from existing ODA projects | BRS |

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PROCUREMENT MANAGEMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
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| Bid Document Preparation | Delayed procurement due to incomplete bid documents submitted | 2 | 3 | 6 | Conduct training, when necessary, on the updates of the IRR of RA 9184, DPWH Procurement Manual, GPPB issuances/resolutions and Guidelines of the Financing Institutions. Hold periodic focus group discussions with stakeholders to clarify procurement requirements | PrS |
| Bid Evaluation | Failure of bidding due to non-compliance with technical requirements | 3 | 3 | 9 | Conduct training, when necessary, on the updates of the IRR of RA 9184, DPWH Procurement Manual, GPPB issuances/resolutions and Guidelines of the Financing Institutions. Hold periodic focus group discussions with stakeholders to clarify procurement requirements | PrS |
| Performance Evaluation | Unrealistic performance rating of consultants due to incomplete evaluation report resulting to: inaccurate database award of contract to unqualified consultants | 2 | 3 | 6 | Conduct training/seminar of Consultant's Performance Evaluation System (ConsPes) among Procurement Engineers and Specialized Offices (e.g. BOC, BOD, Planning & Design Section/Division) Proper filing of procurement and technical documents related to ConsPes | PrS IOs Specialized offices |

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HUMAN RESOURCE MANAGEMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|--|--|---|---|----|---|--|
| Recruitment, selection and placement | Invalidation of Appointments due to incorrect information in the publication of vacant positions (e.g. item number, position title or qualification standards) resulting to termination of appointments | 2 | 3 | 6 | Incorporate generation of publication in the PIS | Human Resource Management Division (HRMD), HRAS Human Resource |
| | Increased number of invalidated appointments resulting to revocation of DPWH accreditation to act on appointments | 1 | 3 | 3 | | Management Section, Regional Office |
| Performance Management | Subjective Performance Rating due to the lack of a standardized and updated database matrix for performance evaluation resulting to employee's low morale and poor performance | 2 | 2 | 4 | Activate Department / Office PMTs Revisit existing database of Bureaus, Services and UPMOs, and develop standard database for RO, DEOs (per class) | Office PMT HRAS CPMD |
| Rewards and Recognition | Step Increment due to Meritorious Performance (top 5% performers) disproportionately granted resulting to low morale of high performers | 3 | 2 | 6 | Determination of the top 5% performers should be identified from each Division of Bureaus/Services/ROs including Clusters of UPMO. | HRAS |
| Learning and Development | Unaddressed competency gap due to unresponsive training programs resulting to low impact (in terms of application of knowledge and skills to actual job or improvement in performance and behavior) | | 2 | 4 | Review and update the existing training programs to address the identified competency gaps in the IDPs Develop guidelines on prioritization of training needs per office Develop the IDP Database | Capacity Development Division (CDD), HRAS |

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FINANCIAL MANAGEMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|----------------------------|---|---|---|----|--|-----------------|
| Fiscal Accountability | Non-submission of billing documents resulting to low disbursement rate and/or lapse of Notice of Cash Allocation | 3 | 3 | 9 | Strict implementation of sanctions to IOs for non-compliance Issuance of a policy requiring payment of final billing in the contract provision prior to the issuance of certificate of final acceptance Initiate a dialogue with COA to harmonize documentary requirements for payment of claims | FS IOs |
| Fund Control Accounting | Project Modifications resulting to low absorptive Capacity | 2 | 3 | 6 | Minimize Project modification by improving project programming and planning. | IOs PS FS |

