

## **RISK MANAGEMENT PROCESS INCLUDING RISK MANAGEMENT PROCESS FLOW CHART AND RESPONSIBILITY MATRIX**

### **Article 1**

#### **Stages of the risk management process**

1. Risk management is a systematic process consisting of the following steps:
  - a. **IDENTIFICATION** - identification of a completely new or existing risk.
  - b. **ANALYSIS AND EVALUATION** - detailed risk description and evaluation
    - i. **RISK ANALYSIS**
      1. a detailed description of the risk,
      2. a description of the impact of the risk,
      3. a description of the cause of the risk.
    - ii. **RISK EVALUATION**
      1. estimating the probability of the risk occurring, determining the point value of the consequence and the financial impact of the risk,
      2. determining the total value of the risk,
      3. determining the category of risk, i.e. whether it is a negligible or standard risk:
        - a. negligible risk - its impact (financial or otherwise) is marginal. The risk is accepted or monitored,
        - b. Standard risk - its impact (financial or otherwise) is noticeable.  
A standard risk may impact only the unit that identified it, or it may impact multiple units or the entire BUT. If it threatens multiple units or the entire BUT, it is recommended for inclusion as a University-wide risk.
  - c. **RISK TREATMENT** - selecting an appropriate strategy for dealing with the risk in question.  
The following strategies can be chosen:
    - a. risk avoidance,
    - b. risk transfer,
    - c. risk reduction,
    - d. acceptance (assumption) of risk,
    - e. risk monitoring.
  - d. **DOCUMENTATION MANAGEMENT**  
Risk documentation is maintained in the risk management module of the BUT IS.
  - e. **RISK COMMUNICATION**  
During this phase, all stakeholders are informed about the threat posed by the risk and the measures proposed and taken to mitigate or eliminate the risk. A verifiable record of the risk communication shall be kept.

### **Article 2**

#### **Description of the different phases of risk management**

#### **PART A**

##### **Risk identification**

1. Risk identification is an ongoing process, the aim of which is to create a database of all potential risks that may threaten a given Unit and, consequently, the entire BUT. The identified risks will feed into the next stages of the risk management process.

2. All employees are involved in risk identification. They inform their supervisor of the identified risk, who in turn informs the unit risk manager. For risks that are only related to a sub-process, it is the responsibility of the immediate supervisor to resolve the risk immediately; documentation does not need to be maintained in the BUT IS.
3. Risks requiring a more complex assessment, with a potentially higher impact, concerning other evaluation units or other units, are documented in the BUT IS.
4. When identifying risks, special attention should be paid to external risks, i.e. risks associated with changes in legislation, financing, project challenges, technological developments, etc. These risks are identified mainly by the BUT authorities and faculty bodies, unit directors, Vice-Rectors, Vice-Deans, and professional departments of the Rector's Office. A separate record of them is kept in the BUT IS. Once an external risk is identified, stakeholders are informed about it.
5. External risks are generally classified as University-wide risks. The Rector's Office Risk Manager is responsible for recording these risks. In analysing them, he/she cooperates with both the Rector's Office's specialist departments and the VIŘR. In dealing with them, the framework procedure set out below is applied as appropriate.
6. Framework procedure for risk identification:
  - a. ongoing risk identification by all employees of the Unit,
  - b. at least once a year, a working meeting between the risk manager and senior staff of the unit shall be held to identify the risks to the unit,
  - c. the risk manager describes the identified risk in detail, identifies how it is a threat to the Unit, describes the cause and impact. Describing the context of the risk, i.e. providing additional information about the circumstances of the risk, is an important unit of risk identification,
  - d. In deciding which risks will be addressed at the unit and which will be proposed as university-wide, the following circumstances must be considered:
    - i. frequency of risk,
    - ii. the potential impact of the risk on the Unit or the BUT as a whole (whether the impact is financial or non-financial, including reputational damage),
    - iii. the ability to manage risk effectively,
    - iv. the costs associated with the choice and application of the selected risk management scenario.

**PART B**  
**Risk analysis and evaluation**

1. The aim of the risk analysis and evaluation is to create a detailed description of the identified risk, quantify its financial impact and determine the overall value of the risk.
2. Risk analysis and evaluation framework:
  - a. based on a description of what the risk may cause and the likelihood of it occurring, the risk manager evaluates the risk according to Table 1.

