

CLIMATE INVESTMENT FUNDS

CTF-SCF/TFC.9/9
October 25, 2012

Joint Meeting of the CTF and SCF Trust Fund Committees
Istanbul, Turkey
November 2, 2012

Agenda Item 6

ENTERPRISE RISK MANAGEMENT FRAMEWORK REPORT FOR THE CLIMATE INVESTMENT FUNDS

PROPOSED DECISION

The joint meeting of the CTF and SCF Trust Fund Committees, having discussed the document CTF-SCF/TFC.9/9, *Enterprise Risk Management Framework Report for the Climate Investment Funds*:

- a) agrees to the CIF Enterprise Risk Management Framework proposed on page 12 of the document.
- b) agrees to the establishment of a working group, comprised of the following members, to oversee the development and implementation of the risk management framework. The working group as a whole should include expertise in financial, strategic and operational issues associated with the CIF.
 - i. [Name of one Committee member from eligible recipient country];
 - ii. [Name of second Committee member from eligible recipient country];
 - iii. [Name of one Committee member from a contributor country];
 - iv. [Name of second Committee member from a contributor country];
 - v. Representative of the Trustee;
 - vi. Representative of the CIF Administrative Unit;
 - vii. Representative of one MDB financing projects in the public sector [to be selected by the MDBs]; and
 - viii. Representative of one MDB financing projects in the private sector [to be selected by the MDBs].
- c) decides that the working group will be chaired by the Representative of the Trustee, supported by a Lead Risk Management Officer to be recruited as a staff member in the CIF Administrative Unit (see subparagraph (f) below). The Trustee and CIF Administrative Unit will recruit experts to advise the working group as required.
- d) requests the working group to undertake the following tasks as its first priority:
 - i. establish the context for the risk management framework, including identification of 5 to 7 priority risk areas for the CIF;
 - ii. design the communication program;

- iii. establish the risk baseline, including identification of critical events, and potential risks, evaluation of such risks, and determination of response strategies; and
- iv. develop monitoring and reporting processes.
- e) further requests the working group to report back to the CTF and SCF Trust Fund Committees at their joint meeting in November 2013 and to propose recommendations as to the evolution of the responsibilities and tasks of the group for further consideration by the Committees.
- f) agrees that the CIF Administrative Unit should recruit a lead Risk Management Officer to support the working group and oversee the implementation of the risk management framework for the CIF.
- g) requests the Trustee to procure ERM software to facilitate the timely implementation of a robust CIF ERM Program.
- h) requests the CIF Administrative Unit and the Trustee to prepare a budget for implementing the above and to circulate it to the CTF and SCF Trust Fund Committees for approval by mail.

CTF-SCF/TFC.9/9

Enterprise Risk Management Framework Report for the Climate Investment Funds

October 2012

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Executive Summary

The purpose of this report is to present the design of an Enterprise Risk Management Framework for the Climate Investment Funds

- ▶ Booz Allen Hamilton (Booz Allen) was engaged by the Climate Investment Funds (CIF or the Fund) to develop an Enterprise Risk Management (ERM) Framework for this multilateral partnership program and evaluate commercial off-the-shelf (COTS) ERM tools to determine if the tools meet the risk management needs of the CIF's two funds, the Clean Technology Fund (CTF) and Strategic Climate Fund (SCF)
 - Phase 2 of the ERM Framework consists of **developing a methodology** for measuring risks and designing, developing and testing a comprehensive ERM Framework for the CTF, which will eventually be rolled out to the SCF
 - Phase 2 presents a **preliminary set of risks** and does not present final risk recommendations or a full set of risks
- ▶ The Fund helps developing countries pilot ways to transform their economies through low-emissions and climate-resilient development, with scaled-up funding channeled through the Multilateral Development Banks (MDBs)
- ▶ The CIF Trust Fund Committees (TFCs) are responsible for governing the \$7.2b Fund to achieve the CIF's climate objectives. One of the unique elements of the CIF is that contributors can provide funding to the Fund in the form of grants or capital contributions and, in the case of CTF, concessional loan contributions
- ▶ The Fund's current operational structure includes leveraging each MDB partner's processes to effectively and efficiently administer and utilize the CIF funds. Each MDB plays a critical role in administering the Fund

Implementing the ERM Framework facilitates risk-informed decision making throughout the CIF

- ▶ Although the process has been working well, no standardized view of risks exists at the partnership program (i.e. enterprise) level while also satisfying the financial, strategic and operational risk management needs of each TFC member
- ▶ Given the Fund's innovative contribution structure and dispersed risk management practices, the TFCs need a risk management process that focuses on the enterprise (the Fund) and enables risk-related decision making
- ▶ ERM is defined as a process; affected by the TFCs, MDBs, Trustee and the CIF Administrative Unit; applied in strategy development across the partnership; and designed to:
 - Identify potential events and risks that may affect the CIF
 - Manage the risks within the CIF's risk tolerance
 - Provide reasonable assurances regarding the achievement of CIF's objectives
- ▶ Annex A provides a glossary of ERM terms

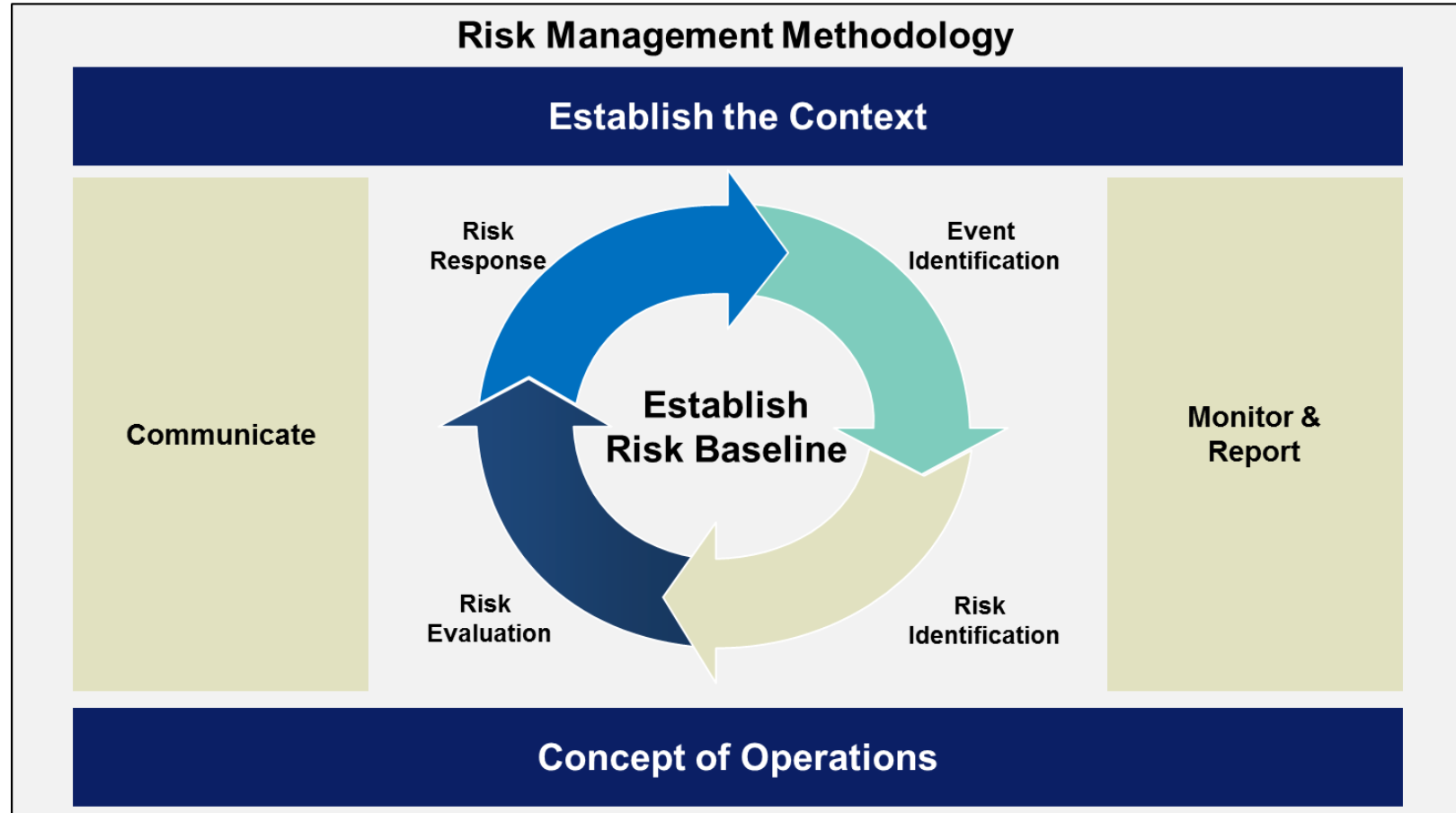
The CIF ERM Framework benefits the TFCs, MDBs, Trustee and the CIF Administrative Unit in the areas of communication, decision making and risk mitigation

- ▶ The CIF ERM Framework enables the TFCs to:
 - Make better informed strategic and operational decisions
 - Take a portfolio view of risks
 - Adopt a planning and decision-making approach that aligns with the CIF's risk tolerances
- ▶ The CIF ERM Framework also enables the MDBs, Trustee and the CIF Administrative Unit to:
 - **Communicate** in a more transparent and effective manner
 - **React appropriately** to potential future events and decisions that create uncertainty, such as local currency loans and over-programming, to ensure effective use of funds
 - **Establish risk tolerances and triggers** (through consensus of TFCs) to monitor risks at all levels, from project to portfolio
 - **Provide reasonable assurance** that the CIF's governance and operational structure are adequately equipped to manage the Fund's risks
 - **Evaluate relevant information** in a consolidated view to inform CIF decisions

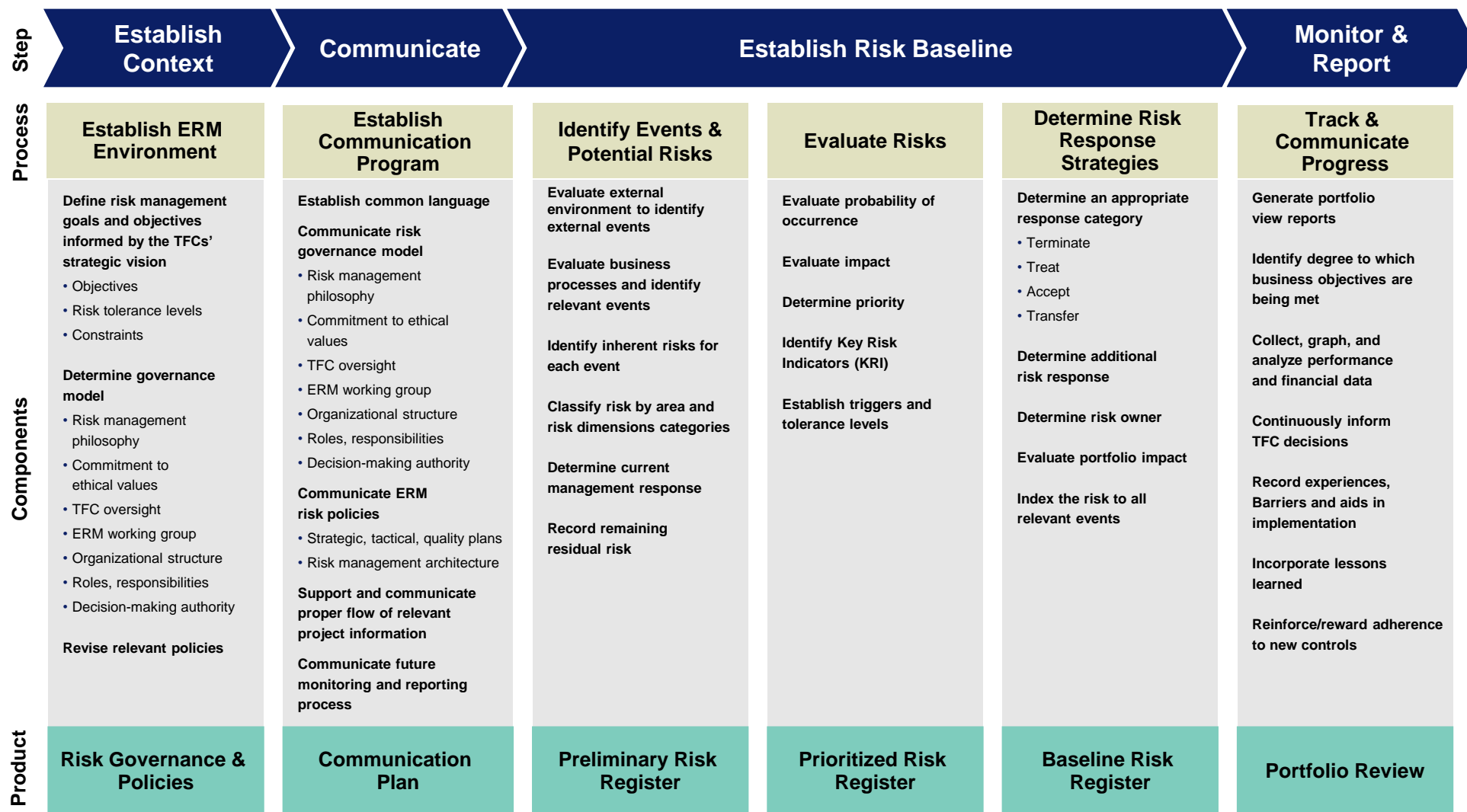
This CIF ERM Framework was informed by the Phase 1 current state assessment and ERM best practices

- ▶ The Phase 1 current state analysis, key risks identification and gap analysis conducted by Booz Allen informed the ERM Framework. Five key themes were discovered, including:
 - Information is not aggregated at the portfolio level
 - Information is highly fragmented and is not always effectively communicated to the TFCs in a timely manner
 - MDBs follow a comprehensive due diligence and an effective risk management process in their respective institutions
 - Information flow to the TFCs related to private sector projects is critical
 - MDBs have an interest in providing local currency products and exploring hedging options
- ▶ The Phase 1 report was informed through communications with the TFCs, MDBs, Trustee and CIF Administrative Unit
- ▶ The Trustee, CIF Administrative Unit, TFC members (United Kingdom, Germany, Australia, Canada) and MDBs (IFC, ADB) provided comments on the Phase 1 report
- ▶ The final Phase 2 report was informed by consultations and comments from the Trustee, CIF Administrative Unit, TFC members and MDBs. Refer to Annex D for a detailed list of entities consulted
- ▶ Booz Allen leveraged ERM best practices frameworks to develop the CIF ERM Framework to meet the Fund's unique risk needs

The CIF ERM Framework focuses on the CIF as the “enterprise”



The CIF ERM Framework: consists of **four steps**, which are broken into processes and components, to produce the risk work products



Booz Allen recommends establishing an ERM Program working group to drive the ERM process

- ▶ Booz Allen recommends forming an ERM Program working group to:
 - Establish the context, including identification of five to seven priority risk areas for the CIF
 - Design the communication program
 - Establish the risk baseline, including identification of critical events and potential risks, evaluation of these risks, and determination of risk response strategies
 - Develop monitoring and reporting processes
 - Report back to the CTF and SCF TFCs at joint meetings, including recommendations on the evolution of the responsibilities and tasks of the working group
- ▶ The ERM Program working group's **first** focus is the Tier 1 risk areas
- ▶ The ERM Program working group includes financial, strategic and operational experts from the TFCs (two from contributing countries and two from recipient countries); Trustee (one); CIF Administrative Unit (one); and MDBs (one from public and one from private sector operations) and utilizes ERM experts to facilitate the working sessions and drive timely completion
- ▶ The ERM Program working group focuses on implementing the CIF ERM Program through an iterative approach

