

# Risk Management in the Province of Tyrol

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Mag. Andreas Koler  
[koler@alps-gmbh.com](mailto:koler@alps-gmbh.com)

# ▲ Overview

alpS – Who We Are

Making Cities Resilient

Risk Management in the Province of Tyrol

ORTIS Risk Management Tool & Services

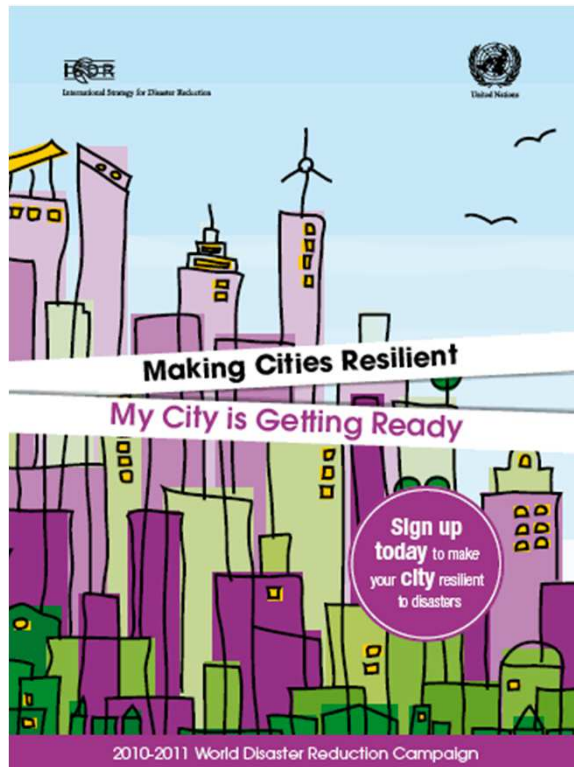
Some More Facts



## ▲ alpS – Who We Are

- ▲ R&D center based in Innsbruck/Austria
- ▲ Topics: natural hazard research and risk management
- ▲ Focus on climate change adaptation
- ▲ 85 employees at 3 locations – still growing
  
- ▲ 70 company partners in 15 countries
- ▲ 20 scientific partners in 6 countries
- ▲ 10 public authorities in 3 countries
  
- ▲ 30 projects running
- ▲ 25% in the field of applied risk management
- ▲ Risk management in the Province of Tyrol

# ▲ Making Cities Resilient



- ▲ Province of Tyrol (279 municipalities) and City of Lienz:

