

Workshop at RISK 07

Successful (Risk)Communication needs the right language

Participants

Participants to the workshop were

- Stefan Kollarits (PRISMA solutions) and Nathalie Wergles (ÖBB) as workshop leaders; both Austria
- Arno Berr, NÖ Zivilschutzverband, Austria
- Franz Berger???, Abteilung Hydrologie, Gruppe Wasser, Amt der NÖ Landesregierung, Austria
- Milica Slokar, Administration for Civil Protection and Disaster relief, Slovenia
- Savino Cimarosto, Regione Veneto – Geological Survey, Italy
- Theodora Toli, ANAIT Development Agency, Greece
- Joze Papez (PUH) as afternoon guest, Slovenia

Introduction: objectives of workshop

The objectives of the workshop were defined as

- Identify practical problems in risk communication in order to have a list of some instructive problems;
- Identify, discuss, define basic terms needed in risk communication in order to produce a list of terms with description of their usage (needs)
- Provide recommendations for risk communication

Schedule

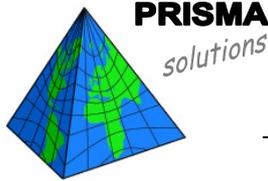
After a short *introduction* of all participants and a short presentation of their expectations to the workshop, two different *communication situations* were defined.

For these communication situations a list of necessary base terms was worked out together and classified. Three terms were picked out for a definition attempt (which was carried out within subgroups).

A short presentation of the workshop leaders was then given on state-of-the-art of *risk definition* and *risk perception*.

In the afternoon session a *role play* was performed – a citizen council was confronted with a new hazard zone plan.

Conclusions and *recommendations* finalised the workshop programme.



Communication situation and terms

The two communication situations were pre-defined:

1. the communication between, generally, an expert on the risk to a non-expert that there IS a risk, on the nature of the risk and on how one's own behaviour can modify the risk (increase or decrease it). Could be called 'enlightenment' (Aufklärung).

As example of this "Nominal phase" (= no disaster happened / is pending) a Hazard-Zonation plan is to be discussed; setting is an "open council" ("citizen panel")

2. the communication between different stakeholders and decision makers, more or less: how to treat the risk.

As example for this situation an "Alarm phase" was discussed – high water alarm; setting is a discussion between experts / decision makers.

For each situation the (communication) objectives of the involved experts, the (communication) objectives of risk management (as such) and the (communication) objectives of the affected population was worked out. Each situation is to be seen as a bi- (or multi-) lateral communication situation.

For these situations a list of most important terms was worked out by the participants. Here it is already presented classified as matrix, distinguishing between terms needed for situation description and terms needed for activity description, and between terms of experts vs. terms of the (concerned) public.

Situation 1) Hazard zone plan presentation and discussion

Situation related terms	Activity related terms
What the expert says	
(residual) risk	prevention
vulnerability	Prevention measures (constructive measures, technical measures)
hazard	Preparedness
threat	Protection
Hazard zone	Risk management
Occurance probability	Emergency response management
Endangered elements	
danger	
What the public (concerned) says	
security	cost
	responsibility
	Liability
	Guilt
	Trust (distrust)

The terms identified for expert use correspond very well to the terms identified as important in the MONITOR ontology working group. Only few basic terms of the MONITOR ontology were missing (esp. "damage").

Conclusion 1:

On the expert level a rather fixed set of basic terms can be identified. This set seems to be rather constant and to apply to different groups of experts.

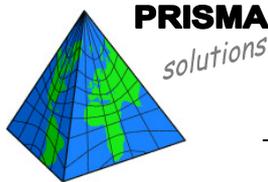
Situation 2) Flood alarm phase

Situation related terms	Activity related terms
Forecast	Evacuation
Water level <ul style="list-style-type: none"> - minimum - maximum - critical 	Relocation
Flood	dislocation
Alarm level	dispersion
Time span	alarm
Neuralgic points	Warning system
Threshold	Preparatory time
Accuracy	
Observation	

No such clear distinction between experts and people concerned could be established. But discussion showed that for people concerned accuracy, time span and water level are most important.