Establishing the context is the first step towards developing the ERM Framework

- ▶ The context of the ERM is the multilateral CIF partnership program as the “enterprise” and the corresponding process of establishing the ERM Environment
- ▶ The CIF (CTF/SCF) strategic vision and objectives inform CIF ERM goals and objectives
- ▶ The ERM Framework provides a process by which the TFCs can determine its risk tolerance levels
 - Note, the TFCs are the responsible parties for determining risk tolerances using the ERM tolerance analysis process
 - Initial analysis in Phase 1 found that the TFCs have a range of tolerance levels by risk type (strategic, financial and operational), which is typical at the enterprise level
- ▶ The CIF operating environment informs the ERM Framework and corresponding policies
- ▶ The proposed ERM governance works within the current CIF governance model
- ▶ The CIF’s ERM context sets the foundation for the risk management Framework and includes risk management philosophy, governance structure, policies and procedures
- ▶ The CIF ERM Framework balances the need for robustness and ease of implementation

Establishing risk communication processes effectively leverages risk management and control processes

- ▶ The communication process is the primary vehicle to affect ERM awareness and information sharing amongst TFCs, MDBs, Trustee and the CIF Administrative Unit
- ▶ The communication plan and process support all steps of the ERM Program, including establishing the context, establishing the risk baseline and continuous monitoring and reporting
- ▶ The communication process:
 - Establishes common language
 - Communicates risk governance model and organizational structure, roles, responsibilities and decision-making authority
 - Communicates ERM risk policies
 - Supports the proper flow of relevant project information
 - Communicates future monitoring and reporting process

The **establish risk baseline** step consists of three sub-processes and requires the active participation of the TFCs

- ▶ Booz Allen developed an **initial risk register** (Annex B) to support the working group in the processes of (i) identifying events/risks, (ii) evaluating the risks and (iii) determining the appropriate risk response processes
- ▶ In the first process within the establish risk baseline step, **identify events and potential risks**, the working group analyzes external events and internal business processes to identify relevant events and then analyzes potential risks (and opportunities) that the events can create
 - Through risk working sessions with the TFCs, the working group:
 - Identifies/confirms the inherent risks (risks that the event naturally causes)
 - Identifies/confirms the current management practices and existing risk process to mitigate the risk
 - Determines/confirms the residual (remaining) risk to the Fund
 - The working group is well positioned to identify risks that are unique to the Fund
 - Booz Allen, as a component of developing the initial risk register, identified the risks for which the current management process included adequate management practices to mitigate the inherent (original) risk. In addition, Booz Allen identified preliminary areas where additional controls and enhancements may be needed

The next two sub-processes are to **evaluate risks** and **determine the appropriate risk response strategies**

- ▶ The next sub-process is to **evaluate risk**. The working group evaluates the residual risk, including probability, impact and priority and then establishes risk indicators, tolerance levels and triggers
- ▶ The last sub-process is to **determine risk response strategies**. The working group:
 - Determines the type of risk response (risk category)
 - Provides additional recommendations for the response if the risk were to occur
- ▶ In the final activity of the determine risk response sub-process, the working group applies risk filtration criteria to determine which risks are most critical to the management of the Fund (portfolio view)
- ▶ To ensure accountability, a component of the **determine risk response** sub-process is to assign a risk owner to each risk
 - The risk owner is the staff/group that has the ability to monitor the events and tolerances to identify that the risk is being realized and to implement the agreed risk responses
 - The risk owner communicates the event, risk and response to the appropriate parties, based on the roles and responsibilities determined in the risk governance structure

Establishing the risk baseline provides the TFCs with a robust risk register that can be implemented within the existing CIF operational and reporting processes

Risk Identification	
Event	Implementation and Supervision
Risk Area	Financial
Risk Dimension	Private Sector Project Credit
Inherent Risk	Private sector borrowers credit rating decreases and the possibility of default increases
Risk Name	Private sector credit
Current Management Response	MDBs track credit rating but do not report to TFC
Remaining Residual Risk	Private sector credit ratings are not aggregated at the portfolio level

Risk Response	
Risk Response Category	Treated
Additional Recommended Response	Aggregate credit ratings at the portfolio level
Owner	TFC
Portfolio Impact	High

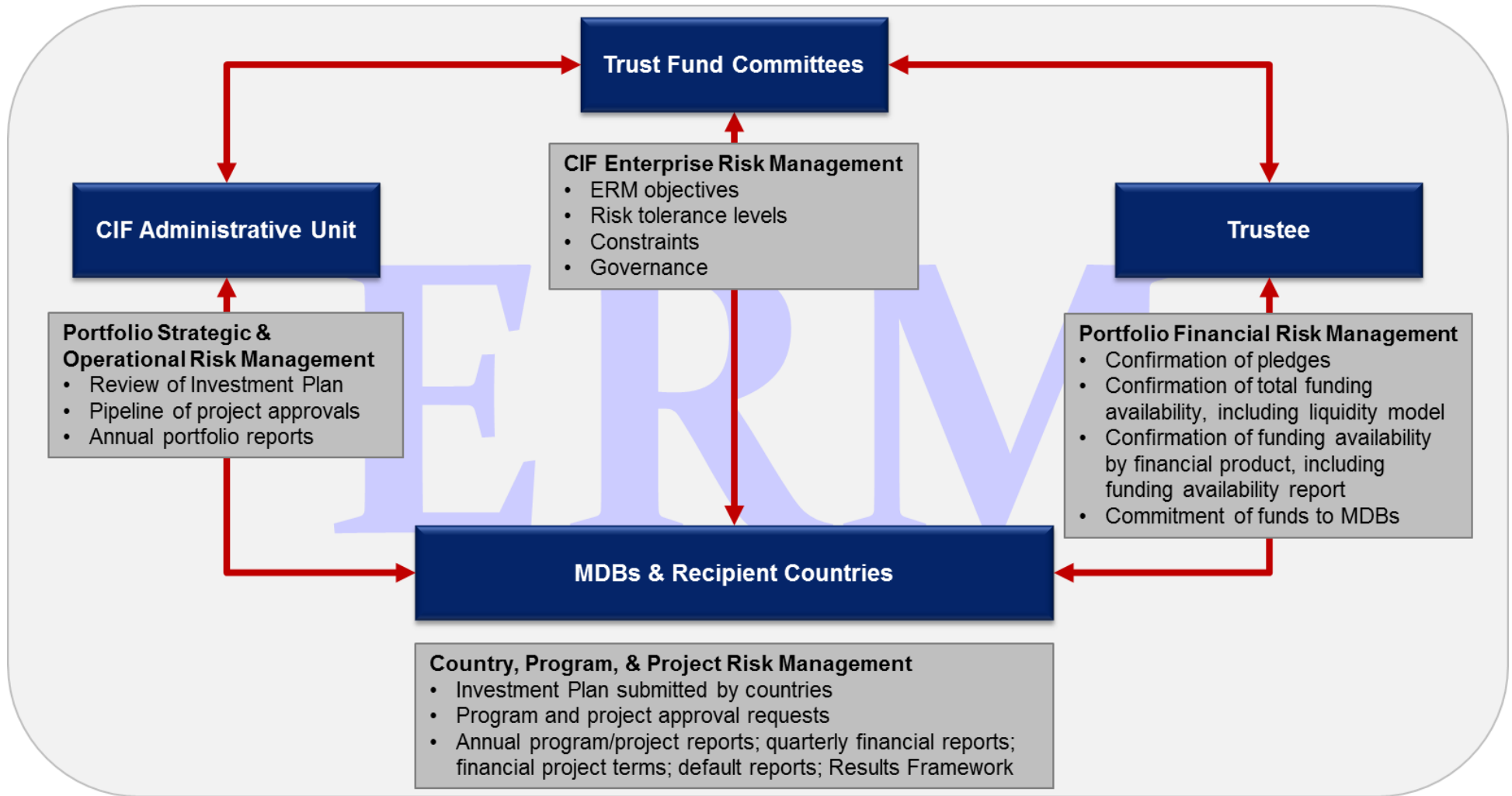
Risk Evaluation	
Probability	High
Impact	High
Priority	High
Key Risk Indicator (KRI)	1) Credit Rating 2) Credit Outlook
Trigger	1) Credit ratings: Low: XXX- and higher Medium: XX+ Sustainable: XX High: XX- Justification: the portfolio as of June 2011 was rated XXX- 2) Credit Outlook: Low: less than 10% of the portfolio has a negative outlook Medium: 10% - 14.99% of the portfolio has a negative outlook Sustainable: 15%-19.99% of the portfolio has a negative outlook High: more than 20% of the portfolio has a negative outlook

Note: The example above illustrates how the risk register may be completed by the working group. All confidential items will be addressed by and are subject to the approval of the working group.

During the **monitoring and reporting** processes, the working group embeds the additional risk responses into operational processes

- ▶ The working group collaborates with the MDBs, the Trustee and the CIF Administrative Unit to embed the ERM Framework into existing reporting processes, such as the Results Framework and Trustee reporting
- ▶ The monitoring and reporting step ensures that risk owners are following existing policy
- ▶ The monitoring and reporting activities identify when the probability of the risk exceeds the established tolerances so that the CIF can take proactive steps to mitigate the risk based on the agreed risk response
- ▶ The robustness of the monitoring/reporting process determines the degree to which risks are being properly identified and managed

The initial **concept of operations** for the CIF ERM Framework enables the TFCs to implement the ERM Program holistically throughout the Fund



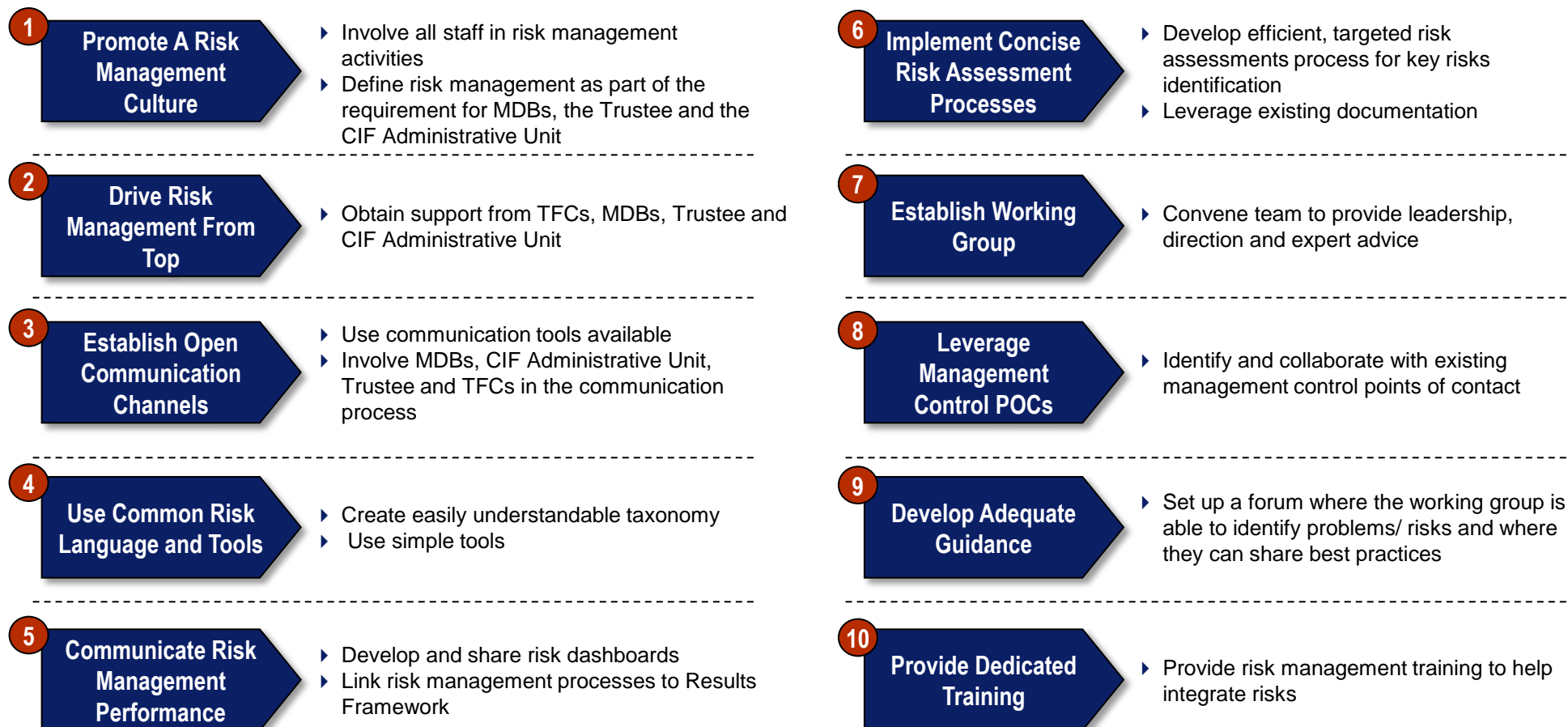
Booz Allen analyzed ERM tools to determine if COTS software would support the CIF's ERM needs (refer to Annex C for examples of risk reports and scorecards)

Category	Sub-Category	Definition	Active Risk	Methodware	MetricStream
Functionality	Workflow & Scheduling	Incorporates workflow for ease of use and capable of generating scheduled or triggered prompts to users			
	Usability	Possesses user interface and reporting capability that are intuitive, flexible, and customizable			
CIF Tool Requirements	Identification & Monitoring	Provides functionality to define and rate events, risks (both inherent and residual), and internal controls, as well as capture risk mitigation strategies and link risks to controls			
	Modeling & Analysis Capabilities	Includes capacity to analyze and process financial information (i.e. repayment schedules and flows) and generate financial reports			
Pricing	Price Point & Value	Offers a competitive annual rate and a high degree of value for services rendered			
	Pricing Options	Contains flexible pricing options for licensing, training, and hosting that are within budget			
System Specifications	Integration, Hosting & Security	Offers numerous integration options with internal and external systems, as well as various hosting formats and security features			

Legend		
Does Not Satisfy:		Partially Satisfies:
		Fully Satisfies:

Key ERM implementation success factors include people, process and technology

Key Success Factors for Implementing ERM



The way forward - implementation of the CIF ERM Program consists of three major tasks

WBS	Task Name	Duration	Start	Finish
1	Approve CIF ERM implementation approach	3 days	Fri 11/2/12	Tue 11/6/12
2	Implement the ERM Program (by iteration starting with top five to seven Tier 1 risks)	256 days	Thu 11/15/12	Thu 11/7/13
2.1	Finalize ERM context	36 days	Thu 11/15/12	Thu 1/3/13
2.2	Implement Iteration 1 of ERM (top 5-7 risks)	96 days	Fri 1/4/13	Fri 5/17/13
2.3	Implement iteration 2 - N ERM	124 days	Mon 5/20/13	Thu 11/7/13
3	Implement ERM software	119 days	Thu 11/15/12	Tue 4/30/13

Refer to Annex E: ERM Implementation Project Plan for detailed activities

The way forward – required approvals and initial steps

WBS	Task Name	Duration	Start	Finish
1	Approve CIF ERM implementation approach	3 days	Fri 11/2/12	Tue 11/6/12
1.1	Review and approve the CIF ERM Framework and phased implementation approach	3 days	Fri 11/2/12	Tue 11/6/12
1.2	Approve resources required to implement Tier 1 Priority, ERM Program and ERM software	3 days	Fri 11/2/12	Tue 11/6/12
1.2.1	Approve ERM Program working group	3 days	Fri 11/2/12	Tue 11/6/12
1.2.2	Approve ERM Risk Officer	3 days	Fri 11/2/12	Tue 11/6/12
1.2.3	Approve the procurement of a COTS ERM tool	3 days	Fri 11/2/12	Tue 11/6/12
1.3	Establish ERM Program working group	3 days	Fri 11/2/12	Tue 11/6/12
1.3.1	Identify participants	3 days	Fri 11/2/12	Tue 11/6/12
1.3.2	Develop overall governance roles and responsibilities	3 days	Fri 11/2/12	Tue 11/6/12

