Appendix E
Risk Management Assessment

National Information & Communication Technology (ICT) Plan

National ICT Strategy
Risk Management Assessment

Appendix E

What is Project Risk?

All projects have elements of risks that, if not managed properly, can seriously jeopardize project success. In order to manage risk it is important to have a clear understanding of what risk is. Risk is the impact of uncertainty or the inevitability that even the best laid plans can be confounded by unexpected events, false assumptions or human failure. In other words, risk management is about identifying what could go wrong as a result of internal or external events, and planning appropriate actions to prevent or minimise the impact. Experience has shown that risk cannot be totally eliminated from any initiative, however if managed proactively it can be minimised and in some cases even avoided.

This preliminary risk assessment was conducted using input from Working Group members. The objectives of this assessment were to:

- Identify and describe risks associated with the development and implementation of the National ICT Plan;

- Assess the probability and impact of each risk to determine relative priority and needs; and,

- Develop mitigating actions to help minimise the adverse effects of risk on the NICT Plan.

The purpose of this document is to identify key risks to the success of the NICT Plan, and corresponding mitigation strategies.

Risk Assessment Approach

Identify Risk Categories

Review key project activities & outcomes, and identify risk categories

Identify and Assess Risks

Understand how critical risks can occur and estimate their affect on key success factors

Prioritize Risks

Establish which of those risks require immediate attention, ongoing attention or minor involvement

Create Risk Management Plan

Devise a plan or set of actions in advance to reduce the effect of risk

Implement and Monitor

Track the effects of the risks identified by monitoring effects of actions on risks & reviewing the risk management plan

Step 1: Identify Risk Categories
- Review NICT Strategy scope, potential programmes and projects, stakeholder groups and desired outcomes, and identify broad categories of risk

Step 2: Identify and Assess Risks
- Identify risks that could emerge within each category, and assess probability and impact
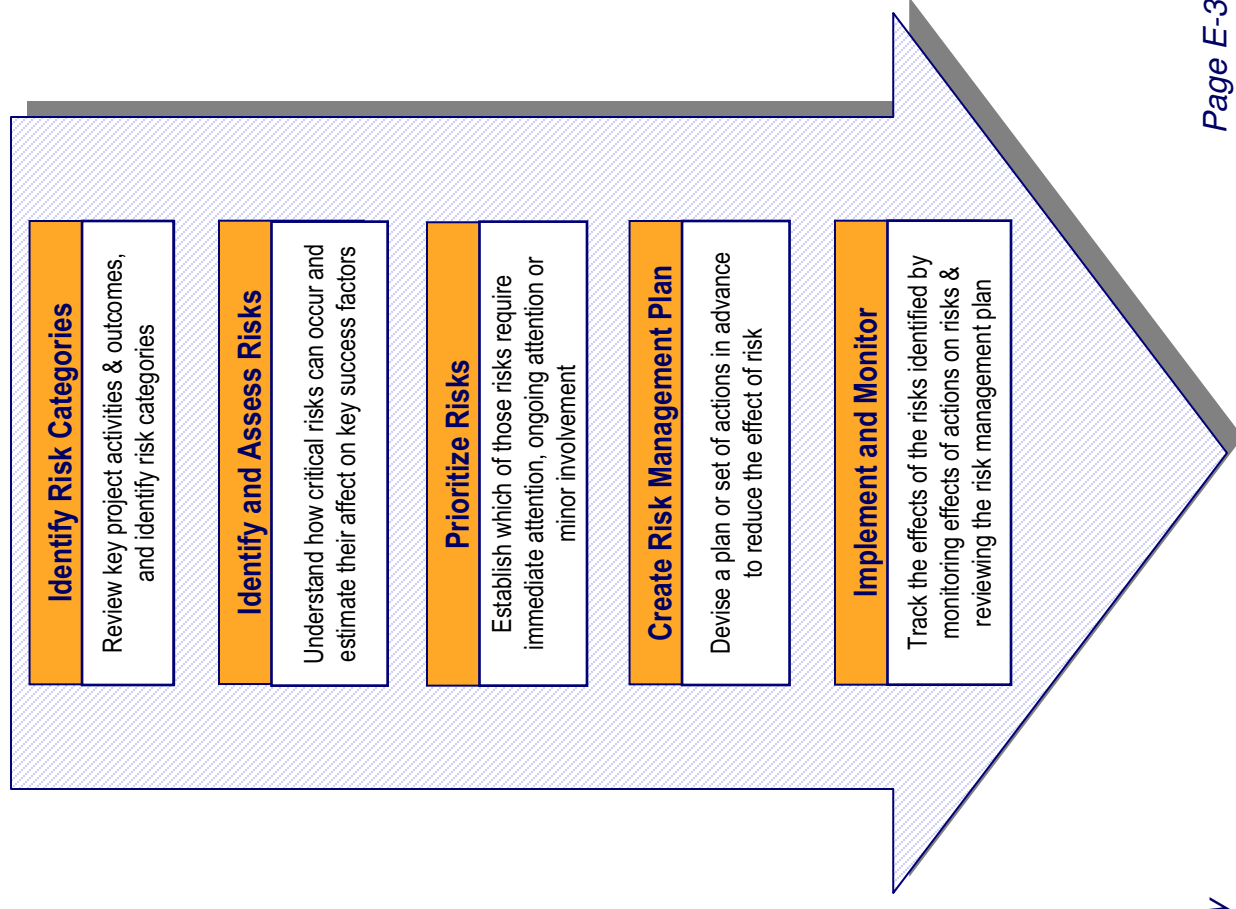
Step 3: Prioritize Risks
- Classify and rank risks in priority according to the perceived probability and impact on the National ICT Strategy.

