

Audit of the National Repository of Grey Literature (NRGL) in the NTK using the DRAMBORA tool

The third audit, 2011

The first audit of NRGL as a trustworthy digital repository using the tool and methodology DRAMBORA (Digital Repository Audit Method Based on Risk Assessment) was performed at the end of 2009 as an integral part of creating a digital repository of grey literature in the National Technical Library (NTK). The outcomes of the audit and the experience from its course were summarized in the final report and during 2010 they were published in the book of the NTK *Repositories of Grey Literature*.

The most important outcome of the audit was the set of identified risks related to the NRGL repository and endangering its operation, quality, image and other features. The NRGL team was trying to eliminate or moderate these risks during the whole year of 2010. The main principle of the DRAMBORA audit and, at the same time, its main contribution, is its iteration, i. e., its repetition after a certain time period in new conditions when the original risks are reassessed, the measurements adopted for their solution are assessed and new risks are identified.

The second audit of the NRGL digital repository was performed after one year, and, again, it was run internally, only with the help of an external consultant, who brings an independent view of the issue from outside and who meant a valuable reinforcing of the NRGL team especially at the year's end. The complete NRGL team participated in the preparatory phase and the acquisition of relevant data. A meeting of the team with an external consultant took place. On this occasion, the present state of the repository was assessed, the progress reached during 2010, new risks and possible ways to their elimination or moderation of their impact were identified by means of brainstorming. During 2010, the NRGL documentation, the description of the project, of its procedures and processes and related documents advanced significantly and thus, they represented a very good basis for the audit.

The third audit was performed after one year using the same method as the two preceding audits, with the presence of an external consultant who obtained information by interviewing NRGL team members and through study of the most significant documents containing responses to the previous audit and progress of the NRGL in 2011 including changes in its relevant environment.

All acquired data were processed using on-line DRAMBORA tool (<http://www.repositoryaudit.eu>). For this second audit, the incremental method was chosen, i. e., including new data into the saved data of the existing audit in the form of comments and adding new records into the existing database. In order to maintain consistency, the same format was selected for this audit as in 2009 and 2010 and the most important information on the DRAMBORA tool and on the audit methodology were repeated in the new report to avoid the necessity of re-reading the previous report.

The very work with the DRAMBORA tool went on without great surprise and problems using the experience of the previous audit. On the basis of the experience from 2009 and 2010, we communicated with the authors of the tool and methodology and we proposed some improvements and modifications. As a result, the web tool DRAMBORA appeared more stable after the one-year's pause; however, the most unpatiently expected modifications have not been introduced yet, especially elimination of the unpleasant fact that the on-line version of the DRAMBORA tool does not support languages from the code page of iso-8859-2/windows-1250, neither the Czech language. Therefore, we decided to continue using English for the same reasons as last year, mainly because using Czech without diacritics is unnatural, furthermore, because the tool and the methodology are available only in English and, last but not least, since the audit results will be presented in the international field, in the area of grey literature projects and hopefully in the area of the audit of the DRAMBORA tool.

Notably, the careful mapping of the repository using the DRAMBORA tool may already give an overview of what is finished and what is not, which important documents, procedures, tools and measurements are missing and where the most critical risks reside, which endanger the existence and success of the repository, how the individual parts of the repository relate, which

documentation is available etc. The data entered into the audit database may be linked to external sites by URL or any documents may be attached. Thus, the database may be considered as a centre of important information on the audited repository.

After all necessary information is entered the Reporting Centre function helps to create output reports on the identified risks for the repository, on their gravity, relations and solutions. Two types of output reports are available, those in .pdf format and those in .html format. Other saved descriptive information cannot be exported easily enough; however, with some effort they may be copied from the saved snapshot of the audit page. These output reports and copied information may be found below in this file or in the attachments.

Besides the mapped repository and its relevant environment, the producers of the methodology and the tool consider the most important output to be the analysis of identifiable risks endangering the repository, its quality, readiness, reputation and position in the eyes of both specialists and ordinary users. For those seriously interested, the complete audit is available at <http://www.repositoryaudit.eu>. Since the DRAMBORA tool does not provide read-only access, we cannot allow free access to the audit. In the following text, the identified risks and resulting conclusions will be analyzed. The complete audit may be found in the attachments and in the DRAMBORA database.

Analysis of identified risks

As mentioned above, we assessed risks identified in the previous two audits, in particular progress in eliminating them, and we identified new risks within the current audit. The biggest change in comparison with last year is that the NRGL pilot project ended in 2011, and the NRGL became an integral part of services offered by the NTK and is fully funded from the NTK budget, which was reflected in the assessment of risks related to the mandate and funding of the NRGL. The other significant changes are apparent from incremental commentaries in the DRAMBORA database, from files attached to it and from records added mainly in the areas of Constraints, Objectives and Activities. The identified and reassessed risks continue to pertain particularly to the conditions of activity description and

repository procedures, condition and development of staff, project funding, hardware and software resources and NRGL collections including backup and relevant NRGL environment.

We assessed the 24 originally identified risks and we ascertained 3 new risks; their order presented below is not significant as they were numbered by the DRAMBORA tool.

Risks identified in 2009:

Risk Number 1: Loss of Staff Members

Risk Number 2: Pilot Project End

Risk Number 3: Disaster Recovery

Risk Number 4: Partner Network Voluntary

Risk Number 5: Backup Tapes Storage

Risk Number 6: Financial Shortfall

Risk Number 7: Budget for Services

Risk Number 8: FAST Trial Version

Risk Number 9: Weak Mandate

Risk Number 10: No Ingest Policy

Risk Number 11: Document Formats

Risk Number 12: Software Administration

Risk Number 13: Undocumented Policies

Risk Number 14: Long Term Preservation Strategy not described

Risk Number 15: Staff Skills insufficient

Risk Number 16: Deliberate System Sabotage

Risks newly identified in 2010:

Risk Number 17: Duplicate project

Risk Number 18: Partners do not supply fulltexts

Risk Number 19: Slow growth of partner network

Risk Number 20: Sample partner contract has limited usability

Risk Number 21: Migration to new HW platform

Risk Number 22: New CDS Invenio version

Risk Number 23: Legal Risk - Authors Act

Risk Number 24: Termination of legal support

Risks newly identified in 2011:

Risk Number 25: Law No. 130/2002 Sb.

Risk Number 26: Document Typology Revisited

Risk Number 27: Metadata format NUSL

Risk Number 1: Loss of Staff Members

This risk considers the fact that the NRGL team is relatively small, recently created, it can hardly cover all related activities and thus, there is no substitutability if some team members are absent or leave. Thus, NRGL activity is directly endangered by any absences. Ideally, the repository team should be expanded in such a way that knowledge could be shared and substitutability could be increased; however, this is beyond the project budget. Another suitable solution would be to complete and broaden the descriptions of knowledge and activities of individual team members, possibly also in electronic form as used in Wikipedia, the free encyclopedia. Thus, any substituting team member could be quickly acquainted with his new activity.

State in 2010: During 2010, the team slightly expanded and thus the substitutability of its members increased. The activities of team members are documented and presented in regular team meetings; the documents are stored in a newly created knowledge database NRGL wiki. The team is compact since they work all together in one office. The susceptibility to the risk has diminished; however, the risk still exists.

State in 2011: In 2011, the NTK staff numbers, including the NRGL team, were reduced by 15%; certain NRGL workloads were cut and certain employees were replaced. Expected liability to these factors is higher for 2012.

This risk is related to risks no. 6, 12, 15 and optionally to risk no. 16

Risk Number 2: Pilot Project End

One of the NRGL mandates follows from the project of the Ministry of Culture of the Czech Republic for the period of 2008-2011 – The Digital Library of Grey Literature – Functional Model and Pilot Realization. This project will come to a conclusion in 2011, which may cause weakening of the NRGL mandate and possible financial problems. This challenge may be met by applying for participation in another similar project or looking for other financial sources to continue and develop the NRGL project.

State in 2010: Main NRGL activities (long-term acquisition, archiving and providing access to grey literature) are going to be covered in the NTK budget after 2011.

Further development of the repository should ideally be covered by another grant project. This risk substantially diminished and its basis slightly altered; however, it still exists.

State in 2011: The pilot project ended, the NRGL became part of the NTK services, and only time will show the impact of this change upon the NRGL.

This risk is related to risks no. 4 and 6, partially also 9.

Risk Number 3: Disaster Recovery

There is a guideline for the backup of the NRGL database but no plan exists on how to proceed in the case of recovery after a potential failure or damage to the database and who shall be responsible for individual steps. This risk may lead to the prolongation of the time needed to recover after a failure or after other problems. Such a plan must be prepared including the nomination of responsible staff and connection to the backup plan, which also needs to be finalized and embodied in the NRGL wiki mentioned in Risk no. 1.

State in 2010: Along with the strategy and methodology of the backup, a plan for the recovery of the repository after a failure is being developed. This plan should be finalized and verified. The susceptibility to the risk slightly diminished; however, the risk still exists.

State in 2011: A new backup system was designed, and backup storage outside the NTK building is in progress, which significantly decreases the risk.

This risk is indirectly related to risk no. 5.

Risk Number 4: Partner Network Voluntary

The network of partner organizations supplying material to NRGL is based upon volunteer participation; no law mandates its creation, all is exclusively based on the willingness of employees of partner institutions. This risk may cause difficulties in supplying material to NRGL. A possible solution consists in finding motivating factors for partner organizations (such as the benefits of a centralized repository, the international aspect of the project, etc.), and in encouraging the

promotion of NRGL targeted to partner organizations and academic public. Last but not least, a motivation similar to publishing in specialized journals would be helpful at a political level – some kind of positive evaluation for organizations supplying their grey literature production to NRGL, possibly with impact on their funding.

State in 2010: Partners are offered local installation of the CDS Invenio system preinstalled for building a grey literature collection. Further support consists in methodical guidelines and instructions for NRGL partners, targeted promotion of the NRGL in specialized journals, in the conferences etc. Contracts with 16 partners were signed but this risk still exists.

State in 2011: 38 partnership agreements were executed; however, the growth of the partners' network is slow and complicated by various factors; thus the risk is still imminent.

This risk is related to risks no. 2, 6 and 9.

Risk Number 5: Backup Tapes Storage

Backup tapes containing copies of the NRGL database are stored in the same room as the hardware repository. If there were a fire, terrorist attack or another serious disaster, the database would be destroyed together with its backup. At the present time, under pilot operation, when the database only contains minimal records, this risk is negligible; however, in the full operational phase, an alternative storage location must be found and this fact must be specified in the finalized backup plan.

State in 2010: Backup strategy and methodology including manipulation with backup tapes and recovery plan after failure are under development. These documents must be finalized, verified and saved in the NRGL wiki. This risk slightly diminished; however, it still exists.

State in 2011: A new backup system was designed and backup storage outside the NTK building has been arranged, which will significantly decrease the risk after the backups are physically stored outside the NTK building.

This risk is indirectly related to risk no. 3.

Risk Number 6: Financial Shortfall

The present budget and funding sources cover the project in its existing form but they do not assure NRGL development in any relevant areas. No institution, project or company showing zero development and growth has a potential for a long-term existence.

The solution is the same as that for risk no. 2 – timely application for participation in a similar project or search for other financial sources to support the continuation and development of the NRGL project.

State in 2010: The project funding is being continuously assured, for instance for software licenses, upgrade of hardware, etc. See also risk no. 2.

State in 2011: The pilot project ended, the NRGL will be funded from the NTK budget in 2012, and only time will show the impact of this change upon the NRGL.

This risk is related to most of the other risks.