Conclusion 2:

Different risk communication situations need clearly different sets of terms! Overlap seems to be rather small.



On the basis of this term list three important terms were chosen for definition (and for working out problems in definitions – even on an expert level). The discussion between subgroups showed easy acceptance of two definitions but no single solution for the third term (“residual risk”).

Vulnerability	Characteristic (quality) of (persons, house, environment), which define the degree of susceptibility to negative impact of a hazard.
Hazard	Event or physical condition that is potential cause for damage (fatalities, losses, ...).
Risk	Expected damages (losses ...) from specific hazard.
Residual risk (1)	Risk after specified measures have been taken (“objective risk”).
Residual risk (2)	Risk after specified measures have been taken and which is equivalent to acceptable risk.

The two definitions for residual risk could not be resolved. As explanation the working group defined that the definitions were depending on different views:

Residual risk (1):

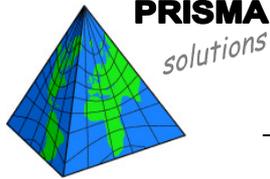
In the *view* of the *society* – which is closely corresponding to the view of experts – first the acceptable level of risk is defined (normatively). Measures are defined to reach this acceptable level of risk (which defines the objective of measures). The risk remaining is the residual risk, which can objectively be defined but which can be different from acceptable risk! (due to miscalculations, problems in measure implementation or changes of knowledge ...).

Residual risk (2):

The *individual (personal) view* sees some measures are being taken, recognises that a residual risk exists even after and has to accept this risk (because no other alternatives are available).

Risk definition: “objective” vs. “constructed” risk (risk perception)

Short presentation with discussion



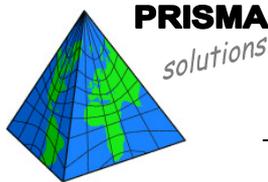
Instructive problem examples

One instructive example was given from Greece. Within MONITOR project the Greek partners had prepared a leaflet and deployed it end of July. At the same time the prefect (highest politician within prefecture) made a television appearance, stating a warning about severe fire hazard situation. It was for the first time in this prefecture that such an intensive risk communication took place.

A week after that two severe fires happened in the prefecture for the first time. What went wrong?

- Basic distrust against politicians may lead to a neglect of warning (“who is communicating !?”)
- It never happened before – why should it happen now ?

In a similar way the example of the big flood in the valley of Kamp in 2002 was presented from Lower Austria. A fire officer said if he had proposed a flood training before the event nothing would have been done, because “it has never happened in that area and it makes no sense to carry out such a training”.



Role play

Setting: At a citizen panel in Floodville, a small town next to a lowland river that floods the surrounding plain periodically. Several urban extensions have been made in recent times, getting closer to the river floodplain. The occasion of the citizen panel is the presentation of the newly developed hazard zone plan. The plan is highly sensitive as numerous inhabitants of Floodville will find their houses to be in the yellow zone.

Mr. Mayor

Is the mayor of a small town called Floodville of 30.000 inhabitants in the vicinity of a lowland river. Apart from being the mayor of his little town, he runs a building company and as a matter of fact he is a quite influential man when it comes to local building activities. For being the mayor he also represents the highest authority in the municipality for giving out building permits. In former years he authorized various building activities in areas which are now, according to the recently developed hazard zone map, endangered by a high watermark with a 100-years-probability. Among them an urban extension with newly built single family houses and an extension of the industrial zone of Floodville.

Prof. Almighty

Is professor in hydrology and a well-known expert in the field of the simulation of discharges of rivers. He can tell you everything about the water regime of rivers and has been in charge of a study on the river of Floodville. This study contributed largely to the hazard zone plan for Floodville. However, when it comes to explaining this matter to a layperson he has difficulties making his point clear without referring too much to scientific models and statistics. Besides, he is convinced that a global climatic change takes place and that it will lead to an increase in extreme weather conditions. According to him, the parameters that are assumed in order to calculate the discharge models will no longer be valid in the future and that areas that have never been affected by floods will also be endangered in the future.