Step 4: Create Risk Management Plan
- Determine appropriate mitigating actions, depending on the nature and priority of the risks. Actions are then summarized and consolidated into a formal risk management plan, and integrated into the overall NICT project plan.

Step 5: Implement and Monitor
- Manage risks through appropriate actions, monitor results and update plan as appropriate.

Risk Management Plan

Risk Category: Governance/Management/Coordination

Issues and Concerns	Impact	Probability	Mitigation Strategies:	Priority
Lack of transparency and accountability in management of the funds	High	High	• Presidential appointment of members to "oversight committee" • Ensure appropriate "checks and balances" of governing bodies • Involving IDB funding comes with built-in control mechanisms • Access (publication) of funding mechanisms (FOI) • Creation of Charter documenting rules, guiding principles for management body ("proactive publication of information") in order to overcome lack of sharing of information	High
Coordination of projects between/ within Ministries and other entities	High	High	• Review and modify current Ministry funding processes, emphasizing incentives for coordination • Management of funds to be with coordinating body • Establishment of overarching management body for ICT projects • Identification of criteria for projects under ICT banner – part of pre-planning process for budgets • Institutionalize existing structures involving Planning, Finance and MPAI	High
Project could become unmanageable if "scope creep" occurs	High	Medium	• Create approval process in place before project implementation • Tight, formal change management procedures (be wary of time delays due to rigidity) • Comprehensive list of criteria for inclusion as an "ICT project"	High

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Risk Management Plan

Risk Category: Funding/ Financing/ Procurement

Issues and Concerns	Impact	Probability	Mitigation Strategies:	Priority
Delays caused by procurement process	High	High	• Investigate creation/ utilization of "fast track" procurement process • Create/ use autonomous bodies for project procurement (e.g. RHA) • Realistic timeline planning where possible	High
External funding may come with unfavourable conditions attached	High	Medium	• Clearly define objectives and milestones required for funding • Good negotiating team for the loan • Alternative funding sources available	High
Escalating project costs (e.g. cost overruns)	Med	High	• Experienced and skilled project managers (hire or train) • Clearly define project milestones and objectives	High
Inadequate funds available to implement NICT Plan	Med	Med	• Prioritize project components • Continue to work closely with IDB for the development of the plan • Explore additional funding sources	Medium
Government faces large unexpected costs	High	Low	• Contingency funding plan • Prioritize projects and components	Medium

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Risk Management Plan

Risk Category: Technology

Issues and Concerns	Impact	Probability	Mitigation Strategies:	Priority
Technology used to prevent competitors from entering markets	High	Low	• Avoid proprietary solutions where possible – embrace open solutions – "avoid solutions that lock you in" • Promote open systems standards and interconnection standards • Legislative framework in place • Properly functioning Telecom Authority (adequately enabled?)	Medium
"Technology drives the solution" – get enchanted with new technology, regardless of fit with requirements	Med	Med	• "Don't chase technology" • Ensure users define functional requirements • Properly balanced project team (tech and non-tech)	Medium
Technology obsolescence	Med	Med	• Incentives for people to try new technologies • Long-term planning by technology experts • Use of appropriate and compatible technology	Medium