Risk Number 7: Budget for Services

Services supporting the FAST software system, which assure the NRGL user interface and are provided by the INCAD company, are under contract and covered by the budget until the end of 2010.

When budgets are prepared for the NTK and the NRGL for 2011, this item should not be neglected and discussions about continuing cooperation with the INCAD company should be initiated in time.

State in 2010: This item is covered in the budget until 2013. It should not be forgotten later on.

State in 2011: No change.

This risk is related to risks no. 2 and 6.

Risk Number 8: FAST Trial Version

The NTK is running the trial version of the FAST software system based on a contract with the INCAD company until the end of 2011. This software supports the NRGL user interface.

During 2010, discussions about the purchase, operation and support of the full version should be initiated to ensure routine operation of the NRGL. The purchase of licenses and their support must be included in the appropriate budget.

2010: Since the full version of the FAST system is currently under operation, this risk was eliminated.

State in 2011: No change – watch coverage by the NTK budget.

This risk is related to risks no. 6 and 7.

Risk Number 9: Weak Mandate

The NRGL mandate is based on a time-limited project of the Ministry of Culture of the Czech Republic and on a brief note in the NTK status. This fact may negatively influence the reputation and position of the NRGL in the eyes of the academic public and partner organizations at home and abroad.

This problem should be solved at a political level, for example by gaining formal support from the NL CR, and AS CR, by promotion in the respective ministries, etc.

State in 2010: The topic of grey literature is included in the concept of library development in the Czech Republic until 2014. A new supplement to the status of the NTK of 12th May 2010 adds new mandates in paragraphs 3f a 3h; see the appropriate section of the audit. This risk was substantially minimized.

State in 2011: The NRGL mandate will be strengthened if the proposed NRGL Board is established - see section Constraints.

This risk is related to risks no. 2, 4 and partially 6.

Risk Number 10: No Ingest Policy

There is no formal procedure and methodology for handling the acquired documents, processing them, determining which checkpoints must be cleared before saving in the database, who is responsible for individual steps etc. This risk may result in ununified process of saving acquired documents and possibly in their insufficient processing and monitoring. As a result, the saved data may lack consistency. This methodology must be drawn up, including nomination of

responsible staff, and must be embodied in the electronic NRGL wiki, mentioned in Risk no. 1.

State in 2010: Acquisition methodologies are being developed; a new position of the contents manager was created and filled in the NRGL team. The risk has strongly diminished.

State in 2011: Acquisition methods developed in 2011 - the risk is very low now. This risk is loosely related to risks no. 11, 13 and 14.

Risk Number 11: Document Formats

Although the typology of NRGL documents is well described, formats for documents to be saved in the NRGL database are not sufficiently defined. This is also true for formalized procedures and processes involving potential migration of formats to newer versions, acquisition of new software needed to access these new versions etc. This risk may result in the inconsistency of saved documents and to problems accessing them over a long time span.

A plan and described methodology should be prepared defining which document formats will be supported by the NRGL and how their migration to upgraded versions will be done, including the software necessary to access the documents.

State in 2010: An analysis of this issue was ordered and created, along with the analysis of long-term storage of digital contents, which also contains manipulation with document formats. This analysis must be verified and drawn into practice. At the moment, this risk is very weak.

State in 2011: A new version of the analysis, methods and procedures of processing various document formats within the NRGL was created; see section Constraints; the risk is very low.

This risk is loosely related to risks 10, 13 and 14

Risk Number 12: Software Administration

The administration of the NRGL repository software system – CDS Invenio – depends on a single individual within the NTK. In addition, this person is not formally controlled by the NRGL manager but is a member of the IT department. This employee is difficult to integrate into the NRGL team and his working

performance is not optimal. If he is absent, there is no acceptably rapid means to substitute for him. This could seriously endanger NRGL operation.

A possible solution may be to hire another person instead this employee and thus increase substitutability in software administration, or, alternatively, to hire an external company under contract. The latter solution seems more suitable but tends to be more financially demanding. This fact should be considered during budget preparation.

State in 2010: The software administrator was included in the NRGL team, another team member was trained in the basic administration, the administration documentation is continuously created and saved in the NRGL wiki database. A weak risk.

State in 2011: A full-time SW administrator left the NTK and was replaced with a half-time employee. Thus, the risk increased again.

This risk is related to risks no. 1 and 6 and loosely to risk no. 16.

Risk Number 13: Undocumented Policies

Although the documentation of the NRGL project is at a very good level, the audit identified several specific points, at which there is insufficient documentation or none at all. The audit concentrated on the most substantial facts and risks in the pilot project phase. After the audit is completed, the documentation of all basic processes must be analyzed, areas lacking coverage must be identified and a timetable for completing the relevant documentation must be created, including the electronic NRGL wiki encyclopedia – see Risk no. 1.

State in 2010: Important working procedures and processes are continuously documented, the knowledge database NRGL wiki was newly created, in which relevant documents are continuously saved. If this procedure is strictly followed further on, this risk is very weak.

State in 2011: NRGL wiki was cancelled due to safety risks and it was only partially replaced by error monitoring of CDS Invenio through Google Code (see Activities).

This risk is related to Risks no. 1, 10, 11, and 14.

Risk Number 14: Long Term Preservation Strategy not described

A long-term strategy for storing digital documents is one of the most important aspects in operating and developing a trustworthy digital repository.

This strategy globally considers the vitality of the digital repository regarding technology (such as migration of document formats), functioning of repository team and of the organization as such, funding of repository operation and development etc. The rudiments of this technology are contained in the documentation of the NRGL pilot project; however, this strategy must be prepared as a separate document.

State in 2010: An analysis of this issue was ordered and created, along with the analysis of manipulation with NRGL document formats. This analysis must be verified and drawn into practice. At the moment, this risk is very weak.

State in 2011: A new version of the analysis, methods and procedures of processing various document formats within the NRGL, including their migration to new format versions, was created; see section Constraints; the risk is very low.

This risk is related to risks no. 10, 11 and 13.

Risk Number 15: Staff Skills insufficient

As novel technologies and methods for building and operating digital libraries are developed, it may happen that the knowledge and capabilities of the repository staff will not keep pace with the latest developments. This risk endangers any team and is especially relevant in the case of a small, busy team with practically zero substitutability, where there is insufficient time for training and education.

The NRGL management should not underestimate this problem and should try to provide space and means for regular training and education of themselves and all team members. Naturally, this should be taken into consideration when the number of team members and the NRGL budget is planned.

State in 2010: The expanding team is continuously gaining necessary knowledge by self-study, by participation in specialized conferences and training. The team members themselves state to be gaining unique knowledge. This topic must remain among the main priorities of NRGL management. The risk has been substantially minimized.

State in 2011: In relation to Risk 1 it is necessary to care for team education not only in order to increase qualification, but also as a motivation factor.

This risk relates to risks no. 1, 6 and 16.

Risk Number 16: Deliberate System Sabotage

The risk of deliberate system sabotage by dissatisfied employees or employees on notice, damage to the database, long-term disruption of data consistency and other factors should never be excluded or ignored. Similarly to risk no. 15, such risks are especially relevant in the case of a small, busy team with practically no mutual substitutability and with one member formally belonging to another department; moreover, if no formal procedure exists for the database management.

The NRGL management should try to stimulate positive motivation in the team and encourage their professional development. On the other hand, functional backup should be implemented, along with control mechanisms such as periodic control of data consistency in the NRGL database.

State in 2010: The repository contents and the system are daily backed up, important procedures are documented, the role of the contents manager was created, the substitutability of team members increased along with their knowledge and, consequently, with their satisfaction. All these facts are resulting in minimization of this risk.

State in 2011: In relation to Risks 1 and 15, this risk will increase in the next period, comprehensive care for staff, mainly motivation to enhancement of qualification and offer of interesting work are essential.

This risk is related to risks no. 1, 6, 12 and 15.

Risks newly identified in 2010

Risk Number 17: Duplicate project

Masaryk University in Brno is showing activity in order to gain funding, support and mandate for creating an alternative national repository of grey literature. The NRGL repository is in the pilot project stage and as such it is not fully coined among its partners and academic public; the partner network is growing slowly. This risk may weaken the position of the NRGL and thus partially degrade the effort and costs for its building.

State in 2011: The duplicate project continues at the address <https://repozitar.cz/> with the participation of universities and planned involvement of other organizations – the risk is still high.

This risk is related to risks no. 4, 9 and 19.

Risk Number 18: Partners do not supply fulltexts

The contract partners of the NRGL repository do often not provide full texts of documents to be stored, which complicates their accessibility, automatic indexing of records and their subsequent internationalization for those linked to the international network of grey literature organizations and digital repositories. It is necessary to perform dissemination and persuading activities.

State in 2011: More than 100,000 records are stored in the NRGL and only ca 300 of them contain the full text of the document; the risk is relatively high and must be taken care of.

This risk is related to risks no. 4 and 19.

Risk Number 19: Slow growth of partner network

Despite a large scale of services and promotion events for NRGL partners, the partner network is growing slowly and it is very difficult and time demanding to gain a new partner, for instance for the following reasons:

- insufficient support of management in the potential partner organizations
- potential partners state to have lack of grey literature

- insufficient knowledge and capacities in the potential partner organizations

The promotion effort should be intensified, a case study with a good partner should be created, support by a specific person in the potential partner organization should be sought for, etc.

State in 2011: 38 partnership agreements have been concluded; the development of partners' network is complicated by the above mentioned factors as well as legislation - see Constraints.

This risk is related to risks no. 4 and 20.

Risk Number 20: Sample partner contract has limited usability

Considering the generally complicated Czech legal environment and the low willingness to collaborate, the partners offer require a great number of changes in the sample partner contract to seal their cooperation, which prolongs and complicates gaining new partners. Without the collaboration with the Faculty of Law of Masaryk University in Brno this risk would be even more pronounced.

It is necessary to analyze the most frequently required changes, to modify the sample partner contract, or, alternatively, to prepare several variants of the contract.

State in 2011: New variants of sample agreements are drawn up; however, there is a risk of time-consuming process of conclusion of agreements – high risk.

This risk is related to risks no. 4, 19 and 24.

Risk Number 21: Migration to new HW platform

At the beginning of 2011, the NRGL should be transformed to a new platform. Such a step always brings about some risk concerning i. a. data security, drop-out of services and accumulation of work in the related areas. Such a transformation must be well prepared, the employees should get trained in the use of the new platform and specific risk areas such as back-up and reparations in the case of problems should be assessed in advance.

State in 2011: The migration was successful, watch for next deadline.

Risk Number 22: New CDS Invenio version

At the beginning of 2011, a new version of the CDS Invenio software system will be released, on which the NRGL repository is based. Such a step always brings about some risk concerning i. a. data security, drop-out of services, accumulation of work and modifications in the related software areas. The transfer to the new version must be well prepared; employees should get acquainted with the new software version, especially in the areas related to the NRGL repository, and specific risk areas including backup and restoration in the case of problems.

State in 2011: Installation of the new version of CDS Invenio was successful, watch for next deadline.

Risk Number 23: Legal Risk - Authors Act

Authors Act is a generally complicated legal standard, Czech legal environment is still not sufficiently stable and legal awareness and attention devoted to this topic is rarely at the necessary level on the side of the NRGL partners. As a result, there is still a potential risk that the material provided by the partner and subsequently processed, stored and offered to the public by the NRGL repository may be burdened by unclear author rights, for example concerning coauthorship, or in case the author gave exclusive rights to the third party. This situation potentially threatens with legal disputes.

NRGL partners should be continuously educated in this respect; a document or a presentation on this topic should be prepared.

State in 2011: No change.

This risk is related to risk no. 24.