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PHYSICAL RESOURCE MANAGEMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|--|--|---|--|----|---|---|
| Facilities and Work Environment Management | Delay in the implementation of facility maintenance schedule due to limited resources resulting to high cost of repair | 2 | 2 | 4 | Strict implementation of preventive maintenance schedule Develop Inventory Management Program | Facilities Maintenance Division (FMD), HRAS |
| | Unavailability of supplies and materials for repair of facilities resulting to low productivity due to non-conducive work environment | 3 | 2 | 6 | Come up with short term and medium-term maintenance program | |
| Equipment Fleet Management | Failure to establish actual equipment demand due to non-compliance to Needs Analysis procedure resulting to ineffective acquisition of equipment and fleet requirement deficiency. | 2 | 3 | 6 | Close coordination with the implementing offices thru surveys and lines of communication. Compliance to and enforcement of Department Order No. 64, Series 2016. | BOE IOs |
| | Incorrect equipment specification due to lack of research and publication materials resulting to fleet incompatibility, low utilization and waste of resources.236Continuous learning and t concerned personnel in Ed Demand Management.• Establish a policy in the us Costing and Analysis.• Establish a policy in the us Costing and Analysis.• Adopt and institutionalize "Asset Management: Man Requirements". | | Establish a policy in the use of Life Cycle Costing and Analysis. Adopt and institutionalize ISO 55001:2014 – "Asset Management: Management Systems | | | |
| | Delayed acquisition of fleet requirements due to lack or non- participation of suppliers in the Public Bidding resulting to delay in the re- | 2 | 3 | 6 | Immediately conduct Risk Analysis to address the cause of the Public Bidding failure. Reschedule Public Bidding (Rebidding) | BOE |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
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| | fleeting program and insufficient fleet size to respond to road maintenance program and quick response. | | | | Careful preparation prior to the start of the Public Bidding Process. Ensure that equipment specification covers wider brands and dealers. Conduct continuous market and supplier availability research and updating of equipment pricing. Adopt and institutionalize ISO 55001:2014 – "Asset Management: Management Systems Requirements" | |
| Equipment Fleet Management | Delay in execution of configuration changes (reallocation, replacement, rehabilitation, etc.) due to incomplete requirements resulting to low utilization and further delay on delivery of services | 2 | 3 | 6 | Close coordination with the requesting office through phone and e-mail. Pre-evaluation of documents done by Equipment Maintenance Division (EMD), specifically submitted by District Engineering Offices, before submitting to the Bureau of Equipment to minimize errors. Conduct regular inspection and audit to monitor inventory and up-to-date records. Adopt and institutionalize ISO 55001:2014 – "Asset Management: Management System Requirements". Implement and institutionalize Fleet Management Automation, including PM Program automation and Telematics. | BOE IOs |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
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| Equipment Fleet Management | Accident during operation of equipment due to unsafe acts and unsafe conditions resulting to injury/death or property damage | 1 | 3 | 3 | Timely conduct of investigation and risk assessment. Conduct regular equipment inspection to identify hazards, ensuring safety guards are in place and wearing of proper Personal Protective Equipment (PPE). Conduct regular training on safe operation of equipment. Institutionalize a policy regarding safety operation and maintenance of equipment. | BOE 'IOs |
| | Failure to conduct prescribed Preventive Maintenance (PM) by End- users due to absence of Annual Preventive Maintenance Program and Schedule resulting to increase of equipment failure and delay on the delivery of services | 2 | 2 | 4 | Issuance of memorandum informing corresponding sanctions due to non-compliance to PM Program Policy Close monitoring on the submission of Annual Preventive Maintenance Program and Schedule. Conduct regular training on maintenance planning and scheduling. Implement and institutionalize Reliability-Centered Maintenance (RCM). Adopt and institutionalize ISO 55001:2014 – "Asset Management: Management Systems Requirements" Fleet Management Automation, including PM Program automation and Telematics. | BOE IOs |

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| Process | Risk Event | L | s | RF | Action Plan | Responsible |
|--|---|-------------|-------------|-------------|---|---|
| Equipment Fleet Management | Failed disposal of obsolete/ uneconomical/ unserviceable equipment thru public auction proceeding, due to non-participation of auctioneers resulting to delay in re- fleeting program and further equipment depreciation. | 3 | 2 | 6 | Timely conduct of Risk Analysis to address the cause of the Public Auction failure. Review and recommend the Government Minimum Selling Price to Disposal Committee, and re-schedule Public Auction. Review the extent of coverage of the publication company and notification procedure. Regular assessment and updating of scrap metals price. Annual Nationwide Disposal Plan and Schedule for implementation in the following year. Adopt and institutionalize ISO 55001:2014 – "Asset Management: Management Systems Requirements". | BOE TOs Central Disposal Committee Regional Disposal Committee |
| Survey, Laboratory and Field Testing Equipment Management | Inaccurate survey and test results due to: a. Irregular/ non-calibration of equipment b. lack of training c. insufficient calibration apparatus | 2 1 2 | 3 3 3 | 6 3 6 | Revisit and strengthen D.O. 118, series of 2015 to the DPWH Implementing Offices to: include sanctions for failure to have the equipment calibrated on schedule include accountability of the concerned head of office and Assistant Secretaries Conduct trainings for the technical personnel of BRS and various DPWH Implementing Offices. Procure additional calibration apparatus. | BOD BRS BQS |

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INFORMATION MANAGEMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|-------------------------------------|---|---|---|----|--|---|
| Maintenance of IT Infrastructure | Inadequate maintenance due to outdated hardware and software resulting to security breach, data loss, data theft and/or data leakage | 2 | 3 | 6 | Continuously update security policies and standards Upgrade security equipment and tools (HW and SW), as necessary Improve technical skills of staff thru IT security training | Technology Support Division (TSD), IMS |
| | IT service downtime resulting to business disruption | 3 | 3 | 9 | Schedule Preventive Maintenance Implement high availability strategies (e.g., fail-over mechanisms) Real-time monitoring Document remediation procedures | |

