

# Project Risk Management Plan

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Enterprise Reporting Solution

## Document History

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## **1.0 Background**

### **1.1 Background**

The case study formally outlines the enterprise reporting solution project by the Ministry of Environment, Alberta. The reporting system design by the ministry of the environment in Alberta to build and implement an enterprise reporting solution to support two distinct datasets for Alberta Health's Toxic Reduction Program and Greenhouse Gas Program. This system collects data from Toxics Reporting and Information System (TRAIS) and Greenhouse Gas Information System (GHGIS) individually but process it using the same infrastructure. The environmental branch was approved 1.7 million to achieve the objective.

### **1.2 Purpose**

The prime purpose of the risk management plan is to provide the project team with the information of the risks that this project might have during its life cycle. The Risk Management Plan consists of various stages of identifying risks, its Qualitative and Quantitative analysis, followed by a risk response strategy and monitoring/ controlling the risks throughout the project.

### **1.3 Scope**

- The Enterprise reporting solution configuration and setup for TRAIS and GHGIS programs.
- Web based reporting Interface.
- Allowing the regulated personnel to submit, store and analyze the data.
- Use of only existing tools and technology.
- The resulting Software must easily integrate with the already existing IT services.
- The documentation describing the designing, technological design, implementation must be submitted with the Software at the end of the project.
- Covering end to end workflow from ECCC SWIM solution to MOE's Cognos solution.

## **2 Risk Management Methodology & Strategies**

Not all risk is created equally. Risk can be either positive or negative. Every risk should be defined in risk tracking template and should prioritize the level of risk. The risks should be identified in the early stages of the project in order to deal with it with a risk response. The risk identification, analysis and risk response strategy process of this project is described in the following document.

### **2.1 Methodology**

It is development process of options and actions whose aim is to enhance opportunities and reduce threats for the project's objectives. In this project the risks were identified based on the information gathered by the project team and developing a risk register containing all the data like risk description, risk category. A qualitative risk analysis was performed to prioritize the risks for further actions by assessing and combining the probability of occurrence of the risk and its impact. Once the high-risk areas were identified, risk control processes were selected and implemented. Risk heat map was used to present the results of a risk assessment process.

#### **2.1.1 Risk Identification Methods**

Identifying risks is the first and the most important step in the risk management process. The risk identification was achieved by completing checklists, brainstorming with the team for identifying risks and analysis of historical data and archived documents. Risks to both the internal and external aspects of the project were tracked. Internal risks are those items the project team can directly control. External risks are those events that occur outside the direct influence of the project team. Once the risks were identified, all the risks were logged in a Risk register with the categories.

#### **2.1.2 Risk Analysis Methods**

The Qualitative risk analysis method was used after identification of the risks. The probability (likelihood) of the occurrence of the risk was determined along with its Impact. The scoring method in Probability-Impact matrix was used to determine the potential risks that might affect the project.

#### **2.1.3 Risk Ranking/Scoring Methods**

In the Probability-Impact matrix the risks were scored in the range of 1-5. The risks that have score 1 show a low risk probability and Impact and the one with a score of 5 describes a high risk to the project. The Risk heat map approach is used here with 4 color codes which are as shown in the below figure.

# Likelihood and Impact Scale

Likelihood

Score	Scale	Definition
1	Very Low	Rare that the risk may occur (0% - 5% probability)
2	Low	Unlikely the risk will occur (5% - 15 % probability)
3	Medium	Likely (15 % - 50 % probability)
4	High	Very Likely (50 % - 90 % probability)
5	Extreme	Certain it will happen (90 % - 100 % probability)

Impact

Score	Scale	Definition
1	Very Low	If this risk occurs, little to no impact to cost, schedule, quality, or customer satisfaction will occur.
2	Low	If the risk occurs, a small impact to cost, schedule, quality, or customer satisfaction will occur
3	Medium	If the risk occurs, a moderate impact to cost, schedule, quality, or customer satisfaction will occur
4	High	If this risk occurs, a significant impact to cost, schedule, quality, or customer satisfaction will occur
5	Extreme	If this risk occurs, the project will need to be reassessed and baselined based on the impact to cost, schedule, quality, and customer satisfaction

## 2.1.4 Risk Response Strategies

The risk response strategies that are used differ based on the type of risk. There are positive and negative risks in a project. Both the type of risks has more or less similar risk response strategies.

The Negative risk response strategies are:

1. Avoid: Steps taken to avoid the risk which may involve change of the project management plan, change of the project approach.
2. Transfer: This strategy involves transferring the risk to a third party with all the ownership without the elimination of the risk. A third party is involved.
3. Mitigate: Mitigation of a risk consists of reducing the likelihood or impact of the occurring risk but not eliminating it.

The Positive risk response strategies are:

1. Exploit: This strategy exploits the opportunities that come in the form of risk and makes sure that the opportunity occurs
2. Share: In this the opportunity is shared with a third party that can take out the maximum from the opportunity or the positive risks.
3. Enhance: It just increases the impact of the opportunity to benefit the project.

There is a common strategy that is used in both the risks is the Acceptance strategy. In this response the risk is accepted the way it comes, and no changes are made to the project plan. There are two responses Active and passive. In passive there is no action is needed while in active a contingency reserve is established to handle adverse effects of the risk event.

### 3. Risk Management Roles and Responsibilities

Participants in risk identification activities can include the following, where appropriate: project manager, project team members, risk management team (if assigned), subject matter experts from outside the project team, customers, end users, other project managers, stakeholders, and risk management experts. While these personnel are often key participants for risk identification, all project personnel should be encouraged to identify risks.

<b>Project Role</b>	<b>High-Level Responsibilities Relevant to Risk Management</b>
Steering Committee	Makes all the important decisions related to project
Project Sponsor	He/She is the owner of the project that provides all the funding to the project.
Project Manager	The one who manage the project and manages the deliverables throughout the project.
Project Team Members	The core of the project who are responsible for the deliverables.
Project Partners	Project Partners are the ones who share the profit/ loss margin equally in the project.

## **4. Risk Threshold**

The risk threshold is the risk acceptance of the organization. The risk threshold sets a certain value up to which an organization will accept the risk.

### **4.1 Acceptable Levels of Risk**

The level of risks that are acceptable to an organization. It is defined as per the probability-Impact matrix. System software bugs, lack of resources.

### **4.2 Unacceptable Levels of Risk**

The level of the risks that are not acceptable by the organization. Examples may include Data breach, lack of data confidentiality, System error.



## 5. Risk Assessment

The process of comparing an estimated risk against given risk criteria to determine the significance of the risk.

- Create awareness of hazards and risk.
- Identify who may be at risk (e.g., employees, cleaners, visitors, contractors, the public, etc.).
- Determine whether a control program is required for a particular hazard.
- Determine if existing control measures are adequate or if more should be done.
- Prevent injuries or illnesses, especially when done at the design or planning stage.
- Prioritize hazards and control measures.
- Meet legal requirements where applicable.

Impact	Extreme		R5 Ill trained vendor teams	R7 Governance					
	High			R6 Operations Failure R8 IBM Cognos Integration	R2 IT Dept lack of internal resources R4 Lack of Budget the execution of the project				Critical Risks (in red)
	Medium				R3 Project Deadline				
	Low			R1 Environment Canada Schema - Delayed					
	Very Low								
		Very Low	Low	Medium	High	Extreme			
		Likelihood							