Risk Number 24: Termination of legal support

In 2010 the NRGL repository team used legal service of two lawyers from the Faculty of Law of Masaryk University (JUDr. Radim Polčák a Mgr. Jaromír Šavelka). Their cooperation is quite financially profitable and it is based on the personal interest of both lawyers in the topic of the repository. Since this cooperation is based on particular persons and their personal interest, there is

a potential risk that it may be terminated. For this reason, it would be suitable to find some alternative possibilities of potential substitution of this cooperation.
State in 2011: Cooperation is secured for 2012; this risk remains active for next years.

This risk is related to risks no. 19, 20 and 24.

Risks newly identified in 2011

Risk Number 25: Law No. 130/2002 Sb.

A big legislative obstacle is the fact that under Act No. 130/2002 Coll. on the Support for Research and Development which does not mention grey literature, grant recipients are obliged to publish information on their project in the CEP, CEZ and RIV, which does not cover digital documents. The original idea was that the NRGL will address ministries and their competent departments in charge of grant programmes, will conclude license agreements with them and will obtain project results from them. However, it turned out that the owner of most of the project results is the grant recipient (e.g. a public research institution, university, company etc.), not the grant provider. The grant provider is the owner of results only in case of public contracts, which form a minority, as it follows from the hitherto consultations. The main problem is that this has not been differentiated at ministries in terms of copyright (in most cases, they did not publish project results).

Therefore, it is necessary to address all grant recipients and to conclude license agreements concerning publication of their documents with them, which will lead to extensive administrative load involving addressing, negotiating, executing license agreements but also high demands on the system administration – a lot of users that have to be trained, obtain administrator's rights and complicated transfer of information within the team, which will probably require a software solution. As a result, the NRGL will get several dozens of documents at the most. Unfortunately, this is the only way to get access to results of projects from grant proceedings conducted by the ministries under the current interpretation of the law. This issue has to be consulted with lawyers and a solution has to be found or, as the case may be, the NRGL team has to be strengthened.

Risk Number 26: Document Typology Revised

The NRGL document typology determines and describes collections of documents; new partner organizations use new document types, which are not included in the existing typology. A revision of typology is planned for 2012, which will cover the new document types on the one hand, and which will limit

complexity, non-transparency and difficult use on the other hand. There are two basic risks involved: insufficient typology as one extreme and a typology too complex as the other extreme. Both aspects have to be well-balanced.

Risk Number 27: NRGL Metadata Format

The NRGL plans to consider further use of the NRGL metadata format with the aim to terminate its use and fully migrate to the internal metadata format CDS Invenio - MARC21 as the NRGL's official metadata format. This represents certain risks in the area of consistency of collections. The migration must be carefully prepared on the basis of study of similar experience of other repositories.

The most significant change is termination of the NRGL pilot project and integration of the NRGL into the NTK services and budget. The year 2012 will show the impact of the change upon further operation and development of the NRGL and its team. Generally speaking, elimination of risks is more successful with risks involved in areas that are fully in competence of the NRGL team and its management. With risks concerning cooperation inside or outside the NTK, the situation is more complicated. The NRGL team put a lot of trust in the knowledge database NRGL wiki, because current documentation of processes, activities and results of the NRGL work is essential for elimination or minimization of impact of most risks. However, NRGL wiki had to be cancelled due to safety risks and it was only partially replaced with error monitoring of CDS Invenio through Google Code application. Since the last two audits, the NRGL has marked a big progress in its development, and new activities and objectives have been added. This makes the activity documentation and risk analysis even more important; a full replacement for the NRGL wiki should be considered. A large part of the risks involves building of the NRGL partners' network, i.e. the network of content providers. This area should be prioritized mainly in promotion and education. Legal issues of copyright and obtaining documents must be stressed in connection with the partners – see e.g. issues ensuing from Act No. 130/20052 Coll.

Repository Description

Name: National Repository of Grey Literature

Institution: National Technical Library

Institution Type: Library

Address: Technicka 6/2710
160 80 Praha 6
Czech Republic

URL: <http://invenio.ntkcz.cz/>

Country: Czech Republic

E-mail: petra.techlib@gmail.com

Description: National Digital Repository of Grey Literature

Grey Literature Definition: Information produced on all levels of government, academics, business and industry in electronic and print formats not controlled by commercial publishing i.e. where publishing is not the primary activity of the producing body.

Fields: Multidisciplinary

Scope: National

Materials: Articles
Books
Theses
Images
Audio
Video

Languages: English
Czech

OAI-PMH status known?: Yes

Supports OAI-PMH?: Yes

OAI-PMH URL:

<http://invenio.ntkcz.cz/oai2d?verb=ListRecords&set=global&metadataPrefix=marcxml>

OAI-PMH Metadata Streams:

Software: CDSWare

Z39.50 Support?: No

Has some full-texts?: Yes

Open Access?: Yes

Access Rights:

Legal Mandate to Preserve?: Yes

Ingest Policy: Ingest of grey literature on national level - theses, articles, brochures, research reports, annual reports etc.

Long Term Preservation Strategy: Derived from NTK status mandate

Assessment Status: Self-assessed

Assessment Scope: This audit handles only the part of the entire NTK digital repository, which is devoted to Grey Literature - it is cca 1/3 of the whole physical and logical space of the repository.

Functional Classes

Supporting Functions:

Mandate & Commitment to Digital Object Maintenance

Functions and characteristics that correspond to the commitment of the repository or the institution within which it is based to the maintenance of digital objects, or describe its responsibilities with respect to this.

Organisational Fitness

Functions and characteristics corresponding to the repository's organisational viability, sustainability and value, mainly incorporating issues of resource availability, including human resources.

Legal & Regulatory Legitimacy

Functions and characteristics corresponding to legislative, regulatory or common law rights and responsibilities of the repository.

Efficient & Effective Policies

Functions and characteristics corresponding to the repository's policy infrastructure that facilitates its activities and the completion of its objectives.

Adequate Technical Infrastructure

Functions and characteristics corresponding to the technical and security provisions maintained by the repository to facilitate its activities and assist the achievement of its objectives.

Operational Functions:

Acquisition & Ingest

Functions and characteristics corresponding to the repository's negotiation, submission, receipt and ingestion of data from creators and suppliers.

Preservation of Digital Object Integrity, Authenticity & Usability

Functions and characteristics corresponding to maintenance of object integrity, authenticity and usability.

Metadata Management & Audit Trails

Functions and characteristics corresponding to the documentation recorded by the repository to describe digital objects and processes to which they are subjected.

Dissemination

Functions and characteristics corresponding to the repository's distribution of stored content and end user access provisions.

Preservation Planning & Action

Functions and characteristics corresponding to the curation and preservation of digital materials within the repository.

Staff

Staff Member 1: Position: Manager
Unique Staff ID: 1
Telephone: +420232002485
Staff Email: petra.pejsova@techlib.cz
Address: NTK, Technicka 6/2710, 160 80 Praha 6
Status: Coordinator
Username: petrpej
Name: Miss Petra Pejsova
Alt. Email: petra.techlib@gmail.com
Roles: Management

Staff Member 2: Position: Administrator SW
Unique Staff ID: 2
Telephone: +420232002468
Staff Email: Anna.Motejlkova@techlib.cz
Address: NTK, Technicka 6/2710, 160 80 Praha 6
Status: Contributor
Username: Not Associated with a User
Name: Miss Anna Motejlkova
Roles: Administrator

Staff Member 3: Position: Administrator HW
Unique Staff ID: 3
Telephone: +420232002486
Staff Email: vaclav.jansa@techlib.cz
Address: NTK, Technicka 6/2710, 160 80 Praha 6
Status: Contributor
Username: Not Associated with a User
Name: Mr Vaclav Jansa
Roles: Administrator

Staff Member 4: Position: Metadata Manager
Unique Staff ID: 5
Telephone: +420232002516
Staff Email: bohdana.frantikova@techlib.cz

Address: NTK, Technicka 6/2710, 160 80 Praha 6

Status: Contributor

Username: Not Associated with a User

Name: Mrs Bohdana Fantikova

Roles: Metadata management

Staff Member 5: Position: Legal Support - outsourced
Unique Staff ID: 6
Username: Not Associated with a User
Roles: Legal Support

Staff Member 6: Position: External Consultant
Unique Staff ID: 15
Telephone: Not Provided
Staff Email: andrea.fojtu@ruk.cuni.cz
Address: Not Provided
Status: Contributor
Username: andrea.fojtu
Name: Miss Andrea Fojtu
Alt. Email: andrea.fojtu@ruk.cuni.cz
Roles: Consultant

Staff Member 7: Position: Content Manager
Unique Staff ID: 7
Telephone: +420232002516
Staff Email: bohdana.frantikova@techlib.cz
Address: NTK, Technicka 6/2710, 160 80 Praha 6
Status: Contributor
Username: Not Associated with a User
Name: Mrs Bohdana Fantikova
Roles: Metadata management

Staff Member 8: Position: External Consultant
Unique Staff ID: 33
Telephone: Not Provided
Staff Email: petr@karlach.net
Address: Not Provided

Status: Coordinator
Username: pka
Name: Mr Petr Karlach
Alt. Email: petr@karlach.net
Roles: Consultant

Staff Member 9: Position: Partner Network Manager
Unique Staff ID: 8
Telephone: +420232002468
Staff Email: iveta.furstova@techlib.cz
Address: NTK, Technicka 6/2710, 160 80 Praha 6
Status: Contributor
Username: Not Associated with a User
Name: Miss Iveta Furstova
Roles: Legal Support

Staff Member 10: Position: Power user
Unique Staff ID: 9
Status: Contributor
Username: Not Associated with a User

Roles and Staff Allocations

Role 1: Role Name: Management
Description: Establishes strategy and objectives of the repository
Establishes strategy of the repository content provider network
Builds-up the repository team
Manages and coordinates the team work
Establishes external cooperation
Forms and managetst the repository budget
Promotes the repository on domestic seminars and abroad
Corresponding Staff Members: Manager
Activity Responsibilities: Budget Management, Cooperation Network,
Team Management, NUSL Publicity
Risk Responsibilities: Loss of Staff Members, Pilot Project End,
Disaster Recovery, Partner Network Voluntary, Backup Tapes

Storage, Financial Shortfall, Budget for Services, FAST Trial Version, Weak Mandate, No Ingest Policy, Document Formats, Software Administration, Undocumented Policies, Long Term Preservation Strategy not described, Staff Skills insufficient, Deliberate System Sabotage, Duplicate project, Partners do not supply fulltexts, Slow growth of partner network, Sample partner contract has limited usability, Legal Risk - Authors Act

Role 2: Role Name: Administrator

Description: Setup, maintenance and operation of the CDS Invenio system

Repository user interface setup and maintenance

Data and system backup

Software and hardware infrastructure maintenance

Repository internet domains maintenance

SW admin manages the storage of the documents into the repository

Corresponding Staff Members: Administrator SW, Administrator HW

Activity Responsibilities: Document and Metadata Collecting , Storing and Archiving, Access Management, Repository Backup, Repository

Restore, Software Administration, Hardware Administration, CDS

Invenio localisation, NUSL Interface internalisation

Risk Responsibilities: Disaster Recovery, Backup Tapes Storage,

Document Formats, Software Administration, Undocumented Policies,

Deliberate System Sabotage, Migration to new HW platform, New

CDS Invenio version

Role 3: Role Name: Metadata management

Description: Sets and updates the metadata scheme

Sets and updates data templates nad forms according the document types

Corresponding Staff Members: Metadata Manager

Activity Responsibilities: Document and Metadata Collecting,

Metadata Management

Risk Responsibilities: Undocumented Policies

- Role 4: Role Name: Legal Support
Description: Manages legal contracts with content providers,
document types and how to access them
Manages the network of partners - content providers
Corresponding Staff Members: Legal Support
Activity Responsibilities: Cooperation Network, Legal expertise
Risk Responsibilities: Partner Network Voluntary, Undocumented
Policies, Legal Risk - Authors Act, Termination of legal support
- Role 5: Role Name: Consultant
Description: Typically external consultant, helping the repository
management and staff with specific tasks, e.g. repository audit etc.
Corresponding Staff Members: External Consultants
- Role 6: Role Name: Content Management
Description: - metadata format management
- templates components for data entry definition
- format conversion tables definition
- methodology and training definition and creation
- search patterns definition
- data validation and error corrections
Corresponding Staff Members: Content Manager
Activity Responsibilities: Content Management, Collaboration with
foreign grey literature bodies, Record internalization, NUSL Publicity
Risk Responsibilities: Partners do not supply fulltexts
- Role 7: Role Name: Services
Description: Administrative support and other
Manages partner network
Manages contracts with content providers - partners
Corresponding Staff Members: Partner Network Manager
Activity Responsibilities: NUSL Publicity
Risk Responsibilities: Partners do not supply fulltexts, Slow growth
of partner network, Sample partner contract has limited usability*

Role 8: Role Name: Power user - administrator

Description: - creates collections, user accounts and manages them

- creates and maintains forms for data entry

- tests new system versions

Corresponding Staff Members: Power user

Assessment Centre

Mandate

NUSL - NTK status:

To build national repository of grey literature and to make the information and findings contained in the repository accessible for NTK users using modern information technology.