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LEGAL SERVICES

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|------------------------------|--|---|---|----|---|---|
| Site/Location Acquisition | Impeded ROW acquisition due to: a. Refusal of owners to accept the price offered b. Late action of utility companies to relocate their facilities (aerial and underground utilities) c. Conflicting claimant d. Unidentified owners e. Unregistered Property resulting to failure to gather Permit to Enter (possession of site) causing deferment of project implementation | | 2 | 4 | Early preparation of RAP Improve and strengthen process flow on payment of ROW Prompt and immediate payment of just compensation Revisit issuance on payment of just compensation Initiate filing of expropriation case | IOs, PPPS IO, PS, Legal Service (LS) and PrS PS, IO and LS Legal Service UPMO and Legal Service |
| Legal Opinion Preparation | Lack of legal basis upon which the opinion is based | 2 | 2 | 4 | Updates on jurisprudence, rules and regulations and issuances of other government agencies Request DOJ opinion | LS |

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DOCUMENTATION MANAGEMENT

| Process | Risk Event | L | S | RF | Action Plan | Responsible |
|-----------------------|---|---|---|----|---|-------------|
| Records Management | Loss or damage of documents and records due to inadequate filing system resulting to organizational inefficiency | 3 | 3 | 9 | Adoption of Electronic Document Management System Strict implementation of Records Disposition Schedule (RDS) | RMD, HRAS |
| | Unauthorized disclosure of classified information due to negligence resulting to violation of existing laws, rules and regulations | 1 | 3 | 3 | Issuance of Policy on handling classified documents/records Increase awareness on RA 10173 (Data Privacy Act of 2012) by attending Seminars and workshops and/or trainings | RMD, HRAS |



Quality Management System References

OPPORTUNITY REGISTER

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Opportunities can lead to the adoption of new practices, launching new products, opening new markets, addressing new customers, building partnerships, using new technology and other desirable and viable possibilities to address the organization's or its customer needs. Action Plan is required for Benefit Factor \geq 4. Action Plan is required if regulatory or statutory requirement.

LIKELIHOOD (L)

| Score | Category Name | Likelihood |
|-------|---------------|---|
| 1 | Unlikely | Some chance of favorable outcome in 4 or more years |
| 2 | Likely | Reasonable prospects of favorable results in 1 to 3 years |
| 3 | Very Likely | Favorable outcome is likely to be achieved in 1 year |

BENEFIT RATING (BR)

| Score | Category Name | Indicators |
|-------|---------------|--|
| 1 | Low | Possible opportunity that has yet to be fully investigated by management. Likelihood of success is low on the basis of management of resources currently being applied. |
| 2 | Medium | Opportunity that may be achievable but requires careful management. Opportunity that may arise over and above the plan. |
| 3 | High | Clear opportunity that can be relied upon with reasonable certainty to be achieved in the short-term based on current management processes. |

BENEFIT FACTOR (BF) = L \times BR

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LEADERSHIP

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--------------------------------|--|---|--|----|----|---|--|
| Communication and Awareness | Improved reporting of project accomplishments | 2 | More realistic and community- specific issues are presented in news stories Increased awareness and appreciation of DPWH Projects | 3 | 6 | Conduct interview and obtain testimonials from beneficiaries of DPWH projects | Stakeholders Relations Service (SRS) |

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PLANNING

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--------------------|--|---|---|----|----|--|---|
| Strategic Planning | Stronger executive and legislative support for increased infrastructure spending | 3 | Efficient delivery of projects and services | 3 | 9 | Strengthen the process of identification of High-Impact Projects Monitor utilization of funds | Senior Management Planning Service (PS) Finance Service (FS) Planning Divisions & Sections PGS Committee & TWG Corporate Planning and Management Division (CPMD) |
| | Availability of IT systems and GIS technology to enable processes | 3 | Better decision making More geographically- responsive planning and evaluation | 3 | 9 | Support the development of applications identified in the PGS | Senior Management Information Management Service (IMS) PGS Committee & TWG |



| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
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| - | | | Increased transparency and accountability | | | | CPMD |
| | Increased engagement and participation of stakeholders | 2 | Increased awareness and appreciation of DPWH Projects Improved trust and confidence of the public to DPWH Projects are more responsive to people's needs | 3 | 6 | Strengthen MSGC at Central Office Create regional-level MSGCs | Senior Management IMS PGS Committee & TWG, CPMD |