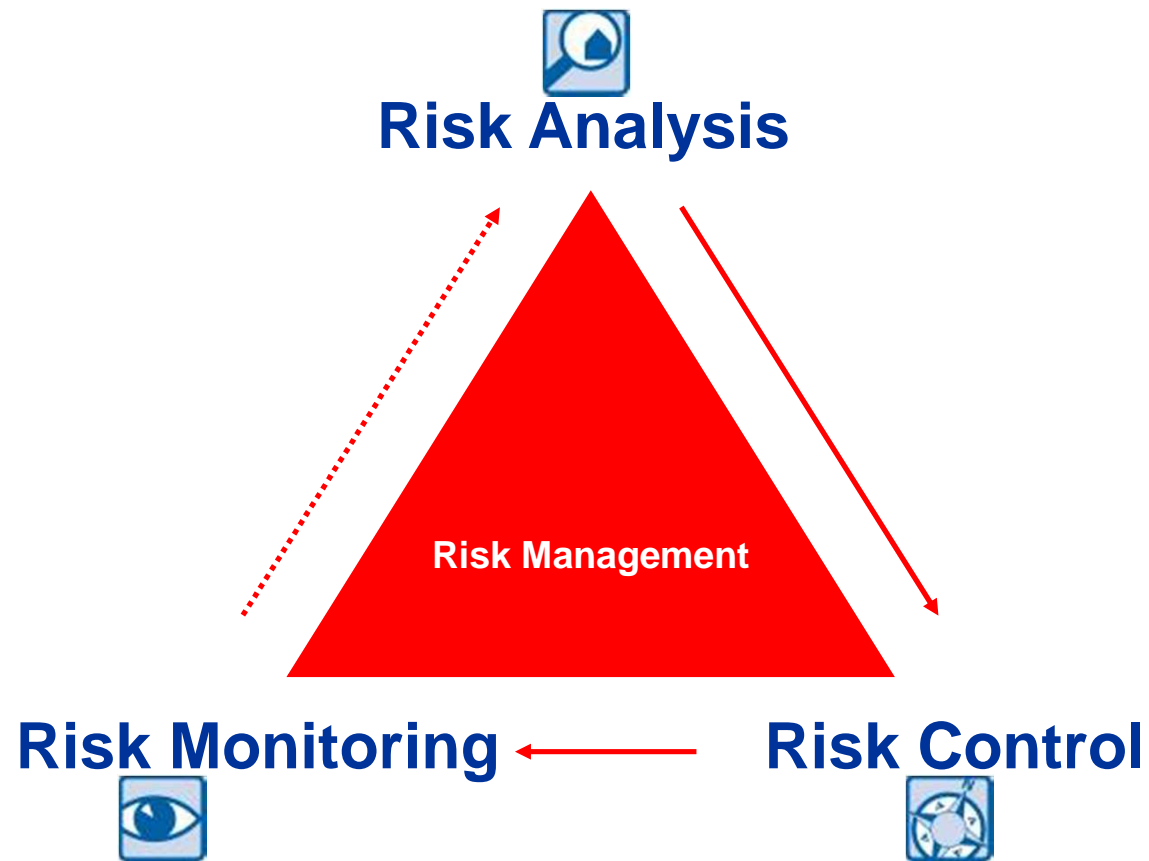
"Role model for community-based risk assessment, management and reduction"

- ▲ National launch of the campaign at the conference "Managing Alpine Future II", 21-23 November 2011 in Innsbruck

## ▲ Today: focus on essential #3

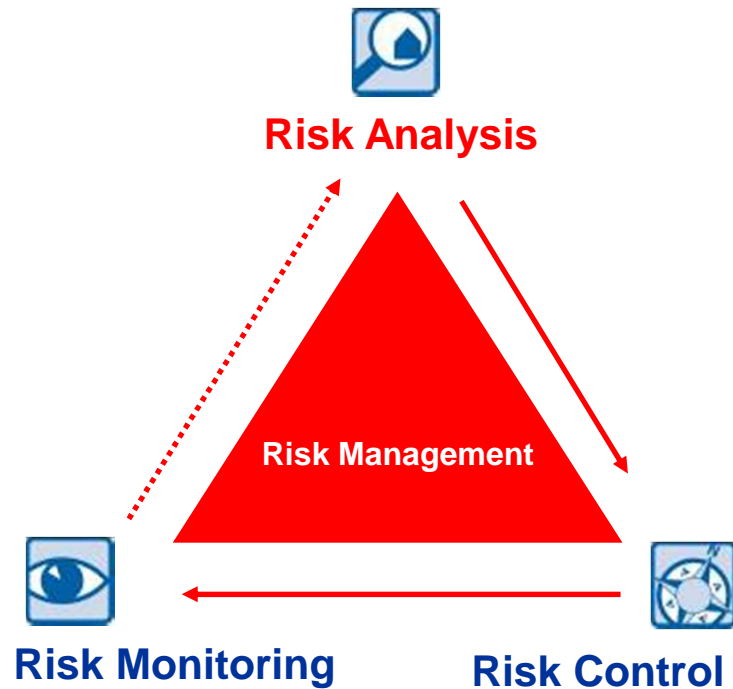
- **Prepare & share risk assessments.**
- Risk assessment method used in the province of Tyrol
- Some results