*Table1 Consequence and risk evaluation*

|                                                                                             | Score | Verbal description                                                                                                                                               |
|---------------------------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>What can the risk cause, what will be its consequence? (N - consequence)</b>             | 4     | Very significant - the impact of the risk unacceptably threatens the operation of the Unit/UT and the performance of the activities for which it was established |
|                                                                                             | 3     | Significant - the impact of the risk significantly affects the fulfilment of the tasks and objectives of the Unit/BUT                                            |
|                                                                                             | 2     | Small - the impact of the risk does not significantly affect the fulfilment of the tasks and objectives of the Unit/BUT                                          |
|                                                                                             | 1     | Very small - the impact of the risk will not affect the operation of the Unit/ BUT                                                                               |
| <b>How likely is it that negative consequences of the risk will occur? (V - occurrence)</b> | 4     | Almost certain - the situation is expected to occur in most cases (the situation will occur)                                                                     |
|                                                                                             | 3     | Probable - the event is likely to occur (the situation should occur)                                                                                             |
|                                                                                             | 2     | Unlikely - situation could occur (situation could occur)                                                                                                         |
|                                                                                             | 1     | Almost impossible - the situation could occur in very rare cases (the situation could only occur by surprise)                                                    |

- b. The risk manager quantifies the financial impact of the risk in question on the Unit. He/she shall use Table 2 to categorise the risks by financial impact.

*Table2 Risks by financial impact*

| acceptability of risk | the financial impact of the risk |    |           | score |
|-----------------------|----------------------------------|----|-----------|-------|
| Unacceptable          | 1 000 001 and more               |    |           | 5     |
| significant           | 500 001                          | to | 1 000 000 | 4     |
| medium                | 300 001                          | to | 500 000   | 3     |
| insignificant         | 50 001                           | to | 300 000   | 2     |
| almost unnoticeable   | 0                                | to | 50 000    | 1     |

The risk manager determines the total value of risk using the following formula:

|                                                           |
|-----------------------------------------------------------|
| Total value of risk = consequence x incidence x financial |
|-----------------------------------------------------------|

- c. Based on the total value of the risk, the risk manager determines whether it is a risk:
  - i. negligible - i.e. a risk that does not pose a financial threat to the Unit or the impacts are acceptable. Such a risk is only further monitored,
  - ii. standard - i.e. a risk that puts the Unit at risk, financially or otherwise, and an appropriate strategy must be chosen to address it.

The risk manager informs the management of the unit about the identified risks and their division into minor and standard risks.

- d. For standard risks, the risk manager assesses and decides whether the risk is only a risk of the units or whether the risk threatens several units or the entire BUT. The risk that goes beyond the level of one unit is then proposed by the VIŘR for resolution at the university-wide level.
- e. The risk evaluation process results in the determination of the risk category according to Table 3.

*Table 3 Risk categories and coping strategies*

| Risk categories    | Level of risk                                  | Total risk value | Verbal description                                                                           |                                                                                                         |
|--------------------|------------------------------------------------|------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>LOW RISK</b>    | Negligible risks (negligible risks)            | 1-3              | Risk unaddressed or being taken. Recommended strategies: risk acceptance or risk monitoring. | Risk management is at the level of heads of divisions/departments/institutes.                           |
|                    | Acceptable risks (standard risks)              | 4-10             | The risk is addressed. Recommended strategies: acceptance, reduction or monitoring of risk.  |                                                                                                         |
| <b>MEDIUM RISK</b> | Risk conditionally acceptable (standard risks) | 11-50            | Risk addressed. Recommended strategies: risk reduction or transfer.                          | Risk management is at the unit management level, for university-wide risks at the BUT management level. |
| <b>HIGH RISK</b>   | Risk unacceptable (standard risks)             | 51-80            | Risk addressed immediately. Recommended strategies: risk reduction, transfer or avoidance.   | Risk management is at the unit management level, for university-wide risks at the BUT management level. |

- f. The manager has the option to mark the selected risk with a priority flag in the risk module. The risk manager thereby expresses the opinion that the risk should be addressed without delay.
- g. The risk manager keeps records of the entire process, including supporting documentation, in the risk management module in the BUT IS, see section D.