<http://www.techlib.cz/default/files/download/id/1747/dodatek-c-1-k-zl-ntk-pdf.pdf>

NUSL - Ministry of Culture Czech Republic:

Project for the years 2008 – 2011 named Digital Library for Grey Literature – Functional Model and Pilot Realisation.

2011 - this mandate is no more valid, because the project ended and from the Jan. 1st, 2012 is NUSL fully integrated in the NTK services - see two other mandate entries, plus it is planned to establish NUSL council based on the NTK status - see Constraints - NUSL Council Container

NUSL - NTK status mandate

The new addendum to the NTK status from 2010/05/12:

<http://www.techlib.cz/default/files/download/id/1747/dodatek-c-1-k-zl-ntk-pdf.pdf>

Section 3f: ensures digitalization and archiving of scientific information and makes it accessible to the public

Section 3h: publishes information related to development and support of information services for research and education.

Constraints

Name: Legal Expertise

Description: Independent doctrinal legal analysis of legal relations originating in the process of digital processing of grey literature and theses by NTK.

Type: Legislation

Functional Class(es): Supporting Functional Classes - Legal & Regulatory
Legitimacy

Web Links: http://nusl.techlib.cz/images/Pravni_exp_NUSL.pdf

Name: Authors' Act

Description: Authors' Act of the Czech Republic - Autorsky zakon c. 121/2000 Sb.

Type: Legislation

Functional Class(es): Supporting Functional Classes - Legal & Regulatory
Legitimacy

Web Links: http://portal.gov.cz/wps/portal/_s.155/696/_s.155/701?l=121/2000

Related Objectives: Licensing and Legal Standards

Name: Creative Commons

Description: Creative Commons licenses are several copyright licenses released on December 16, 2002 by Creative Commons, a U.S. non-profit corporation founded in 2001. From April 2009 available in Czech Republic (under Authors' Act § 46-55 - Licence Agreement)

Type: Legislation

Functional Class(es): Supporting Functional Classes - Legal & Regulatory
Legitimacy

Web Links: <http://www.creativecommons.cz/>

Name: Technical Infrastructure Sharing

Description: Part of technical infrastructure - physical repository is shared with institutional NTK repository. For NUSL is allocated one third of the logical / physical space.

Type: Legislation

Functional Class(es): Supporting Functional Classes - Adequate Technical
Infrastructure

Name: Documents Region

Description: Repository will accept documents only published in the region of Czech Republic

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Documents Timeframe

Description: Repository will accept documents originated in the year 2009 and later, older documents only selectively

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Documents Language

Description: Repository accepts only documents in Czech and English languages, lately all european languages added.

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Documents Publication Status

Description: The Repository is devoted to grey literature, so it accepts only nonpublished or semipublished documents

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Document Content

Description: Repository accepts only documents from the field of special literature (odborna literatura).

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Document Processing and Periodicity

Description: Repository accepts only primary original nonperiodical documents. Periodical documents will be treated as nonperiodical.

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Document Form

Description: Repository accepts electronical document: text, presentation, structured documents, image, multimedia.

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Document Area

Description: Repository accepts document originated only from sciences and research, education, public sector and business.

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nysl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: Document Type

Description: Repository accepts following document types: theses, reports annual, research etc., educational materials, company literature, conference materials, studies, analyses, statistical repors.

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nusl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

Name: NTK Status Mandate Container

Description: NTK status gives the mandate for the repository and at the same time limits the repository by determining the play-ground - for details see the attached file.

Type: Legislation

Functional Class(es): Supporting Functional Classes - Mandate & Commitment to Digital Object Maintenance

Binary Files: ntkstatus.pdf

Related Objectives: Activity Description, Activity Determination, Main Function

Name: Metadata Format

Description: For the repository was defined own metadata format based mainly on OpenSIGLE This metadata format has to be mapped to the format MARC21 - internal CDS Invenio format

2011 - In the year 2012 NUSI plans to review the usage of the NUSL metadata format with the aim to terminate its usage and to use MARC21 as official NUSL metadata format.

Type: Policy

Functional Class(es): Supporting Functional Classes - Metadata Management & Audit Trails

Web Links: http://nusl.techlib.cz/images/NUSLformat_verze1.0_1.pdf

Name: Project Duration

Description: One of the repository mandates is project for the years 2008 – 2011 named Digital Library for Grey Literature – Functional Model and Pilot Realisation supported by Ministry of Culture of the Czech Republic. This mandate represents herewith a time constraint.

2011 - the projects ended and NUSL is now fully integrated into the NTK services

Type: Strategic Plan

Functional Class(es): Supporting Functional Classes - Mandate & Commitment to Digital Object Maintenance

Name: Backup and Recovery Plan

Description: Simple backup plan is formulated as repository and IT team agreement (see attached file), but the plan is not formulated as standard policy and the recovery plan is missing.

2011 - new backup procedure - see the attached file Zalohy_NUSL_06_2011.doc plus it is planned for 2012 to store backups outside the NTK building

Type: Procedure

Functional Class(es): Supporting Functional Classes - Preservation of Digital Object Integrity, Authenticity & Usability Binary Files: Zalohovani_NUSL.doc

Methodology of the cooperation with NUSL

Description: Best practices - how to establish the cooperation with NUSL, prerequisites, document types, technical solution.

2011 - new set of recommendations, rules etc. was prepared and published on the attached link.

Type: Policy

Functional Class(es): Supporting Functional Classes

Efficient & Effective Policies, Acquisition & Ingest, Preservation of Digital Object Integrity, Authenticity & Usability, Dissemination

Binary Files: Instrukce_pripojeni3.pdf

Web Links: <http://nusl.techlib.cz/index.php/Spoluprace>

Long term preservation and duplicity Analysis

Description: The document describes the long term preservation plan, duplicity avoidance strategy and the analysis of long term preservation file formats.

2011- new version of the document was created - see attached link

Type: Procedure

Functional Class(es): Supporting Functional Classes

Preservation of Digital Object Integrity, Authenticity & Usability

Web Links: http://nusl.techlib.cz/images/Formaty_dokumentu_2011.pdf

Persistent Identifier Definition

Description: The document briefly describes the Persistent Identifier Definition for NUSL

Type: Standard

Functional Class(es): Supporting Functional Classes
Preservation of Digital Object Integrity, Authenticity & Usability
Binary Files: reseni_PID_NUSL.doc

Persistent Identifier Definition

Description: The document briefly describes the Persistent Identifier Definition for NUSL

Type: Standard

Functional Class(es): Supporting Functional Classes
Preservation of Digital Object Integrity, Authenticity & Usability
Binary Files: reseni_PID_NUSL.doc

Local CDS Invenio installation for partners

Description: This document describes, how to install local CDS Invenio for partner organisation, which decided to create their own repository of grey literature

2011 - probably will not be offered and maintained in the future - very low interest from the partner organisations

Type: Policy

Functional Class(es): Supporting Functional Classes
Acquisition & Ingest, Dissemination

Binary Files: Dokumentace-lokal-uloziste1.pdf

Web Links: http://nusl.techlib.cz/index.php/Invenio_lokalni

Collection creation for partners

Description: This document describes, how to create a collection in the local installation of CDS Invenio on the partner side.

2011 - probably will not be offered and maintained in the future - very low interest from the partner organisations

Type: Policy

Functional Class(es): Supporting Functional Classes
Acquisition & Ingest, Dissemination

Binary Files: Dokumentace-PraceSeSbirkami.pdf

Web Links: http://nusl.techlib.cz/index.php/Invenio_lokalni

Partner network NUSL 2010

Description: This document summarizes the NUSL partner network building in 2010

Type: Policy

Functional Class(es): Supporting Functional Classes

Acquisition & Ingest, Dissemination

Binary Files: Priloha_12_partnerska_sit_2010.pdf

Metadata format NUSL - MARC21 conversion

Description: This document describes the conversion scheme between internal CDS Invenio metadata format MARC21 and the NUSL metadata format - it is the addition to the document describing the NUSL metadata format itself

2011 - In the year 2012 NUSL plans to review the usage of the NUSL metadata format with the aim to terminate it's usage and to use MARC21 as official NUSL metadata format.

Type: Standard

Functional Class(es): Supporting Functional Classes

Preservation of Digital Object Integrity, Authenticity & Usability, Metadata Management & Audit Trails

Binary Files: Priloha_2_Konverze_NUSLx MARC21.pdf

CDS Invenio Manual for NUSL and partners

Description: Manual about the document processing in CDS Invenio for both NUSL team and partners

Type: Procedure

Functional Class(es): Supporting Functional Classes

Acquisition & Ingest

Binary Files: Manual_Invenio.pdf

Legal expertise 2

Description: Legal expertise on types of contract between NUSL and content providers

Type: Legislation

Functional Class(es): Supporting Functional Classes

Acquisition & Ingest, Dissemination

Binary Files: Pravni_problematika.doc

Legal Expertise 3 - types of documents

Description: Another legal expertise on different types of documents and associated legal regulations - Authors Act

Type: Legislation

Functional Class(es): Supporting Functional Classes

Acquisition & Ingest, Dissemination

Binary Files: pravni_expertiza.doc

NUSL Council proposal container

Description: 2011 the NUSL pilot project ended, from 2012 is NUSL integrated into NTK services, for further support of NUSL development it is proposed to create a NUSL council based on the NTK mandate and organisational rules - see the attached file

Type: Legislation

Functional Class(es): Supporting Functional Classes

Mandate & Commitment to Digital Object Maintenance

Binary Files: NAVRH_Statutu_rady_NUSL_v6.doc

Legal Expertise 4

Description: 2011 - additional legal expertise was created describing the rules and conditions for storing of documents into NUSL - see attached link.

Type: Legislation

Functional Class(es): Supporting Functional Classes

Legal & Regulatory Legitimacy

Binary Files:

Web Links: http://nusl.techlib.cz/images/Zarazeni_SL_do_NUSL_07_2011.pdf

Marketing Plan for 2012

Description: For 2012 is planned to promote NUSL to public users in order to support the grey literature dissemination - see the attached file.