# ▲ alpS Risk Management



Simple, effective and applicable in everyday life

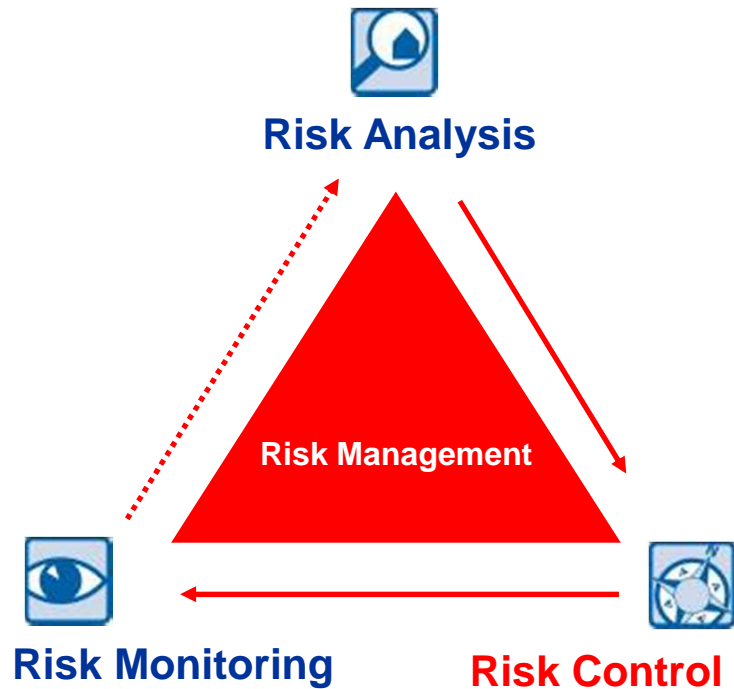
# ▲ Risk Analysis



- ▲ Basic step for EVERY risk management
- ▲ Risk **identification** (essential risks!)
- ▲ Risk **evaluation** (probability and impact)
- ▲ Risk **illustration** (risk matrix, risk list, risk maps)

**We do risk management for users, not for risk managers!**

# ▲ Risk Control



- ▲ Reduce risks
- ▲ Set targets
- ▲ Technical control
- ▲ Organisational control
- ▲ **Better communication!**

**Implement simple and effective control measures!**

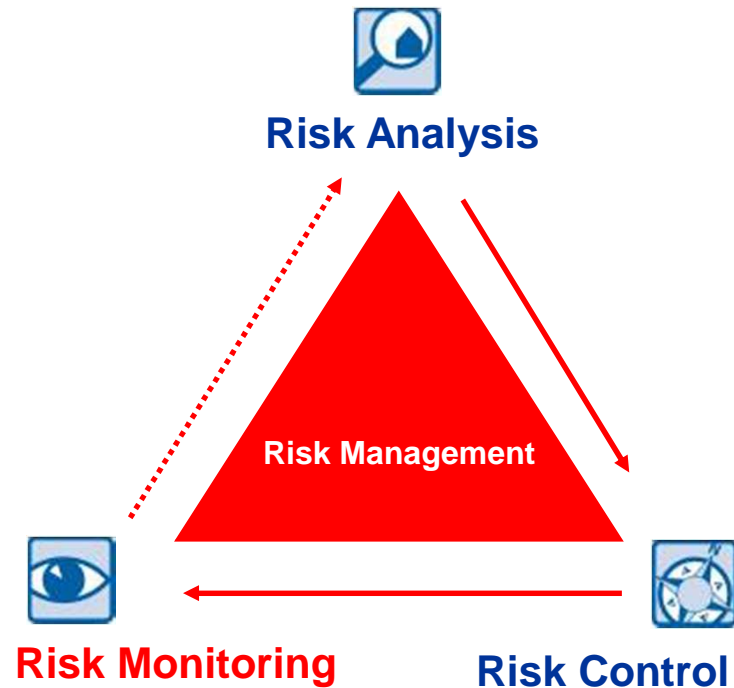


## ▲ Risk Control





# ▲ Risk Monitoring



**keeps the risk-management  
process running!**

- ▲ Changes in processes
- ▲ Changes in potential damage
- ▲ Changes in probability
- ▲ Changes in impacts
- ▲ New risks -> back to step 1 (risk analysis)

## ▲ Risk Monitoring



# ▲ ORTIS – Risk Management Tool

## ▲ ORTIS software tool

- Especially developed to support the risk management process in communities (and companies)
- Following a clearly structured risk management guideline

