NUAC Programme

Definition Phase Final Report

Appendix 12

Risk Management Plan

FEBRUARY 2007

CONTENTS

1 INTRODUCTION

1.1 Purpose

The purpose of this document is to describe how risks are to be identified, analysed, mitigated, documented, controlled, and reported in the NUAC Programme.

1.2 Scope

1.2.1 Identification of risks

The risks to be identified are all risks that might have an impact on the development and the results of the programme. That includes programme being on time, programme being within budget and various deliverables to meet the scope and agreed levels of quality. Furthermore, risks concerning obtaining the necessary approvals from authorities and/or the political level and acceptance from other key stakeholders shall be identified.

1.2.2 Application of this plan

This plan shall be applied on all phases of Programme. For the Definition Phase, risks shall be identified and described related to the scenarios described in the ToR for the Definition Phase. For consecutive phases, risks shall be related to selected scenario.

1.2.3 Limitation of scope

This plan does not cover personal safety (like electrical hazards or fire hazards when working with equipment). It is assumed that all staff is properly trained and has adequate instructions to maintain a safe working environment. All risks and hazards related to flight safety are assumed covered by the Safety Plan.

1.3 Approval

The Programme Manager shall approve this plan.

1.4 Revisions

This plan can be revised on initiative from the Programme Manager or the Programme Risk Manager.

2 ORGANISATION

2.1 NUAC Programme Risk Manager

The Programme Risk Manager reports to the Programme Manager.

The Programme Risk Manager has, in cooperation with the project/activity leaders, the task of managing all work related to risks and to update risk related documentation, to report the results and status of work to the Programme Manager in accordance to reporting routines described in chapter 6.

2.2 The NUAC Risk Management Process
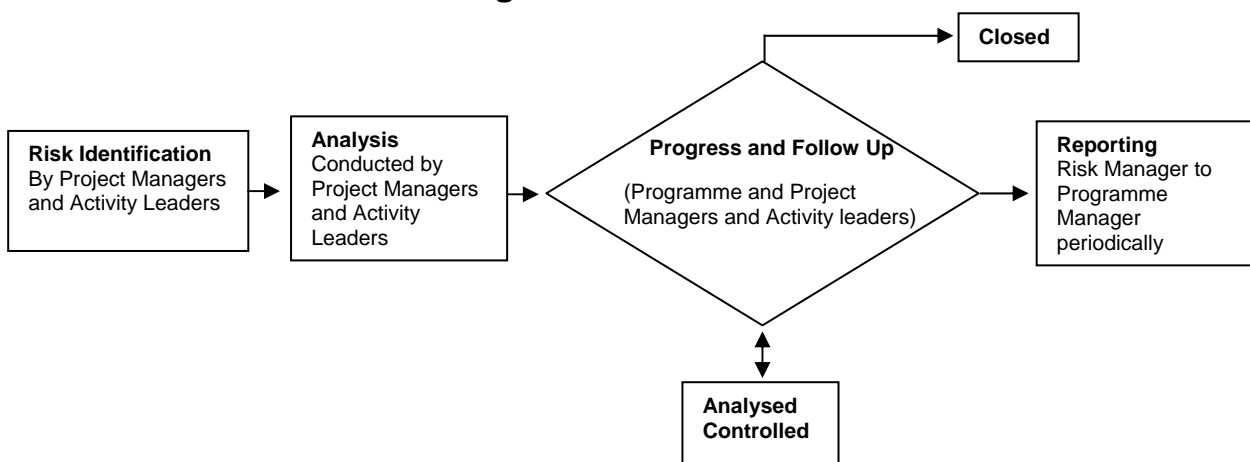
2.3 Programme Manager responsibility for risk handling

Programme Manager is responsible for conducting a structured risk handling and mitigation regarding identified programme risks. The Programme Management Team shall inform the Risk Manager or the Programme Manager at any time if they find a new risk has arisen.

2.4 Project/activity leaders responsibility for risk handling

- Project managers/activity leaders shall monitor global developments to get early indications on issues with a possible impact on the NUAC Programme.

- Project managers/activity leaders are responsible for conducting a structured risk handling and mitigation in the appropriate projects/activities.

- Project managers/activity leaders reports to the Programme Risk Manager.

- Risks shall be identified by the members in the various projects and programme activities and shall be handled according to this plan.

2.5 Other possible risk inputs

All members in NUAC Projects/Activities shall inform the Risk Manager or the Programme Management Team at any time if they find a new risk has arisen and not covered by scenarios above.

3 RISK IDENTIFICATION

Risk identification shall be done by a balanced and competent analysis group of key individuals. Project managers/activity leaders shall document all identified risks on a standard programme template (attached) with the following information:

- Scenario
- Title
- Status: Identified
- Description
- Affected areas (if possible)

The risk identification sheet shall be handed over to the Programme Risk Manager for registration in the Risk Register. The Programme Risk Manager shall report relevant risks to the Programme Manager in accordance with chapter 6 in this document.

4 ANALYSIS

4.1 The Analysis Process
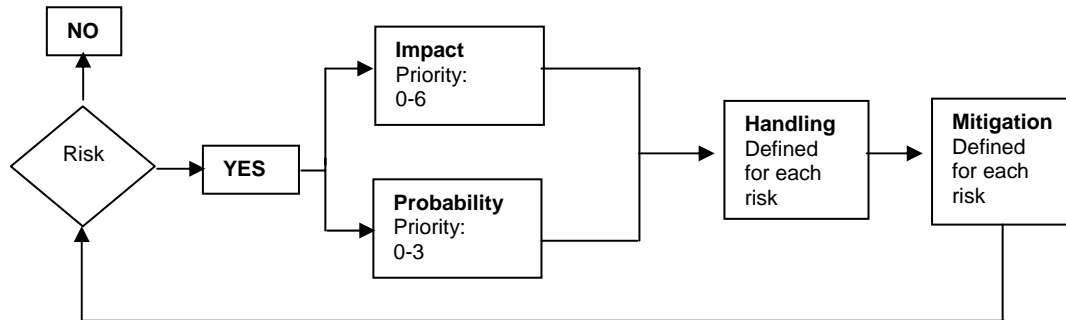
4.2 Conducting Analysis

The project manager/activity leader shall, in co-operation with the Programme Risk Manager, take the necessary actions to get all risks analysed.