Risk Management Plan

Risk Category: Resource/ Organizational Capacity

Issues and Concerns	Impact	Probability	Mitigation Strategies:	Priority
Appropriate people not available to implement all projects	High	High	• Define skills required for ICT plan • Attract, develop and retain appropriate persons with appropriate skills • Reward and compensate • Outsource where appropriate • Sensitize HR managers on use of appropriate resources?? (avoid vagueness of ICT task/ skill descriptions)	High
Inadequate organizational framework to execute project	High	High	• Build the need for the framework within the body of the Plan • Project framework to sit outside existing government during the execution of the process (set up separate authority) • Ensure appropriate budget to support the framework	High
Bureaucratic hiring process is inadequate to meet timely resource needs	High	High	• Develop and use "fast track" hiring process (through new ICT authority)	High

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Risk Management Plan

Risk Category: Communication/ Marketing

Issues and Concerns	Impact	Probability	Mitigation Strategies:	Priority
Lack of national ownership of NICT Plan; Loss of stakeholder support; Lack of coordinated activities between entities;	High	Med	• Stakeholder analysis and communication plan (including segmentation, outreach program…) • Continuous public awareness using all media • Highlight and celebrate achievements • Ensure responsive feedback mechanisms • Link communications process to real deliverables (manage expectations)	High
Lack of funding to sustain communications initiatives	High	Low	• Ensure communications included in overall project funding plan	Medium

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Risk Category: Political

Issues and Concerns	Impact	Probability	Mitigation Strategies:	Priority
Loss of political support	High	Low	• Develop "grassroots pull" • Ensure "quick wins" (2003/04) • Build on existing support… • "Depoliticize" the Plan • Ensure politicians included as a stakeholder group in stakeholder analysis	Medium

Summary of Key Risks and Strategies

#	Key Risks	Mitigating Strategies
1	"Procurement process that is inadequate for NICT fails to deliver key resources in timely fashion"	Actions recommended include the creation and utilisation of "fast-track" procurement and hiring processes for the NICT Plan. Examples of such processes currently exist within Government. Despite using such mechanisms, it was recommended that realistic timeline planning be used as much as possible.
2	"Lack of project coordination and integration within Government, and between Government and stakeholders, results in project failure"	The establishment of an overarching management body to be responsible for the funding and delivery of NICT programmes and projects was the key recommendation. Toward this goal, there are thought to be some opportunities to institutionalise existing structures involving the Ministries of Planning, Finance and Public Administration and Information. Additionally, as part of pre-planning process for budgets, Ministries will be encouraged to identify ICT-related projects, using criteria identified by the NICT management body. In general, the creation of robust governance structures for ICT is thought to be the most effective way to prevent project failure.

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Summary of Key Risks and Strategies

#	Key Risks	Mitigating Strategies
3	"Appropriate human resources required for Plan implementation are not available"	The skill sets associated with Strategy implementation must be identified before resourcing plans can be developed. If resources with these skills cannot be found within government, it will be necessary to find ways to attract, develop and retain appropriate persons. Skilled individuals who are very much in demand will need to be appropriately compensated. Acquiring resources from outside the country must not be overlooked, especially when seeking specialised skills.
4	"Lack of public buy-in and support for NICT Plan limits it to a 'made-by-government' initiative"	A stakeholder analysis and communication plan must be developed, which identifies the unique informational needs of different segments of the population (e.g. seniors, businesspeople, children, etc.). Using all media, public awareness campaigns must enthusiastically deliver the ICT message. The plan will highlight and celebrate achievements. It will also provide responsive feedback mechanisms to ensure that communication flows both ways. Various elements of the plan must be given to the private sector and local communities for design and implementation. Wide ownership of the plan must be clearly demonstrated and communicated.
5	"Loss of political support for NICT results in project delays or stoppage"	In order to be the NICT Strategy to be successful, it is important that it be driven by "grassroots pull". The demands of citizens, groups and businesses for greater ICT development must give the project sufficient strength to overcome political agendas or inertia. In the early stages, this will be achieved by ensuring the public is aware of the real and tangible benefits produced by the project through an effective communication campaign.

Ongoing Management and Actions

- In the short term, a newly-created Transition Team will retain ownership and ongoing management of NICT-related risk management

- Quarterly updates of risk management plan should be undertaken and reported to the NICT Steering Committee, and to Cabinet

- More detailed risk assessment analyses will be conducted by the project managers for individual NICT programmes and projects as part of the design, build and implementation phases

- Identified risk mitigating strategies will be assigned, implemented and monitored by appropriate project team members

#	Risk Area	Action Taken	Result	Date

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