Type: Policy

Functional Class(es): Supporting Functional Classes, Dissemination

Binary Files: Marketingovy_plan_2012.pdf

Related Objectives: NUSL Marketing for Public

Collaboration with other GL organisations

Description: 2011 status of Collaboration with other GL organisations

Type: Policy

Functional Class(es): Supporting Functional Classes

Acquisition & Ingest, Dissemination

Binary Files: nusl_mezinarodni_systemy.xls

Related Objectives: Collaboration with OpenGrey etc.

Partner network NUSL 2011

Description: The attached document describes the building of NUSL partner network in the year 2011

Type: Policy

Functional Class(es): Supporting Functional Classes

Acquisition & Ingest, Dissemination

Binary Files: Tvorba_partnerske_site_2011.doc

Objectives

Name: Main Function

Description: The repository serves as the central interface for searching, accessing and retrieval of grey literature.

2010: Started activities for cooperation with grey literature bodies in abroad to disseminate national grey literature in the world

Related Constraints: NTK Status Mandate Container

Related Activities: Document and Metadata Collecting , Storing and Archiving, Access Management, Budget Management, Repository Backup, Repository Restore, Team Management

Functional Class(es): Supporting Functional Classes - Mandate & Commitment to Digital Object Maintenance

Related Risks: Pilot Project End, Loss of Staff Members, Financial Shortfall, Weak Mandate, Undocumented Policies, Staff Skills unnsufficient

Name: Activity Description

Description: Repository gathers, preserves and makes accessible nonpublished and semupublished literature (grey literature) on the national level of Czech Republic and supplements hereby the function of the National Library, which covers the officially published literature, in the digital electronic form as fulltext or metadata with the URL to the original document location.

Related Constraints: NTK Status Mandate Container

Related Activities: Document and Metadata Collecting , Storing and Archiving, Cooperation Network, Software Administration, Hardware Administration

Functional Class(es): Supporting Functional Classes - Mandate & Commitment to Digital Object Maintenance

Name: Activity Determination

Description: The repository is designed to support science, research and education

Related Constraints: NTK Status Mandate Container

Functional Class(es): Supporting Functional Classes - Mandate & Commitment to Digital Object Maintenance

Name: Licensing and Legal Standards

Description: Licensing models, sample contracts and legal standards for building similar cooperating institutional repositories are one of the planned outputs of the project.

2010: Legal expertise plus contract template was created already in 2009, during 2010 the experience showed limited usability of the sample contract, see Identified Risks

2011 - additional legal expertise created plus new sample contracts, see Constraints and Risks

Related Constraints: Authors' Act

Related Activities: Cooperation Network

Functional Class(es)*: Supporting Functional Classes - Legal & Regulatory Legitimacy

Name: Best Practices

Description: Best practices for building similar cooperating institutional repositories are one of the planned outputs of the project

2010: Best practices for partners created in the technical and methodical areas, see section Constraints - Methodology of the cooperation with NUSL etc.

Functional Class(es)*: Supporting Functional Classes - Efficient & Effective Policies

Name: Metadata Standard

Description: Sample metadata standard for building similar cooperating institutional repositories are one of the planned outputs of the project

2010: NUSL metadata format was created and refined including the conversion to MARC21 - see section Constraints

2011 - In the year 2012 NUSI plans to review the usage of the NUSL metadata format with the aim to terminate it's usage and to use MARC21 as official NUSL metadata format.

Functional Class(es): Supporting Functional Classes - Metadata Management & Audit Trails

Name: Partner Network

Description: To create partner network of cooperating local producers of grey literature

2010: Signed contracts with 16 partners, see section Constraints - Partner Network 2010

2011 - 38 partner contracts signed so far, see section Constraints - Partner Network 2011

Related Constraints: Legal Expertise

Functional Class(es): Supporting Functional Classes - Mandate & Commitment to Digital Object Maintenance, Acquisition & Ingest

Name: Long Term Preservation

Description: To preserve the long term accessibility and usability of stored documents

2010: See section Constraints - PID, Methodology, Long Term Preservation etc.

Functional Class(es): Supporting Functional Classes - Preservation Planning & Action

Related Risks: Long Term Preservation Strategy not described

Name: Collaboration with OpenGrey etc.

Description: The scope of NUSL is national, but it plans to collaborate with grey literature organisations from abroad such as OpenGrey and with Registry of Open Access Repositories (ROAR) to help to disseminate the information about Czech grey literature in the world.

2011 - OPEN GREY collaboration started including harvesting - 2011 harvested and indexed only records with attached fulltexts, for 2012 planned harvesting and automatic indexing of records without attached fulltexts, 2011 prepared PSH and SIGLE mapping - <http://www.opengrey.eu/> Collaboration with other GL bodies see Constraints

Related Constraints: Collaboration with other GL organisations

Related Activities: Collaboration with foreign grey literature bodies, Record internalization, NUSL Interface internalisation, NUSL Publicity

Functional Class(es)*: Supporting Functional Classes, Dissemination

Related Risks: Duplicate project

Name*: NUSL Marketing for Public

Description*: For 2012 is planned to promote NUSL to public users in order to support the grey literature dissemination

Related Constraints: Marketing Plan for 2012

Related Activities: NUSL Marketing for Public

Functional Class(es)*: Supporting Functional Classes, Dissemination

Name*: Invenio Bug Tracking

Description*: On this URL <http://code.google.com/p/nusl-invenio/> was in the year 2011 created the database of Invenio bugs for NUS with the objective to gather, share and report the problems/bugs within the NUSL repository software

Related Constraints:

Related Activities: Invenio Bug Tracking

Functional Class(es)*: Supporting Functional Classes,

Adequate Technical Infrastructure

Assets

Repository Hardware - Hardware used to run the repository software and database - XEN Cluster, servers LV1 - 3 (HP BL 680cG5) Red Head Linux 5 AP

Repository Software - CDS Invenio for the repository + FAST for User Interface

Grey Literature Collection - the GL records stored in NUSL repository

Activities

Activity Name: Document and Metadata Collecting

Activity Desc: To locate the proper sources, document and metadata

Activity Role(s): Administrator, Metadata management

Related Objective(s): Activity Description, Main Function

Functional Class(es): Acquisition & Ingest

Related Risks: No Ingest Policy

Activity Name: Storing and Archiving

Activity Desc: Storing and Archiving the acquired documents and metadata

Activity Role(s): Administrator

Related Assets: Repository Hardware, Repository Software

Related Objective(s): Activity Description, Main Function

Functional Class(es): Acquisition & Ingest, Preservation of Digital Object

Integrity, Authenticity & Usability

Related Risks: Deliberate System Sabotage

Activity Name: Access Management

Activity Desc: To make the stored documents accessible for the users

Activity Role(s): Administrator

Related Assets: Repository Hardware, Repository Software - CDS Invenio + FAST

Related Objective(s): Main Function

Functional Class(es)*: Dissemination

Related Risks: Budget for Services, FAST Trial Version

Activity Name: Budget Management

Activity Desc: To create and maintain the budget for the repository and related areas and activities, in cooperation with top management to ensure the proper financing of the repository and its development

Activity Role(s): Management

Related Objective(s): Main Function

Functional Class(es): Mandate & Commitment to Digital Object Maintenance, Acquisition & Ingest, Preservation of Digital Object Integrity, Authenticity & Usability, Dissemination, Adequate Technical Infrastructure

Activity Name: Repository Backup

Activity Desc: To create the backup copy of the system to preserve the current setup and of the repository database to preserve its content

Activity Role(s): Administrator

Related Assets: Repository Hardware, Repository Software

Related Objective(s): Main Function

Functional Class(es)*: Preservation of Digital Object Integrity, Authenticity & Usability

Related Risks: Backup Tapes Storage

Activity Name: Repository Restore

Activity Desc: To restore the system and the repository database after possible failure or disaster resulting in loss of data.

Activity Role(s): Administrator

Related Assets: Repository Hardware, Repository Software

Related Objective(s): Main Function

Functional Class(es)*: Preservation of Digital Object Integrity, Authenticity & Usability

Related Risks: Disaster Recovery

Activity Name: Cooperation Network

Activity Desc: To create the network of cooperating content providers and to sign with them legal contracts

Activity Role(s): Management, Legal Support

Related Objective(s): Activity Description, Licensing and Legal Standards

Functional Class(es): Legal & Regulatory Legitimacy, Acquisition & Ingest
Related Risks: Partner Network Voluntary

Activity Name: Software Administration
Activity Desc: Administration of the CDS Invenio system
Activity Role(s): Administrator
Related Assets: Repository Software
Related Objective(s): Activity Description
Functional Class(es): Preservation of Digital Object Integrity, Authenticity & Usability
Related Risks: Software Administration

Activity Name: Hardware Administration
Activity Desc: Administration of the repository hardware
Activity Role(s): Administrator
Related Assets: Repository Hardware
Related Objective(s): Activity Description
Functional Class(es): Preservation of Digital Object Integrity, Authenticity & Usability

Activity Name: Team Management
Activity Desc: Management and development on the staff team.
Activity Role(s): Management
Related Objective(s): Main Function
Functional Class(es)*: Organisational Fitness, Efficient & Effective Policies

Activity Name: Metadata Management
Activity Desc: Setting and updating of the metadata scheme
Setting and updating of the data templates nad forms according the document types
Activity Role(s): Metadata management
Functional Class(es)*: Metadata Management & Audit Trails

Activity Name: Collaboration with foreign grey literature bodies

Activity Desc: Collaboration with OpenGrey, ROAR etc. to support the dissemination and accessibility of national grey literature from abroad. This activity influences the metadata format (the field for interlibrary exchange service contact).

2011 - OPEN GREY collaboration started including harvesting - 2011 harvested and indexed only records with attached fulltexts, for 2012 planned harvesting and automatic indexing of records without attached fulltexts,

2011 prepared PSH and SIGLE mapping - <http://www.opengrey.eu/>

Collaboration with other GL bodies see Constraints

Activity Role(s): Content Management

Related Assets: Repository Software: CDS Invenio for the repository + FAST for User Interface

Related Objective(s): Collaboration with OpenGrey etc.

Functional Class(es)*: Dissemination

Activity Name: Record internalization

Activity Desc: Adding english titles

Adding english keywords by automatic indexing of fulltexts

Activity Role(s): Content Management

Related Assets: Repository Software: CDS Invenio for the repository + FAST for User Interface

Related Objective(s): Collaboration with OpenGrey etc.

Functional Class(es)*: Dissemination

Activity Name: CDS Invenio localisation

Activity Desc: CDS Invenio was not fully localised to Czech language, NUSL team is performing localisation of the software, error messages and of the main part of the help texts

2011 - localisation of error messages was outsourced to external translator organisation

Activity Role(s): Administrator

Related Assets: Repository Software: CDS Invenio for the repository + FAST for User Interface

Related Objective(s): Main Function, Partner Network

Functional Class(es)*: Dissemination

Activity Name: NUSL Interface internalisation

Activity Desc: The user interface of NUSL was originally in Czech language, for the cooperation with foreign grey literature bodies is NUSL team performing the translation of the user interface to english to support the dissemination of national grey literature to the world

Activity Role(s): Administrator

Related Assets: Repository Software: CDS Invenio for the repository + FAST for User Interface

Related Objective(s): Main Function, Collaboration with OpenGrey etc.

Functional Class(es)*: Dissemination

Activity Name: NUSL Publicity

Activity Desc: NUSL team is performing various types of publicity activities to propagate NUSL among potential partners - lectures in conferences, articles in czech and foreign magazines, on-site presentations etc.