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PERFORMANCE EVALUATION

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--|--|---|---|----|----|--|--|
| Quality and Safety Assurance (DPWH Materials Engineers and Contractors' and Consultants' Materials Engineers Accreditation Examination) | Increased number of qualified and competent DPWH MEs, Contractors' and Consultants' Materials Engineers | 3 | Improved quality assurance of project implementation | 3 | 9 | Increase frequency of the conduct of DPWH Materials Engineers Accreditation Examination | Bureau of Research and Standards (BRS) |
| Quality and Safety Assurance | Implementation of the Department's Standard Specifications for Project Quality Assurance, Volume IV | 3 | Savings in roads and bridges maintenance costs Infrastructure projects meeting/exceeding their expected design lives Improved image of the Department | 3 | 9 | Sustain the Quality Assurance Program Continue incentive scheme of including Quality Assurance Rating in Project Implementation in the criteria for giving out PBB Promote the use of advanced QA equipment in the conduct of quality audits | MANCOM BQS BRS BOC Implementing Offices (IOs) |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--|---|---|--|----|----|--|---|
| Quality and Safety Assurance (Materials Testing) | Improved testing capabilities due to the availability of state of the art testing equipment | 1 | Faster generation of reliable test results, and increased testing productivity Materials used meet the quality requirements | 2 | 2 | Procure new testing equipment | BQS, IOs |
| Quality and Safety Assurance | Enhanced laboratory personnel's capabilities and know how due to updated laboratory testing procedures | | Reliable test results, and increased testing productivity Materials used meet the quality requirements | | | Update laboratory testing procedures based on the latest standards (ASTM/AASHTO) | BQS, IOs |
| Monitoring and Measurement | Adoption of ASTM/AASHTO standard in project implementation | 3 | Clear and specific guideline in implementing QA in projects Straightforward conduct of QA audit | 2 | 6 | Continuously conduct monitoring activities with forms, guidelines and legal basis to ensure the effective workmanship and quality control of materials in the project. | Project Operation and Maintenance Division, BQS |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|----------------|--|---|--|----|----|--|---------------------------------|
| Internal Audit | Increased number of competent auditors with knowledge in Department's processes. | 2 | More comprehensive conduct of audit Increased compliance with the regulatory and statutory requirements | 3 | 6 | Prepare and implement continuing education/training program for auditors | Internal Audit Service (IAS) |
| Internal Audit | Correct and complete audit findings and accurate application of audit criteria | 2 | Verified/validated audit results is achieved | 3 | 6 | Assign a committee to conduct a semi- annual review and updating of the standard audit checklist and procedure | IAS |
| | Uniform interpretation of rules, regulations and other audit criteria | 2 | Standard recommendations | 3 | 6 | Conduct monthly staff meeting to tackle new/updates on the relevant rules and regulations | IAS |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---|---|---|--|----|----|---|-------------|
| Internal Audit (Actions on Common Findings) | Increased awareness of auditee of D.O. 85 s. 2014 re: Reiteration on the Strict Adherence to the IRR of RA 9184 and existing DO's on the Procurement of Contracts for Civil Works Projects, Goods and Consultancy Services | 2 | Reduced `non- compliance' audit findings | 3 | 6 | Close coordination with PrS on the conduct of trainings . on R.A. 9184 | IAS, PrS |
| External Stakeholders Relations | Improved documentation of community engagement activities | 2 | Improved public image | 3 | 6 | Issuance of Department Order regarding the involvement/role of the External Stakeholders in community engagement activities | SRS |
| Feedback Management | Reduced complaints on DPWH services | 3 | Improved net satisfaction rating | 3 | 9 | Timely response to complaints | SRS |

