8.4.6. Risk Analysis

Risk Analysis is an essential method for identifying and assessing factors that could negatively impact the success of an operation or project. It allows for the examination of potential risks and aids decision-making by determining whether to proceed with a given action.

Risk Analysis typically considers:

- 1. The likelihood of a threat.
- 2. The **impact** on the operation or further procedures.

Resulting in a Net Risk-matrix, introducing to the threat-level overall.

These factors are then plotted on a **Net Risk Matrix**, providing an overview of overall threat levels. The Net Risk Matrix can be seen in the first graphic, where threats are categorized based on their likelihood and impact, with color coding to indicate risk levels from very low to very high. Once risks have been assessed, the next step is to develop strategies to manage and mitigate them effectively.

Impact/	Negligible (1)	Minor (2)	Moderate (3)	Severe (4)	Critical (5)
Likelihood	No serious injuries	Minor injuries	Non-life threatening injuries. Serious injury High stress.		Death or severe injury
	Minimal asset loss or damage	Some asset loss or damage	Asset loss or damage Major asset destruction		Destruction or total asset loss
	No delay to programs/operations	Some delay to programs/operations	Program/operation delays and disruptions	Severe disruption to programs/operations	Loss of projects or programs/cancellation of operation
Very likely (5)	5	10	15	20	25
Likely (4)	4	8	12	16	20
Moderately likely (3)	3	6	9	12	15
Unlikely (2)	2	4	6	8	10
Very unlikely (1)	1	2	3	4	5

Step 1: Identify Threats

Identify existing and potential threats within the operating environment. These threats can originate from various sources, including but not limited to:

- **Political**: Changes such as a new government, public unrest, shifting stakeholders, or evolving public opinion.
- Economic: Market system collapse or economic instability.
- **Reputational**: Loss of confidence among stakeholders or damage to reputation.
- Human: Illness, death, injury, or the loss of a key individual.
- **Operational**: Disruptions affecting support operations or access to essential assets.
- **Procedural**: Failures in accountability, internal systems, controls, or risks from fraud.
- **Natural**: Environmental threats like extreme weather, natural disasters, or disease.
- **Infrastructure**: Damage to or blockage of critical infrastructure points (CIPs) or essential routes.
- Information:

Communication breakdowns or loss of information integrity.

Note:

The term "operational" applies to both civilian and military contexts and can be adapted as needed.

Additional threats may arise during operations, but not every potential threat requires attention, depending on its assessed impact.

The second graphic illustrates an example of calculating risk levels in an operational environment. It provides an example Net Risk score for a hypothetical 'Theatre XY,' showing how different ranges (very low to very high) are determined based on the likelihood and impact scores.

Example for scenario in Theatre XY Part 1:

Risk scenario of threats	Vulnerability consideration	Likelihood (1-5)	Impact (1-5)	Net risk (1-25)	Net risk level
Political	Administration in the country is fragile	5	4	20	Very high
Economical	Economy lacks, high inflation rate >25%, import problem at BXP	3	4	12	High
Reputational	Bad international reputation of government and stakeholder due to high corruption	4	3	12	High
Human	Lack of Secondary and Tertiary Hospitals	2	3	6	Low
Operational	Missing support by HNS	3	3	9	Medium
Procedural / mission readiness	Planned operation is self- sustainable	1	2	2	Very low
Natural	Monsun season during operation phase	4	2	8	Medium
Infrastructure	Linked to Monsun season	4	3	12	High
Information	Land-lines are affected by Monsun but back up thru Iridium, Thurava phones	4	2	8	Medium

1 – 3	4 - 6	7 – 11	12 – 16	17 – 25
Very low	Low	Medium	High	Very high

Step 2: Assess Risks

After identifying threats, assess the risks by evaluating each threat's **likelihood** and **impact**. This assessment provides a prioritized view of threats, enabling effective resource allocation for risk mitigation.

The third graphic displays a detailed risk scenario table, categorizing threats by type (e.g., political, economic, reputational) and including specific vulnerability considerations, likelihood, impact, and resulting Net Risk score and level. This table helps decision-makers visualize and prioritize risks based on their scores.

In most operational settings, a standardized **Risk Matrix** is used to visualize threat levels and prioritize responses. An example matrix is available in *Annex 9.7* of this Handbook, along with an Excel worksheet template for practical application.

Net Risk (likelihood X impact) for <u>The Example for scenario in Theatre XY</u> Part 2:

The Risk Threat for the example in Theatre XY is:

8,9 = Medium

Please note: In general operations within the range of "medium" will not hamper the tasks and do not constitute a specific threat neither for civil nor military interests.