### PART C Risk treatment

1. The following risk approach strategies can be selected within the treatment phase:
  - a. **risk avoidance** - with this strategy, the activity or project that is at risk will not be implemented.
  - b. **risk transfer** - this strategy means transferring the risk in the form of insurance or outsourcing the activity to which the risk is associated. Choosing this strategy will not eliminate the risk in question completely, but it will significantly reduce the potential damage that the risk may cause.
  - c. **risk reduction** - a strategy in which steps are defined and implemented that will lead to a reduction of risk, or possibly to the complete elimination of risk.
  - d. **Risk acceptance (risk taking)** - the strategy of acceptance is that the risk will be taken, no conscious steps will be taken to eliminate or mitigate it. The probability with which the risk may occur is low, or the impact of the risk on the BUT is tolerable.
  - e. **Risk monitoring** - monitoring consists of monitoring the identified risk and reassessing the approach strategy if the forecast of its acceptability deteriorates.

2. Risk management framework procedure:
  - a. The risk guarantor, depending on the risk analysis performed, will recommend to the RIA member which risk approach strategy to choose,
  - b. the member of the IEBR will discuss the design of the sponsor with the management of the Unit and decide on an appropriate approach strategy,
  - c. The risk guarantor, in cooperation with the work team and depending on the chosen risk approach strategy, defines the steps to be implemented,
  - d. The SIRC member, together with the Unit leadership, approves the proposed actions, including the timeline and responsibilities,
  - e. The risk guarantor and the team will estimate the cost of implementing the measure and assess whether the benefits of the measure outweigh its costs,
  - f. The risk guarantor, together with the work team, implements the proposed actions to eliminate or mitigate the risk in question,
  - g. The risk guarantor keeps the risk manager and the member of the IACR informed of the progress of the solution,
  - h. the risk manager verifies the effectiveness of the actions implemented,
  - i. the risk manager updates the data in the BUT IS.

#### **PART D**

##### **Record keeping**

1. The documentation is kept in the risk management module of the BUT IS, mainly in risk cards. The risk card contains in particular:
  - a. description of the risk - name of the risk, status of the risk, detailed description of the risk itself, cause and impact of the risk,
  - b. the chosen risk management strategy,
  - c. a description of the measures taken, the timetable for implementation, the guarantor and the composition of the working team.
2. The risk management module in the BUT IS can be accessed by the risk managers of the units and members of the VIŘR.
3. Risk information is entered into the module by:
  - a. risk manager for risks that are identified and addressed on its Unit,
  - b. Secretary of the MHA for risks that are addressed at the university-wide level.
4. Once the risks have been treated, it is necessary to monitor the relevant threats and update the risk evaluation if changes are detected. For risk management, it is necessary to regularly record information on the progress of the management in the BUT IS and to update the status of the work in progress in the context of addressing the risk in question. The risk management states that may occur are listed in Table 4.

*Table4 Risk resolution statuses*

| <b>Risk management states</b> | <b>Description of condition</b>                                                                                                  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Identified by                 | The threat has been identified.                                                                                                  |
| Elaborated %                  | The risk manager, in cooperation with the management of the unit, decided on the risk solution. The status of the solution in %. |
| Completed                     | The risk has been eliminated and is no longer being managed.                                                                     |
| Monitored by                  | Risk is tracked over time.                                                                                                       |

