

## Risk Register

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### What is the Risk register and what is it used for

Each project is associated with certain risks, i.e. uncertain events which may occur and influence (usually negatively) the project progress. Risk analysis is a separate discipline with attempts to anticipate risks, estimate their probability of occurrence, the severity of their impact, and to identify events which can be used to determine that the risk occurred. We then use risk management to reduce the probability of occurrence, reduce possible impacts and create emergency plans if the risk occurs.

The Risk register is a tool for storing all of the above-listed information and keeping it up-to-date. It is a live document, since risks may change during the realisation of the project. Some identified risks gradually stop being probable and, on the other hand, new risks arise which were not identified earlier.

**Risks need to be identified with sufficient concreteness** (e.g.: not "insufficient resources for the project", but instead "we won't be able to find qualified teachers").

The probability that a risk occurs is determined by an expert estimate in combination with historic experience. **If the probability of the risk is 100%, it is no longer considered a risk, i.e. an uncertain event, but a problem which we record in the Issue log** (see the Issue Log form).

We quantify the impact based on the matrix below

Area	1 - Very small impact	2 - Small impact	3 - Medium impact	4 - High impact	5 - Very high impact
Cost increase	<5%	<10%	<20%	<40%	>40%
Extension of duration	<10%	<20%	<40%	<80%	>80%
Extent	Small change in the extent of a single area	Several small changes of extent	Large extent change	The change of the project's result will not be acceptable for the submitter	The project's output will be useless
Quality	Minor problems in a single area	Minor problems in several areas	Large problems with the quality of outputs	Significant shortcomings in quality, unacceptable for the submitter	The project's output will be useless

**Response (approach to the risk):**

- ACCEPTANCE – we will accept the risk as we identified it, and will not carry out any actions to reduce its probability or impact, but can prepare a plan of corrective actions.
- REDUCTION – we will carry out preventive steps to reduce the probability or impacts of the risk.
- ELIMINATION – a strategy used to completely avoid the risk, e.g. by not realising the parts of the project which are at risk or by using a different technology.
- TRANSFER – the risk is transferred to a third party, e.g. through risk insurance.

**When is the document prepared**

The Risk register should be created already during **the project planning phase**, which includes the identification of risks based on external conditions and experience from similar events. This basic list of risks needs to be taken into account when planning the budget and schedule, since precautions for the prevention of risks, similarly as the removal of their impacts, always need to be connected to impacts on costs and time.

## Who participates in the preparation process

**The project manager in cooperation with the project team** should focus their efforts to primarily identify risks during planning. In this case, it definitely holds that more heads know more and that it is suitable to dedicate a meeting for identifying the risks, allowing everyone to voice their opinion on the risks related to the realisation of the project. When identifying risks, the core is to reveal as many alternative threats as possible and subsequently analyse them. Thus, it is often suitable to use methods such as **brainstorming**.

The subsequent risk assessment is then rather a professional activity, which requires knowledge and experience in the field of the project. The most frequently used method to quantify risks, i.e. estimate their probability and impact, is an expert opinion, followed by statistical information if available.

## When is the document used

The Risk register is used during the project, when we update the register in regular meetings, e.g. 1x every 14 days, and assess the efficiency of previously used risk plans.

## Process of preparing the document

1. Fill in the project header.
2. Enter the ID and description of identified risks in the first two columns.
3. Fill in the risk owner, i.e. the person in charge of the risk, in the third column.
4. Enter the estimated probability of the occurrence of the risk (in a 5-point scale) in the fourth column.
5. Enter the estimated impact of the risk (in a 5-point scale) in the fifth column.
6. The sixth column is used to calculate the risk score as a multiplication of the probability and impact of the risk. Risks with the highest score need to be prioritised during risk management.
7. Enter the risk response in the seventh column.
8. Describe the steps of the selected strategy in the eighth column.
9. Describe the risk trigger in the eighth column. This is the event which will indicate that the risk has become reality, i.e. that it actually occurred and needs to be dealt with.
10. Describe the steps that will follow if the risk occurs in the ninth column. This is the so-called backup plan or plan for the reduction/removal of damages.

## Example of a completed form

### Risk register

Project name:		Further education of teachers to improve the quality of teaching							
Date of update:		25/05/2012							
Identification of risks					How we will behave towards the risk		How we will behave if the risks transform into reality		
ID	Risk description	Risk owner	Probability (1-lowest, 5-highest)	Impact (1-lowest, 5-highest)	Score (1 to 25)	Response	Response plan, adopted measures	Trigger (how we find out that the risk has become reality)	Plan of corrective actions (the scenario we will realise if the risk occurs)
1	Survey not successful due to the low number of respondents	Survey organiser	2	4	8	decrease	Motivation to answer the survey through the use of vouchers for subsequent courses	questionnaire return rate below 30%	Repeat the survey, use a different survey method.
2	Teachers-participants are ill during the spring flu epidemic	Project manager	1	2	2	Acceptance	-	Illness rate above 20%	14-day extension of the deadline for finishing the modules
3	Absence of suitable areas for introducing the project in schools	Project coordinator	3	4	12	Elimination	Presentation of the project in rented premises owned by a third party	-	-
4	Damage or theft of HW resources	Technical provision of realisation	3	5	15	transfer	Insurance including the borrowing of replacement HW during the fallout.	Nonfunctional or missing PC.	Contact the insurance company and HW supplier to obtain replacements