Activity Role(s): Management, Metadata management, Content Management, Services

Related Assets:

Related Objective(s): Main Function, Partner Network, Collaboration with OpenGrey etc.

Functional Class(es)*: Acquisition & Ingest, Dissemination

Activity Name: NUSL Marketing for Public

Activity Desc: For 2012 is planned to promote NUSL to public users in order to support the grey literature dissemination

Activity Role(s): Services

Related Assets: Grey Literature Collection: The grey literature records stored in the NUSL repository

Related Objective(s): NUSL Marketing for Public

Functional Class(es)*: Dissemination

Activity Name: Invenio Bug Tracking

Activity Desc: All relevant NUSL administrators and testers report problems on the bug database <http://code.google.com/p/nusl-invenio/>

Activity Role(s): Management, Administrator, Power user - administrator

Related Assets: Repository Software: CDS Invenio for the repository + FAST for User Interface

Related Objective(s): Invenio Bug Tracking

Functional Class(es)*: Adequate Technical Infrastructure

Identified risks + risk management

Risk Number 1: Loss of Staff Members

Risk Description:	<p>The team is relatively small, the skills are not shared, it is even complicated to cover all necessary activities.</p> <p>----- 2010 ----- The team was growing during 2010, so the substitutability of the team members. The team members activities are documented and presented on the regular team meetings, the documents are stored in the newly established NUSI wiki. The team is compact and located in one place. The risk vulnerability is lower, but the risk still exists</p> <p>2011 - NTK staff was reduced by 15% including NUSL team, where some jobs contracts were shortened. The risk vulnerability is now and for 2012 higher.</p>
Risk Areas:	Personnel, Management & Admin Procedures
Vulnerability(ies):	<ul style="list-style-type: none">• The team is build from relatively fresh employees, which are not stabilised within the organisation -
Consequence(s):	<ul style="list-style-type: none">• Loss of any staff member might have impact on basic functions of the repository especially in the initial phase of the pilot project
Relationship(s):	<ul style="list-style-type: none">• From risk #667 ("Staff Skills insufficient") to this risk, relationship type is 'explosive'.
Risk Owner(s):	Management
Functional Classes:	Organisational Fitness
Date of Identification:	2012-01-09 10:34:55
Risk Probability:	Medium
Risk Impact:	High (Service Delivery)
Risk Severity:	12
Risk Mitigation:	<i>Avoidance Strategy:</i> Ideal would be to add more staff members to the team and make them share the

knowledge. Not in the budget. For 2012 is the budget even lower.

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Avoidance Strategy: To document all processes and activities to make it easier and quicker for new staff members to acquire all necessary skills - for 2012 even more important

Strategy Owner: Management

Target:

Check Date: 2010-06-30

Avoidance Strategy: Keep documenting the team activities, store and organise related documents to the proper storage, improve the working conditions of the team

Strategy Owner: Management

Target:

Check Date: 2012-09-30

Risk Number 2: Pilot Project End

After the pilot project end - see constraint Project Duration - might the repository have problems with financing and mandate

Risk Description:

----- 2010 ----- The main NUSL activities (long term grey literature collection, preservation and accessibility) are covered in the NTK budget for the years following 2011. Further development should be covered by another grant program. The risk is minimised and its character slightly changed, but still exists

2011 - pilot project ended, NUSL is part of the NTK services, the time shows which impact this will have on NUSL

Risk Areas:

Personnel, Management & Admin Procedures

Vulnerability(ies):

- The pilot project has its definite end, but this does not mean automatically financing problems

Consequence(s): • Underfinancing can undermine the vast majority of repository functions

Relationship(s): No Relationships Established

Risk Owner(s): Management

Functional Classes: Mandate & Commitment to Digital Object Maintenance
Organisational Fitness

Date of Identification: 2012-01-04 13:27:22

Risk Probability: Low

Risk Impact: Medium (Service Delivery)

Risk Severity: 6

Treatment Strategy: To try to get involved in another successive project and/or to find another financing source for the NUSL repository - now integral part of the NTK budget

Strategy Owner: Management

Target:

Risk Mitigation: *Check Date:* 2012-09-30

Avoidance Strategy: Bring this theme to the proposed NUSL Council, if it will be established

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Risk Number 3: Disaster Recovery

Disaster recovery plan is missing. There is in place simple backup plan, but the recovery after some data loss is not described.

Risk Description: ----- 2010 ----- Together with backup strategy and methodology is being developed disaster recovery plan. The plan has to be finalised and validated. The risk is slightly minimalised, but still exists

2011 new backup plan was developed and it is planned to store backups outside the NTK building

Risk Areas: Physical Environment

Vulnerability(ies): • The risk is slightly minimised, but still exists

Consequence(s): • Delayed recovery after disaster

Relationship(s): • From this risk to risk #668 ("Deliberate System Sabotage"), relationship type is 'explosive'.

Risk Owner(s): Management
Administrator

Functional Classes: Preservation of Digital Object Integrity, Authenticity & Usability

Date of Identification: 2012-01-04 13:29:53

Risk Probability: Very Low

Risk Impact: Medium (Service Delivery)

Risk Severity: 3

Treatment Strategy: To maintain and further develop the written disaster recovery plan - maybe even test it

Strategy Owner: Management

Target:

Check Date: 2012-09-30

Risk Mitigation:

Avoidance Strategy: Validate the backup storage outside te NTK building

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Risk Number 4: Partner Network Voluntary

Risk Description: The planned network of partner organisations, supplying content for the repository, is based on organisations voluntariness, there is no legal regulation in place. ----- 2010 ----- For partners was prepared local CDS Invenio installation pre-configured for creation of grey literature digital collection followed by methodical documents and training for partners plus targeted NUSL propagation in the press, conferences etc. Signed contracts with 16 partners, but the risk still applies 2011 - 38 partner contracts signed so far, but the growth of partnet network is slow and complicated, risk still applies

Risk Areas:	Operations & Service Delivery
Vulnerability(ies):	<ul style="list-style-type: none"> • Few organisations already postponed the cooperation
Consequence(s):	<ul style="list-style-type: none"> • Problems with ingest
Relationship(s):	<ul style="list-style-type: none"> • From risk #661 ("Weak Mandate") to this risk, relationship type is 'explosive'. • From this risk to itself, relationship type is 'contagious'.
Risk Owner(s):	Management Legal Support
Functional Classes:	Legal & Regulatory Legitimacy Acquisition & Ingest
Date of Identification:	2012-01-10 09:21:08
Risk Probability:	Medium
Risk Impact:	High (Service Delivery)
Risk Severity:	12
	<i>Treatment Strategy:</i> To try to find more motivations for the partners, to try to simplify the process for them, to explain better the benefits of the partnership (for example the benefit of one central archive, international aspect of the project, possibly influencing the financing of the partners etc.). <i>Strategy Owner:</i> Management <i>Target:</i> <i>Check Date:</i> 2012-09-30
Risk Mitigation:	<i>Treatment Strategy:</i> Promotion of the project towards the partners and towards the public users <i>Strategy Owner:</i> Management <i>Target:</i> <i>Check Date:</i> 2012-06-30
	<i>Treatment Strategy:</i> Try to get NUSL rated for the impact factor - very political ministerial level. <i>Strategy Owner:</i> Management <i>Target:</i> <i>Check Date:</i> 2012-09-30

Treatment Strategy: Continue to promote NUSL among potential partners, create a partner success story

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Risk Number 5: Backup Tapes Storage

Risk Description:	<p>Tapes with backup copies of the repository are stored in the same room, where the physical repository itself is located.</p> <p>----- 2010 ----- Backup strategy and methodology is being developed uncluding tape handling and disaster recovery plan. The plan has to be validated and finalised.</p> <p>2011 new backup plan was developed and it is planned to store backups outside the NTK building - but this is still not finalised - risk still exists</p>
Risk Areas:	<p>Physical Environment Personnel, Management & Admin Procedures</p>
Vulnerability(ies):	<ul style="list-style-type: none">• Any physical disaster, (fire etc.), which damages repository, might damage backup copies in the same time.
Consequence(s):	<ul style="list-style-type: none">• In case of physical disaster loss of the repository and backup copies in the same time
Relationship(s):	No Relationships Established
Risk Owner(s):	Management Administrator
Functional Classes:	Preservation of Digital Object Integrity, Authenticity & Usability Adequate Technical Infrastructure
Date of Identification:	2012-01-04 13:30:43
Risk Probability:	Very Low
Risk Impact:	Medium (Service Delivery)
Risk Severity:	3
Risk Mitigation:	<i>Treatment Strategy:</i> Validate the backup storage

outside the NTK building
Strategy Owner: Management
Target:
Check Date: 2012-06-30

Treatment Strategy: Maintain and develop the backup procedures and strategy
Strategy Owner: Management
Target:
Check Date: 2012-06-30

Risk Number 6: Financial Shortfall

Risk Description: Finances are sufficient for the status quo, not for the advancement of the repository
----- 2010 ----- Financing of the project is continuously ensured, for example for software licences, hardware renewal etc.
2011 - For 2012 will be NUSL financed from the NTK budget without financial support from any project, the time shows the impact of this change.

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies): • What does not advance, perishes

Consequence(s):

Relationship(s): No Relationships Established

Risk Owner(s): Management

Functional Classes: Mandate & Commitment to Digital Object Maintenance

Date of Identification: 2012-01-04 13:32:41

Risk Probability: Low

Risk Impact: Medium (Organisational Viability)

Risk Severity: 6

Risk Mitigation: *Treatment Strategy:* To find another source of financing - additional to the NTP budget
Strategy Owner: Management
Target:
Check Date: 2012-09-30

Treatment Strategy: Look for another grant to

support the financing of NUSL
Strategy Owner: Management
Target:
Check Date: 2021-06-30

Risk Number 7: Budget for Services

Risk Description: Services of the supplier of the software for user interface FAST, company INCAD, are covered in the budget and contract until the end of the year 2010.

----- 2010 ----- The services contract with FAST system supplier is signed until the end of 2013.

Risk Areas: Physical Environment

Vulnerability(ies):

- Without external services is NTK unable to maintain the FAST software

Consequence(s):

Relationship(s): No Relationships Established

Risk Owner(s): Management

Functional Classes: Dissemination
Adequate Technical Infrastructure

Date of Identification: 2010-12-13 14:29:44

Risk Probability: Very Low

Risk Impact: Low (Service Delivery)

Risk Severity: 2

Treatment Strategy: To find/cover the finances within the NTK budget on time.

Strategy Owner: Management

Target:

Check Date: 2012-09-30

Risk Mitigation:

Treatment Strategy: Include this finances to the 2014 budget

Strategy Owner: Management

Target:

Check Date: 2013-06-30

Risk Number 8: FAST Trial Version

Risk Description: NTK uses for the repository trial version of the software FAST, covered by contract with INCAD until the end of the year 2011.

----- 2010 ----- Full FAST version already in place - this risk was eliminated

Risk Areas: Physical Environment

Vulnerability(ies):

- From the year 2012 are the software licences not covered in the budget

Consequence(s):

- Loss of the User Interface System

Relationship(s): No Relationships Established

Risk Owner(s): Management

Functional Dissemination

Classes: Adequate Technical Infrastructure

Date of Identification: 2010-12-19 11:03:37

Risk Probability: Very Low

Risk Impact: Very Low (Service Delivery)

Risk Severity: 1

Risk Mitigation: *Treatment Strategy:* Include payment for the FAST full version to the NTK budget on time
Strategy Owner: Management
Target:
Check Date: 2012-09-30

Risk Number 9: Weak Mandate

There is only one relatively brief paragraph in the NTK status

Risk Description: ----- 2010 ----- Grey literature topic is included in the conception of library development in CZ until 2014. The new addendum to the NTK status from 2010/05/12 adds in the sections 3f and 3h new mandates, see section Mandate of the audit. This risk is now very minimal.