## ▲ The ORTIS tool offers...

- A user-friendly interface
- A web-based platform (no separate software required)
- A structured risk management guideline
- Illustration and visualization elements
- Reporting and statistical functions
- A knowledge database for the administration of documents

# ▲ ORTIS – Risk Management Tool

The screenshot displays the ORTIS web application interface. The top navigation bar shows the user is logged in as 'Voggyakarta' in the 'Administrator' group. The left sidebar lists various risk categories under 'Natural Hazards', including Abrasion, Draught, Earthquake, Erosion, Floods, Landslides, Pyroclastic flows, Riff waves, Tsunami, and Windhose. The 'Pyroclastic flows' category is selected, showing a risk level of 'N5'. The main content area displays the 'Risk: Pyroclastic flows - Mt. Merapi' page. The 'Risk Analysis' tab is highlighted with a red circle. Below the tabs, there is a 'Note/Document' section with a table listing documents and notes. The table has columns for 'Document' and 'Title'. The documents listed are 'Merapi\_Latest\_Map' and 'merapi\_pyroclastic\_flow'. The notes listed are 'Geology Survey' and 'Chronicles of past events'. The bottom status bar shows the date 'Oct 22, 2009 4:02:07 PM' and the user 'ORTIS Administrator'.

ORTIS - Mozilla Firefox  
http://localhost:8080/ORTIS/PersonalizedRiskAction.do?selectedCategoryId=121&selectedCategoryName=Risks&selectedRiskId=254&selectedTab=tabRisk&selectedAction=on3&selectedOrderCol=selectedOrderCol\_sourcePage=1&selectedPage=1&selectedPage=1

ORTIS  
Logged in as client: **Voggyakarta** and in the user group: **Administrator**

Selected Category: Risks

Natural Hazards

Abrasion  
N6 Abrasion

Draught  
N2 Draught

Earthquake  
N4 Earthquake

Erosion  
N8 Erosion

Floods  
N10 Floods

Landslides  
N1 Landslides

Pyroclastic flows  
N5 Mt. Merapi

Riff waves  
N3 South Coast - Riff waves

Tsunami  
N7 Southern coastline

Windhose  
N9 Windhose

Other Risks

Corruption

Administrative Tasks

Add Personalized Risk

Add Evaluation

Print Report

Risk: Pyroclastic flows - Mt. Merapi

N5 Frequency: 5  
Effect: 2  
set manual: NO

Details  
delete

Details General Risk Risk Analysis Risk Control Risk Monitoring

Note/Document

Link to notedocument New Note New Document add to Favorites add to general favorites

Document	Title	remove
Merapi_Latest_Map		
merapi_pyroclastic_flow		

Note

Geology Survey

Chronicles of past events

back Help: ORTIS Administrator Oct 22, 2009 4:02:07 PM Notes: Chronicles of past events edited by user: ORTIS Administrator Change Mandatory Logout