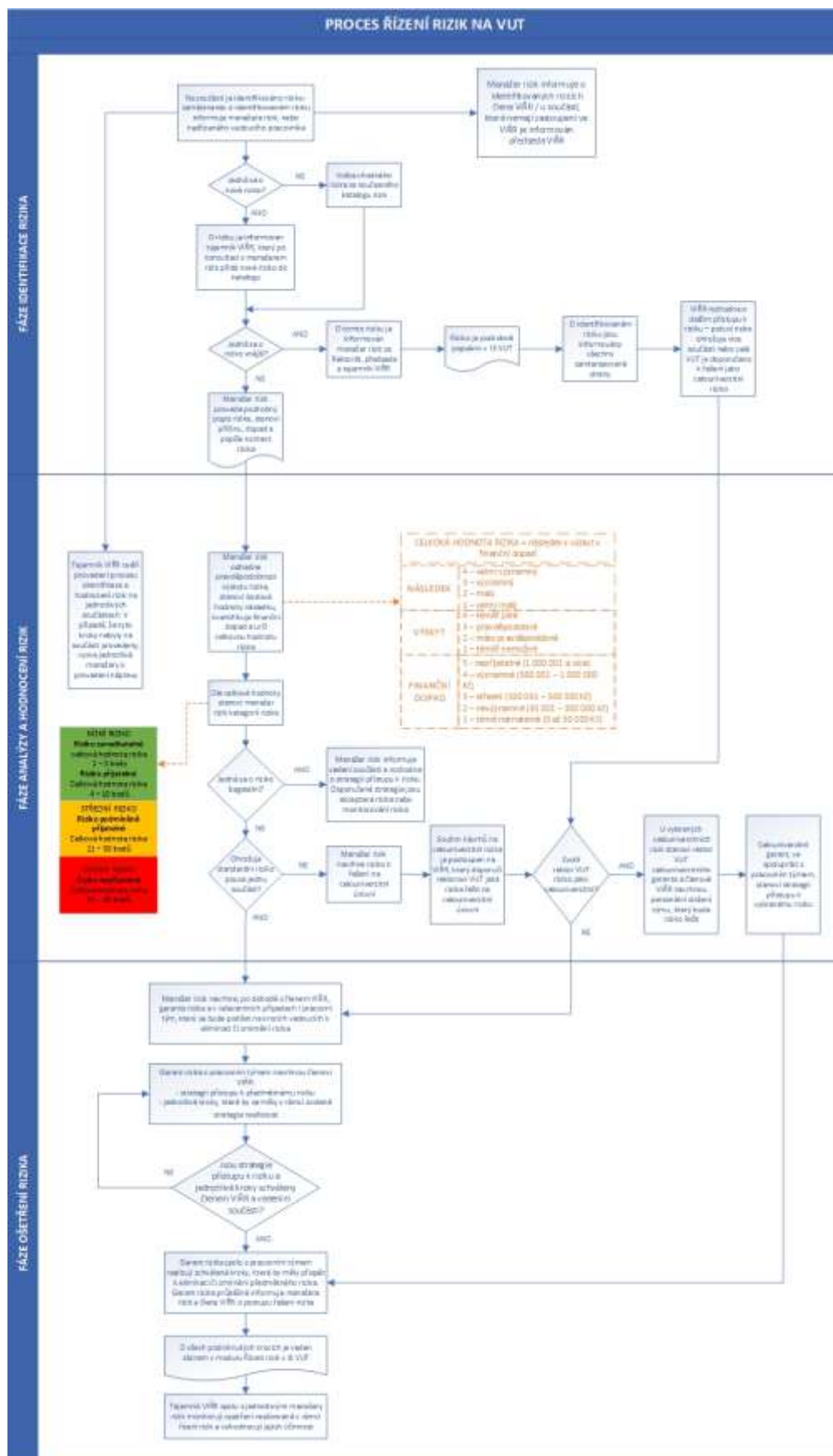
|          |                                                                                                                                                                                                                                      |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accepted | Risk not addressed. The condition leading to the damage has an acceptable level of risk within the operation of the unit or the University, or has a completely minimal impact. Conscious steps are not taken to eliminate the risk. |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

5. A summary of the risk assessment, activities and measures implemented for the year is provided in the Risk Management Summary Report.

**PART E**  
**Communication**

1. The VIŘR regularly informs the Rector on the resolution of university-wide risks.
2. The Rector will decide which risks will be addressed as a priority. In the event that the Rector decides to address a new previously unidentified risk, the Chair of the VIŘR is responsible for its management.
3. The risk sponsor shall regularly inform the unit risk manager of how selected risks are being addressed. The risk manager shall subsequently forward information on the risks addressed to the member of the IRB.
4. The University-wide risk guarantors work with the Chair of the VIŘR.
5. If a new risk is identified, the Risk Manager informs the Secretary of the IADC (for this purpose, he/she can use, among others, the email address [rizika@vutbr.cz](mailto:rizika@vutbr.cz)). The Secretary shall inform the Chair of the IACR of the emergence and inclusion of new risks in the catalogue.
6. The purpose of communicating identified and addressed risks is to:
  - a. Ensuring timely and unbiased risk information,
  - b. setting up cooperation between the persons in charge of the process of dealing with the selected risks.
7. The risk management process is communicated at regular working meetings of the IADM and risk managers, in justified cases (priority risks, high risks) communication of all stakeholders is carried out without delay.