2011 - the mandate will be further strengthened, if the proposed NUSL Council will be created - see

Constraints

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

Consequence(s):

- Weak mandate can result in low prestige of the project damaging it's success

Relationship(s):

- From this risk to risk #656 ("Partner Network Voluntary"), relationship type is 'explosive'.

Risk Owner(s): Management

Functional Classes: Mandate & Commitment to Digital Object Maintenance

Date of Identification: 2012-01-04 13:40:29

Risk Probability: Very Low

Risk Impact: Low (Reputation and Intangibles)

Risk Severity: 2

Risk Mitigation: *Treatment Strategy:* The proposed NUSL Council should be established and start working ASAP
Strategy Owner: Management
Target:
Check Date: 2012-02-29

Risk Number 10: No Ingest Policy

Risk Description: There is no formalized ingest policy in place with described responsibilities

----- 2010 ----- Ingest methodology is being developed. In the NUSL team was created the role of the content management. Risk now very weak

2011 - ingest policies were during the year 2011 further developed - risk very low

Risk Areas: Operations & Service Delivery

Vulnerability(ies):

Consequence(s):

Relationship(s): No Relationships Established

Risk Owner(s): Management

Functional Classes: Efficient & Effective Policies
Acquisition & Ingest

Date of Identification: 2012-01-11 10:15:55

Risk Probability: Very Low

Risk Impact: Low (Service Delivery)

Risk Severity: 2

Treatment Strategy: Continue to maintain and develop current ingest policy
Strategy Owner: Management
Target:
Check Date: 2012-09-30

Risk Mitigation: *Treatment Strategy:* Continue to document ingest policy, make the documents available to the NUSL team
Strategy Owner: Management
Target:
Check Date: 2012-06-30

Risk Number 11: Document Formats

Nonexistent description of supported document formats
Nonexistent formalized procedure for migration of formats to newer versions

Risk Description: ----- 2010 ----- External analysis of this questions was ordered together with Long Term Preservation Strategy Risk. The format handling is now described, risk very weak.

2011 - new version of the analysis/document/poolicies was created - see Constraints, risk very low

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

Consequence(s):

- From risk #666 ("Long Term Preservation Strategy not described") to this risk, relationship type is 'explosive'.

Risk Owner(s): Management
Administrator

Functional Classes: Efficient & Effective Policies
Preservation of Digital Object Integrity, Authenticity & Usability

Date of Identification: 2012-01-09 09:27:07

Risk Probability: Very Low

Risk Impact: Low (Service Delivery)

Risk Severity: 2

Treatment Strategy: Maintain and develop the methodology, which data formats will NUSL support including the migration policy
Strategy Owner: Management
Target:
Check Date: 2012-09-30

Risk Mitigation: *Avoidance Strategy:* Take in account supported document formats in all related NUSL metadata and content activities including the possible document typology and metadata changes
Strategy Owner: Management
Target:
Check Date: 2012-09-30

Risk Number 12: Software Administration

There is only one administrator with skills for CDS Invenio administration, located in the IT department, non-substitutable.

Risk Description: ----- 2010 ----- The software administrator was transferred under the management of the NUSL manager, another team member was trained in this area and the documentation for the administrator is being created. Weak risk.

2011 - the full-time SW administrator left the company, replaced by part-time worker, the risk is again higher

- Risk Areas:** Hardware, Software or Communications Equipt & Facilities
- Vulnerability(ies):**
- The administrator is not well established in the NTK, there is a probability of his loss
- Consequence(s):**
- Significant delay in the development of the repository, risk of data corruption
- Relationship(s):**
- From this risk to risk #668 ("Deliberate System Sabotage"), relationship type is 'explosive'.
- Risk Owner(s):** Management
Administrator
- Functional Classes:** Adequate Technical Infrastructure
- Date of Identification:** 2012-01-09 09:28:35
- Risk Probability:** Medium
- Risk Impact:** High (Service Delivery)
- Risk Severity:** 12
- Treatment Strategy:* To look for the additional SW administrator to the current part-time one
Strategy Owner: Management
Target:
Check Date: 2012-02-29
- Risk Mitigation:** *Treatment Strategy:* Keep the administrator documentation up to date with all relevant changes, for example with new CDS Invenio version and make it available to the NUSL team
Strategy Owner: Administrator
Target:
Check Date: 2012-09-30

Risk Number 13: Undocumented Policies

Risk Description: There is generally low degree of policies

documentation

----- 2010 ----- Undocumented processes are continuously documented, NUSL wiki has been created

2011 - NUSL wiki was cancelled because of weak security of the solution, partially replaced by Invenio bug tracking at google code (see Activities)

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

Consequence(s):

- Low possibility of skills transfer
- Voluntary and chaotic operation

Relationship(s): No Relationships Established
Management

Risk Owner(s): Administrator
Metadata management
Legal Support

Functional Classes: Organisational Fitness
Efficient & Effective Policies
Acquisition & Ingest
Preservation of Digital Object Integrity, Authenticity & Usability
Metadata Management & Audit Trails
Dissemination
Preservation Planning & Action

Date of Identification: 2012-01-09 09:32:32

Risk Probability: Medium

Risk Impact: Medium (Organisational Viability)

Risk Severity: 9

Risk Mitigation: *Treatment Strategy:* After completing the DRAMBORA Assessment to map all discovered policy shortcomings and check the list for omissions. For the newly discovered undocumented policies to start the process of documenting them.

Strategy Owner: Management

Target:

Check Date: 2012-09-30

Treatment Strategy: Think of the replacement of the cancelled NUSL wiki to store all related documents

Strategy Owner: Management
Target:
Check Date: 2012-09-30

Risk Number 14: Long Term Preservation Strategy not described

Long Term Preservation Strategy and the preservation plan are not sufficiently described

Risk Description:

----- 2010 ----- External analysis of this questions was ordered together with Document Format Risk - see section Constraints. This analysis hat to be verified.

2011 - new version of the analysis/document/poolicies was created - see Constraints, risk very low

Risk Areas:

Operations & Service Delivery

Vulnerability(ies):

- The strategy and plan are just drafted in the repository documentation

Consequence(s):

- Possible loss of data consistency and/or document accessibility

Relationship(s):

- From risk #959 ("Document Typology Revisited") to this risk, relationship type is 'explosive'.
- From this risk to risk #663 ("Document Formats"), relationship type is 'explosive'.

Risk Owner(s):

Management

Functional Classes:

Preservation Planning & Action

Date of Identification:

2012-01-09 10:07:18

Risk Probability:

Very Low

Risk Impact:

Low (Service Delivery)

Risk Severity:

2

Risk Mitigation:

Treatment Strategy: Maintain and further develop the current Long Term Preservation Strategy
Strategy Owner: Management
Target:

Check Date: 2012-12-15

Treatment Strategy: Verify and apply the related analysis

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Risk Number 15: Staff Skills insufficient

With the time and development of technologies and policies might staff skills become insufficient

Risk Description:

----- 2010 ----- The growing team continuously acquires required skills by self-improvement, related conferences and trainings. The team members feels, that they are acquiring unique skills.

2011 - with the connection to the Risk 1 it is important to keep eye on this risk and motivate staff members by education

Risk Areas:

Personnel, Management & Admin Procedures

Vulnerability(ies):

- Small team not shared skills

Consequence(s):

- Staff not capable to fulfill all necessary tasks to ensure proper repository functionality and development

Relationship(s):

- From this risk to risk #668 ("Deliberate System Sabotage"), relationship type is 'explosive'.
- From this risk to risk #652 ("Loss of Staff Members"), relationship type is 'explosive'.

Risk Owner(s):

Management

Functional Classes:

Organisational Fitness

Date of Identification:

2012-01-12 13:31:10

Risk Probability:

Medium

Risk Impact:

Medium (Service Delivery)

Risk Severity:

9

Treatment Strategy: Ensure proper training for the staff members - specially good adaptation plans for new team members

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Risk Mitigation:

Treatment Strategy: Keep staff training and knowledge sharing among top management priorities

Strategy Owner: Management

Target:

Check Date: 2012-12-15

Risk Number 16: Deliberate System Sabotage

Dissatisfied or released staff member might deliberate damage the repository

Risk Description:

----- 2010 ----- The content and system backup is daily performed, the role of content manager was created, the team grows and so grows the substitutability in the team.

2011 - connected to risks 1 and 15 is this risk for the next period a bit higher

Risk Areas:

Operations & Service Delivery

Vulnerability(ies):

- Small team, SW administrator administratively belongs to another department

Consequence(s):

- Damage to the repository consistency

Relationship(s):

- From risk #667 ("Staff Skills insufficient") to this risk, relationship type is 'explosive'.
- From risk #664 ("Software Administration") to this risk, relationship type is 'explosive'.
- From risk #654 ("Disaster Recovery") to this risk, relationship type is 'explosive'.

Risk Owner(s):

Management
Administrator

Functional Classes:

Preservation of Digital Object Integrity, Authenticity & Usability

Date of Identification: 2012-01-12 13:34:08

Risk Probability: Medium

Risk Impact: High (Service Delivery)

Risk Severity: 12

Avoidance Strategy: Ensure the satisfaction of the team members by establishing good working conditions, training and personal development

Strategy Owner: Management

Target:

Check Date: 2012-09-30

Risk Mitigation: *Treatment Strategy:* Ensure proper backups of the repository, regular checking of the repository consistency

Strategy Owner: Administrator

Target:

Check Date: 2012-09-30

Avoidance Strategy: Include this topic to the disaster recovery plan

Strategy Owner: Management

Target:

Check Date: 2012-12-15

Risk Number 17: Duplicate project

There is ongoing activity of the Masaryk University in Brno to establish project similar to NUSL

Risk Description: 2011 - the duplicate project continues at <https://repozitar.cz/> with universities participation, it is planned to add other organisation types - risk still high

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

- NUSL is still not fully established in the national grey literature community and the creation of partner network is slow

Consequence(s):

- Duplicate national repository of grey literature - problems with credibility in the partner network

and public

Relationship(s):

- From this risk to itself, relationship type is 'explosive'.

Risk Owner(s): Management

Functional Classes: Mandate & Commitment to Digital Object
Maintenance
Legal & Regulatory Legitimacy

Date of Identification: 2012-01-13 12:38:56

Risk Probability: Medium

Risk Impact: High (Reputation and Intangibles)

Risk Severity: 12

Risk Mitigation: *Treatment Strategy:* Strengthen the position on NUSL in the public users, among partners and on the ministry level by various means of publicity
Strategy Owner: Management
Target: NUSL is recognised as the primary national digital repository of grey literature
Check Date: 2012-12-15

Risk Number 18: Partners do not supply fulltexts

NUSL partners often do not supply full texts of the documents, rather metadata only.