Introduction

Booz Allen was engaged by the CIF to develop an ERM Framework and evaluate COTS ERM software to determine if the tools meet the Fund's risk management needs

- ▶ The objective of the engagement is not to replicate existing processes and procedures, but achieve the following objectives:
 - Analyze the existing process
 - Develop a holistic ERM Framework
 - Operationalize the strategy to drive towards enhanced portfolio optimization
 - Evaluate commercial ERM software to determine if COTS software can meet the CIF ERM objectives
- ▶ The focus of the assessment phase (Phase 1) and design phase (Phase 2) was the CTF; however, additional considerations for the SCF were noted during interviews with members of the CTF TFC
- ▶ Once the CIF ERM Framework is approved by the joint CTF/SCF TFCs, the Framework will be transferred to the SCF for adjustments as needed

The CIF TFCs are responsible for governing the \$7.2b Fund to achieve the CIF's objectives

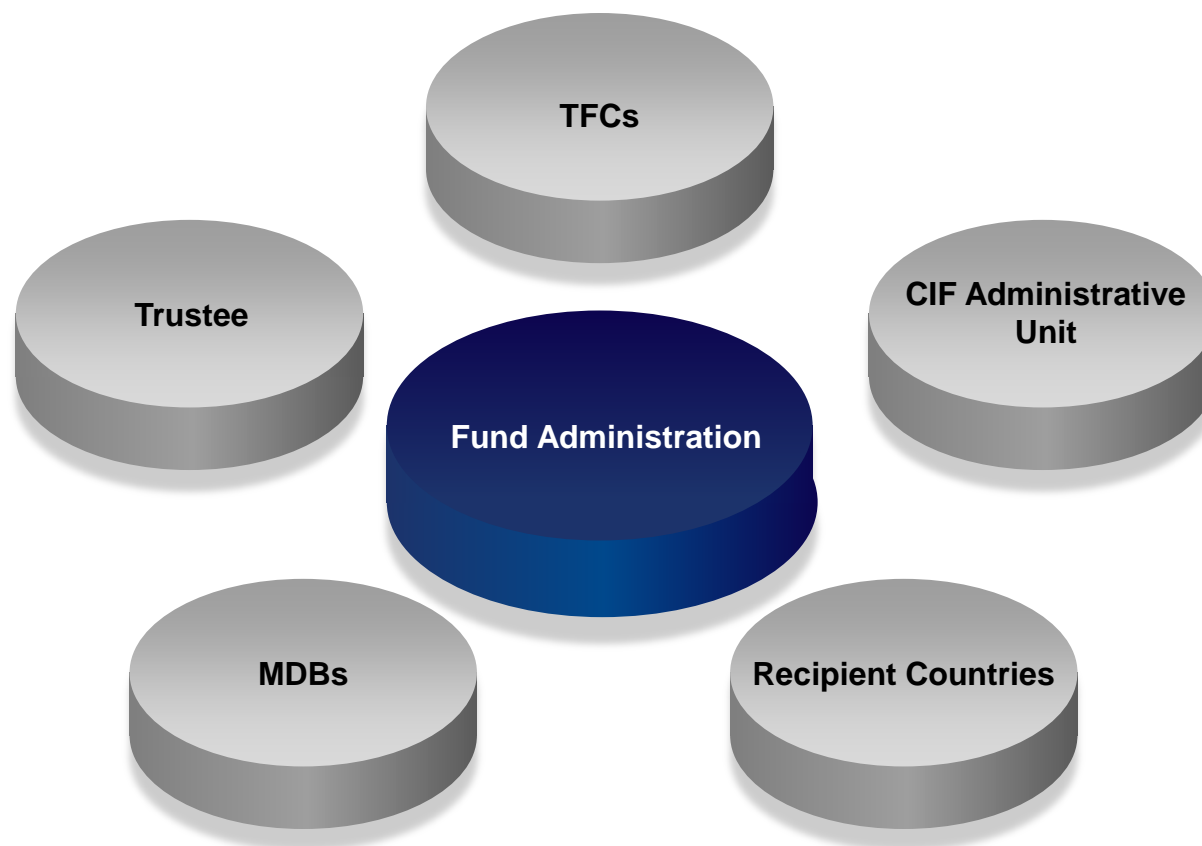
CTF Objectives

Objective 1	Provide positive incentives, through public and private sector investments, for the demonstration of low carbon development and mitigation of greenhouse gas emissions
Objective 2	Fund low carbon programs and projects that are embedded in national plans and strategies, scaling up development and accelerating the diffusion and transfer of clean technologies
Objective 3	Realize environmental and social co-benefits, illustrating the potential for low-carbon technologies in contributing to sustainable development and the Millennium Development Goals
Objective 4	Support international cooperation on climate change
Objective 5	Utilize skills and capabilities of the MDBs to raise and deliver new and additional resources, including official and concessional funding, at significant scale
Objective 6	Share experiences and lessons learned in responding to climate change challenges

SCF Objectives

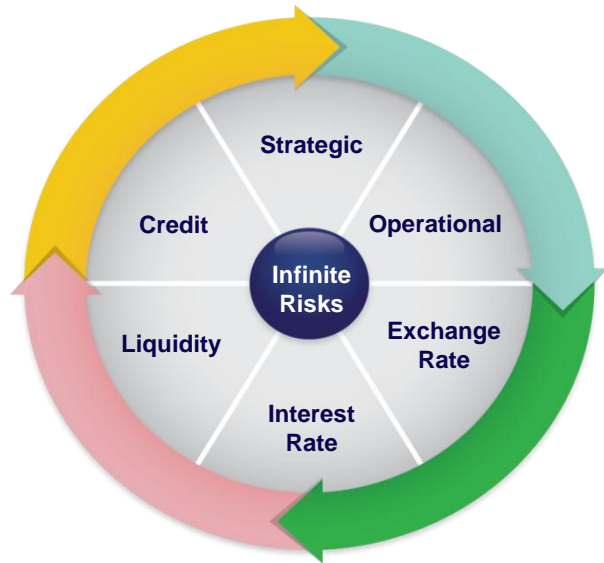
FIP Objective 1	Initiate and facilitate transformational change in developing countries' forest related policies and practices
FIP Objective 2	Facilitate the leveraging of additional and sustained financial resources for reduced deforestation and forest degradation (REDD), including through a possible United Nations Framework Convention on Climate Change (UNFCCC) forest mechanism, leading to an effective and sustained reduction of deforestation and forest degradation, and enhancing the sustainable management of forests
FIP Objective 3	Pilot replicable models to generate understanding and learning of the links between the implementation of forest-related investments, policies and measures and long-term emission reductions and conservation, sustainable management of forests and the enhancement of forest carbon stocks in developing countries
FIP Objective 4	Provide valuable experience and feedback in the context of the UNFCCC deliberations on REDD
PPCR Objective 1	Pilot and demonstrate approaches for integration of climate risk and resilience into development policies and planning
PPCR Objective 2	Strengthen capacities at the national levels to integrate climate resilience into development planning
PPCR Objective 3	Scale-up and leverage climate resilient investment, building on other on-going initiatives
PPCR Objective 4	Enable learning-by-doing and sharing of lessons at country, regional and global levels
SREP Objective 1	Assist low income countries foster transformational change to low carbon pathways by exploiting renewable energy potential
SREP Objective 2	Highlight economic, social and environmental co-benefits of renewable energy programs
SREP Objective 3	Help scale up private sector investments to achieve SREP objectives
SREP Objective 4	Enable blended financing from multiple sources to enable scaling up of renewable energy programs
SREP Objective 5	Facilitate knowledge sharing and exchange of international experience and lessons

The Fund's current operational structure leverages MDB processes to effectively and efficiently administer and utilize the CIF funds

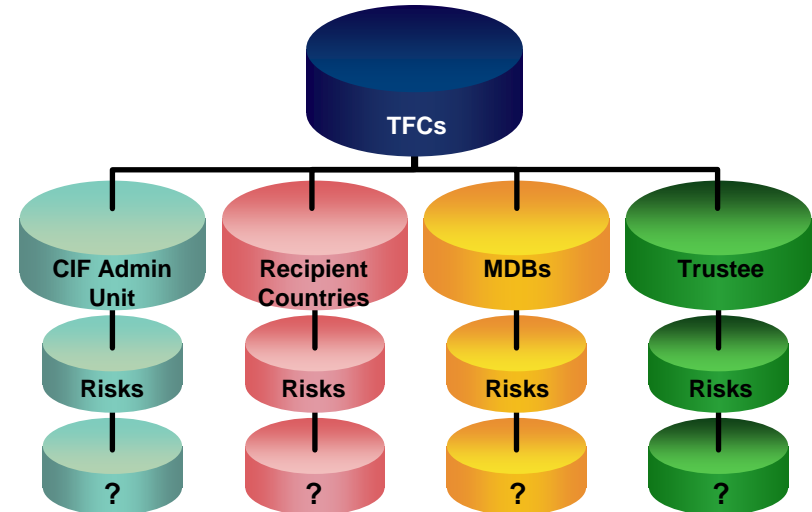


Although the current process for administering the Fund is functional, no standardized view of risks exists at the enterprise level that satisfies the risk management needs of the partnership program

Numerous Impactful Risk Types



No Standardized or Comparable View of Risk



The TFCs need a risk management process that focuses on the enterprise (the Fund) and enables decision making throughout the organization by providing a means to collect and prioritize risks for timely access

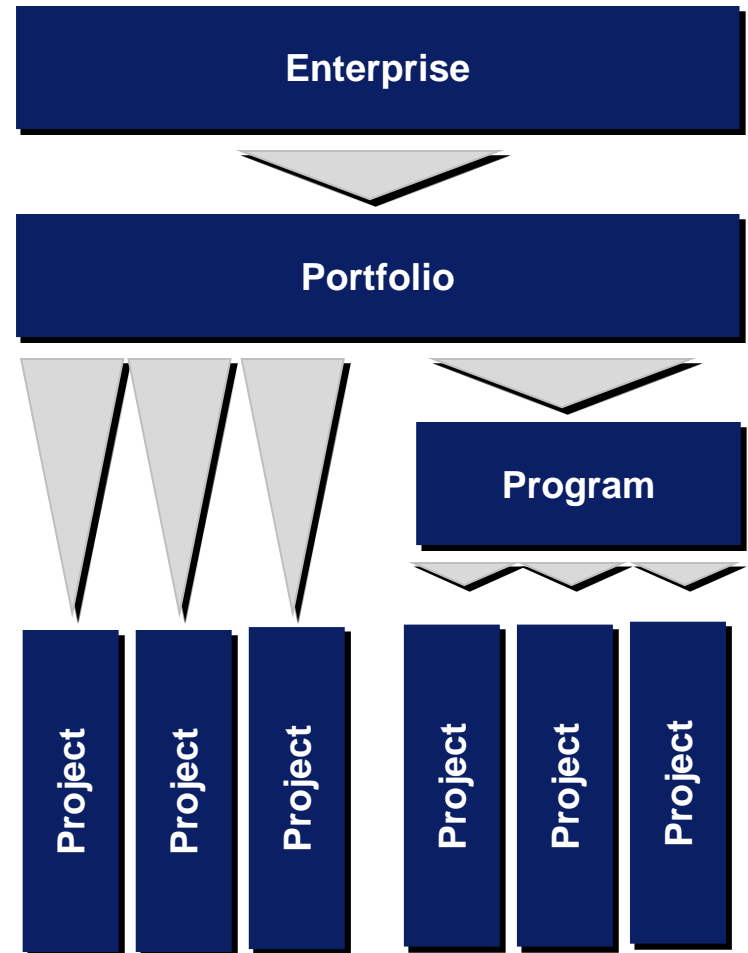
SAMPLE
QUESTIONS

“Are we achieving our objectives?”, “How do we encourage more private sector investment?”

“What was the impact of the last program / project on the portfolio”, “How has the portfolio performed over time?”

“Are we supporting the right technologies?”, “Is the program likely to meet its cost and schedule targets?”

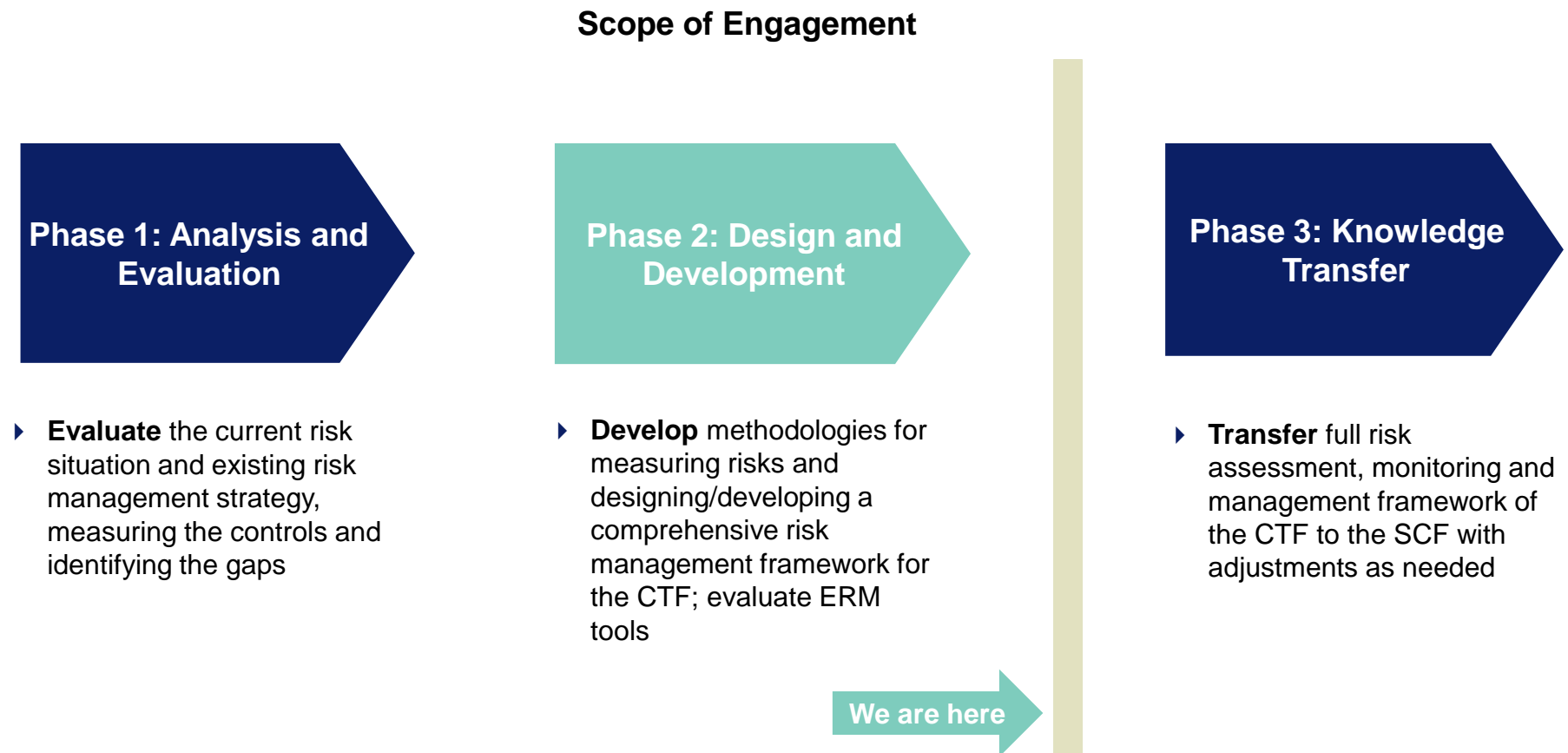
“What are the operating risks of this project and are they mitigated?”, “How are major environmental issues managed?”



