

Integral Risk Management

Definition of recommendations using SWOT-analysis

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1. Motivation

Handbook of „Best Practice“: Integral Risk Management of Snow Avalanches, Rock Avalanches and Debris Flows in Europe – a Guideline for Practitioners

- methods of integral risk management (assessment and mitigation measures)
- case studies
- recommendations

2. Methods – Workshop

- recommendations will be based on IRASMOS' findings and on current practice.
- one workshop per country, bringing together risk managers from practice, administration and science
 - to look at current practice of RM
 - to identify important issues in RM at present as well as in future
 - to discuss possible strategies for further development

2. Methods - SWOT

SWOT

The SWOT is a strategic planning tool to evaluate **Strengths, Weaknesses, Opportunities, and Threats** involved in a project, in a business venture or in any other situation requiring a decision.

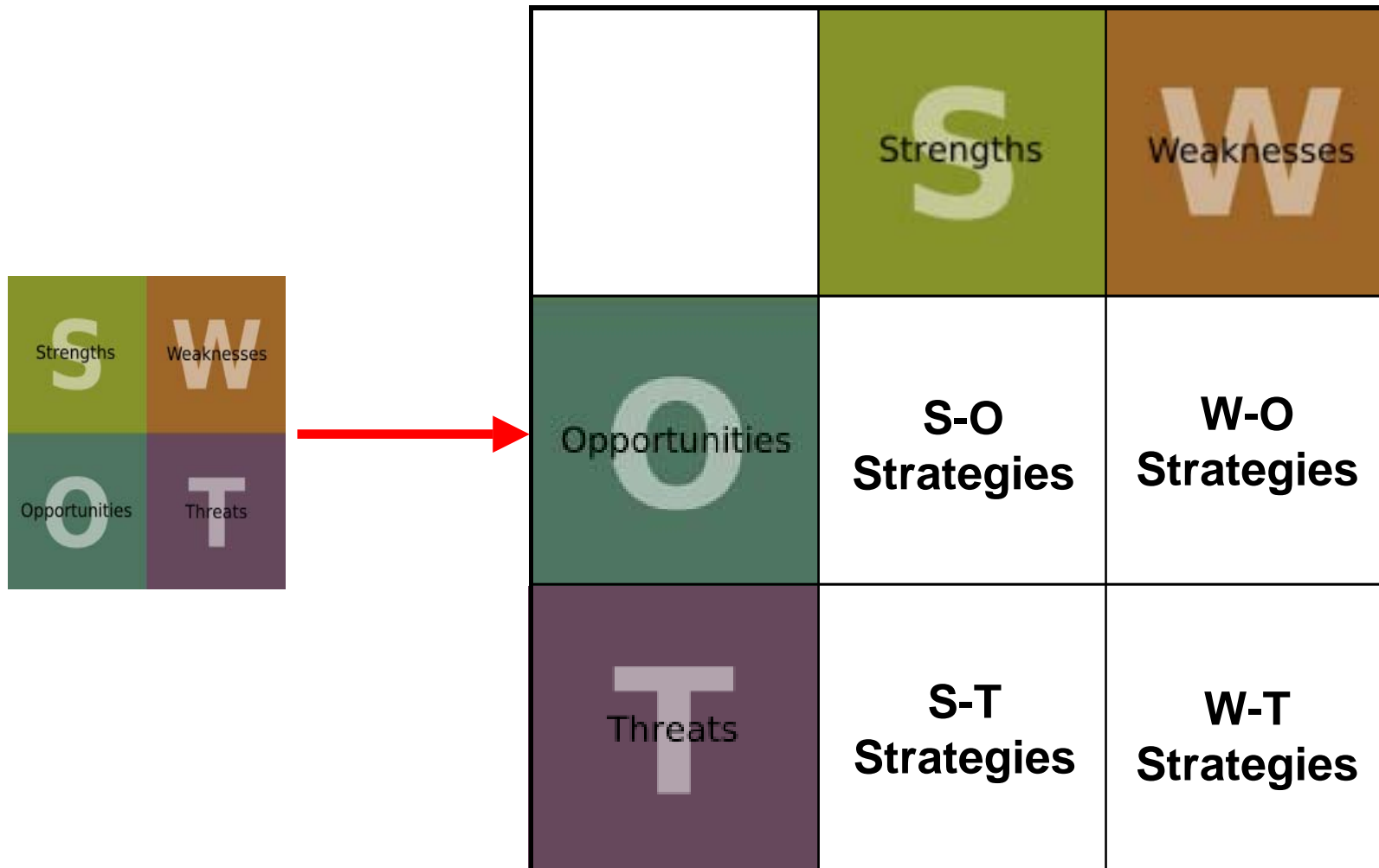
2. Methods - SWOT

people that
professionally
deal with natural
hazards



	POSITIVE / HELPFUL to achieve the goal	NEGATIVE / HARMFUL to achieve the goal
INTERNAL Origin	S Strengths	W Weaknesses
EXTERNAL Origin	O Opportunities	T Threats