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OPERATIONS

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|----------------|---|---|--|----|----|---|-------------|
| Data Gathering | Availability of new surveys and investigation instruments/ equipment including software on data processing | 2 | More efficient and faster data gathering Enhanced capability of DPWH personnel in data gathering Efficient prioritization and allocation of funds Savings on time and resources | 2 | 4 | Continuing capacitation of RBIA Coordinators in the IOs Procure new survey instruments | IOs |
| Data Gathering | Availability of reliable data on roads and bridges | 1 | Acceptable project prioritization | 3 | 3 | Improve the data gathering capabilities IOs Strengthen validation of data gathered | IOs |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--|---|---|---|----|----|---|------------------------------------|
| Project Identification | More efficient allocation of funds through Multi-Year Obligational Authority (MYOA) | 2 | Minimized Project Modification Minimized Variation Order Reversion due to ROW acquisition issues. | 2 | 4 | Adapt and strictly implement D.O. 35 Series of 2015 (Guidelines for the Procurement of Multi-Year Contracts for Locally-Funded Infrastructure Projects) and DBM Circular No. 2015-7 (Updated Guidelines for Issuance of MYOA) | Planning Service |
| Formulation of Plans and Investments Program | Institutionalized knowledge and skills among employees in the preparation/ evaluation of required documents. | 3 | Increased work productivity | 2 | 6 | Provide related seminar among the employees in order to enhance/ strengthen knowledge and skills for a better performance in the office. | Project Development Division |
| Formulation of Project Proposals and Investment Program | More high-impact projects funded by ODA to be proposed in the Medium-Term Public Investment Program | 3 | Increase knowledge in construction technology | 3 | 9 | Develop more master plans and conduct more feasibility studies to | UPMO |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---|---|---|--|----|----|--|------------------|
| - | | | On time achievement of goals and objectives under the Philippine Development Plan | | | increase the number of approved project proposals and investment program | |
| Formulation of Project Proposals and Investment Program (Data Management) | Improved connectivity and coordination between the Department's Offices through Multi-Year Planning System | 2 | Easier and real- time access to infrastructure data More efficient and effective implementation and monitoring of DPWH projects Available and more reliable reporting and analytics to help improve implementation of policies and guidelines. | 2 | 4 | Conduct of regular integration meeting with other offices (IMS, Procurement Service, BOC, BOD, FS and Continuous support from IMS to enhance to application based on Management heads. Continuous capacitation of MYPS coordinators in the IOs | Planning Service |

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Process **Opportunity Event** L Benefit BR BF **Action Plan** Responsible **Public Consultation** Increased awareness on 3 Minimize delay in 2 6 Produces Project external issues from LGUs, project information to be Implementation & ROW affected persons/families implementation considered in the Supervision and other government offices (if policy formulation to Division, PPS any), to be used for policy avoid/minimize delay formulation. in the project implementation. **Plan Preparation** Availability of state-of-the-art Increase in survey Conduct planning Surveys and (Engineering Surveys equipment, design software and 2 3 6 efficiency and and needs Investigation and Investigation) Division, Bureau of knowledgeable personnel in the accuracy assessment for the Design conduct of engineering surveys reduced project Bureau of Design and investigation variations; and and its Regional and • On time project District Counterparts plan preparation to identify appropriate surveying equipment and design software (in coordination with IMS) Procure additional appropriate surveying equipment and design software and increase equipment and



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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
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| - | | | | | | design software ratio per office. Conduct / organize trainings and workshops on the use of surveying equipment and design software. | |
| Plan Preparation | Availability of new design analysis software/s and knowledgeable personnel | 2 | Increased efficiency in the project plan Reduced project variations and Economical project design | 3 | 6 | Procure additional appropriate design software and increase design software ratio per office. Conduct trainings and workshops on the use of surveying equipment and design software | BOD PDD-RO PDS-DEO |
| Cost Estimation | Adoption of new pay items approved by BRS | 3 | Cost-effective and timely procurement of DPWH | 3 | 9 | Ensure all new pay items are approved by BRS before using in procurement | IOs |



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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
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| | | | infrastructure projects | | | | |
| Cost Estimation (Review / Evaluation of Cost Estimates (POW, ABC, DUPA)) | Submission of cost estimates are within the range accepted by the Department due to adherence to the Standard Cost Estimation Manuals and other related policies and issuances of the DPWH | 3 | Cost-effective infrastructure DPWH projects | 3 | 9 | Prepare guidelines and procedures to regularly conduct cost estimation Audit to strengthen awareness of the IOs regarding the use of Cost Estimation Manuals and other related issuances Conduct of enhancement training, seminar/workshop and refresher course on the use of cost estimation-related issuances. (i.e. Department Orders, Standard Forms, Templates, CMPD, etc.) | BOC-PCD |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---|--|---|---|----|----|---|-------------|
| Project Implementation | Early completion of the project | 3 | Achievement of the overall project objectives and deliverables Early realization of projects' benefits to the public High absorptive capacity | 3 | 9 | Ensure project readiness (ROW, Social-political acceptance, environmental clearances) prior to procurement Monitor and comply strictly with the existing laws, rules and regulations and policies of the government and lending institutions | IOs |
| Project Implementation (Request for Revision of Planned Implementation Schedule) | Timely submission by the IO of complete documents and in accordance with the existing laws, regulations and department policies. | 3 | Timely processing and approval of Request for Revision of Planned Implementation Schedule. Real time project information recorded in the | 3 | 9 | Conduct trainings for IOs on project and contract documentation. | BOC-PMD |