### Risk management process flow chart



**Liability Matrix - STANDARD RISK**

| S - APPROVES | O - ANSWERS | N - DOES NOT | PR - DISCUSSES | P - IN PROGRESS | V - CREATES |
|--------------|-------------|--------------|----------------|-----------------|-------------|
|--------------|-------------|--------------|----------------|-----------------|-------------|

| Activity/stakeholders                                                       | Rector of BUT | President of the VIŘR | Member of the VIŘR | Secretary of the VIŘR | Risk Manager | Risk Guarantor | Work team | VUT employees | Unit management |
|-----------------------------------------------------------------------------|---------------|-----------------------|--------------------|-----------------------|--------------|----------------|-----------|---------------|-----------------|
| Identification of risks                                                     | -             | -                     | -                  | -                     | P/O          | -              | -         | P             | -               |
| Entering new risks into IS                                                  | -             | -                     | -                  | P/O                   | N            | -              | -         | -             | -               |
| Risk analysis and evaluation                                                | -             | -                     | -                  | -                     | P/O          | -              | -         | P             | -               |
| Design of the guarantor                                                     | -             | -                     | S                  | -                     | N            | -              | -         | -             | S               |
| Work team design                                                            | -             | -                     | -                  | -                     | S            | N              | -         | -             | -               |
| Choice of risk approach strategy                                            | -             | -                     | S                  | -                     | S            | N              | N         | -             | LAW             |
| Defining the steps that will be taken to address the risk                   | -             | -                     | S                  | -                     | -            | N/O            | N         | -             | LAW             |
| Implementation of steps to mitigate or eliminate risk                       | -             | -                     | -                  | -                     | -            | P/O            | P         | -             | -               |
| Monitoring of the implemented actions and evaluation of their effectiveness | -             | -                     | -                  | P                     | P/O          | -              | -         | -             | -               |
| Revision of the risk management methodology                                 | -             | O                     | N                  | N                     | N            | -              | -         | -             | -               |
| IS Administration BUT - FACULTIES RISKS                                     | -             | -                     | -                  | -                     | P/O          | -              | -         | -             | -               |
| Summary Report                                                              | S             | V                     | LAW                | V                     | -            | -              | -         | -             | -               |

**Responsibility Matrix - UNIVERSAL RISK**

| S - APPROVES | O - ANSWERS | N - DOES NOT | PR - DISCUSSES | P - IN PROGRESS |
|--------------|-------------|--------------|----------------|-----------------|
|--------------|-------------|--------------|----------------|-----------------|

| Activity/stakeholders                                                       | Rector of BUT | MORE    | Secretary of the VIŘR | Risk Manager | Risk Guarantor | Work team | BUT employees |
|-----------------------------------------------------------------------------|---------------|---------|-----------------------|--------------|----------------|-----------|---------------|
| Identification of risks                                                     | -             | -       | -                     | P/O          | -              | -         | P             |
| Risk recommendations for a university-wide solution                         | N/S           | N / LAW | N                     | N            | -              | -         | -             |
| Design for a university-wide guarantor                                      | N/S           | -       | -                     | -            | -              | -         | -             |
| Design of the university-wide risk management team                          | N             | N       | N                     | -            | N              | -         | -             |
| Choice of risk approach strategy                                            | S             | S       | -                     | -            | N              | N         | -             |
| Defining the steps to be implemented in managing the risk                   | -             | S       | -                     | -            | N/O            | N         | -             |
| Implementation of steps to mitigate or eliminate risk                       | -             | -       | -                     | -            | P/O            | P         | -             |
| Monitoring of the implemented actions and evaluation of their effectiveness | -             | -       | P                     | -            | -              | -         | -             |

|                                              |   |   |   |   |   |   |   |
|----------------------------------------------|---|---|---|---|---|---|---|
| BUT IS Management -<br>University-wide risks | - | - | 0 | - | - | - | - |
|----------------------------------------------|---|---|---|---|---|---|---|