Risk Description: 2011 - over 100 000 records are stored in NUSL, only ca 300 of them have attached full-text digital documents, risk relatively high

Risk Areas: Operations & Service Delivery

Vulnerability(ies):

Consequence(s):

- Automatic indexing not possible - records incomplete, problematic internalization of the records -
- Problems with document full text accessibility

Relationship(s): No Relationships Established

Risk Owner(s): Management
Content Management

Services

Functional Classes: Efficient & Effective Policies
Acquisition & Ingest
Dissemination

Date of Identification: 2012-01-12 09:03:12

Risk Probability: High

Risk Impact: High (Service Delivery)

Risk Severity: 16

Risk Mitigation: *Treatment Strategy:* Educate the partner network by various means of publicity, presentations, articles, personal visits etc. about the importance of supplying fulltexts to NUSL in order to support dissemination of national grey literature on the national level and abroad.
Strategy Owner: Management
Target: The amount of NUSL records with fulltexts increases to the 25%
Check Date: 2012-12-15

Risk Number 19: Slow growth of partner network

Risk Description: To establish and activate new partner is very complicated for various reasons: - lack of management support - low amount of grey literature - insufficient skills and capacity

2011 - 38 partner contracts signed so far, the growth of partner network is complicated by factors mentioned above plus legal regulations - see Constraints

Risk Areas: Personnel, Management & Admin Procedures
Operations & Service Delivery

Vulnerability(ies):

- Many organisations are not willing to cooperate
- success often relies on individuals

Consequence(s):

- Small partner network - small amount of documents in the NUSL repository

Relationship(s):

- From risk #958 ("Law No. 130/2002 Sb.") to this risk, relationship type is 'explosive'.

Risk Owner(s): Management Services

Functional Classes: Acquisition & Ingest Dissemination

Date of Identification: 2012-01-13 12:42:26

Risk Probability: High

Risk Impact: High (Service Delivery)

Risk Severity: 16

Risk Mitigation: *Treatment Strategy:* Continue to propagate NUSL, create success story with one excellent partner, always try to find one enthusiastic supporter on the potential partner side.
Strategy Owner: Management
Target: 25 new partners in the year 2012
Check Date: 0201-12-15

Risk Number 20: Sample partner contract has limited usability

Risk Description: The prepared sample contract has limited usability, because potential partners demand lot of changes Legal Cooperation with Masaryk University Brno on every contract, without this collaboration risk much higher

2011 - new sample contracts are being continuously created, danger of labor intensive contract handling - risk high

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

- Legal environment in CZ is complicated
- Prolonged negotiation with potential partners -

Consequence(s): slow building of partner network

Relationship(s): No Relationships Established

Risk Owner(s): Management Services

Functional Classes: Acquisition & Ingest Dissemination

Date of Identification: 2012-01-09 09:41:21

Risk Probability: Medium

Risk Impact: Medium (Service Delivery)
Risk Severity: 9
Treatment Strategy: Together with the legal support analyse the main areas of changes in the sample contract and create new sample contract variants.
Risk Mitigation: *Strategy Owner:* Management
Target: New sample contract variants
Check Date: 0201-06-30

Risk Number 21: Migration to new HW platform

Risk Description: Migration to new HW platform is planned soon
 2011 - successfully migrated

Risk Areas: Hardware, Software or Communications Equipmt & Facilities

Vulnerability(ies):

- HW platform change is always a potential risk on the side of service delivery, data integrity etc.

Consequence(s):

- Possible problems in data integrity
- Possible delay in service delivery

Relationship(s): No Relationships Established

Risk Owner(s): Administrator

Functional Classes: Adequate Technical Infrastructure

Date of Identification: 2012-01-09 09:54:32

Risk Probability: Very Low

Risk Impact: Very Low

Risk Severity: 1

Avoidance Strategy: Check for the next necessary HW migration
Risk Mitigation: *Strategy Owner:* Management
Target: Estimated next HW migration date
Check Date: 2012-06-30

Risk Number 22: New CDS Invenio version

	New version of CDS Invenio is planned soon
Risk Description:	2011- the new version was successfully installed, the migration was smooth
Risk Areas:	Hardware, Software or Communications Equipmt & Facilities
Vulnerability(ies):	<ul style="list-style-type: none">• New version of digital repository system is potential risk for data integrity, service delivery and necessary updates in connected systems
Consequence(s):	<ul style="list-style-type: none">• Possible services delay• Possible updates in related systems• Possible data damage
Relationship(s):	No Relationships Established
Risk Owner(s):	Administrator
Functional Classes:	Preservation of Digital Object Integrity, Authenticity & Usability Dissemination
Date of Identification:	2012-01-09 09:55:19
Risk Probability:	Very Low
Risk Impact:	Very Low (Service Delivery)
Risk Severity:	1
Risk Mitigation:	<i>Avoidance Strategy:</i> Check for the next necessary migration to new CDS Invenio version <i>Strategy Owner:</i> Management <i>Target:</i> Date for the new necessary SW migratio <i>Check Date:</i> 2012-06-30

Risk Number 23: Legal Risk - Authors Act

Risk Description:	Because of the complicated Authors Act regulations in CZ there is potential Risk of the storage of documents, where the authors rights do not belong to he provider of the document, for example in case of exclusive licences, co-authorship et. See Constrains - legal expertises
--------------------------	---

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies): • The authorship regulation is very complicated

Consequence(s): • Possible legal proceedings from the author side

Relationship(s): No Relationships Established

Risk Owner(s): Management
Legal Support

Functional Classes: Legal & Regulatory Legitimacy

Date of Identification: 2010-12-16 10:03:02

Risk Probability: Medium

Risk Impact: High (Reputation and Intangibles)

Risk Severity: 12

Avoidance Strategy: Educate partners in the area of possible Authors Act migration by preparing presentation and document describing the potential risk areas

Risk Mitigation: *Strategy Owner:* Management
Target: Document and presentation (ev. training) for partners on risk areas
Check Date: 2012-06-30

Risk Number 24: Termination of legal support

Risk Description: During 2010 NUŠL used legal services of JUDr. Radim Polcak and Mgr. Jaromir Savelka from Faculty of Law MU Brno mainly for partner contracts. There is possible risk of termination of this cooperation, because the cooperation is based on personal interest of the two lawyers.

2011 - the collaboration secured for the year 2012, but the risk exist for years coming after 2012

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies): • The cooperation is based on personal interest of the two lawyers.

Consequence(s): • Large complications with partner contracts

Relationship(s): No Relationships Established

Risk Owner(s): Legal Support

Functional Classes: Legal & Regulatory Legitimacy

Date of Identification: 2012-01-13 13:31:42

Risk Probability: Low

Risk Impact: High (Organisational Viability)

Risk Severity: 8

Treatment Strategy: Try to find potential new source of legal support

Strategy Owner: Management

Target: Potential new source of legal support identified

Check Date: 2012-09-30

Risk Mitigation: *Avoidance Strategy:* Improve the sample contracts in the way described in the related risk, make all related legal documents, expertise etc. available to the NUSL team (store to the NUSL wiki replacement?)

Strategy Owner: Management

Target:

Check Date: 2012-09-30

Risk Number 25: Law No. 130/2002 Sb.

Risk Description: Law No. 130/2002 Sb. has the consequence, that it is not possible to have partner contract from the bodies issuing grants and have the results of the grant projects from them, but that it is necessary to have contracts with the grant recipients, because they are owners of the project results.

Risk Areas:

Vulnerability(ies): • This leads to very labor intensive partner contract management, which is not covered by NUSL stass

Consequence(s): • Labor intensive partner contracts management

Relationship(s):

- From this risk to risk #854 ("Slow growth of partner network"), relationship type is 'explosive'.

Risk Owner(s): Management
Legal Support
Services

Functional Classes: Legal & Regulatory Legitimacy
Acquisition & Ingest
Dissemination

Date of Identification: 2012-01-13 13:51:13

Risk Probability: High

Risk Impact: High (Service Delivery)

Risk Severity: 16

Treatment Strategy: Consult this problem with the legal support and try to find workaround

Strategy Owner: Management

Target:

Check Date: 2012-02-29

Risk Mitigation: *Treatment Strategy:* For the case of unsuccessful search for workaround try to prepare strategy how to minimize workload connected to this risk - sample contracts etc-

Strategy Owner: Management

Target:

Check Date: 2012-06-30

Risk Number 26: Document Typology Revisited

Risk Description: NUSL document typology is connected to the document collections, new partner organisations have new document types, which are not covered by current typology, for 2012 is planned the revision of the typology.

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

- Nor easy to balance the complexity and usability of the typology

Consequence(s):

- Problematic new documents harvesting and

storage, typological description not sufficient

- Too complicated typology, which cannot be handled within the NUSL system
- From this risk to risk #666 ("Long Term Preservation Strategy not described"), relationship type is 'explosive'.

Relationship(s):

Risk Owner(s): Content Management
Acquisition & Ingest

Functional Classes: Preservation of Digital Object Integrity, Authenticity & Usability
Dissemination

Date of Identification: 2012-01-09 09:51:46

Risk Probability: High

Risk Impact: Medium (Service Delivery)

Risk Severity: 12

Risk Mitigation: *Avoidance Strategy:* Good preparation for the revision of the document typology including the study of similar typologies with the aim to balance the descriptiveness and complexity
Strategy Owner: Management
Target: Revised NUSL document typology well balanced
Check Date: 2012-02-29

Risk Number 27: Metadata format NUSL

Risk Description: In the year 2012 NUSL plans to review the usage of the NUSL metadata format with the aim to terminate it's usage and to use MARC21 as official NUSL metadata format

Risk Areas: Personnel, Management & Admin Procedures

Vulnerability(ies):

- All major changes are potential risk

Consequence(s):

- Possible changes and/or disruptions in the collection organisation, searching etc.

Relationship(s): No Relationships Established

Risk Owner(s): Management
Metadata management

Functional Classes: Metadata Management & Audit Trails
Dissemination

Date of Identification: 2012-01-13 13:52:14

Risk Probability: High

Risk Impact: Medium (Service Delivery)

Risk Severity: 12

Risk Mitigation: *Avoidance Strategy:* Good preparation for the change of the metadata format including the study of experience study with similar changes in similar repositories
Strategy Owner: Management
Target:
Check Date: 2012-02-29

Přílohy:

1. NUSL_risk_register_2011.pdf – výstupní sestava rizik, standardní formát
2. NUSL_risk_register_2011_tab.pdf – výstupní sestava rizik, formát tabulky
3. NUSL_risk_register_2011_new.pdf - výstupní sestava nově identifikovaných rizik

Ostatní důležité a relevantní přílohy jsou uvedeny v databázi DRAMBORA

i v její kopii zahrnuté do této zprávy

(NTK_NUSL_DRAMBORA_ASSESSMENT_2011.doc)

jako odkazy – URL, případně jako jména souborů.

Použitá literatura:

DRAMBORA Interactive User Guide DCC & DPE 2009

Plán důvěryhodného digitálního repozitáře (PLATTER), 2009

Materiály z DRAMBORA Auditors Training: London February 2009

Digital Curation Centre and DigitalPreservationEurope, (February 2007),
"DCC and DPE Digital Repository Audit Method Based on Risk Assessment,
v1.0., retrieved 28.02.2007, from <http://www.repositoryaudit.eu/download>

DigitalPreservationEurope, (April 2008), "DPE Repository Planning Checklist and
Guidance DPED3.2", Retrieved from:
http://www.digitalpreservationeurope.eu/publications/reports/Repository_Planning_Checklist_and_Guidance.pdf

Trustworthy Repositories Audit & Certification: Criteria and Checklist, 2007 OCLC
and CRL

erpaGuidance – Ingest Strategies, 2004

Proč jsou české digitální repozitáře „nespolehlivé“? Jan Hutař, NK ČR

Digital Preservation Europe newsletter, November 2006 Issue 1

Digital Preservation Europe newsletter, September 2007 Issue 2

RODA - A service-oriented repository to preserve authentic digital objects
Miguel Ferreira & José Carlos Ramalho, University Of Minho
Rui Castro, Luís Faria, Francisco Barbedo, Cecília Henriques & Luís Corujo,
National Archives

An Approach to Audit and Certification, HATII, University of Glasgow, July 2007

s