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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
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| | | | PCMA and generated reports are reflective of the actual project status. | | | | |
| Project Implementation (Inland Channel Dredging Project by Administration) | Availability of heavy equipment on demand due to: a. Strategic allocation of required resources for the DPWH Dredging Fleet and Implementation, b. Optimized utilization of MOOE for Dredging, and c. Strategic operations and maintenance planning | | Improved contribution in the protection of Lives and Properties Improved contribution in the protection and preservation of environment Improved contribution in the gradual Reduction of the impact of climate change – flooding Sustained capability improvement of | 3 | 3 | Institutional Strengthening of BOE (creation of Major River Basin Engineering Offices additional plantilla positions, improvement of shops and allocation required resources) and Regional Office Equipment Management Division Establish a Program to Address the Impact of Climate Change to DPWH Water-Based Water-Based Management Impact of Climate | MANCOM Bureau of Equipment (BOE) IOs |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
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| | | × | dredging crew and fleet utilization • Reduced capital expenditure from dredging project by contract | | | Equipment Fleet and Personnel Prepare Long, Medium and Short Term Strategic Dredging Program and Management Plans to include: 5-Year Medium Term Dry docking Plan Extension the 5-Year Re-fleeting Program (started on CY 2013) for another 5-Year (until 2023) Continuous Institutional and Capability Development Program | |
| Infrastructure Asset Maintenance (Implement infrastructure asset maintenance) | Generate employment for marginalized people from the local community, in partnership with concerned government agency. | 2 | Contribution to poverty reduction through job opportunity | 3 | 6 | Facilitate early approval of Memorandum of Understanding, between involved agencies, on hiring of local workers. | Bureau of Maintenance (BOM) IOs |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
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| Inspectorate and Monitoring (Inspection/ validation of maintenance activities) | Increase engagement of the public in reporting defects /deficiencies on infrastructure | 2 | Timely response to the maintenance needs of infrastructure | 2 | 4 | Plan and implement the routine maintenance program taking into consideration the guidelines on hiring of local workers under the Job Generation Program | BOM IOs |
| Inspectorate and Monitoring (Monitoring of the situation of disaster/calamity- affected major national road network) | Enhancement of current communication and reporting system that would enable real- time dissemination of information concerning mobility along major national road network during and after the occurrence of disasters/ calamities | 2 | Prompt assistance and accurate information to motorists and the general public during disasters/calamiti es to ensure the safety of all concerned. | 3 | 6 | Develop a Disaster Situational Report Application (web/mobile) in coordination with the Information Management System (IMS). Establish the Policy Guidelines for the use of the application in the event of a Disaster/Calamity. | BOM IOs |

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| | | | | | | Cascade the use of the application to the Regional and District offices. | |
| Inspectorate and Monitoring (Project Monitoring) | Increased number of Project Engineers and Project Inspectors meeting PCMA requirements | 3 | Effective monitoring of implementation of all infrastructure projects | 3 | 9 | Facilitate trainings and seminars for accreditation of qualified engineers Require engineers who have undergone Materials and/or Comprehensive Field Engineers' Course to be deployed to actual operations Hire additional qualified engineers | HRAS, BOC, BQS, BRS, IOs |

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RESEARCH AND DEVELOPMENT

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---|--|---|---|----|----|--|-------------|
| New Product/ Technology Evaluation and Accreditation | Incorporation and use of newly accredited products/ technologies in DPWH projects | 2 | Improved project quality | 3 | 6 | Continuous evaluation/accreditat ion of new products/technologie s for use in DPWH projects Promote the newly accredited products and technologies to IOs | BRS |
| Standard Specifications Formulation (Regular Updating of Standard Specification) | Increased awareness of IOs about updated standard specifications resulting to inclusion of the same in DPWH infrastructure projects. | 2 | Improved quality assurance of project implementation in the Department. | 3 | 6 | Ensure the timely conduct of deliberation and dissemination of updated standard specifications | BRS |

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PROCUREMENT MANAGEMENT

| Process | Opportunity Event | L | В | enefit | BR | BF | Action Plan | Responsible |
|--|---|---|---|---|----|----|--|--|
| Bid Documents Preparation | Prompt review and finalization of bid documents due to early submission of Implementing Office to Procurement Service 12 days before the Pre- procurement Conference (PPC) | 2 | • Expe | tisement dite irement | 3 | 6 | Require Implementing Office (IOs) for early submission of duly signed and reviewed PPMP, for consolidation and preparation of bidding documents prior to PPC | Procurement Service, Unit Staff Implementing Office (IOs) |
| Pre- qualification and Bid Evaluation | Increased compliance with the existing guideline resulting to early completion of bid evaluation | 2 | of fai evalu • Shou evalu there time | d failed bid ation occur, 's adequate to evaluate in for nsideration | 3 | 6 | Proper assignment and training of TWG on the latest Revisions of RA 9184, GPPB Issuances/ resolutions and IFI's Evaluation Guidelines | BAC/ BAC-TWG/ Procurement Service |



| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---------------------------|--|---|---|----|----|--|--|
| - | | | | | | BAC thoroughly review the recommendation of TWG and recommend re- evaluation if necessary | |
| Performance Evaluation | Increased compliance with the existing guideline resulting to early completion of post qualification evaluation | 2 | Lower probability of failed post qualification evaluation Should failed post qualification evaluation occur, there's adequate time to evaluate Motion for Reconsideration (if any) | 3 | 6 | Proper assignment and training of TWG on the latest Revisions of RA 9184, GPPB Issuances /resolutions and IFI's Evaluation Guidelines BAC thoroughly review the recommendation of TWG and recommend re- evaluation if necessary | BAC/BAC TWG/ Procurement Service |

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HUMAN RESOURCE MANAGEMENT

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--|--|---|---|----|----|--|--|
| Recruitment, Selection and Placement | Publication of vacant positions in the PIS | 2 | Efficient generation of vacant positions | 2 | 4 | Initiate Personnel Information System (PIS) enhancement integrating the publication of vacant positions | Human Resource and Administrative Service in coordination with IMS |
| Performance Management | Improved validation process of SPMS | 2 | Objective generation of performance rating | 2 | 4 | Engage Office PMT to actively monitor and implement SPMS processes | HRAS |
| Rewards and Recognition | Upgraded Program on Awards and Recognition for Service Excellence | 2 | High morale of employees due to upgrade of awards and recognition provisions Conferment of Agency's PRIME HRM Maturity Level 2 | 2 | 4 | Review existing PRAISE Benchmark with other agencies on their best practices for rewards and recognition Upgrade or introduce new criteria for rewards and recognition | HRAS |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|-----------------------------|---|---|--|----|----|---|-------------|
| Learning and Development | Improved review and validation of training programs | 2 | No funds are wasted Bridge competency gap | 2 | 4 | Improve LNA process to validate proposed Training program | HRAS |

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FINANCIAL MANAGEMENT

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|----------------------------|--|---|--|----|----|--|--------------------------|
| Fiscal Accountability | Implementation of the Annual Cash Based Budgeting System | 3 | Enhanced transparency and accountability in the budget process | 3 | 9 | In preparation to the implementation, an inventory of all unpaid obligations should be done. Fast track the preparation of Progress Billings. | FS IOs ROs DEOs |
| Fund Control Accounting | Implementation of the Bureau of Treasury Management System (BTMS) | 3 | Improved transparency in the entire budget execution process Providing online and ready access to information on allocations, expenditure, liability, payments, balances etc. Capturing the data once, at the source, and generation of reports as per specific needs of users, which avoids | 3 | 9 | Participate in the trainings provided by DBM-BTMS Team. Roll-out training to Regional Offices on the first year of implementation. | FS IOs ROs DEOs |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---------|--------------------------|---|---|----|----|-------------|-------------|
| - | | | redundant efforts in data recording, data exchange, validation, formatting and reporting | | | | |

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PHYSICAL RESOURCE MANAGEMENT

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--|--|---|---|----|----|---|---|
| Equipment Fleet Management (Operations and Maintenance) | Increased Fleet Operating Life due to sustainable Preventive Maintenance Program compliance. | 2 | • Lower or deferred capital expenditure from equipment acquisition | 3 | 6 | Ensure "On time" submission per standard Annual Preventive Maintenance (PM) Program Monitor all end-users and IOs Annual PM Program Compliance Adopt ISO 55001:2014 – "Asset Management Standard" Physical Asset Management Automation Procurement of the latest and most appropriate preventive and predictive maintenance equipment and tools | BOE Regional Office - Equipment Management Division District Engineering Office - Equipment Services Unit |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|-------------------------------|--|---|---|----|----|---|--|
| Equipment Fleet Management | Decreased Equipment Fleet Failure Rate due to sustainable PM Program Compliance | 2 | Better/improved Department image; low or reduced in maintenance expenditures from corrective and emergency maintenance; and, optimized resources utilization – manpower, materials, and tools | 3 | 6 | Ensure "On time" submission per standard Annual Preventive Maintenance (PM) Program Monitor all end-users and IOs Annual PM Program Compliance Adopt ISO 55001:2014 – "Asset Management Standard" Physical Asset Management Automation Procurement of the latest and most appropriate preventive and predictive maintenance equipment and tools | BOE Regional Office - Equipment Management Division District Engineering Office - Equipment Services Unit |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|-------------------------------|---|---|---|----|----|---|---|
| Equipment Fleet Management | Local and international recognition due to PM Program implementation | 2 | Better/improved Department image; and, international standard of excellence | 3 | 6 | Ensure "On time" submission per standard Annual Preventive Maintenance (PM) Program Monitor all end-users and IOs Annual PM Program Compliance Adopt ISO 55001:2014 – "Asset Management Standard" Physical Asset Management Automation Procurement of the latest and most appropriate preventive and predictive maintenance equipment and tools | BOE Regional Office - Equipment Management Division District Engineering Office - Equipment Services Unit |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|---|--|---|---|----|----|---|---|
| Equipment Fleet Management (Disposal of obsolete/ uneconomical/ unserviceable equipment) | Increased revenue from sales of Disposal Equipment | 2 | Better/improved Department image; low or reduced in maintenance expenditures from corrective and emergency maintenance; and, reduced safekeeping and storage cost; optimized resources utilization – manpower, materials, and tools; and, encouraged scrap business participation | 3 | 6 | Adopt ISO 55001:2014 – "Asset Management Standard" Establish Annual Disposal Plan and Schedule | BOE Regional Office - Equipment Management Division District Engineering Office - Equipment Services Unit |