# ▲ ORTIS – Risk Management Tool

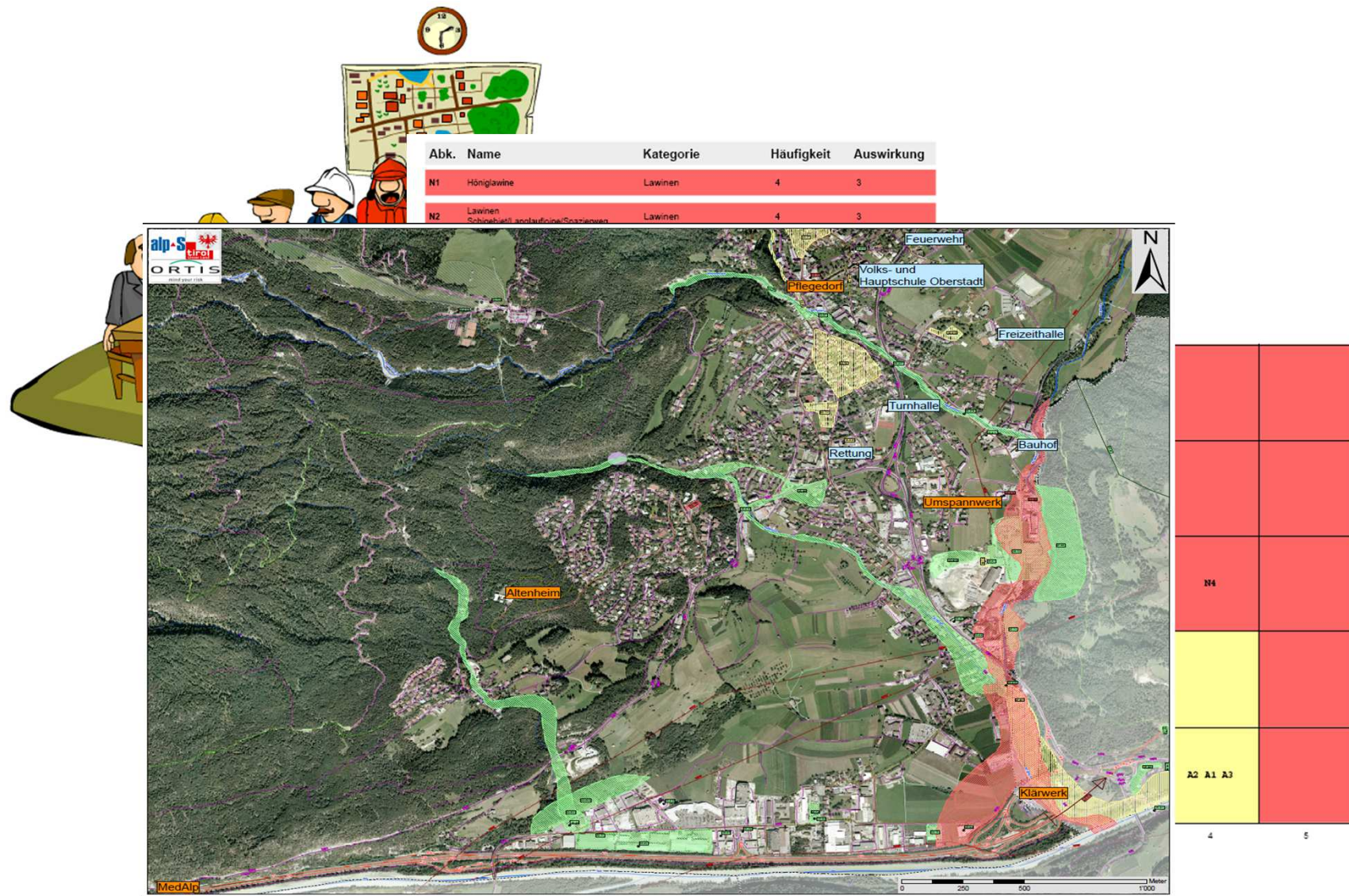
## ▲ ORTIS Services

- Special methodology based on extensive research and practical experience gained from national and international risk management activities
- Workshops
- Cartographic processing
- Personal support throughout the process
- Latest scientific know-how through other activities within alpS and alpS network

