materials for V28: V27_B_risk register

linked to work package KPB8 – Proj. Documentation
(month of preparation of V27_B is M12)

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BRAIN:IT

**M0 = risks estimated at the time of project submission*

**IN=internal, EX=external, UNI=university, ORG=organisation*

**preventive measures were deliberately defined for risks with a higher probability of occurrence (2) so that they could be avoided*

Designation	Risk name	Risk description	Month of risk definition	Link to WP	Probability of occurrence	Severity	Risk category	Structure (internal/external; university/organisation)	Triggering event (trigger)	Preventive measures - P	Corrective measures - N	Response (avoid, reduce, contingency plan, transfer to another entity, share impacts among partners, acceptance; exploit the opportunity, enhance outputs based on the opportunity, reject the opportunity)
R1	Insufficient objectivity in the preparation of proposals	Failure to assess the views and specifics of both partners involved in the creation of the final solution; preference for only one side	M0	KPB1, 2, 3, 4	1	2	Low	IN, UNI, ORG	Lack of objectivity detected during acceptance of the output by the project manager	-	Diverse team composition; use of a combination of methods	reduce
R2	Failure to include relevant entities in decision-making on individual parts of the project	Omission of selected stakeholders from decision-making; relevant stakeholders will not be given the opportunity to express their views	M0	KPB5, 6, 7	1	2	Low	IN, UNI, ORG	Failure to include relevant entities detected during acceptance of the output by the project manager	-	Project communication strategy; RACI matrix; contracts	reduce
R3	Failure to include an essential part of the solution in testing	A specific part of the solution not included in an important type of testing	M0	KPB5	2	3	High	IN, UNI, ORG	Identification of an error in later phases of the project that could have been detected during testing	Collective approval of the list of tests	List of key parts of the solution	avoid
R4	Overlooking significant trends when updating the knowledge base	Failure to allocate sufficient time to examine key trends	M0	KPB1, 2, 3	2	2	Medium	EX, UNI	During the implementation of activities building on the updated knowledge base, significant trends emerge that are not included in it	-	Continuously updated project knowledge base	contingency plan
R5	Non-acceptance of prepared publication outputs by relevant journals	Failure to assess the time needed for timely submission of the publication to the selected journal; the approval and review process for articles varies in length and may take from several months to a year; insufficient quality of the output; unsuccessful peer review	M0	KPB6	3	3	High	EX, UNI	Rejection by reviewers or the editor	Diversification of publication sources	Use of best practice and experience with previous publication outputs	avoid
R6	Overlooking available technological solutions on the market	Failure to allocate sufficient time to examine available technological solutions	M0	KPB3	1	3	Medium	EX, UNI	When integrating parts of the solution into a single whole, another suitable technological solution emerges that was not used	-	Continuously updated project knowledge base	contingency plan
R7	Failure to monitor bottlenecks in the project	Not all bottlenecks were identified, and others were identified only spontaneously when they actually occurred	M3	KPB1, 8	1	3	Medium	IN, UNI, ORG	A bottleneck occurred that had not been identified in advance (capacity overload, failure to meet deadlines...)	-	Analysis of the bottleneck and rapid application of operational measures	share impacts among partners
R8	Obsolescence of the technology used as a result of unexpected innovations and changes in standards	Failure to capture relevant standards or potential legislative changes due to insufficient forecasting	M3	KPB1	2	2	Medium	EX, UNI	A competing solution applying newer technology has appeared	Selection of team members working on the given WP with the necessary expertise and up-to-date overview in the given field	-	avoid
R9	Communication discrepancies between partners	Unnecessary interpersonal conflicts; differences in preferences for communication channels	M3	KPB8	1	1	Low	IN, UNI, ORG	Emergence of communication noise; repeated requests for information already provided	-	Obtaining preferences (survey) and proposing new communication channels/options	reduce
R10	Inability to use the planned allocated staff capacities	Allocated capacities were disrupted by the arrival of unforeseen tasks unrelated to the project	M3	KPB1, 8	1	3	Medium	IN, UNI, ORG	Review of project progress at the relevant milestone	-	Review of newly arising tasks unrelated to the project and search for a possible transfer of these tasks to other members of the organisation	share impacts among partners
R11	Change requested by stakeholders	Unexpected requirements from stakeholders that could not originally be captured	M3	KPB1	1	2	Low	EX, UNI, ORG	A new, previously not included, requirement from a specific stakeholder was identified	-	Review of new requirements - where it is possible to include the requirements in the project, they will be implemented; where it is not possible to include them in the project, the reasons will be communicated to the stakeholders	share impacts among partners
R12	Failure to include an essential available solution in the analysis	A specific available solution was not included in the analysis	M3	KPB1	2	3	High	EX, UNI, ORG	Failure to include an essential available solution detected during acceptance of the output by the project manager	Selection of team members working on the given WP with the necessary expertise and up-to-date overview in the given field	Adjustment of the plan so that the late-identified new solution can be included in the final product of the project	avoid
R13	Omission of an important criterion for a successful comprehensive assessment of the most suitable solution	An essential criterion was not included in the tool for selecting the final solution	M3	KPB1	1	2	Low	IN, UNI	Omission of an important criterion detected during acceptance of the output by the project manager	-	Review by another member of the project team who is not working on this output - obtaining an outside view	avoid