2. Methods - SWOT



3. Results – SWOT Switzerland

Strengths of Swiss risk management:
(selection)

- S1: Long tradition and experience
- S2: National standards
- S3: Knowledge and techniques
- S4: Professional networks
- S5: Compulsory building insurance



3. Results

Weaknesses of Swiss risk management: (selection)

W1: No inclusion of benefits

W2: Not yet integral nor consistently risk-oriented

W3: Event-driven

W4: Weak controlling

W5: Weak formation of the people potentially threatened



3. Results

Opportunities for Swiss risk management: (selection)

- O1: top-ranked on the political agenda
- O2: public perception is high
- O3: increasing demand for RM
- O4: Administrative changes
- O5: Favorable climatic conditions



3. Results

Threats for Swiss risk management:
(selection)

T1: Increasing demand for public safety

T2: decreasing individual responsibility

T3: framework of RM may rapidly change due to politics

T4: Increasing mobility and extension of settlements

T5: No legal definition of risk



4. Results – comparison of SWOT of CH, A, N and F

1. SWOT that were mentioned more than once and that are similar in several countries
2. SWOT that were mentioned more than once but that are seen the opposite way round in two or more countries
3. SWOT that were mentioned only once
 - specific for one country
 - not mentioned in other countries

4. Results – comparison of S of different countries



CH

Long tradition and experience

National standards

Knowledge and techniques

Professional networks

Compulsory building insurance

+

A, F

F

A, F

A, N

F, N

-

F

N

A

F

Hazard maps

A, F, N

A, F, N

Supported on / linked to local level

A

N

Event analysis

F

A

4. Results – comparison of W of different countries



CH

+

-

No inclusion of benefits

Not yet integral nor consistently risk-oriented

Event-driven

Weak controlling

Weak formation of potentially threatened people

F

Strong administrative structuring A, F, N, (CH)

Missing standardised methods A, F

4. Results – comparison of O of different countries



CH

top-ranked on the political agenda

public perception is high

increasing demand for RM

Administrative changes

Favorable climatic conditions

+

A, N

A, F, N

(A), N

A, F, N

-

N

Developing (scientific) networks

A, N, (F)

Disastrous events

N

4. Results – comparison of T of different countries



CH

+

-

Increasing demand for public safety

A

decreasing individual responsibility

A, N

N

change due to politics

A, N

Increasing mobility and extension of settlements

A

No legal definition of risk

A

Climate change

F, N

(CH)

5. From SWOT to strategies

	POSITIVE / HELPFUL to achieve the goal	NEGATIVE / HARMFUL to achieve the goal
INTERNAL Origin	<p>Strengths</p> <ul style="list-style-type: none"> S1: Long tradition and experience S2: National standards S3: Knowledge and techniques S4: Strong in snow avalanche RM S5: Good data S6: Professional networks S7: Attitude of professionals S8: Compulsory building insurance 	<p>Weaknesses</p> <ul style="list-style-type: none"> W1: Risk quantification is complicated W2: No inclusion of benefits W3: Not yet integral nor consistently risk-oriented W4: Weak knowledge on rock avalanches W5: Generally incomplete information W6: Event-driven W7: Dealing with very rare events not specified W8: Administrative difficulties W9: Weak controlling W10: Weak formation of the people concerned
EXTERNAL Origin	<p>Opportunities</p> <ul style="list-style-type: none"> O1: Natural hazards are top-ranked on the political agenda O2: public perception is high O3: increasing demand for RM O4: Societal environment O5: People O6: Administrative changes O7: Economic strength O8: Technologically advanced level O9: Favourable climatic conditions O10: Internationally growing demand 	<p>Threats</p> <ul style="list-style-type: none"> T1: Increasing demand for public safety T2: decreasing individual responsibility T3: framework of RM may rapidly change due to politics T4: Short memory T5: Increasing mobility and extension of settlements T6: Socio-political conflicts T7: No legal definition of risk T8: Federalism T9: Administrative processes are slow

5. Example of a Swiss WO-combination

W “event-driven” + O “political and public perception”

- ➔ Strategy: prepare communication for event situations. Benefit from the high interest of media and public in such situations. Get across the messages of risk management.

5. Outlook – towards recommendations

Surrounding conditions O and T are similar in all countries.

→ No (strong) differentiation

Concentrate on S and W (and according strategies):

- similar in several countries
 - Possibly high affinity, joint strategies
- the opposite way round in two or more countries
 - Learn from each other, exchange
- mentioned only once
 - clarify if really specific for one country
 - Keep individuality if reasonable

Thank you!

Photo: Kantonspolizei GR

- **IRASMOS partners in A, F, I, and N**
- **Workshop participants**
- **My colleagues at WSL / SLF**
- **The audience**