The key elements of the analysis are to find answers to the following questions:

- What is the probability of the risk?
- What is the impact of the risk?
- How shall the risk be handled?
- How shall the risk be mitigated

The project manager/activity leader is primarily responsible for conducting the risk analysis but the Programme Risk Manager shall assist and supervise as deemed necessary.

4.3 Probability and impact

4.3.1 Probability

The probability of each risk is turned into a priority factor based on table 1.

Description	Probability	Level	Priority factor
Impossible	0%	No	0
Not likely	0 - 40%	Low	1
Likely	40 - 70%	Medium	2
Very likely	70 - 100%	High	3

Table 1. Levels of risk probabilities

4.3.2   Impact

The impact is assessed with respect to the following elements:

- Performance (personnel, development model, system, hardware recourses etc.)
- Plans (decision-making and acceptance at different levels)
- Budget (risk for exceeding the budget frame)
- External (having an effect on other programmes or e.g. political decisions)

The impact of each risk is turned into a priority factor based on table 2.

Level	Priority factor
No impact	0
Low impact	1
Medium impact	3
High impact	6

Table 2. Levels of risk impact

4.3.3   Priority levels

When the level of probability and impact has been established, the priority level of a risk can be deduced from table 3, where the priority factors from table 1 are simply multiplied with the priority factor from table 2.

Priority level Priority factor (after multiplication)			
0		Nil	Nil
1-3	🟩	Low	Acceptable/monitoring
4-6	🟨	Medium	Shall take mitigation actions
7-18	🟥	High	Unacceptable

Table 3. Risk priority levels

The priority factors and priority levels are recorded in the Risk Register for each risk.

4.4   Handling and mitigation of the risks

For each identified and prioritised risk, actions shall be defined on how to handle the risk and how the risk shall be mitigated. The scope and level of detail of an action should reflect the priority level, which also serves as input to the decision of the target date.

The actions can be focused on reducing both impact and probability of the risk. For more complex actions it may be necessary to analyse the need for resources (time, budget and manpower) to clarify if the actions are possible.

The Risk Register is then updated with information regarding:

- What to be done, details of the action
- How it shall be done
- Target date for the action
- Person assigned to perform the action
- New status 'Analysed'

5 PROGRESS AND FOLLOW UP

When new risks have been identified or existing risks need to be re-analysed, this shall be raised to the relevant project/activity on how the risk shall be handled and mitigated. This should be done continuously e.g. at project/activity meetings.

Information to the members of projects/activities on how risk status, risk actions and mitigation are progressing shall be given as deemed feasible.

Any risk issue that cannot be solved in the project/activity shall be referred to a special meeting in which the Programme Risk Manager, project/activity leader and appointed programme members participate. The outcome of such meetings shall be reported to the Programme Manager.

A risk can be in one of four phases:

- **Identified**, as long as analysis is not completed

- **Analysed**, as long as actions to control the risk have not had any noticeable effect

- **Controlled**, when actions have started to have a noticeable effect (monitoring of the risk is still necessary)

- **Closed**, for instance when completion of a programme activity renders a risk obsolete.

6   REPORTING

6.1   The Reporting Process
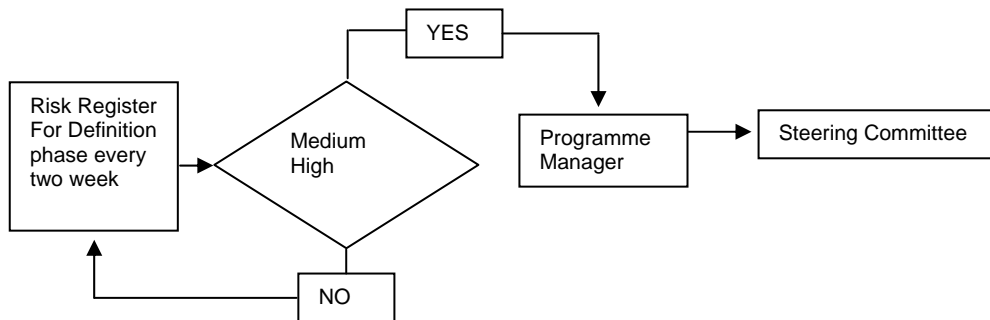
6.2   Reporting

The Programme Risk Manager reports periodically to the Programme Manager. The report shall be issued with an interval set by the Programme Manager and with use of a NUAC risk report template.

For the Definition Phase the report interval is set to every two weeks.

All risks with priority "medium" and "high" shall be reported to the Programme Manager.

7   DOCUMENTATION

The Programme Risk Manager shall establish and maintain a NUAC Programme Risk register.

8   REFERENCES

- NUAC Programme Definition Phase Terms of References
- NUAC TMP Risk Management Plan.

NUAC PROGRAMME RISK SHEET

Project/activity Title:		Risk no:	
Responsible:		Date identified:	
Risk Title:		Scenario:	

Risk Description

Affected Areas:

Road Map:	☐	Performance:	☐	Probability:	
Budget:	☐	Support:	☐	Impact:	
Other Issues:	☐	External:	☐	Priority:	

Comments:

Mitigation actions: