



NostalgiaBits

AAL project

Risk management plan



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DEFINITION OF RISKS AND RISK MANAGEMENT PLAN

in the implementation of international AAL project called Nostalgia Bits

The aim of the risk management activity, plan connected to the project implementation is through the use of available information, knowledge and methodology base regarding the given project (defined in the AAL project proposal)

- (1) mapping and definition of range of potential forthcoming, possible negative events;
- (2) definition and monitoring of real probability level of their occurrence and the seriousness of their consequences;
- (3) definition of tools for minimalization and systematic management of insecurities and consequences of events;

The objective of this risk management plan: planned and regulated implementation of risk management activity to implement the Nostalgia Bits project tasks and objectives on the optimal level of implementation with a risk level which is acceptable for all project partners participating in the implementation.

Definitions

Risk

Every unexpected, uncertain event/factor, which occurrence, impact makes an effect on the project implementation and/or project results

Process of risk management

- (1) Systematic, documented identification of risk factors
- (2) Complete analysis of factors based on the probability of occurrence and degree of their effects. Result of this activity is the list of factors, which shows the focus from the biggest danger to the smallest one for the stakeholders.
- (3) Creation of reaction strategy, so the definition and implementation of planned action plan for prevention or reduction of effects.
- (4) Re-evaluation (identification, analysis) of risk factors along the project implementation milestones and – if necessary – correction of reaction strategy

Methodology tools used for identification of risk factors

- (1) Expert opinion, expert consultancy, evaluation of experiences
- (2) Analysis of project implementation process and of coherence system of its linkages.

Alternatives for risk factors' management

- (1) Removal of risk factors – elaboration of such a project implementation plan in which the defined factor cannot occur
- (2) Reduction of feasibility of risk occurrence and/or the degree of risk's effects – definition of action and process control plans and responsibility areas

- (3) Sharing of risk effects – use of risk and work sharing strategies between stakeholders (institutions, persons etc.)
- (4) Elaboration of alternative task implementation plans
- (5) Acceptance of risk factors with the creation of eligible financial reserves

Risks defined on the present information and knowledge regarding the successful project implementation, which enables the achievement of NoBits project objectives will be presented in details within the following parts of this document. Three steps of international risk management practice will be mapped in the structure of this study:

- (1) Identification: in tabular format the risk factors regarding project management and project implementation will be presented. Definition of structure of collected risk factors:
 - (I) Risk factors based on the management of project activities
 - (II) Risk factors which originate from the environment of project implementation and which has an important effect on the project implementation, project management
- (2) Evaluation: visualization of independent, measurable parameters of each risk factor
- (3) Management: identification of activities suggested for elimination or reduction of risk factors

IDENTIFICATION OF RISKS, RISK FACTORS

I. Risks, risk factors coming from the project implementation and from the operation of the project as a system

I. 1. Project management (PM)

I.1.1 Operation, management of PM organization

Summary of objectives, tasks

- Creation and maintenance of regulated, stable processes of project implementation
- Composing the right PM staff (group) who are able to ensure the reliable project implementation
- Keeping contact with NoBits consortium partners and other stakeholders of the project
- Regulated compliance of information flow process based on data
- Organization of consortium meeting which can ensure the successful project implementation and cooperation of NoBits partners
- Preparation of decisions, finalization of decisions
- Validation of decisions/information on the decisions to NoBits project partners and other stakeholders

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Problems in creation of separate account and documentation system	Changes in national intermediate authority which can cause problems in contracting, administrative and financial issues
	Storage and registration of original documentation in connection with NoBits Project, and their presentation at different on-site monitoring visits	Changes in criteria of cost-accounting (on national or international level at AAL projects)
	Problems in quality management and the creation of documentation suitable for cost-accounting	

Professional	Conflicts of interest between project management members	Project implementation according to the determined project procedures can be in contradiction with the national operative legal regulation
	Lack of information on project information and available documentation	External governmental authority of some project partners may change
	Lack of sanctions in the case of non-performance	External governmental authority of some project partners can define new focus areas for the given project partner organization/institution
	Changes in key persons of project management team or in the decision making persons	
	Availability of key PM persons is restricted (because of implementation of other projects, tasks etc.)	
	Decision making process requires too much time	
	Longer absence of decision making persons (for example during summer holiday etc.)	
	Absence of official representative of NoBits project partners (it can cause difficulties in the case of official signature requests)	
	Mistakes in decision preparation process or in decision making procedures	
	Implementation of decision which serves the interests of one or more project partners but which are not harmonised to the NoBits project goals	
	Communication problems between the PM organization members (misunderstanding, distortion of information)	

I.1.2 Communication and contact with subcontractors

Summary of objectives, tasks

- Preparation of contracting issues
- Quality assurance – management, monitoring and control of performance quality based on the official contracts
- Reaction and clear answers to questions based on performance, implementation of tasks defined in subcontracts, preparation of decision making

- Suitable information flow and communication between NoBits project partners and subcontractors (if it is necessary or requested)

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Request of additional cost budget from the project partners based on their changed expectations or needs	Additional costs occurred because of the implementation methodology used by subcontractor
	Payment of subcontractors' invoices after the official deadline / prompt	Request of subcontractors' payment occurs not as scheduled
	Subcontractor's invoice does not match the requirement of accountability or project administration requirements	Changes in national or international AAL procedures which can have effect on payment of subcontractors' invoices
	Delay in receiving the grant amount can cause problems and difficulties in payment of subcontractors' invoices	Inner financial problems of the subcontractor which can have an effect of his performance in NoBits project
Professional	No clear definition of project tasks and responsibilities between project partner(s) and subcontractors	Quality of subcontractor performance is different from the requirements defined in contract
	Difficulties in managing decision making situations coming from subcontractors, delays in decision making	Subcontractor's operation in the market becomes impossible

I.1.3 Communication, cooperation with the Intermediate Authorities

Summary of objectives, tasks

- Information on the NoBits project implementation to the national and international AAL authorities
- Coordination and conciation with responsible persons of AAL Intermediate Authorities regarding financial and professional issues of the project or changes in procedures
- Reply to information requests coming from the national and international AAL Intermediate Authorities

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	No consequent use of financial regulations and procedures, lack of its detailed knowledge	Changes in financial procedures of the national or international Intermediate Authorities
	Discrepancy in the project procedures and the own procedures of project partners	Delay of transferring the requested grant amount
Professional	Communication between the PM organization/project partners and Intermediate Authorities based on not relevant documentation	Changes of contact persons within Intermediate Authorities
	Communication between the PM organization/project partners and Intermediate Authorities are blocked because of personal issues (changes of responsible persons etc.)	Reorganization or elimination of Intermediate Authorities
	Delay in adopting changes in project implementation procedures requested by Intermediate Authorities	Problems of communication channels and/or administration interfaces at Intermediate Authorities
		Delay in professional project implementation based on the late reply from Intermediate Authorities

I.1.4 Administration and reporting*Summary of objectives, tasks*

- Definition and creation of templates, sample documentation which can support and prove performances implemented within NoBits project (personal performances, subcontractors' performances etc.)
- Documentation on project implementation
- Preparation of financial and professional project reports

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Documents used for support and prove of NoBits project implementation with formal mistakes or with mistakes in their contents	Subcontractors use their own documentation system (not the received, correct documentation templates)
	Delay in use of project documentation in the company's/institution's accounting system	Delay in payment (for example in the case of subcontractors' performances) because the documentation provided by external partners is incomplete
	Mistakes in administration system of project financial issues can cause over or under spending in costs	Problems in reporting system of AAL national or international Intermediate Authorities
	Delay in composing the project reporting documentation which can cause delay in grant payment and/or financial instability of the project	
Professional	Delay in creation of reports on project implementation	Subcontractors use not the correct documentation templates
	Creation of incomplete project reports, which can cause delay in project financing issues	Deficiency in information on reporting issues (for example lack of information coming from Intermediate Authorities)
	Differences in project indicators (based on project documentation)	The performances provided by subcontractors are different as it is defined in the Grant Agreement of project partners

I.1.5 Monitoring and control activity based on administration system*Summary of objectives, tasks*

- Operation of an up-to-date monitoring system which serves as a basis for analysis of project implementation eligible to the project schedule
- Presentation of the contracted and real implemented tasks, analysis of differences in them
- Planning of corrections in the case of different project implementation as scheduled
- Operation of up-to-date information and reporting system on the project implementation

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Functional defects in administration system causes wrong financial data on project implementation	Lack of information provided by subcontractors
	Defects in administration system based on human mistakes which causes temporal and figures differences in payments connected to NoBits project	
	Correction of professional mistakes and their financial settlement happens not in the same time, which can cause problems in the project's financial administration	
	Delay in transferring the grant amount can cause problems in payment of subcontractors' invoices or in hiring new employees	
Professional	Operation of an administration system which cannot manage the complexity of project implementation	Occurrence of factors which cannot be planned and are independent from the project partners
	Incomplete definition of relationships between different project tasks	
	Results of BPR (or similar changes) is not available in the project administration system	

I.1.6 Management of financial processes

Summary of objectives, tasks

- Assurance of Cash Flow
- Assurance of financial performance during the project implementation phase, optimisation of financial issues regarding NoBits project implementation
- Planning of payments regarding project implementation
- Preparation and submission of financial reports according to the project implementation schedule

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Lack of liquidity (based on inner calculation on administration mistake)	Suspension of grant amount's payment by national authorities
	Problems in financial issues connected to reporting activity	Unexpected changes in grant amount's transfer schedule
	Delay in grant amount drawdown based on mistake in calculation or administration	Increase of planned costs based on changes in national tax regulations
	Increase of prices of services or goods achieved within NoBits project based on administrative failure or delay in orders	Changes in currency exchange rates
Professional	Incomplete preparation of decision regarding the increase of cost related to project implementation	Financial instability of subcontractors
	Incorrect planning of cash flow and needs	
	Delay in payment of purchases based on incomplete administrative documentation	
	Formal or professional mistake occurring in financial project reports	
	Problems of separate accounting system	
	Durable financial insolvency of a project partner	

I. 2. Tasks regarding NoBits project implementation

I.2.1 Monitoring, control, administration – Obligation of accountability

Summary of objectives, tasks

- Coordination of project partners implementing development tasks and activities within NoBits project
- Effective communication between project partners on the joint implemented project tasks
- Communication on projects tasks which are connected to each other
- Implementation of development activities within NoBits project
- Monitoring of project implementation (according to the schedule)
- Management of changes in project implementation

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Incomplete technical requirements which can cause difficulties in project implementation	Underestimation of project implementation's costs
	Incomplete technical requirements which can cause increase in project budget	Increase in costs based on subcontractors' mistake
	Mistakes in input data of the administration system which can cause difficulties in financial performance	
Professional	Mistakes in communication cause the delayed realization of not acceptable performance in project implementation	Problems in cooperation with subcontractors
	Problems in communication between project partners	Subcontractors give wrong information on their task implementation activities
	Incompleteness in processes which are built on each other	Changes in national regulation systems can have an effect to the project implementation
	Incomplete information for decision making	
	Difficulties, delay in decision making	

1.2.2 Ethical issues*Summary of objectives, tasks*

- Collection, analysis and share of personal data
- Development of public and private spheres of NoBits portal
- Definition of users' rights
- Safe storage of saved users' data
- Development of sufficient safety applications

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Saving and management of collected Human data require special equipment	Changes in the national legislations on Human data collection
		Differences in the national legislations on Human data collection at project partners
Professional	Differences in principles on Human data collection at the project partners	Resistance of target group regarding data collection

		New (prohibitive) regulation on observation of people's location
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1.2.3 Technology innovation

Summary of objectives, tasks

- Development of NoBits portal and connected services which must be unique (novelty) in the market
- Development of easily usable portal and connected devices, because end-users have totally different IT skills
- End-users (elderly persons) must be able to use the final NoBits portal and connected devices easily, while it must be an interesting experience for grandchildren, too
- Final results of NoBits project must be adaptable with the new technological achievements (which are going to appear in the market)
- Technology innovation within the developed product must be attractive for potential business

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Use of newest technologies available on the market requires more sources as planned	Prices of competitive products change
	Implementation of new technologies based on market changes with more costs	
Professional	Project plan does not calculate with the new achievements introduced into the market during the project development phase	Totally new innovations entering the market during the implementation phase
	No clear identification of real user needs	Changes of elderlies' habits regarding using IT tools
	Technology assumptions defined in the project proposal are not close to the real end-users expectations	New requirements on the developed NoBits portal coming from the market
	Choice of the not suitable technology direction (which will not be competitive enough on the market in the future)	

1.2.4 Development activity

Summary of objectives, tasks

- Collection of user requirements and system design
- Development of Artefact Management and Processing Systems
- Portal development
- Development of affective demonstration system
- Implementation of field trials
- IPR

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Exit of a project partner causes difficulties regarding further development activities	Changes in national AAL funding systems might endanger the development process
	Differences in the development status at project partners can cause financial problems as well	
Professional	Different project implementation status at NoBits partners can effect problems at integration	New version of integrated elements will be available on the market
	Using wrong inputs at development process can endanger the further business success of NoBits portal	Planned inputs/elements required to the development are not available on the market
	Wrong defined development criteria	
	Exit of a project partner may result development problems	
	Discussion between the partners in development directions	

1.2.5 Business model development, creation

Summary of objectives, tasks

- Market segmentation
- Creation of SWOT analysis regarding NoBits project and the final product
- Composing an exploitation plan
- Definition of NoBits partners participating in the commercialization of final NoBits product
- Creation of an operable business structure for commercialization of final NoBits product

- Plan for managing obligatory tasks during the maintenance period of NoBits project
- Management of future IPR and income issues

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Mistakes in market segmentation	Competitive portal enters into market before the finalization of NoBits portal
	No clear definition of second and other target group categories	
Professional	Definition of wrong conclusions based on former experiences	Competitive portal with really similar functionalities will be available on the market
	Choice of not the best business model	Different user habits on the different market
	Business models can be different by countries	Channels to the parget groups might change easily and can be different at each country
		Effects of the financial crisis
		Mistrust of end-users can endanger the business success of final portal
		Incorrect competitive company can destroy the whole market

I.3. Purchase of devices, assets

I.3.1 Monitoring, control, administration

Summary of objectives, tasks

- Coordination of devices, assets suitable for fulfilling the defined functional criteria
- Use of official institutional, corporation purchase procedures in the case of purchasing devices within NoBits project
- Definition of cost and deadline framework of purchases and their coordination

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	The former defined requirements regarding used devices is not good enough anymore (it does not fit to the market supply and/or user requirements)	Risk of change of exchange rates in the case of some project partners
	Original calculation of budget (regarding purchase is of devices) contains a bad estimation on devices' prices	
Professional	Devices defined in the original project proposal are not the best available and modern devices available in the market	Incomplete documentation received by supplier
	Technical specification is not detailed or clear enough to transact the optimal purchase process	Problems in purchase process based on insufficient quotation received from suppliers
	Insufficiency in management of changes of requirements regarding the devices	
	Insufficiency in management of adaptation of user requirements	

I.4. Publication, PR, dissemination

I.4.1 Creation of a communication plan

Summary of objectives, tasks

- Definition of communication tools and communication schedule
- Identification of target groups, assignment the sufficient, relevant methodology and communication tools to them
- Definition of requirements on communication materials

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Requirements on communication activity defined by national and international Intermediate Authorities which does not fit into the project budget	Changes in obligatory image used in communication materials which can implement with extra costs (not planned in the budget)
	Underestimated communication budget	Delay in implementation of communication activities based on subcontractors performance

	New (not planned) elements of communication budget based on managing important changes or problems in project implementation	
Professional	Requirements on communication activity is not defined enough	Requirements on communication activity is not defined enough
	Elimination of probable target groups' reactions in creation of communication plan	Communication problems with the representatives of target groups
	Insufficient definition of communication life cycles	
	Underestimation of the size of target group	

I.4.2 Implementation of communication plan, monitoring and control of the activity

Summary of objectives, tasks

- Management of internal and external communication activities according to the schedule and quality requirements
- Use of design and image elements defined by national and international AAL Intermediate Authorities
- Coordination for implementation based on the given cost frames and schedule

Identified risks, risk factors of task, objective

Field	Inner risk factors	External risk factors
Financial	Overcosts of communication materials and services purchase based on the insufficient definition of requirements	Delay in communication, dissemination activity (services or creation of materials) based on subcontractor's failure
	Calculation on communication budget differs from the market prices	
Professional	Insufficiency in target groups' involvement	Inactivity of target groups
	Communication activities implemented not as scheduled	Delay in communication activity (services or creation of materials) based on subcontractor's failure
	Problems in decision making regarding communication issues	
	Problems in managing changes during the project implementation's period	

II. Risks, risk factors coming from the project implementation's environment

Social-political environment	Political risk factors	Not controllable by PMT / project manager	Controllable by PMT / project manager
		AAL priorities loose their importance on EU level	Political content or advertisements on NoBits portal
		AAL priorities loose their importance on national level at a project partner	
	Social risk factors	Changes in social habits of target groups	Use of portals like NoBits is not preferred by some groups (potential target groups)
Social problems of elderlies will be emphasized by a totally different focus		Changes of preferences of end-users (instead of using a web portal they prefer an interactive, portable IT tool etc.)	
Legal-economic environment	Legal-financial risk factors	New regulation on management of private data	Late adaptation of legal changes
		New taxes introduced in several countries	Bad calculation on exchange rates
		Changes in exchange rates	
	Economic risk factors	New type of advertisements on the market	Too much targeted advertisement can be disturbing
			Too much targeted advertisement can destroy trust
			Lack of information regarding the prices of the developed product
Natural environment	Natural risk factors	Natural disaster	
	Risk factors of life quality	Changes in the pension system	
		Changes in life quality of elderly	

EVALUATION OF RISK FACTORS

Evaluation of the different risk factors is based on the dimensions of chance of occurrence, estimated (and not expected) cost effect of the factor and time factor of them.

Definition of priority categories of risk factors:

Value of damage	Definition of the parameter
„1”	<p>„low”</p> <p>Definition of the factor based on cost effect: damages over the value 1,000 EUR</p> <p>Definition based on time aspect: risk factors effecting no significant delays or deviances in the project implementation process</p> <p>Definition based on probability: risk factors effecting the project implementation process not in merit</p>
„2”	<p>„moderate”</p> <p>Definition of the factor based on cost effect: damages over the value 5,000 EUR</p> <p>Definition based on time aspect: risk factors with direct effect on the project implementation schedule, but which do not cause the obstruction of project implementation</p> <p>Definition based on probability: slight, controllable risk factors</p>
„3”	<p>„medium”</p> <p>Definition of the factor based on cost effect: damages over the value 10,000 EUR</p> <p>Definition based on time aspect: risk factors with direct effect on the project implementation schedule, causing short, temporary obstruction in project implementation process</p> <p>Definition based on probability: high, but controllable risk factors</p>
„4”	<p>„high”</p> <p>Definition of the factor based on cost effect: damages over the value 20,000 EUR</p> <p>Definition based on time aspect: risk factors with direct effect on the project implementation schedule, causing obstruction in project implementation process</p> <p>Definition based on probability: high risk factors which endanger the implementation of NoBits project</p>
„5”	<p>„very high”</p> <p>Unacceptable risk factors which cannot be controlled and which drive to the collapse of NoBits project</p>
Field	Working processes of project management

Description	Implementation of NoBits project development tasks requires the cooperation and collaboration of several experts and developers with different knowledge, background, experience and culture. Definition of obligations, responsibilities, functions and authorities is the basic criteria for successful project implementation and for effective risk management activity. Lack of this clear definition can induce troubles in working and management processes as well.
PROBABILITY (%)	“high” – representation of so many participants within NoBits consortium requires organized management structure
COST EFFECT (%)	“medium” – NoBits project partners are responsible for the implementation of the proposed project primary to their national AAL funding agency (based on the Grant Agreement), delays at one partner might not result in financial difficulties of an other project partner.
TIME EFFECT (%)	“high” – troubles on uncoordinated WPs and development process can cause significant delays in the implementation of the whole project
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	establishment of PMT; creation of work flow processes, their use and monitoring;
<i>REDUCTION OF EFFECTS</i>	Working with project staff with relevant professional knowledge and background

Field	Coordination and internal communication
Description	Quick, interactive and controlled ways of communication and documentation sharing must be created. Misunderstanding in internal communication and lack of information can affect the false implementation of original project objectives. Effective internal communication serves as basis for right communication to AAL CMU and national funding agencies and for the collection of real data.
PROBABILITY (%)	“high” – cooperation of 10 consortium members requires quick, reliable and effective communication ways and communication methods
COST EFFECT (%)	“medium” – mistakes and troubles in internal communication can delay the project implementation or drive to minor changes in project results and achievements, but the original (accepted) NoBits project proposal is available at each project partners, so project partners must know their tasks and obligations
TIME EFFECT (%)	“medium” – lack of information, uncertainty and troubles in communication can affect the delayed project implementation
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	definition of communication channels and their regulated use; regular project management meetings or conference calls; monitoring of project implementation process; use of more communication channels;
<i>REDUCTION OF EFFECTS</i>	Evolving cooperative approach within NoBits consortium (project partners) Creation of project implementation schedule with time reserves

Field	Project administration
Description	Up-to-date knowledge of project implementation and administration regulation is a must at an international AAL project. Project coordinator helps project partners in questions regarding the international reports (financial and professional reports) presented to AAL CMU. In national funding issues project partners must know their national conditions, opportunities and obligations. Administration of the own financial and professional activities is the tasks for each partner separately. Lack of organizational/institutional administration might endanger the implementation of the whole project (for example false data given to the Annual Progress and Financial Report or any other document required by AAL CMU). Clear administration system is the basis for supplying real data on implementation and development processes.
PROBABILITY (%)	“medium” – project implementation and related administration requires the parallel knowledge on legal regulations and procedures
COST EFFECT (%)	“medium” – risk factor can effect primary in time aspect, that means delays in transferring the grant amount etc.
TIME EFFECT (%)	“medium” – delays in submission of requested documentation can endanger the future development activities and the review of the project
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	Project management and administration systems should be based on templates and schedules
<i>REDUCTION OF EFFECTS</i>	Immediate communication of changes in administrative issues and deadlines given by AAL CMU Sending written reminders on changes and deadlines Control of project documentation of partners before submission

Field	Monitoring and control of project implementation
Description	The quality of project implementation and the development processes is critical aspect at AAL CMU and national AAL funding agencies. The complex monitoring of the whole NoBits project implementation process is required to the success of the project. Creation of accordance between financial and professional plans and the real implementation process is a task dedicated to the project management organization. Significant changes to the original plan can endanger the fulfilment of NoBits project's objectives.
PROBABILITY (%)	“low” – several control and evaluation points are built in the AAL system
COST EFFECT (%)	“medium” – at control points the consortium can change development and activity direction and return to the original plans and objectives
TIME EFFECT (%)	“low” – this task is the basic part of project management activity, which is controlled by different (national and international) authorities
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	Good, reliable and transparent documentation system Definition of obligations and tasks within the Consortium Agreement Working with high quality external partners (as subcontractors)
<i>REDUCTION OF EFFECTS</i>	Definition of alternatives for the case of non-performance or bad performance

	Use of external experts or consultants if required
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Field	Financial management of NoBits project
Description	Delays in transferring the grant amount or liquidity problems at project partners have an effect to the whole project implementation process (it is strictly connected to the professional parts of development, too) can drive to the failure of the project (worst case scenario). Avoid of further delays might be connected with increase of costs (based on shorter time frames for given activities), especially in the case of subcontractors. Delays in transferring the grant amount can based on two situations: (1) mistakes at submission of the requested reports (2) financial difficulties of the state which can set back the transfer of entitled grant amount
PROBABILITY (%)	“high” – based on former experiences and the analysis of international situations, relations
COST EFFECT (%)	“medium” – project participants might use other sources (reserves, revenue etc.) for solving the temporary liquidation problems
TIME EFFECT (%)	“high” – delays at one or two project partners can slow down the whole project implementation process, in this case significant extension of project duration is requested
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	Schedule on submission of financial reports and request for transferring grant amount – several times if it is possible according to the Grant Agreement Creation of reserves at the beginning of project implementation phase
<i>REDUCTION OF EFFECTS</i>	Definition of milestones within the project plan – payment is based on milestones

Field	Special risk factor at project partners
Description	In an international project like NoBits consortium with the participation of 10 project partners from 6 countries can generate significant, not plannable risk factors. A wide range of risk factors can occur based on national difficulties, differences in work culture, communication misunderstandings, problems with exchange rates, changes in project staff at NoBits partners etc. This category can include minor changes (which are defined as minor risk factors) as well as significant risk factors with the opportunity of destruction the whole project implementation. This kind of risk factors includes all the possible professional problems related to the effective, successful project implementation at project partners.
PROBABILITY (%)	“medium” – only an average level of probability can be given based on the wide range of possible effect, situations and opportunities
COST EFFECT (%)	“high” – significant changes at project partners can affect really high cost effects at other project partners (for instance a partner has to take over the tasks of an exiting project partner etc.)
TIME EFFECT (%)	“high” – if a major problem occurring at an important project partner, this situation can be resulted at least in delay of project implementation or endanger the whole

	project implementation (worst case scenario)
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	Regular, (pro)active internal communication Assistance of PMT Good relationship with national AAL NCPs
<i>REDUCTION OF EFFECTS</i>	Regular forum for PMT to discuss all the difficulties occurring during the project implementation phase Collaboration with reliable, experienced project partners and subcontractors Proactive behaviour of PMT in the case if some risk factors might occur (in the phase when the risk factors only might be realized)

Field	Dissemination, impact assessment and awareness raising
Description	During the project development phase a complex, international dissemination activity must be realized. Dissemination activities must base on the Dissemination Guidelines for AAL projects, but they have to suit the preferences of potential target group as well. Real effects of dissemination activities are quite hard to summarize while we do not know which part of our dissemination activity resulted in consumer behaviour.
PROBABILITY (%)	“medium” – the importance of these activities will increase in the second period of project implementation, while at the end of NoBits projects even more focus must be given to the action related to dissemination, impact assessment and awareness raising
COST EFFECT (%)	“medium” – ineffective dissemination, impact assessment and awareness raising activities can endanger the acceptance of NoBits portal at elderlies, which is the base of future business success
TIME EFFECT (%)	“low” - changes or delays in dissemination activities can endanger the further business success of the final NoBits portal but not the project development and implementation
<i>REDUCTION OF CHANCE OF OCCURANCE</i>	As soon as a portal prototype is to be shown, proactive dissemination plan will be developed Determination of information which can be published
<i>REDUCTION OF EFFECTS</i>	Clear defined rights, opportunities and obligations Definition of dissemination principles accepted by all project partners Feedback to the proposed publications

MANAGEMENT OF RISK, RISK FACTORS

Implementation of NoBits project is based on general defined process elements and parameters, but is characterized by several unique and special parts/issues, which are connected only with the given project and its elements and which can endanger the implementation of the project or its results. Upon this, the former or pre-identification and analysis of potential problems and risk factors could be really difficult; PMT has to face with quite big challenges regarding these issues. Based on these specialities, the definition of risk management tools and management alternatives available during the project implementation phase, as well as risk management monitoring activity depends on several internal and external factors.

Successful implementation of NoBits project with the expected results and achievements is the main interest of project partners and other stakeholders, as well the identification of risk factors affecting the project development process, and their effective management. On-going and a wide range of risk management activity is the task of project management activity (WP6), both the project manager and the PMT are responsible for the fulfilment of this obligation. Risk management activity must be the common part of the whole project management activity; it must be implanted as a daily routine under the other tasks (management of professional or financial issues) related to WP6.

Implementation process of risk management:

1. The project manager and the PMT identify all of the potential risk factors which can endanger the further project implementation. If there is a lack of some special knowledge, consultation with external (professional) experts is suggested. Identification of risk factors includes the revision of risk factors identified during the project planning and preparation phases and the categorization and recategorization of risk factors according to the real project implementation environment.
2. After the categorization of risk factors their probability and effects will be defined
3. Development of reaction strategy in the cases of risk factors categorized as factors with high probability or with significant effects which defines the activity for reducing the realization chance of the factor, as well as the person responsible for the implementation of reaction activity and its deadline.
4. Identification of alternatives for creation of reserves in project schedule and project budget, rescheduling the project (if necessary). With the use of these alternatives unexpected effects (risk factors) can be managed
5. Administration of the whole risk management processes in the register of risk factors

As part of the project management activity the process of risk management must be implemented regularly (at least monthly) based on the feedbacks coming from the NoBits project implementation process.

DOCUMENTS OF RISK MANAGEMENT

(A) Task and Responsibility matrix

Task	Responsible within NoBits project		
	a	b	c
Control of risk analysis process		X	
Identification of risk factors in the project implementation phase	X		X
Analysis of risk factors during the project implementation process	X		
Evaluation of risk factors during the project implementation process		X	
Instructions for reanalysis of risk factors		X	
Instructions for actions against risk factors	X	X	
Management of risk factors, actions for reducing the effect of risk factors			X
Control of implementation of actions	X		

- a. project manager
- b. PMT
- c. NoBits project partners

(B) Register of risk factors

Date of the latest registration

Risk factor ID	Category	Date	Project partner (effected by the risk factor)	Definition of risk factor	Reaction strategy	Responsible partner	Status of implementation	Close