The CIF ERM Framework benefits the TFCs, MDBs, Trustee and the CIF Administrative Unit in the areas of communication, decision making and risk mitigation

- ▶ The CIF ERM Framework enables the TFCs to:
 - Make better informed strategic and operational decisions
 - Take a portfolio view of risks
 - Adopt a planning and decision-making approach that aligns with the CIF's risk tolerances
- ▶ The CIF ERM Framework also enables the MDBs, Trustee and the CIF Administrative Unit to:
 - **Communicate** in a more transparent and effective manner
 - **React appropriately** to potential future events and decisions that create uncertainty, such as local currency loans and over-programming, to ensure effective use of funds
 - **Establish risk tolerances and triggers** (through consensus of TFCs) to monitor risks at all levels, from project to portfolio
 - **Provide reasonable assurance** that the CIF's governance and operational structure are adequately equipped to manage the Fund's risks
 - **Evaluate relevant information** in a consolidated view to inform CIF decisions

The ERM Framework is informed by the Phase 1 current state analysis, key risks identification and gap analysis



Five key themes were discovered during the Phase 1 analysis

Key Themes Discovered

1	Information is not aggregated at the portfolio level	<ul style="list-style-type: none">It is important to note that to access aggregate information at the portfolio level, the TFCs should not duplicate the MDBs' due diligence processes and practices, given that the CIF was designed to rely on MDB practices. Thus, to seek more information at the portfolio level, the TFCs should have a methodology to evaluate risks and potential mitigation strategies at the portfolio level based on the information and data that can be collected through MDBs' existing risk processes and reports to the Trustee.
2	Information is highly fragmented within the CTF TFC	<ul style="list-style-type: none">The CTF TFC requires a more robust communication process and a risk framework to assess portfolio level impacts. The CIF Administrative Unit, the CIF Trustee and the MDBs have existing risk management processes that are effective but that should be consolidated under an overall ERM Framework with robust processes and tools that support the CTF and SCF TFCs in making risk-informed portfolio decisions.
3	MDBs follow comprehensive due diligence processes	<ul style="list-style-type: none">However once a project is approved, information related to significant program/project changes, potential issues and risks may not always be effectively communicated to the TFCs on a timely basis. Furthermore, supplemental information may be required from the MDBs to perform portfolio risk assessment and management.
4	Information flow to the TFCs related to private sector projects is critical	<ul style="list-style-type: none">While country credit ratings provide a certain level of information and comfort on credit risk for public sector projects, financial risk management for private sector projects is especially critical given the higher level of risk assumed by the TFCs when lending to private sector entities.
5	MDBs are interested in providing local currency products and exploring hedging options	<ul style="list-style-type: none">A paper on local currency financing for CIF in private sector operations has been developed. The paper covers: CIF experience in local currency financing to date, a justification for the deployment of CIF funds in local currency, proposed options, possible interim solutions and proposed revisions to relevant document.Options for managing risks associated with local currency lending include: treating local currency loans as reimbursable grants; expanding the Foreign Exchange reserve to account for risks (interim solution); and requesting that the Trustee explore hedging mechanisms.

Methodology

Booz Allen leveraged ERM best practice frameworks (COSO, ISO, and NIST) to tailor the ERM Framework to meet CIF's unique risk needs

1

COSO

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) provides a framework to identify particular events or circumstances relevant to the organization's strategic objectives (risks and opportunities), assess risks in terms of likelihood and magnitude of impact, determine a response strategy, and monitor progress. ***The COSO framework played the largest hand in guiding the design of the CIF ERM***

2

ISO

The International Standards Organization (ISO 31000) standard defines ERM as carrying out a holistic, organization-wide activity that addresses risk from the strategic level to the tactical level, ensuring that risk-based decision making is integrated into every aspect of the organization

3

NIST

The National Institute for Standards and Technology (NIST 800-37) standard defines integrated, enterprise-wide risk management as including: the strategic goals/objectives of organizations; organizational missions/business functions prioritized as needed; mission/business processes; enterprise and information security architectures; and system development life cycle processes

The CIF ERM Framework focuses on the CIF as the “enterprise” (refer to Annex A for risk term definitions)



The ERM Framework includes **four steps** broken into processes, components to produce the risk work products

Step	Establish Context	Communicate	Establish Risk Baseline			Monitor & Report
	Establish ERM Environment	Establish Communication Program	Identify Events & Potential Risks	Evaluate Risks	Determine Risk Response Strategies	Track & Communicate Progress
Process	<p>Define risk management goals and objectives informed by the TFCs' strategic vision</p> <ul style="list-style-type: none"> Objectives Risk tolerance levels Constraints <p>Determine governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Revise relevant policies</p>	<p>Establish common language</p> <p>Communicate risk governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Communicate ERM risk policies</p> <ul style="list-style-type: none"> Strategic, tactical, quality plans Risk management architecture <p>Support and communicate proper flow of relevant project information</p> <p>Communicate future monitoring and reporting process</p>	<p>Evaluate external environment to identify external events</p> <p>Evaluate business processes and identify relevant events</p> <p>Identify inherent risks for each event</p> <p>Classify risk by area and risk dimensions categories</p> <p>Determine current management response</p> <p>Record remaining residual risk</p>	<p>Evaluate probability of occurrence</p> <p>Evaluate impact</p> <p>Determine priority</p> <p>Identify Key Risk Indicators (KRI)</p> <p>Establish triggers and tolerance levels</p>	<p>Determine an appropriate response category</p> <ul style="list-style-type: none"> Terminate Treat Accept Transfer <p>Determine additional risk response</p> <p>Determine risk owner</p> <p>Evaluate portfolio impact</p> <p>Index the risk to all relevant events</p>	<p>Generate portfolio view reports</p> <p>Identify degree to which business objectives are being met</p> <p>Collect, graph, and analyze performance and financial data</p> <p>Continuously inform TFC decisions</p> <p>Record experiences, Barriers and aids in implementation</p> <p>Incorporate lessons learned</p> <p>Reinforce/reward adherence to new controls</p>
Components						
Product	Risk Governance & Policies	Communication Plan	Preliminary Risk Register	Prioritized Risk Register	Baseline Risk Register	Portfolio Review

Booz Allen recommends establishing an ERM Program working group to drive the ERM process

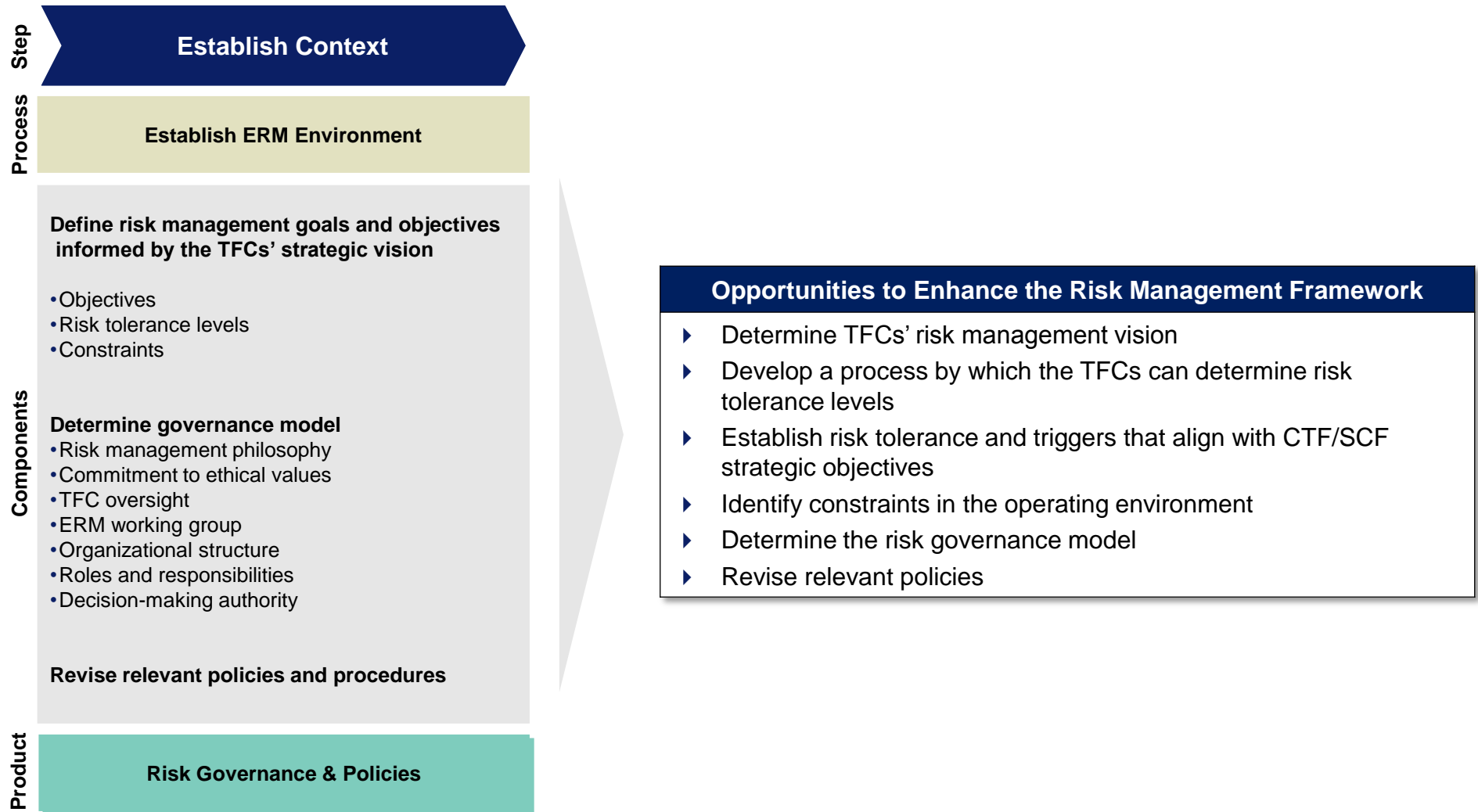
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 - Establish the context, including identification of five to seven priority risk areas for the CIF
 - Design the communication program
 - Establish the risk baseline, including identification of critical events and potential risks, evaluation of these risks, and determination of risk response strategies
 - Develop monitoring and reporting processes
 - Report back to the CTF and SCF TFCs at joint meetings, including recommendations on the evolution of the responsibilities and tasks of the group
- ▶ The ERM Program working group's **first** focus is the Tier 1 risk areas, including but not limited to:
 - Local currency loans
 - CTF contributions (capital, grants and loans)
 - Over-programming to address projects which may drop out or never move through the pipeline
 - Subordinated loans which may require additional quantitative and qualitative information
- ▶ The ERM Program working group includes financial, strategic and operational experts from the TFCs (two from contributing countries and two from recipient countries); Trustee (one); CIF Administrative Unit (one); and MDBs (one from public and one from private sector operations) and utilizes ERM experts to facilitate the working sessions and drive timely completion
- ▶ The ERM Program working group:
 - Focuses on implementing the CIF ERM Program through an iterative approach
 - Integrates the lessons learned from previous iterations, starting with the Tier 1 risk areas iteration

Design

Establishing the context is the first step of the ERM Framework

Step	Establish Context	Communicate	Establish Risk Baseline			Monitor & Report
	Establish ERM Environment	Establish Communication Program	Identify Events & Potential Risks	Evaluate Risks	Determine Risk Response Strategies	Track & Communicate Progress
Process	<p>Define risk management goals and objectives informed by the TFCs' strategic vision</p> <ul style="list-style-type: none"> Objectives Risk tolerance levels Constraints <p>Determine governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Revise relevant policies</p>	<p>Establish common language</p> <p>Communicate risk governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Communicate ERM risk policies</p> <ul style="list-style-type: none"> Strategic, tactical, quality plans Risk management architecture <p>Support and communicate proper flow of relevant project information</p> <p>Communicate future monitoring and reporting process</p>	<p>Evaluate external environment to identify external events</p> <p>Evaluate business processes and identify relevant events</p> <p>Identify inherent risks for each event</p> <p>Classify risk by area and risk dimensions categories</p> <p>Determine current management response</p> <p>Record remaining residual risk</p>	<p>Evaluate probability of occurrence</p> <p>Evaluate impact</p> <p>Determine priority</p> <p>Identify Key Risk Indicators (KRI)</p> <p>Establish triggers and tolerance levels</p>	<p>Determine an appropriate response category</p> <ul style="list-style-type: none"> Terminate Treat Accept Transfer <p>Determine additional risk response</p> <p>Determine risk owner</p> <p>Evaluate portfolio impact</p> <p>Index the risk to all relevant events</p>	<p>Generate portfolio view reports</p> <p>Identify degree to which business objectives are being met</p> <p>Collect, graph, and analyze performance and financial data</p> <p>Continuously inform TFC decisions</p> <p>Record experiences, Barriers and aids in implementation</p> <p>Incorporate lessons learned</p> <p>Reinforce/reward adherence to new controls</p>
Components						
Product	Risk Governance & Policies	Communication Plan	Preliminary Risk Register	Prioritized Risk Register	Baseline Risk Register	Portfolio Review

The context of the ERM is the multilateral CIF partnership program as the “enterprise” and the process of establishing the ERM Environment



The Fund's strategic objectives inform the CIF ERM goals and objectives

CTF Strategic Objectives

Strategic Objective 1	Provide positive incentives, through public and private sector investments, for the demonstration of low carbon development and mitigation of greenhouse gas emissions
Strategic Objective 2	Fund low carbon programs and projects that are embedded in national plans and strategies, scaling up development and accelerating the diffusion and transfer of clean technologies
Strategic Objective 3	Realize environmental and social co-benefits, illustrating the potential for low-carbon technologies in contributing to sustainable development and the Millennium Development Goals
Strategic Objective 4	Support international cooperation on climate change
Strategic Objective 5	Utilize skills and capabilities of the MDBs to raise and deliver new and additional resources, including official and concessional funding, at significant scale
Strategic Objective 6	Share experiences and lessons learned in responding to climate change challenges

EXAMPLE

ERM Risk Management Objectives

- ▶ Develop a methodology for measuring risks and design and develop a comprehensive ERM Framework for the CIF
- ▶ Develop robust risk monitoring and response mechanisms
- ▶ Identify areas where controls may not sufficiently mitigate risks and develop options for how these risks can be terminated, treated, transferred or accepted
- ▶ Create an ERM Framework, including tools for identifying and tracking specific risks over time
- ▶ Ensure the ERM Framework and tools are easily implementable with an appropriate program for implementation and a periodic reporting schedule

The TFCs play a important role in ERM Framework development by **determining risk tolerance levels** and revising them over time if necessary

Initial Ranking of CTF Risks by Priority

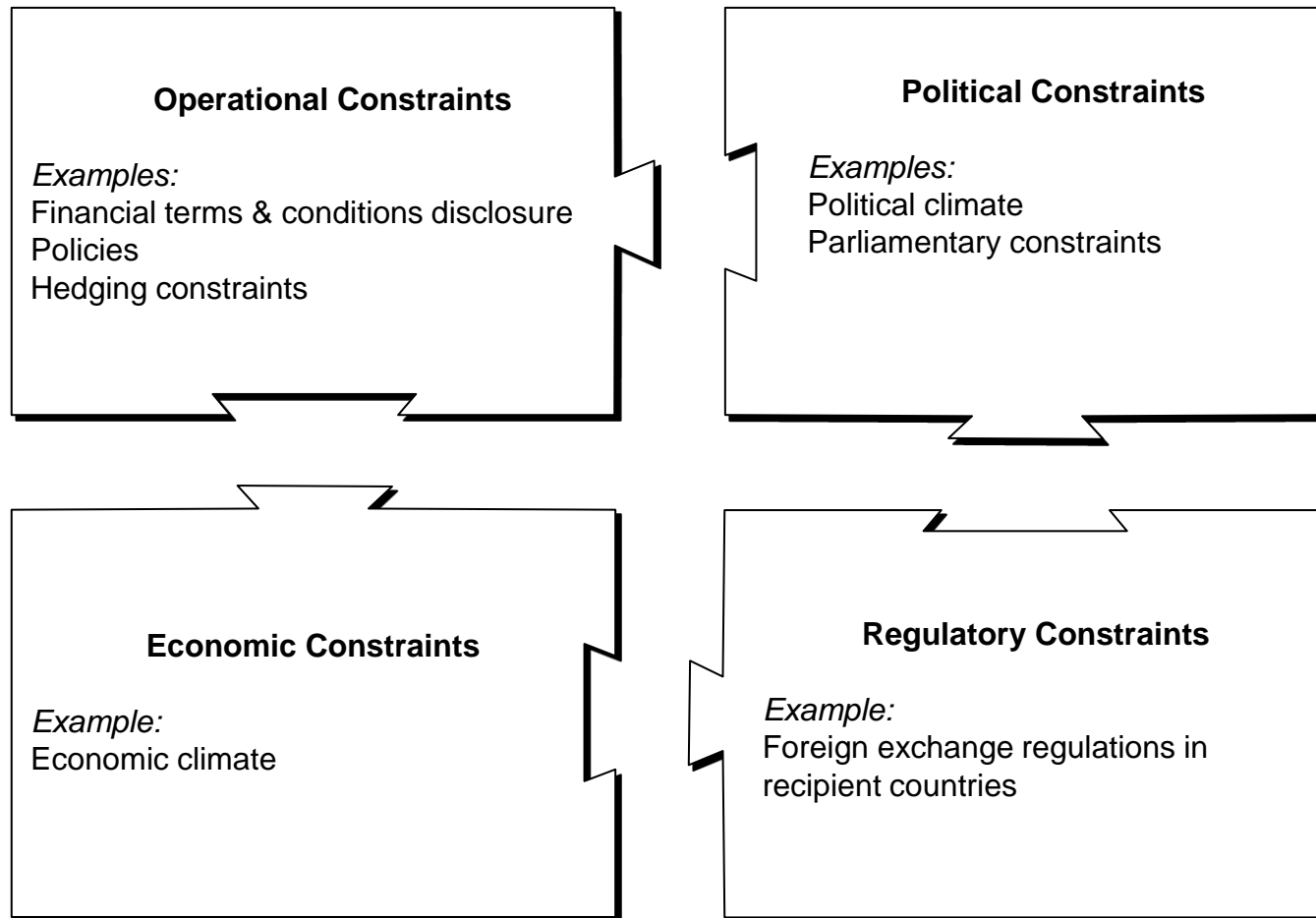
Risk Area	Priority	Risk Dimension - Risk Tolerance
Financial	High	Private Project Credit – High Public Project Credit – High Liquidity – Low Exchange Rate – Medium Interest Rate – Low
Strategic	Medium	Internal Stakeholder – High Governance – Medium Performance – Medium Technology – High
Operational	Medium	Operating Processes & Procedures – Medium Reputational Impact – Low

PRELIMINARY

Guidelines

- ▶ An initial evaluation of risk tolerance levels and prioritization of risks was performed during the Assessment Phase
 - Risk priority is defined by the level of attention, analysis and risk mitigation strategies required and is scored on a scale of low, medium or high
 - Risk tolerance is scored on a scale of low, medium or high (with low being highly risk averse)
- ▶ Annual Revisions
 - Given that contributors' political environment and priorities may change, Booz Allen recommends reviewing the ERM Framework on a periodic basis
 - Priorities and risk tolerance levels will be finalized when the ERM Framework is implemented though consensus amongst the members of the TFCs

Determining the operating environment constraints informs the ERM Framework and corresponding policies



The proposed ERM governance works within the current CTF and SCF governance models

CIF ERM Governance Model

Internal Stakeholder	Role	Summary of Roles and Responsibilities
CTF and SCF TFCs	Enterprise Risk Management	<ul style="list-style-type: none"> Establishes risk management objectives, priorities, risk tolerance levels and limits Oversees financial, strategic and operational risk management from the enterprise perspective Holds responsibility for providing strategic direction to the CIF, approval of programming and pipeline priorities, endorsing further development activities, approval of allocation of CIF resources for programs and projects and establishing financial accountability
CIF Administrative Unit	Portfolio Strategic and Operational Risk Management	<ul style="list-style-type: none"> Administers portfolio strategic and operational risk management Holds responsibility for preparing an annual consolidated report on the CIF's activities, performance and lessons, including details on the CIF's portfolio; status of implementation; funding allocations for the previous period; pipeline of projects and funding projections; administrative costs incurred; and other pertinent information
Trustee	Portfolio Financial Risk Management	<ul style="list-style-type: none"> Administers portfolio financial risk management Holds responsibility for holding in trust, as a legal owner and administrator, the funds, assets and receipts that constitute the Trust Fund, pursuant to the terms entered into with the contributors Holds responsibility for aggregating financial information at the portfolio level and receiving periodic financial reports from the MDBs, as agreed to by the Trustee and the TFCs. Regular reports on the financial status of the Trust Fund are be provided by the Trustee to the CTF and SCF TFCs
MDBs	Program and Project Risk Management	<ul style="list-style-type: none"> Administers all aspects of program and project risk management Holds responsible for reporting portfolio-level information to the Trustee, CIF Administrative Unit and TFCs Facilitates collaboration, coordination and the exchange of information, knowledge and experience among MDB partners

The ERM context sets the foundation for the risk management Framework and includes risk management philosophy, policies, procedures and allocation of resources

CIF ERM Context



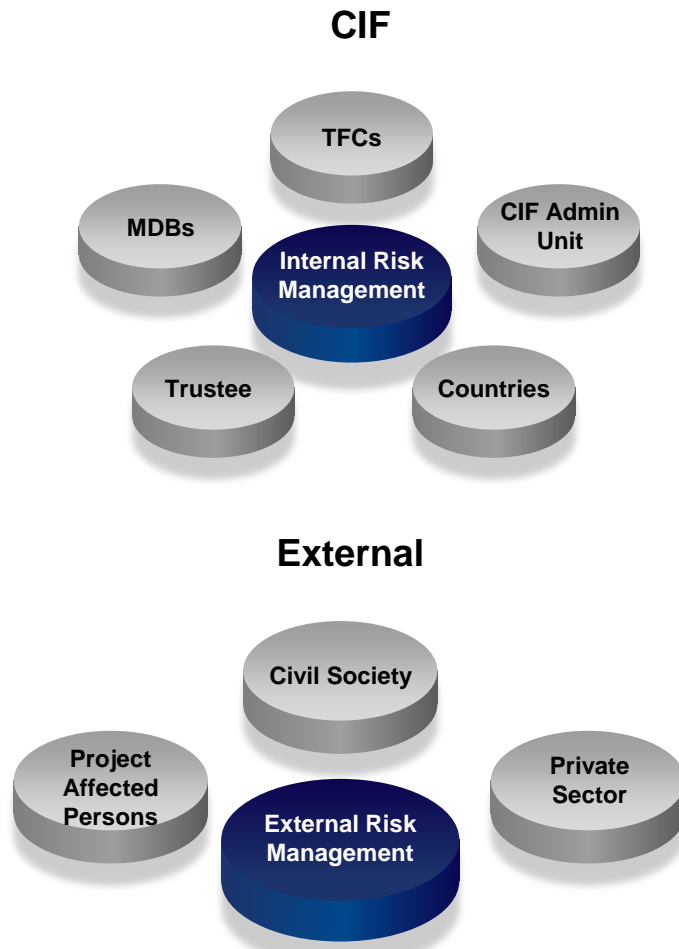
CIF ERM Context

- ▶ Risk Management Philosophy and Governance
 - Establishment of risk governance process, roles and responsibilities
 - Determination of decision-making authority
 - Setting of guiding principles, investment objectives and constraints
 - Establishment of risk culture and risk tolerances
- ▶ Risk Management Policies (additional/updated)
 - Foreign exchange policy
 - Loan subordination policy
 - Revision schedule of the ERM Framework
- ▶ Risk Management Procedures (additional/updated)
 - Foreign exchange
 - Loan subordination
 - Fraud, corruption and misuse of funds
 - Principles for using equity
- ▶ Resources
 - People: CIF Administrative Unit/Trustee resources to implement the ERM
 - Process: integrate ERM Framework into the existing processes
 - Technology: ERM software

The **communication process** supports all ERM steps, including establishing context and risk baseline and monitoring and reporting

Step	Establish Context	Communicate	Establish Risk Baseline			Monitor & Report
	Establish ERM Environment	Establish Communication Program	Identify Events & Potential Risks	Evaluate Risks	Determine Risk Response Strategies	Track & Communicate Progress
Process	<p>Define risk management goals and objectives informed by the TFCs' strategic vision</p> <ul style="list-style-type: none"> Objectives Risk tolerance levels Constraints <p>Determine governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Revise relevant policies</p>	<p>Establish common language</p> <p>Communicate risk governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Communicate ERM risk policies</p> <ul style="list-style-type: none"> Strategic, tactical, quality plans Risk management architecture <p>Support and communicate proper flow of relevant project information</p> <p>Communicate future monitoring and reporting process</p>	<p>Evaluate external environment to identify external events</p> <p>Evaluate business processes and identify relevant events</p> <p>Identify inherent risks for each event</p> <p>Classify risk by area and risk dimensions categories</p> <p>Determine current management response</p> <p>Record remaining residual risk</p>	<p>Evaluate probability of occurrence</p> <p>Evaluate impact</p> <p>Determine priority</p> <p>Identify Key Risk Indicators (KRI)</p> <p>Establish triggers and tolerance levels</p>	<p>Determine an appropriate response category</p> <ul style="list-style-type: none"> Terminate Treat Accept Transfer <p>Determine additional risk response</p> <p>Determine risk owner</p> <p>Evaluate portfolio impact</p> <p>Index the risk to all relevant events</p>	<p>Generate portfolio view reports</p> <p>Identify degree to which business objectives are being met</p> <p>Collect, graph, and analyze performance and financial data</p> <p>Continuously inform TFC decisions</p> <p>Record experiences, Barriers and aids in implementation</p> <p>Incorporate lessons learned</p> <p>Reinforce/reward adherence to new controls</p>
Components						
Product	Risk Governance & Policies	Communication Plan	Preliminary Risk Register	Prioritized Risk Register	Baseline Risk Register	Portfolio Review

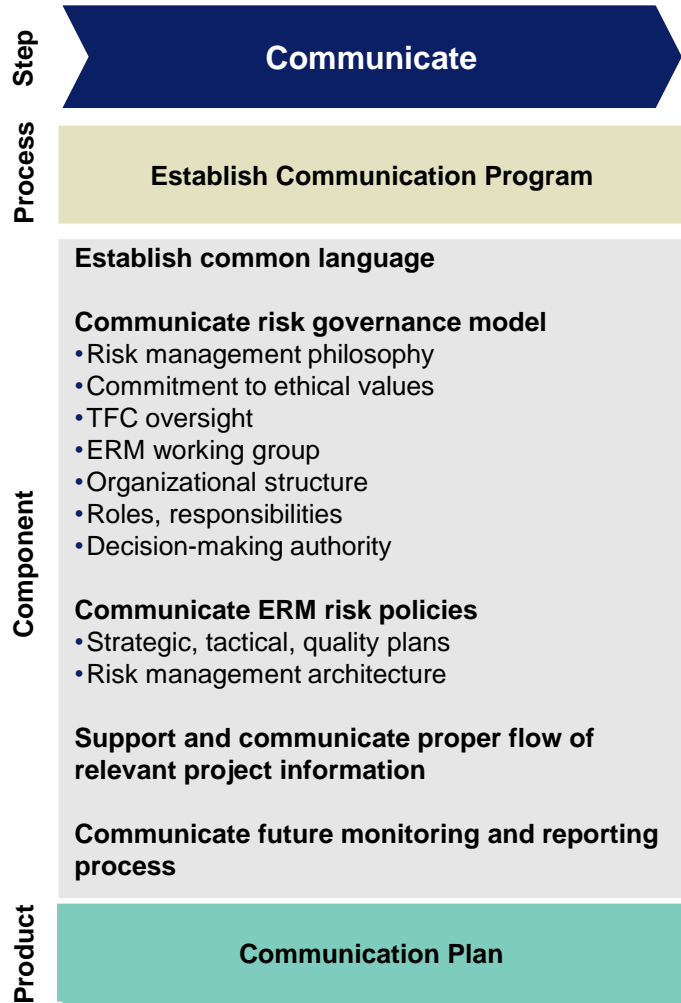
The communication process is the primary vehicle to affect ERM awareness and information sharing amongst TFCs, MDBs, Trustee and the CIF Administrative Unit



Objectives of the Communication Plan

- ▶ Support all components of the ERM Program including establishing the context, establishing risk baseline and continuous reporting and monitoring
- ▶ Raise awareness, disseminate information, promote a clear understanding of the ERM mission and manage expectations
- ▶ State the objectives and timing factors driving the ERM effort and its implementation
- ▶ Inform internal stakeholders and influence how they react to the ERM effort, which may contribute to the success or failure of the project
- ▶ Provide opportunities for a two-way dialogue with key stakeholders
- ▶ Provide a flow of timely, accurate and consistent messages
- ▶ Disseminate actionable messages ensuring smooth and timely execution of the reengineering initiative and its implementation tasks
- ▶ Complement and be consistent with initiatives outlined in the CIF's overall communications goals
- ▶ Generate positive understanding and encourage participation in the ERM effort for the short and long terms

Establishing a communication process leverages the existing risk management processes