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INFORMATION MANAGEMENT

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|-------------------------|--|---|--|----|----|--|-------------|
| Needs Identification | Increased exposure/ awareness to the state- of-the-art technologies available in the market | 2 | Effective and efficient IT policy decisions Department responsive Information Systems Strategic Plan (ISSP) | 3 | 6 | Actively participate/attend in the latest IT trainings, workshops and/or demos. | IMS |
| Application Development | Improved IT programming skills | 2 | Less application development time Efficient coding practice Improved application report generation | 3 | 6 | Allocate training funds on advanced programming | IMS |
| Application Development | Availability of web based applications | 2 | Easier application deployment and management Simpler user interface | 3 | 6 | Advocate development of web based application. Strengthen current IT infra to support web based application requirements. | IMS |

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| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|----------------------------------|-------------------|---|---|----|----|---|-------------|
| IŢ Infrastructure Maintenance | Cloud migration | 2 | Improved user productivity Improved utilization of resources Easier application deployment and management Easier upgrade of IT infra | 3 | 6 | Adapt DICT's Department Circular 2017-02 `Cloud First Policy' | IMS |

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LEGAL SERVICES

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|--|--|---|--|----|----|--|--------------------|
| Legislative Affairs and Research/Legal Opinion (Preparation of Legal Opinion) | Availability of new edition law books | 3 | Prompt and reliable reply/ action on request for legal opinion | 3 | 9 | Conduct/Request for quotations from different bookstores | Legal Service (LS) |
| | Creation of additional lawyer positions | 1 | | 1 | 1 | Coordinate with the Human Resources Administrative Service (HRAS) | LS HRAS |
| Site /Location Acquisition (Payment of Right-of-Way Claims) | Implementation of Cash-Based Budgeting System | 3 | Prompt payment of just compensation | 3 | 9 | • Formulate scheme/guidelines for the disbursement of ROW funds before the end of 1st quarter of 2019 | LS PS |
| Site /Location Acquisition | Early start of procurement of the Government Financial Institution (GFI) in determining the current market value (CMV) of affected properties resulting to the acceptance of the offer by the lot owners to | 3 | Expedited ROW acquisition On time project implementation | 3 | 9 | Early preparation of Right-of-way Acquisition Plan (RAP) | IOs |

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| - | expedite the ROW acquisition Early determination of current market value (CMV) | | | | | | |
| Site /Location Acquisition | Accurate identification of the following: a. Informal Settler Families (ISF) b. structures and Improvements c. other obstructions (e.g. utilities, trees, etc.) | 3 | Timely procurement of project | 3 | 9 | Early preparation of Right-of-way Acquisition Plan (RAP) | IOs |
| Contract Letting /Review and Litigation | Creation of digital files of all reviewed contracts | 3 | Easy retrieval of files for reference | High | 9 | Compile scanned copies of contracts including the opinion rendered by the personnel assigned | LS |

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DOCUMENTATION MANAGEMENT

| Process | Opportunity Event | L | Benefit | BR | BF | Action Plan | Responsible |
|-----------------------------|--|---|---|----|----|---|--|
| Documentation Management | Adoption of Electronic Data Management System | 2 | Easier retrieval of records Reduced Storage Space Availability of Back up files and disaster recovery | 2 | 4 | Procurement of Electronic Data Management System | HRAS |
| | Policy Issuance on Handling classified documents/records | 2 | Ensure Department compliance with statutory and regulatory requirements Protection of employees' reputation and right to privacy | 2 | 4 | Request training on Data Privacy Act Train Receiving Officers in handling classified Records | District Records Management Section Designated Records Officers |