R14	Error in the logical links between activities from different work packages	Overlooking the interdependence of activities and their outputs across different work packages	M3	KPB8	2	2	Medium	IN, UNI, ORG	Review of project progress at the relevant milestone	Review *peer review* by another project manager or member of the organisation with project management knowledge who is not involved in this project	-	avoid
R15	Errors in the materials for the updated project justification	Neglected review of materials; insufficient explanation of the requirements for individual materials; incomplete preparation of materials	M3	KPB8	1	2	Low	IN, UNI, ORG	Error detected during acceptance of the output by the project manager	-	Detection of errors by the project manager and request to the team members concerned to correct them within a set deadline	avoid
R16	Insufficient accuracy of the selected ML algorithms	The machine algorithms used may not achieve the required level of accuracy, which may lead to false positive or false negative results and thereby jeopardise the reliability of the entire solution	M6	*KPB3*	1	2	Low	IN, UNI, ORG	During deployment of the algorithms, insufficient accuracy on the test data set was detected	-	Adjustment of the algorithm selection criteria, repetition of the ML algorithm selec	reduce
R17	Insufficient datasets for testing ML algorithms	A low volume, poor quality or non-representativeness of data may significantly limit the ability of the algorithms to learn relevant patterns, which reduces their usability in real deployment	M5	*KPB3*	1	1	Low	IN, UNI, ORG	During the review of datasets before the start of testing	-	Supplementing the datasets to the required level	reduce
R18	Insufficient materials for the selection of SOC modules	If sufficient technical and operational requirements are not gathered, unsuitable security modules may be selected, which reduces the overall effectiveness of the SOC solution	M6	KPB2	1	2	Low	IN, UNI, ORG	At the point of creating the solution architecture, it was discovered that the modules do not meet all the needs of future tenants	-	Supplementing the materials and re-selection of SOC modules	reduce
R19	Incorrect selection of technologies for the SOC system	The selection of incompatible, obsolete or poorly scalable technologies may adversely affect the performance, extensibility and security of the SOC system	M6	KPB2	1	3	Medium	IN, UNI, ORG	The selected technologies do not meet all the relevant defined requirements at the final check before moving to the next step	Emphasis placed on filtering out obsolete and poorly scalable solutions during the initial selection; thorough compilation and explanation of all required selection criteria; clear communication of the required criteria to the persons responsible for selecting technologies for the SOC system	-	avoid
R20	Poor architectural design of the SIEM	Errors in the design of the SIEM system architecture (e.g. unsuitable data flows, weak connection to logging systems) may cause inefficient event processing and jeopardise the timely detection of security incidents	M12	KPB4	2	2	Medium	IN, UNI, ORG	When completing the proposed solution, an error related to the SIEM architecture was discovered	Combination of architecture expertise on the part of both partners	-	share impacts among partners
R21	Unsuitably selected architecture for the SOC	The selection of an architecture that does not take into account the size of the organisation, the number of data sources or the incident management capabilities may lead to inefficient operation of the entire security operations centre	M12	KPB4	1	3	Medium	IN, UNI, ORG	When completing the proposed solution, an error related to the SOC architecture was discovered	Combination of architecture expertise on the part of both partners	-	share impacts among partners
R22	Poor selection of reputable journals - specification of the negative event following on from R5	Submitting articles to journals that are not sufficiently specialised or do not reflect the focus of the research may reduce the chances of publication and weaken the scientific impact of the project	M8	KPB6	1	2	Low	IN, UNI	Articles rejected by the editor before peer review	-	More thorough selection of a new journal before submitting the same article; recommendation by the editor to transfer it to another relevant journal	contingency plan
R23	Late submission of articles for peer review - specification of the negative event following on from R5	Late submission of articles may lead to missed deadlines, project delays or the loss of the opportunity to publish in high-quality journals	M8	KPB6	2	3	High	IN, UNI	Monitoring the progress of the peer review, communicating with editors and publishers	Planning the submission of articles sufficiently in advance based on previous experience with previous publishers	Submission of prepared publication outputs, created as a back-up, to journals which, based on experience, have a shorter publication time but still meet the required parameters	avoid
R24	Incompatibility of sub-components, unsuccessful completion of the proposed solution	After the separate selection of the individual suitable components, problems were identified when completing the solution, and it was not possible to combine the individual components into a functional whole	M22	KPB5	2	3	High	EX, UNI, ORG	Detection of shortcomings during the preparation of output V16	During the analysis and design of parts of the solution, carry out a final compatibility check with the other components	Involvement of the responsible investigators for work packages KPB1, KPB2 and KPB3 in the design of an alternative solution	avoid
R25	Hampered coordination of team members during the summer months (M16, M17) due to the project team taking leave	Leave taken by different members on different dates caused irregularity in coordination and made it more difficult to plan joint meetings	M16, M17	KPB4	1	3	Medium	IN, EX, UNI, ORG	Two unsuccessful attempts to schedule an internal meeting; lack of preparedness of participating members at the meeting	Creation of a clear tool for recording planned leave and transparent sharing of this information	Increased coordination of the project management team, repeated reminders and flexible replacement of large meetings with several smaller meetings (with a smaller number of selected members)	share impacts among partners