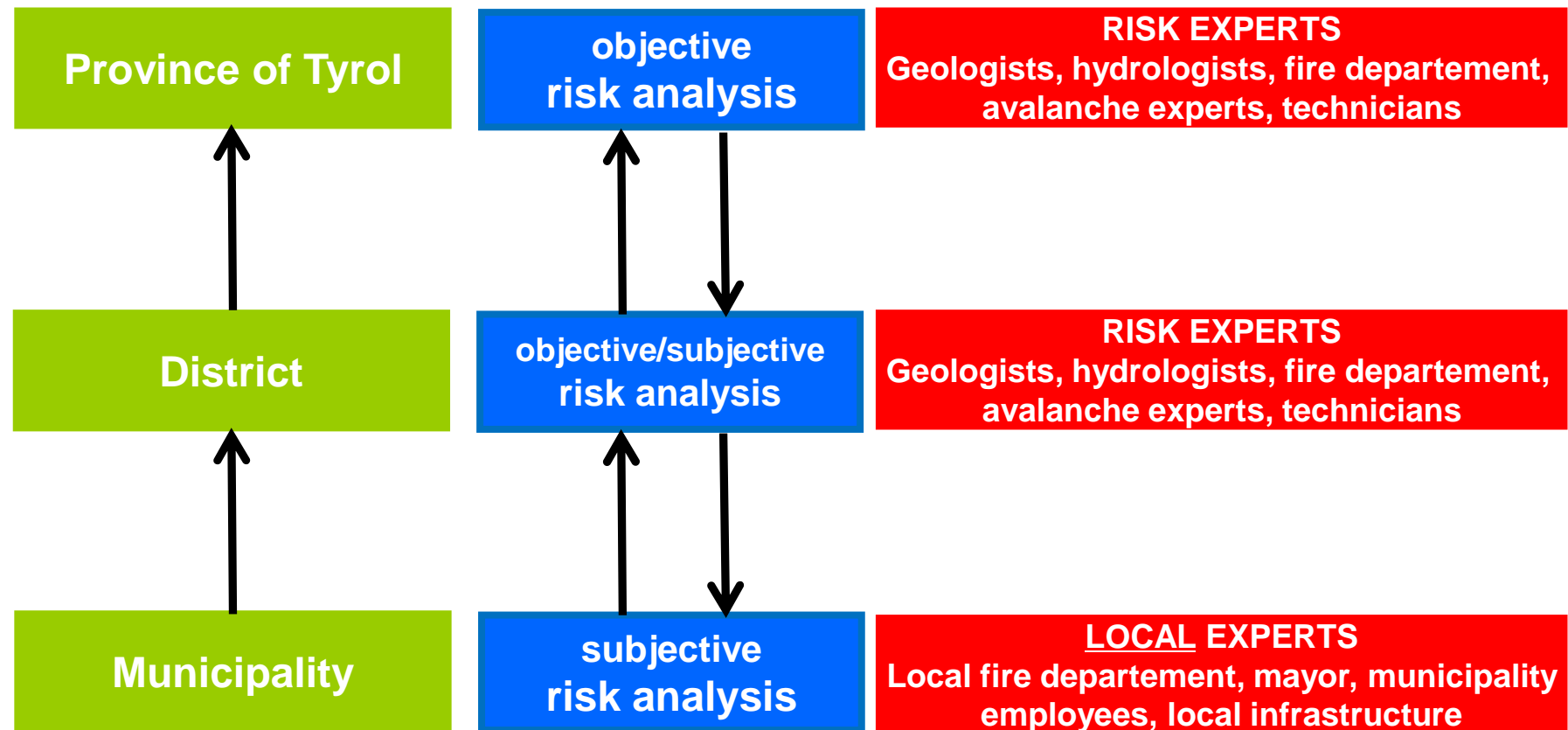




# ▲ What Do We Do in the Municipalities?



## ▲ The Next Steps





## ▲ Some Numbers

- ▲ **10** risk-management experts involved
  - Regional government
  - alpS
- ▲ **200** workshops in municipalities
- ▲ **180** municipalities completed
- ▲ **4800** risks identified
  - Average of 27 (range from 5 to 170)
  - More than 60% natural hazards
- ▲ **1.5** terabyte data generated (mostly GIS-maps)
- ▲ **170** days „on the road“
- ▲ **900** local experts involved
- ▲ **50** risk experts involved

## ▲ Application Examples

- ▲ Province of Tyrol (279 communities)
- ▲ „Risk management without borders“ in cooperation with the German Federal Office for Civil Protection and Disaster Assistance
- ▲ Different cities and municipalities in other parts of Austria
- ▲ Risk management workshops in
  - Germany
  - Switzerland
  - Italy (Province Alto Adige)
  - Indonesia
  - China
  - Algeria
  - Argentina
- ▲ National risk analysis Austria

# Thank you for your attention!

Mag. Andreas Koler  
alpS - Center for Climate Change Adaptation Technologies  
A-6020 Innsbruck/Austria

phone: +43 512 392929-25  
email: [koler@alps-gmbh.com](mailto:koler@alps-gmbh.com)