

Appendix 4:

Risk assessment tables

This Appendix describes a very simple technique which is designed to assist in the prioritisation of downside risks for analysis (see Section 4.3). The idea is that each risk event is first of all classified into one of several 'likelihood' categories, according to its probability of occurrence, and is then classified into one of several 'consequence' categories, according to the severity of the consequences if the risk event occurs. Each category has a score and the score for likelihood is multiplied by the score for consequence to get the combined score for the risk event. The risk events with the highest combined score are then selected for priority analysis.

Set out below are some specimen risk assessment tables. However, it should be emphasised that there is a variety of ways in which such tables can be drawn up, so as to meet the needs of the particular project, with different

categories and differing decision rules about which risks should be eliminated, managed or ignored.

To explain the use of the specimen tables, suppose that a particular risk event has a 30% chance of occurring at least once during the project's life-cycle. If it occurs, it will be a serious threat to the investment. It will be awarded a score of 8 in Table 15 and a score of 100 in Table 16, leading to a combined score of 800 (see Table 17). According to the suggested decision rule, this risk event would come into the category of undesirable – i.e. a risk which one should attempt to avoid or transfer if at all possible.

Suppose, however, that the same risk event had been assessed as having a disastrous consequence if it occurs. Then the combined score would have been 8000, which means it is an intolerable risk. If it cannot be eliminated, transferred or avoided, the whole future of the project may be in doubt.

Description	Scenario	Probability	Scale value
Highly likely	Very frequent occurrence	Over 85%	16
Likely	More than evens chance	50–85%	12
Fairly likely	Quite often occurs	21–49%	8
Unlikely	Small likelihood but could well happen	1–20%	4
Very unlikely	Not expected to happen	Less than 1%	2
Extremely unlikely	Just possible but very surprising	Less than 0.01%	1

Table 15. Risk assessment table – likelihood. This table categorises risks according to their probability of occurring at least once at some point during the whole project life-cycle

Description	Scenario	Scale value
Disastrous	Business investment could not be sustained (e.g. deaths, bankruptcy)	1000
Severe	Serious threat to business or investment	100
Substantial	Reduces profit significantly	20
Marginal	Small effect on profit	3
Negligible	Trivial effect on profit	1

Table 16. Risk assessment table – consequence

Likelihood		Consequence				
		Disastrous (1000)	Severe (100)	Substantial (20)	Marginal (3)	Negligible (1)
Highly likely	(16)	16 000	1600	320	48	16
Likely	(12)	12 000	1200	240	36	12
Fairly likely	(8)	8000	800	160	24	8
Unlikely	(4)	4000	400	80	12	4
Very unlikely	(2)	2000	200	40	6	2
Extremely unlikely	(1)	1000	100	20	3	1

Table 17. Risk assessment table – acceptance of risk

Points	Category	Action required
Over 1000	Intolerable	Must eliminate or transfer risk
101–1000	Undesirable	Attempt to avoid or transfer risk
21–100	Acceptable	Retain and manage risk
Up to 20	Negligible	Can be ignored

Key to acceptance of risk

As pointed out in Section 4.3, risk assessment tables can sometimes be misleading, in that they may fail to draw attention to some of the key risks which ought to be studied and possibly eliminated, avoided or transferred. Such tables are not an essential step in the RAMP process and should be used with caution, if at all.