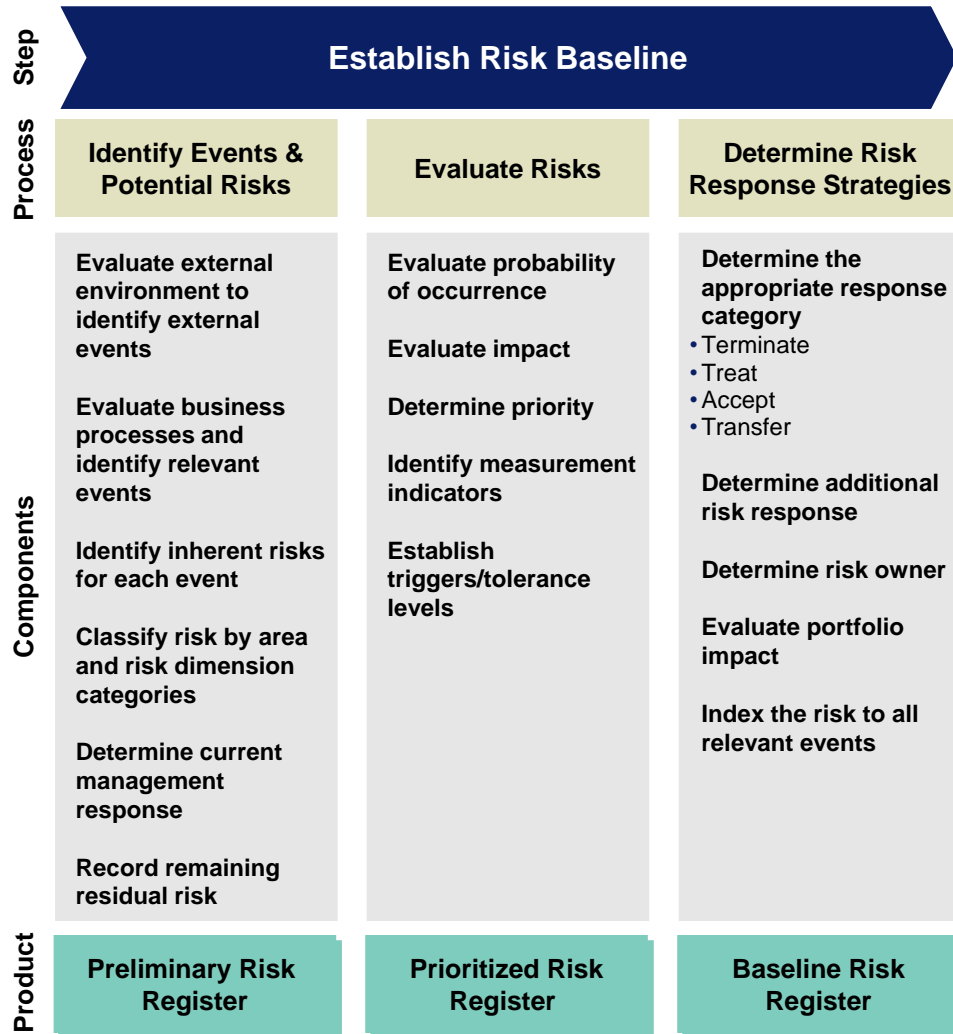
Opportunities to Enhance the Risk Management Framework

- ▶ Determine and communicate risk taxonomy
- ▶ Develop and execute ERM awareness and communication
- ▶ Involve all internal stakeholders into the communication process
- ▶ Distribute communication jointly from the CIF Administrative Unit and the Trustee
- ▶ Establish working group

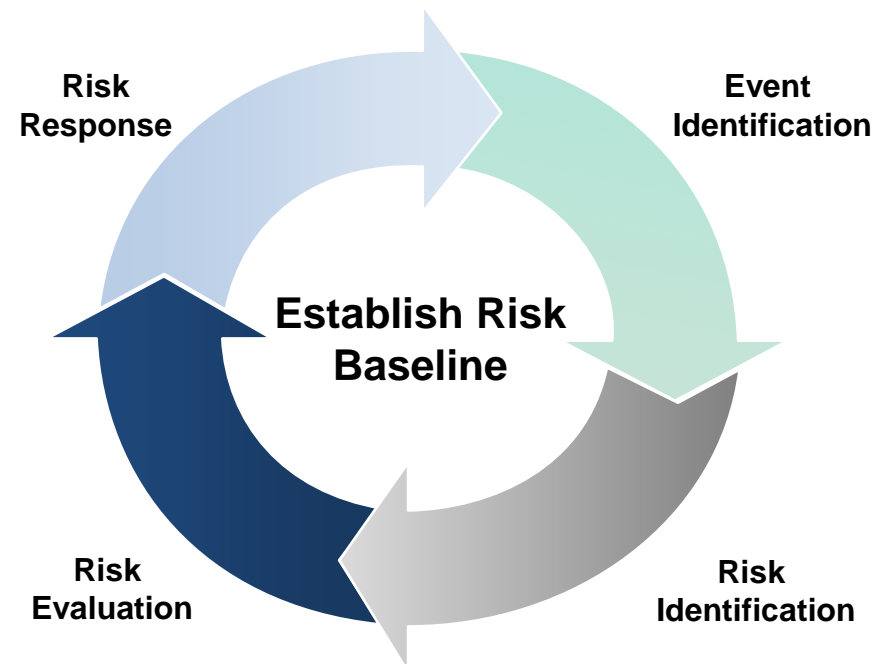
Establishing the risk baseline requires the active participation of the TFCs

Step	Establish Context	Communicate	Establish Risk Baseline			Monitor & Report
	Establish ERM Environment	Establish Communication Program	Identify Events & Potential Risks	Evaluate Risks	Determine Risk Response Strategies	Track & Communicate Progress
Process	<p>Define risk management goals and objectives informed by the TFCs' strategic vision</p> <ul style="list-style-type: none"> Objectives Risk tolerance levels Constraints <p>Determine governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Revise relevant policies</p>	<p>Establish common language</p> <p>Communicate risk governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Communicate ERM risk policies</p> <ul style="list-style-type: none"> Strategic, tactical, quality plans Risk management architecture <p>Support and communicate proper flow of relevant project information</p> <p>Communicate future monitoring and reporting process</p>	<p>Evaluate external environment to identify external events</p> <p>Evaluate business processes and identify relevant events</p> <p>Identify inherent risks for each event</p> <p>Classify risk by area and risk dimensions categories</p> <p>Determine current management response</p> <p>Record remaining residual risk</p>	<p>Evaluate probability of occurrence</p> <p>Evaluate impact</p> <p>Determine priority</p> <p>Identify Key Risk Indicators (KRI)</p> <p>Establish triggers and tolerance levels</p>	<p>Determine an appropriate response category</p> <ul style="list-style-type: none"> Terminate Treat Accept Transfer <p>Determine additional risk response</p> <p>Determine risk owner</p> <p>Evaluate portfolio impact</p> <p>Index the risk to all relevant events</p>	<p>Generate portfolio view reports</p> <p>Identify degree to which business objectives are being met</p> <p>Collect, graph, and analyze performance and financial data</p> <p>Continuously inform TFC decisions</p> <p>Record experiences, Barriers and aids in implementation</p> <p>Incorporate lessons learned</p> <p>Reinforce/reward adherence to new controls</p>
Components						
Product	Risk Governance & Policies	Communication Plan	Preliminary Risk Register	Prioritized Risk Register	Baseline Risk Register	Portfolio Review

The ERM drives the identification of the events/risks, evaluation of risks and determination of appropriate risk response processes

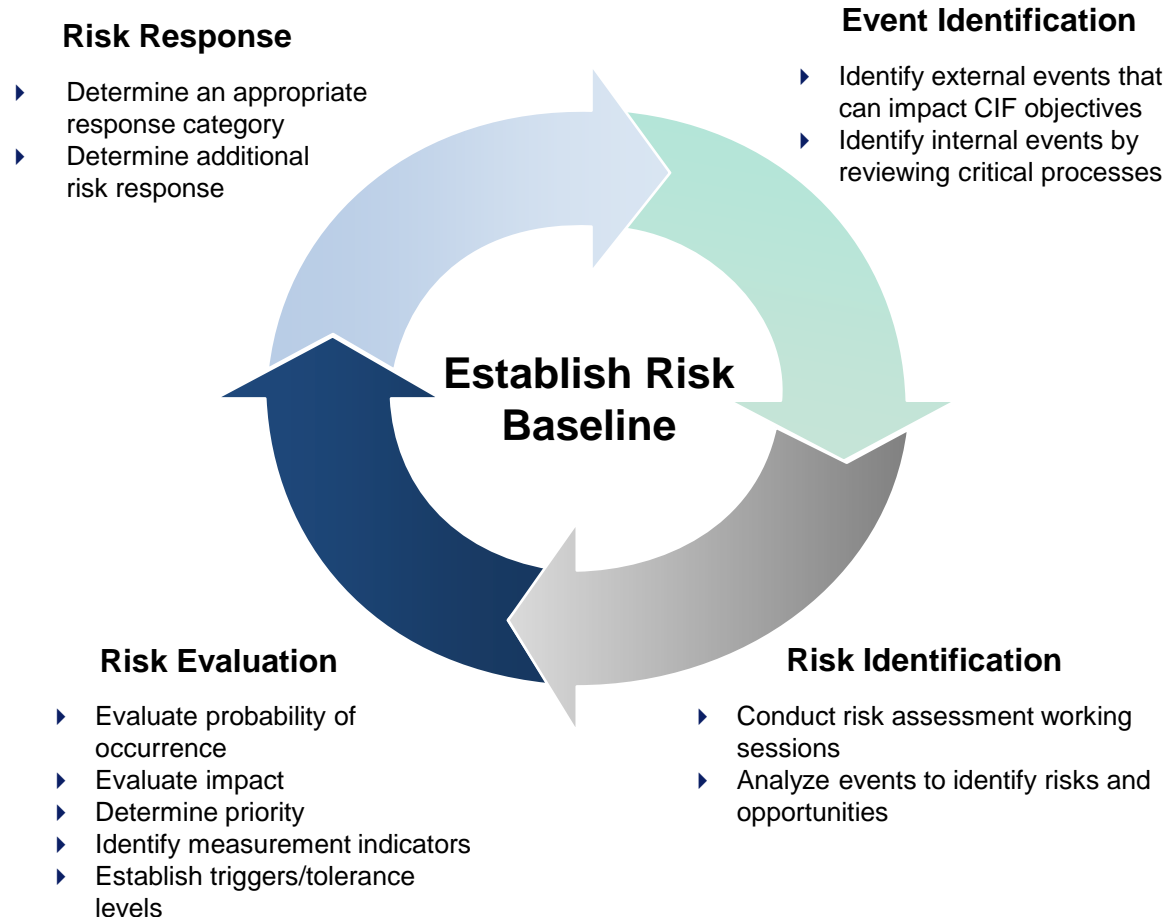


ERM Risk Assessment Process



The primary product of the establish risk baseline step is the CIF risk register

ERM Risk Assessment Process



Risk Register Outline

Risk Register

Event

Risk Area

Risk Dimension

Inherent Risk

Risk Name

Current Management Response

Remaining Residual Risk

Probability

Impact

Priority

Key Risk Indicator (KRI)

Trigger

Risk Response Category

Additional Recommended Response

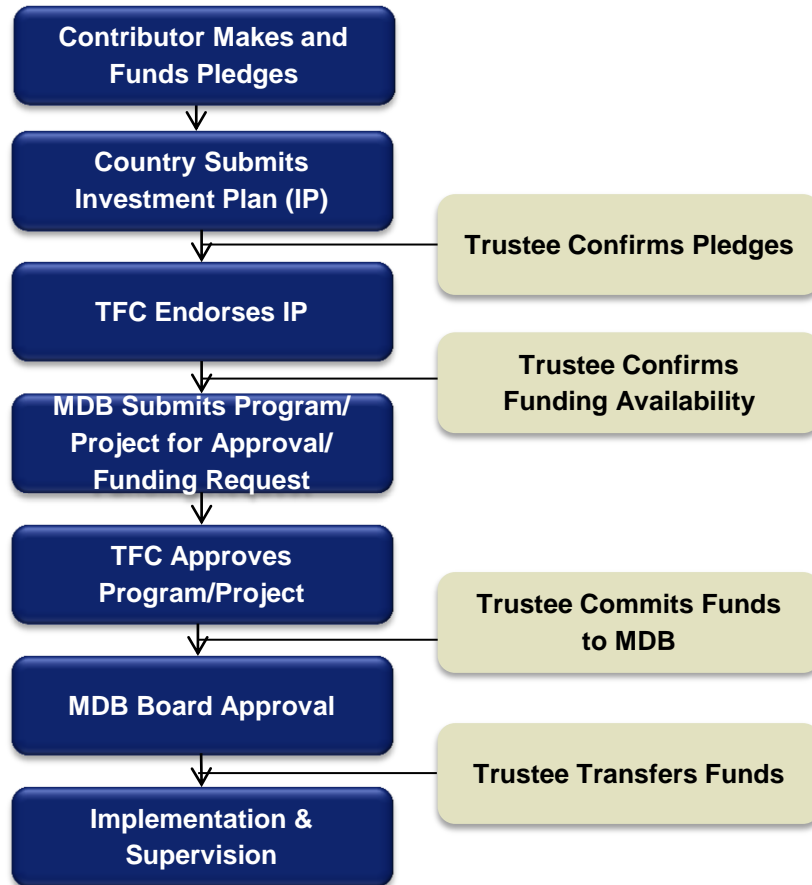
Owner

Portfolio Impact

Index

The first sub-process, **identify events and potential risks**, starts with analyzing external events and internal business processes to identify relevant events

CTF Funding Approval Process



Event Identification

- ▶ Identify external events
- ▶ Identify internal events
 - Collect critical process list
 - Create/update process maps
 - Identify critical processes
 - Capture and catalog processes
- ▶ Conduct structured working sessions with process owners and ERM experts that define the operational environment from which risks are identified and captured in a risk register

The working group then identifies risks (and opportunities) that the event may create

Risk Register	Description
Event	Implementation and Supervision
Risk Area	Financial
Risk Dimension	Private Sector Project Credit
Inherent Risk	Private sector borrowers credit rating decreases therefore increasing the possibility of default
Risk Name	Private sector credit
Current Management Response	MDBs track credit ratings but do not report to TFCs
Remaining Residual Risk	Private sector credit ratings are not aggregated at the portfolio level

EXAMPLE

Risk Identification

- ▶ It is important to identify those incidents, occurring internally or externally, that could affect strategy and achievement of objectives
- ▶ Risk identification process includes the following steps:
 - Conduct risk assessment working sessions
 - Determine process-based risks and controls
 - Analyze risk events
 - Differentiate risks and opportunities
- ▶ Events that may have a negative impact represent risks
- ▶ Events that may have a positive impact represent natural offsets (opportunities), which management channels back to strategy setting
- ▶ Booz Allen has developed an initial risk register that can be reviewed and evaluated by the ERM working group

Note: The example above illustrates how the risk register may be completed by the working group. All confidential items will be addressed by and are subject to the approval of the working group.

Booz Allen developed an initial risk register that the working group may leverage to implement the ERM Framework

- ▶ The initial risk register, as displayed in the following slides, provides a starting point that the working group may utilize to analyze events and financial, strategic and operational risks to create the **official CIF risk register**
- ▶ The initial risk register contains items that Booz Allen deemed as having a high portfolio impact
- ▶ The risk register should be a living document, with iterative processes for identifying, analyzing, and incorporating new events and risks as they arise
- ▶ All figures (i.e. ratings and triggers) in this initial risk register are representative. The working group will establish the starting values for the official risk register
- ▶ All confidential information will be addressed by the working group and will take into account the disclosure policies of the MDBs
- ▶ The version of the initial risk register on the following slides contains events and risks for which Booz Allen believes there are adequate management responses in place and where additional controls may be needed, respectively

Booz Allen identified risks where the current management processes are adequate to mitigate the inherent (original) risk

PRELIMINARY

#	Event	Risk Area	Risk Dimension	Inherent Risk	Inherent Risk Name	Current Management Response	Remaining Residual Risk
1	Contributor makes contribution payments in the form of promissory notes	Financial	Exchange Rate	Trustee receives funding commitment in the form of Promissory Notes in foreign currency and the foreign currency depreciates in value	Contributors' foreign exchange rate risk	15% reserve is established by the Trustee to manage this risk	Contributors' currency depreciates greater than the reserve
2	Trustee confirms pledges	Financial	Liquidity	The funding is not sufficient to meet the IP needs	IP funding availability	CIF Administrative Unit uses pipeline management to manage funding available for projects in the pipeline	Slow moving projects may not be funded
3	Trustee confirms funding available	Financial	Liquidity	Approved funding is outside the financial product limits	Funding availability by financial product	Pipeline management and funding limits by financial product indicators	Although the funding approvals are made within financing product limits, the funding limits may be in the range that require review - add to ERM additional reviews by Trustee
4	TFC approves project	Financial	Interest Rate	Potential loss incurred due to a time mismatch between the interest earned on the assets and the interest due on liabilities	Mismatch between interest on assets and liabilities	Since CTF pays 0.75% on loan contributions while earning at least 0.75% on loans made by the MDBs, there is no risk from a mismatch of interest rates – treated	None (Interest rate risk)
5	TFC endorses IP	Financial	Public Sector Project Credit	IP is endorsed for a country with a poor credit rating	Public sector credit	(1) MDBs typically perform debt sustainability assessment; (2) Sovereign guarantees are provided	Country may be high risk for loan repayment (loan default) - add to ERM additional TFC reviews
6	TFC confirms funding availability	Financial	Liquidity	The funding is not available for the approved project	Funding availability	Trustee confirms funding availability before CIF Administrative Unit submits the project to the TFC for approval	Although the funds are sufficient, the funding may be in the range that requires review
7	MDB submits program/project for approval/funding request	Strategic	Investment Strategy	The program/project's pricing and terms do not meet the minimum concessionality principle	Minimum concessionality	TFC relies on MDBs to perform an evaluation based on client needs, market conditions, and negotiations for private sector projects	MDB submits the project request that violates the principle. Add to ERM additional TFC reviews
8	MDB submits program/project for approval/funding request	Strategic	Investment Strategy	The program/project's pricing and terms displace commercial financing and "crowd out" other private investors	No "crowding-out" principle	TFC relies on MDBs to perform an evaluation based on client needs, market conditions, and negotiations for private sector projects	MDB submits the project request that violates "no crowding out" principle add to ERM additional TFC reviews

In addition, Booz Allen identified preliminary areas where additional controls and enhancements may be needed

PRELIMINARY

#	Event	Risk Area	Risk Dimension	Inherent Risk	Inherent Risk Name	Current Management Response	Remaining Residual Risk
1	Country submits IP	Financial	Exchange Rate	The CTF does not have procedures for managing/hedging foreign exchange rate risk	Exchange rate policy	TFC is considering developing foreign exchange rate procedures including the criteria on whether to hedge foreign exchange rate risk	The remaining residual risk needs to be determined after the methodology to quantify the local currency exposure and mitigation strategies have been developed
2	Country submits IP	Financial	Exchange Rate	MDB submits a local currency financing proposal and TFC makes a decision not to hedge	Unhedged local currency exposure	Currently, MDBs sometimes accept the risk	Working group needs to determine if any residual risks still exist
3	MDB submits program/project for approval/funding request	Financial	Private Sector Project Credit	The CTF funds are subordinated to other MDB investments and additional information is not received	Subordination	MDBs have to report on an annual basis if funds are subordinated; TFC has subordination guidelines	Subordination reporting is not received on a timely basis – TFC decisions are not fully informed
4	Implementation and Supervision	Financial	Credit	Country credit rating deteriorates therefore increasing the possibility of default	Public /private sector credit	TFC relies on the MDBs to track credit worthiness . Information may not always flow back to TFC in a timely manner.	Country credit worthiness may deteriorate to an unacceptable level
5	Implementation and Supervision	Financial	Private Sector Project Credit	Private sector borrowers fail to repay a loan	Private sector credit	Quarterly Credit Reports developed by MDBs and if there's default MDB inform the Trustee	The remaining risk is the possibility of defaults
6	Implementation and Supervision	Financial	Private Sector Project Credit	Private sector borrowers credit rating decreases therefore increasing the possibility of default	Private sector credit	MDBs track credit rating but do not report to TFC	The remaining risk is market risk
7	Implementation and Supervision	Financial	Credit	Private sector borrowers fail to repay a loan	Private sector credit	Quarterly Credit Reports developed by MDBs and if there's default MDB inform the Trustee	MDBs corrective actions do not resolve the default issue add to ERM additional TFC reviews
8	Contributor makes pledges	Strategic	Stakeholder	CTF funding is suspended as a result of a major global, political and/or financial event	Major global event	TFCs currently does not have processes in place to manage this risk	There is a risk of a major global, political, and/or financial event

In addition, Booz Allen identified preliminary areas where additional controls and enhancements may be needed (continued)

PRELIMINARY

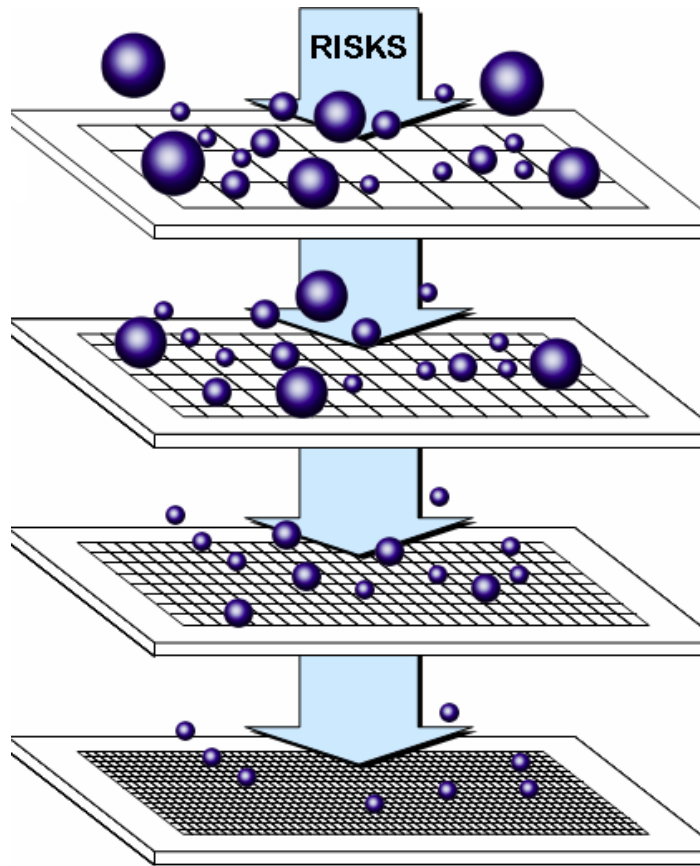
#	Event	Risk Area	Risk Dimension	Inherent Risk	Inherent Risk Name	Current Management Response	Remaining Residual Risk
9	Country submits IP	Strategic	Investment Strategy	The IP does not maximize the amount of MDB and other bi-lateral financing and commercial financing available	Leverage	TFC reviews maximization and request country/ MDBs restructure funding formal process	Leverage is not sufficient for all committee contributors
10	Country submits IP	Strategic	Stakeholder	Country submits an IP and it raises concerns with a local civil society organization	Civil society	TFC relies on MDBs perform necessary reviews and due diligence	Civil Society concerns remain
11	Country submits IP	Strategic	Technology	Innovative technology will not be accepted, becomes obsolete, or is not viable	New entrant	MDBs perform due diligence assessment	The new entrant risk remains
12	Implementation and Supervision	Strategic	Stakeholder	There is a major political and/or financial event at the national level causing the slowdown and/or termination of projects	Major national event	TFC relies on MDBs to manage the exposure to risks at national levels	The risk of a major national event remains
13	Implementation and Supervision	Strategic	Governance	Information required per the charter and agreements in not provided to the TFC in a timely manner	Information requirements	TFC currently does not have robust processes in place to manage this risk	Information is not provided – TFC decisions are not fully informed
14	Implementation and Supervision	Strategic	Governance	Needs and risk tolerance levels of the TFC members change, leading to obsolete policies and procedures	Changing risk tolerance levels	TFC currently does not robust have robust processes in place to manage this risk	Risk tolerance levels change – current risk tolerance levels are not reflected the CTF policies and procedures
15	Implementation and Supervision	Strategic	Governance	The TFC members' risk tolerance is so varied that consensus on CTF's risk appetite cannot be obtained , ultimately leading to not meeting CIF objectives	Varied risk tolerance levels	TFC currently does not have robust processes in place to manage this risk	Risk tolerance levels vary leading to the least common denominator and conservative decisions – CIF objectives are not met
16	Implementation and Supervision	Strategic	Performance	The TFC does not obtain the information needed to perform a robust portfolio risk management	Lack of information	TFC currently does not have processes in place to manage this risk	Information is not provided to the TFC and the TFC decisions are not well informed

In addition, Booz Allen identified preliminary areas where additional controls and enhancements may be needed (continued)

PRELIMINARY

#	Event	Risk Area	Risk Dimension	Inherent Risk	Inherent Risk Name	Current Management Response	Remaining Residual Risk
17	Implementation and Supervision	Strategic	Performance	The current CTF structure includes some diversification principles although the information is not aggregated at the portfolio level – TFC decisions are not well informed	No portfolio level information	TFC currently does not have processes in place to manage this risk	The information is not aggregated at the portfolio level and the TFC decisions are not well informed
18	Implementation and Supervision	Operational	Reputational	Allegations of corruption, fraud, and misuse of funds	Reputational impact risk	MDBs monitor for corruption, fraud and misuse but no clear guidelines for reporting back to the TFC are in place	Reputational impact risk remains
19	Implementation and Supervision	Operational	Operational Processes	Information is not provided to the TFC in accordance with established policies and strategies – TFC decisions are not well informed	Information sharing	New e-business platform is expected to facilitate communication	Information sharing is likely to remain as a risk - TFC decisions are not well informed

The last two sub-processes are performed in an iterative manner by applying a risk filtration criteria to determine which risks are most critical to managing the Fund



- ▶ Does the risk impact CIF objectives and goals?
- ▶ What business processes and events are impacted by this risk?
- ▶ What are the probability, impact and priority of the risk?
- ▶ What are the KRIs for managing the risk?
- ▶ Is the risk currently managed by MDBs, Trustee and/or CIF Administrative Unit?
- ▶ What is the overall impact of the risk on the portfolio?
- ▶ What are the highest priority risks based on the TFCs' risk priorities (financial, strategic, operational)?
- ▶ What are the inter-linkages between events, risks and rewards?

The next sub-process, **evaluate risks**, includes reviewing the residual risk, including probability, impact and priority and then establishing risk indicators, tolerance levels and triggers

Risk Register	Description
Probability	High
Impact	High
Priority	High
Key Risk Indicator (KRI)	1) Credit Ratings 2) Credit Ratings Outlook
Trigger	1) Credit ratings: Low: XXX- and higher Medium: XX+ Sustainable: XX High: XX- Justification: the portfolio as of June 2011 was rated XXX- (2) Outlook: Low: less than 10% of the portfolio has a negative outlook Medium: 10% - 14.99% of the portfolio has a negative outlook Sustainable: 15%-19.99% of the portfolio has a negative outlook High: more than 20% of the portfolio has a negative outlook

EXAMPLE

Risk Evaluation

- ▶ Probability: TFC assesses the likelihood that an identified risk occurs: High, Medium, Low
- ▶ Impact: TFC rates the significance of risk to the Fund in terms of the effect on achieving business objectives.
- ▶ Priority: TFC rates the residual risks by priority (high, Medium, Low) in order to be able to deal with the highest priority risks first. In Phase 1 the following overall priorities were identified
 - Financial: High
 - Private Sector Project Credit – High
 - Public Sector Project Credit – High
 - Liquidity – Low
 - Exchange Rate – Medium
 - Interest Rate – Low
 - Strategic: Medium
 - Internal Stakeholder – High
 - Governance – Medium
 - Performance – Medium
 - Technology – High
 - Operational: Low
 - Operating Processes & Procedures – Medium
 - Reputational Impact – Low
- ▶ Key Risk Indicators (KRI): quantitative or qualitative measures of risk exposure
- ▶ Trigger: quantitative and qualitative information that signifies that the risk is occurring or has a high probability of occurring

Note: The example above illustrates how the risk register may be completed by the working group. All confidential items will be addressed by and are subject to the approval of the working group.

The last sub-process, **determine risk response strategies**, includes assigning a risk response category and determining any additional responses necessary if the risk were to occur

Risk Register	Description
Risk Response Category	Treated
Additional Recommended Response	1) Aggregate credit ratings at the portfolio level 2) Aggregate credit ratings outlook at the portfolio level
Owner	TFC
Portfolio Impact	High

EXAMPLE

Risk Response

- ▶ Risk Response Category:
 - Terminate
 - Treat
 - Accept
 - Transfer
- ▶ Additional recommended response: additional risk mitigation mechanisms required to manage this risk
- ▶ Owner: party responsible for managing the risk and developing a mitigation strategy
 - MDB
 - CIF Administrative Unit
 - Trustee
 - TFC
- ▶ Portfolio Impact: level of the risk impact on the portfolio
 - High
 - Medium
 - Low

Note: The example above illustrates how the risk register may be completed by the working group. All confidential items will be addressed by and are subject to the approval of the working group.

To ensure accountability, a component of the determine risk response strategies sub-process is to assign a risk owner to each risk

- ▶ The risk owner is the staff/group that both has the ability to monitor the events and tolerances to identify that the risk is being realized and to implement the agreed risk responses
- ▶ The risk owner communicates the event, risk and response to the appropriate parties based on the roles and responsibilities determined in the risk governance structure

Once the risk baseline is established, the TFCs have a robust risk register that can be implemented within the existing CIF operational and reporting processes

Risk Identification	
Event	Implementation and Supervision
Risk Area	Financial
Risk Dimension	Private Sector Project Credit
Inherent Risk	Private sector borrowers credit rating decreases therefore increasing the possibility of default
Risk Name	Private sector credit
Current Management Response	MDBs track credit rating but do not report to TFC
Remaining Residual Risk	Private sector credit ratings are not aggregated at the portfolio level

EXAMPLE

Risk Response	
Risk Response Category	Treated
Additional Recommended Response	Aggregate credit ratings at the portfolio level
Owner	TFC
Portfolio Impact	High

Risk Evaluation	
Probability	High
Impact	High
Priority	High
Key Risk Indicator (KRI)	1) Credit Rating 2) Credit Outlook
Trigger	1) Credit ratings: Low: XXX- and higher Medium: XX+ Sustainable: XX High: XX- Justification: the portfolio based on country ratings as of June 2011 was rated XXX- 2) Credit Outlook: Low: less than 10% of the portfolio has a negative outlook Medium: 10% - 14.99% of the portfolio has a negative outlook Sustainable: 15%-19.99% of the portfolio has a negative outlook High: more than 20% of the portfolio has a negative outlook

EXAMPLE

Note: The example above illustrates how the risk register may be completed by the working group. All confidential items will be addressed by and are subject to the approval of the working group.

The **monitoring and reporting** step entails incorporating the risk response, KRIs and triggers into the existing operational and reporting environment

Step	Establish Context	Communicate	Establish Risk Baseline			Monitor & Report
	Establish ERM Environment	Establish Communication Program	Identify Events & Potential Risks	Evaluate Risks	Determine Risk Response Strategies	Track & Communicate Progress
Process	<p>Define risk management goals and objectives informed by the TFCs' strategic vision</p> <ul style="list-style-type: none"> Objectives Risk tolerance levels Constraints <p>Determine governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Revise relevant policies</p>	<p>Establish common language</p> <p>Communicate risk governance model</p> <ul style="list-style-type: none"> Risk management philosophy Commitment to ethical values TFC oversight ERM working group Organizational structure Roles, responsibilities Decision-making authority <p>Communicate ERM risk policies</p> <ul style="list-style-type: none"> Strategic, tactical, quality plans Risk management architecture <p>Support and communicate proper flow of relevant project information</p> <p>Communicate future monitoring and reporting process</p>	<p>Evaluate external environment to identify external events</p> <p>Evaluate business processes and identify relevant events</p> <p>Identify inherent risks for each event</p> <p>Classify risk by area and risk dimensions categories</p> <p>Determine current management response</p> <p>Record remaining residual risk</p>	<p>Evaluate probability of occurrence</p> <p>Evaluate impact</p> <p>Determine priority</p> <p>Identify Key Risk Indicators (KRI)</p> <p>Establish triggers and tolerance levels</p>	<p>Determine an appropriate response category</p> <ul style="list-style-type: none"> Terminate Treat Accept Transfer <p>Determine additional risk response</p> <p>Determine risk owner</p> <p>Evaluate portfolio impact</p> <p>Index the risk to all relevant events</p>	<p>Generate portfolio view reports</p> <p>Identify degree to which business objectives are being met</p> <p>Collect, graph, and analyze performance and financial data</p> <p>Continuously inform TFC decisions</p> <p>Record experiences, Barriers and aids in implementation</p> <p>Incorporate lessons learned</p> <p>Reinforce/reward adherence to new controls</p>
Components						
Product	Risk Governance & Policies	Communication Plan	Preliminary Risk Register	Prioritized Risk Register	Baseline Risk Register	Portfolio Review

Booz Allen recommends that KRIs and triggers be imbedded in the current operational and reporting processes

Existing CIF Risk Management and Operational Processes



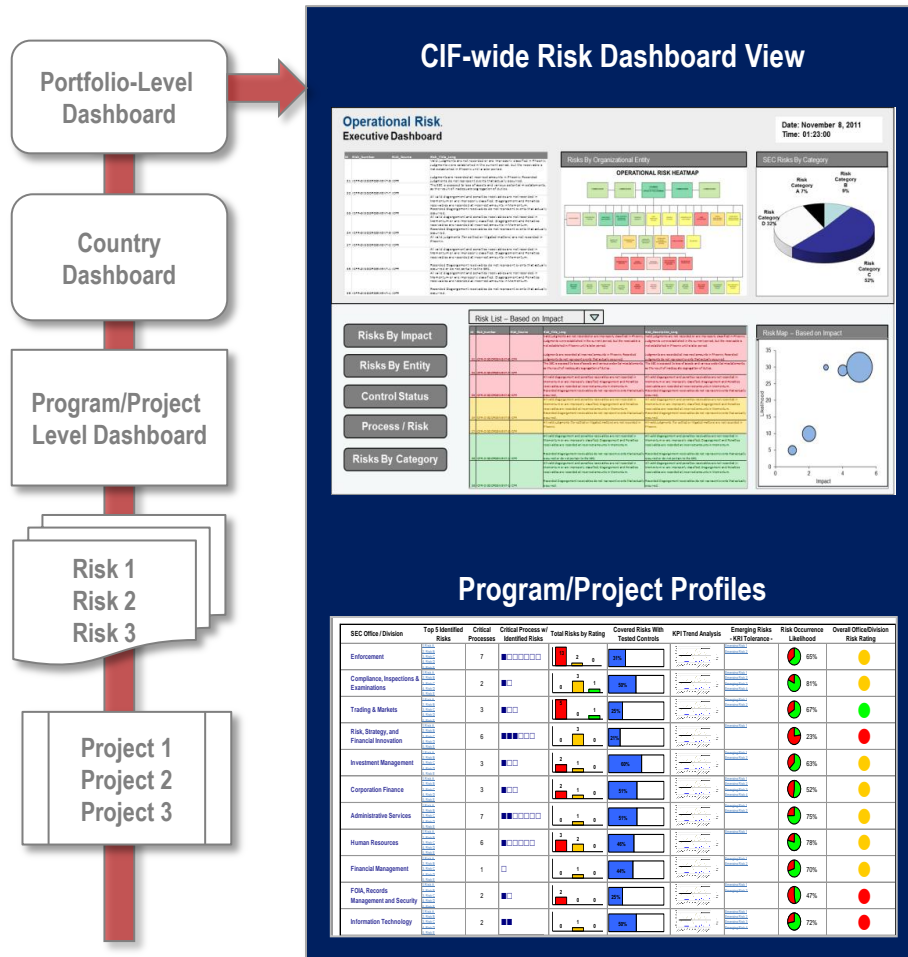
Note: Trustee's role in outgoing loan terms and conditions refers to its responsibility to record terms and conditions to report back to the Committee

The monitoring and reporting step ensures that risk owners follow existing policy and guidance

- ▶ Subordinated Reporting - According to the CTF Financing Products, Terms and Review Procedures for Private Sector Operations, if CTF funds are subordinated, MDBs' reports should provide annual portfolio reviews if “additional risk assumed by the CTF investments is delivering additional impact to the MDB’s preparedness to invest on similar terms to the CTF investments in similar future project” (page 13, paragraph 45)
- ▶ Financial Terms and Conditions for Private Sector Projects - According to the CTF Financing Products, Terms and Review Procedures for Private Sector Operations, financial terms and conditions of each project’s “(financial instrument (loan, guarantee, etc.), interest rate, amortization schedule, tenor and security/ranking (secured/unsecured, senior/subordinated, etc.) are to be provided within 30 days following the project's financial closing” (page 13, paragraph 46)

The robustness of the monitoring and reporting process determines the degree to which risks are being properly identified and managed

CIF-wide Risk Dashboard

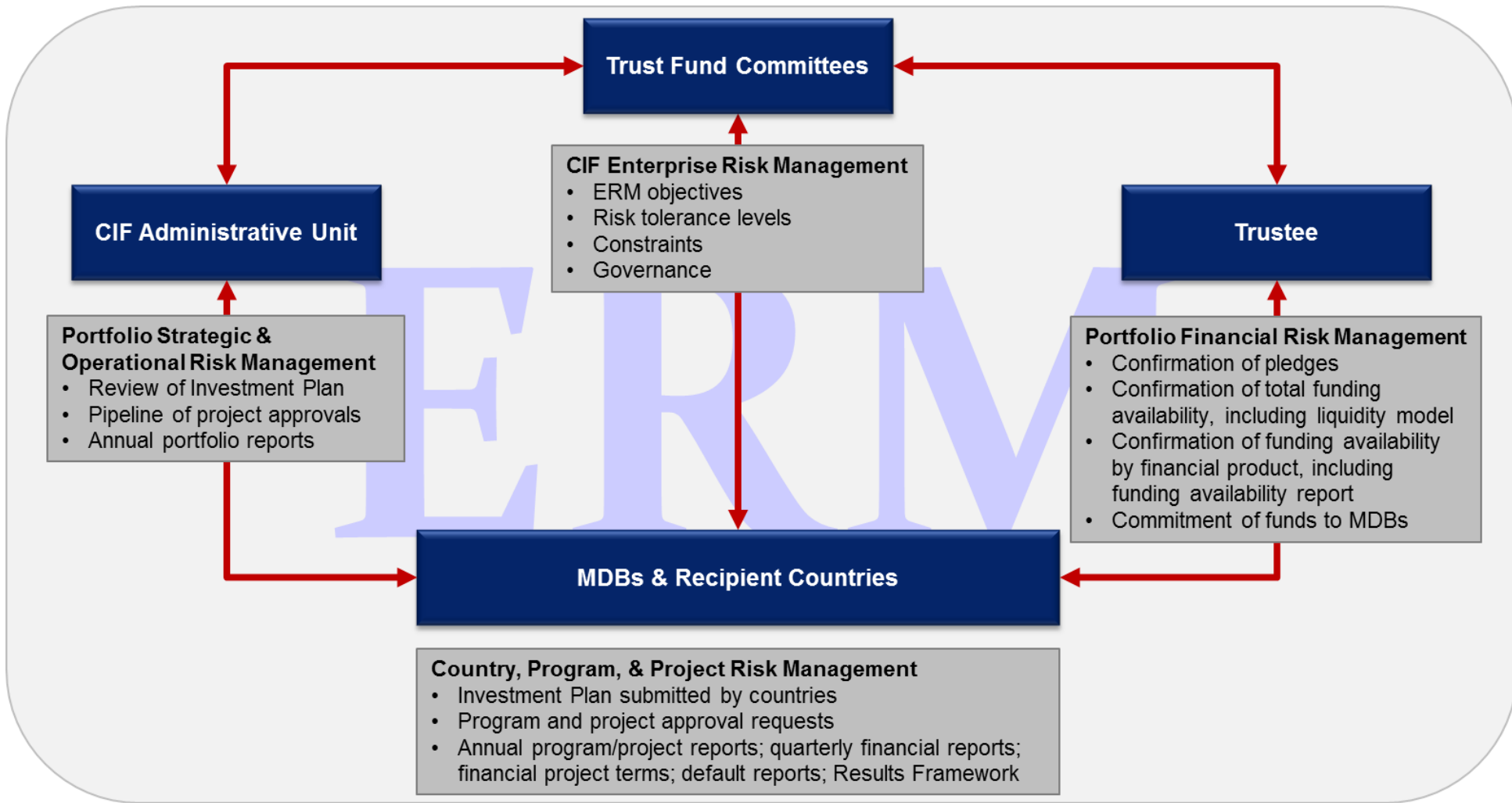


Monitoring and Reporting

- ▶ MDBs perform program and project monitoring and inform Trustee and CIF Administrative Unit
- ▶ Trustee performs financial portfolio controls monitoring and generates portfolio view financial reports
- ▶ CIF Administrative Unit performs strategic portfolio and performance results controls monitoring and generates portfolio view reports
- ▶ ERM Program
 - Informs TFC decisions on ongoing basis
 - Records experiences and barriers and aids in the implementation
 - Incorporates lessons learned
 - Reinforces/rewards adherence to new processes
 - Facilitates comparisons to Results Framework

| Concept of Operations

The initial concept of operations for the CIF ERM Framework enables the TFCs to implement the ERM Program holistically throughout the Fund



ERM Tool Analysis

CIF requires robust ERM tools to support its risk identification, tracking and mitigation efforts

CIF Tool Requirements & External Research Process






















- ▶ CIF requires ERM software to perform or operationalize the following risk management activities:
 - Automate risk register to facilitate information sharing and version control
 - Identify, track and monitor risks at both the project and portfolio levels
 - Define and rate controls and processes
 - Perform analysis and reporting functions at the portfolio levels
 - Automate models currently housed in MS Excel
 - Support linkages of events, risks and rewards/opportunities
- ▶ Booz Allen conducted external research to identify industry leaders, compared vendor descriptions to CIF requirements, and then shortlisted three ERM software providers
- ▶ Booz Allen used the following CIF ERM requirements to conduct a high level ERM COTS software analysis:
 - Functionality, including reporting and analysis capabilities
 - Usability, including an intuitive user interface and workflow
 - System requirements, including integration capabilities, security and hosting options
 - Pricing and delivery options




Booz Allen surveyed and analyzed the top ERM software vendors and selected three providers to conduct on-site demos

ERM Software Vendors

- ▶ Based on the results of Booz Allen's initial analysis, the following three vendors were invited to the Trustee to give live, complimentary demonstrations of their software offerings:
 - Active Risk
 - Methodware
 - MetricStream
- ▶ The vendors were given non-disclosure agreements and hypothetical risk registers with examples of financial, strategic and operational risks to inform the structure and content of each presentation and demonstrate each tool's ability to meet CIF's needs
- ▶ Booz Allen developed a taxonomy to evaluate each vendor and system against the functional, usability, system and price criteria
- ▶ Annex C provides snapshots of out of the box ERM scorecards and reporting. The reports were provided by Methodware, MetricStream and Active Risks
- ▶ The next steps in the vendor evaluation process are to conduct a detailed evaluation, perform a Cost-Benefit analysis, and release an RFP

Based on the vendor evaluation criteria, two of the three vendors' ERM tools meet CIF's risk management needs

Category	Sub-Category	Definition	Active Risk	Methodware	MetricStream
Functionality	Workflow & Scheduling	Incorporates workflow for ease of use and capable of generating scheduled or triggered prompts to users			
	Usability	Possesses user interface and reporting capability that are intuitive, flexible, and customizable			
CIF Tool Requirements	Identification & Monitoring	Provides functionality to define and rate events, risks (both inherent and residual), and internal controls, as well as capturing risk mitigation strategies and linking risks to controls			
	Modeling & Analysis Capabilities	Includes capacity to analyze and process financial information (i.e. repayment schedules and flows) and generate financial reports			
Pricing	Price Point & Value	Offers a competitive annual rate and a high degree of value for services rendered			
	Pricing Options	Contains flexible pricing options for licensing, training, and hosting that are within budget			
System Specifications	Integration, Hosting & Security	Offers numerous integration options with internal and external systems, as well as various hosting formats and security features			

Legend		
Does Not Satisfy:		Partially Satisfies: 
		Fully Satisfies: 

Development Roadmap

The way forward - implementation of the CIF ERM Program consists of three major tasks

WBS	Task Name	Duration	Start	Finish
1	Approve CIF ERM implementation approach	3 days	Fri 11/2/12	Tue 11/6/12
2	Implement the ERM Program (by iteration starting with top five to seven Tier 1 risks)	256 days	Thu 11/15/12	Thu 11/7/13
2.1	Finalize ERM context	36 days	Thu 11/15/12	Thu 1/3/13
2.2	Implement Iteration 1 of ERM (top 5-7 risks)	96 days	Fri 1/4/13	Fri 5/17/13
2.3	Implement iteration 2 - N ERM	124 days	Mon 5/20/13	Thu 11/7/13
3	Implement ERM software	119 days	Thu 11/15/12	Tue 4/30/13

Step One: Joint TFC Decisions – approval of approach and resources

WBS	Task Name	Duration	Start	Finish
1	Approve CIF ERM implementation approach	3 days	Fri 11/2/12	Tue 11/6/12
2	Implement the ERM Program (by iteration starting with top five to seven Tier 1 risks)	256 days	Thu 11/15/12	Thu 11/7/13
2.1	Finalize ERM context	36 days	Thu 11/15/12	Thu 1/3/13
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2.3	Implement iteration 2 - N ERM	124 days	Mon 5/20/13	Thu 11/7/13
3	Implement ERM software	119 days	Thu 11/15/12	Tue 4/30/13

Refer to Annex E: ERM Implementation Project Plan for detailed activities

Step Two: Implement ERM Program, by iterations, starting with the Tier 1 top five to seven risks

WBS	Task Name	Duration	Start	Finish
2	Implement the ERM Program (by iteration starting with top five to seven Tier 1 risks)	256 days	Thu 11/15/12	Thu 11/7/13
2.1	Finalize ERM context	36 days	Thu 11/15/12	Thu 1/3/13
2.2	Implement Iteration 1 of ERM (top 5-7 risks)	96 days	Fri 1/4/13	Fri 5/17/13
2.3	Implement iteration 2 - N ERM	124 days	Mon 5/20/13	Thu 11/7/13

Refer to Annex E: ERM Implementation Project Plan for detailed activities

Step Three: Implement ERM software

WBS	Task Name	Duration	Start	Finish
3	Implement ERM software	119 days	Thu 11/15/12	Tue 4/30/13
3.1	Develop an ERM software request for proposal (RFP)	30 days	Thu 11/15/12	Wed 12/26/12
3.2	Evaluate responses	15 days	Fri 1/11/13	Thu 1/31/13
3.3	Invite a shortlist of vendors to conduct in-depth demos	5 days	Mon 2/4/13	Fri 2/8/13
3.4	Select vendor	5 days	Fri 2/8/13	Thu 2/14/13
3.5	Integrate ERM Program iterations into software plan	5 days	Thu 2/14/13	Wed 2/20/13
3.6	Develop software implementation plan	5 days	Thu 2/14/13	Wed 2/20/13
3.7	Configure ERM software	50 days	Wed 2/20/13	Tue 4/30/13
3.8	Create reports and dashboards	50 days	Wed 2/20/13	Tue 4/30/13
3.9	Train users	50 days	Wed 2/20/13	Tue 4/30/13
3.10	Integrate to existing systems	50 days	Wed 2/20/13	Tue 4/30/13