Mrs. Survey, civil-engineer, spatial planner

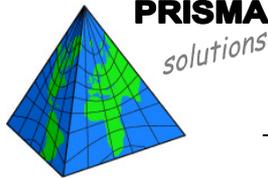
Is the one in charge of the development of the hazard zone plan for Floodville. She has a tough role as she has to present the new hazard zone plan to the audience as well as answer questions. As a spatial planner she is personally convicted that passive measure, such as building prohibitions in hazard-prone areas, should be preferred over active measures, such as the building of protective dams. This means that, according to her, settlements in endangered zones have to be avoided and those already existing should possibly be resettled in not-endangered areas.

Mr. Safe, representative of insurance company

Is a very attentive observer of the public debate in Floodville and the positions of those citizens who take part in the citizen panel. On the one hand, his company wants to raise the payments for those endangered objects that are already insured against damages from flooding because of the new findings. On the other hand, he presents his insurance as potential risk transfer of the individual risk to the insurance.

Mr. Grisu, head of local action force

Is more concerned with practical issues. He wants to know from the experts what the implications of the hazard zone plan are for the rescue teams. He has little idea of prevention of disasters; his focus is more on the post disaster phase.



Mrs. Monroe

Is an elderly lady and widowed since 10 years. She has been living in her house together with her husband for 50 years which now she finds to be in the yellow zone of the hazard zone plan. She has experienced several floods in her life yet her house has never been affected. She doesn't trust very much in authorities and blames them of having neglected to build sufficient dams to protect the town.

In any case, she is an old lady and definitely doesn't want to leave the place which she is living in for so many years. Generally she is quite quarrelsome and she is hard to convince that disaster-prevention is important.

Mr. Average

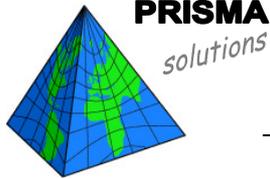
Is father of a family of 4 (plus a dog). He has just recently built his own house in the urban extension of Floodville and now he learns from the hazard zone plan, that his house is located in an area that is potentially affected by floods. He is very concerned about it and blames the municipality of being responsible. He has bought the plot of land for good money, yet he thinks that the municipality has unwarrantedly sold the property and is responsible for the fall of value of his property. Just as most of the citizens, he has the opinion that the town has to protect its citizens.

Mrs. Rich, owner of medium-size company

Is the owner of a medium-size company whose production plant is situated in the red zone. She bought the land from the mayor for a good prize at that time. The fact that her headquarters is situated in the red zone doesn't really take her by surprise. Rather she thinks that taking a risk is part of running a business. She reacts more cool-headed than the other citizens and wants to know from the experts how she can prepare for the next disaster. In the debate she intends to draw the discussion towards possible solutions. Above all, she wants to get answers on how to behave in disaster situations from the experts.

Conclusion 3:

All workshop participants have experienced language problems in risk communication and consider it to be a common problem. This problem can be found at different (experts, public concerned ...) levels.



Recommendations

Due to time restrictions only some very basic recommendations could be prepared by the working group. These were drawn from the discussion on terms, from the problem examples as well as from the role play.

- Risk communication is most important in “peace time”, when no disaster is pending.
- Risk communication needs a target group specific language. The objective of risk communication is to evoke the “right” images (which correspond to expert knowledge about situation and activities necessary). The objective can not be to bring people to expert level of knowledge.

This means that specific factors of risk perception have to be accounted for in communication, like the social dimension (“social justice”, degree of personal concern, ability to be sensed, ...)

- On expert level any risk related communication has to be based on a initially agreed upon set of terms and related consistent definitions.