**Proofs of Concept**

**Executive report for Roadmap consideration**

**Scenario 1.1**

**Revision:draft**

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**Revision History**

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# EXECUTIVE SUMMARY

KIK-IRPA, one of the Belgian DCH organisations, has already a local preservation system for their data. They have described their preservation system in a “Best practices” document that is accepted throughout the organisation. However one of their main concerns is to maintain the integrity of their data.

There exist auditing and certification schemes for trustworthy repositories, see: “Trustworthy Repositories – Audit and Certification” <http://www.digitalrepositoryauditandcertification.org/pub/Main/ReferenceInputDocuments/trac.pdf> and "Risk-analysis for E-depots:DRAMBORA" <http://www.repositoryaudit.eu/>. Such an audit also equals a risk analysis of the chosen archiving method. How easy this all may sound, real life shows that almost no one ever terminates the whole procedure, hence there is no common “best practices” available.

Doing an audit in a consequent way requests to use the necessary tools.

In this scenario we want to use existing tools and document the auditing process. We will do this on the local data that is in the KIK-IRPA preservation scheme and on data of the Italian partners..

Such an audit is in fact independent of where the data is stored but it is certainly a “tool” that will be very valuable for preservation done on data stored with e-infrastructures or other storage service providers.

Once done it would be useful to execute the procedure on preservation done on grid and cloud.

The original work defined for this PoC included the study of the Drambora auditing and certification scheme, the partially existing implementations and arrive at a user friendly implementation that woul d be used for test the integrity of local data at KIK-IRPA in Belgium and ICCU in Italy.

However this work was too huge to be included in the timeframe of the first round of PoCs and the choice went to use the tool “Scoremodel” developed by DEN. DEN Foundation is the national center for ICT in cultural heritage.

## Grading

For an explanation and the definitions of the various aspects see Annex 1.

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| **Aspect**  | **Score** |
| * Usefulness of the tool
 | **4** |
| * User friendliness of the tool
 | **4** |

## Recommendations

The “Scoremodel” is a useful tool to test the integrity of a collection. It does not implement the full Drambora scheme but has the advantage that it is easily understood and usable by DCH people.It can be used in the roadmap as an example for testing the integrity of data.

# Scenario overview

The tool scoremodel will be used to test the integrity of data stored locally at KIK-IRPA in Belgium and at ICCU in Italy.

## document structure

Below the tool ”Scoremodel” is introduced together with the results of its use.

## Scenario / Tool testing environment

The “Scoremodel”tool is available via the website [www.scoremodel.org](http://www.scoremodel.org). The user needs to register with the website to be enabled to use the tool. The results of the tool are only delivered to the registered user and are not stored on the website or made available to a third party.

# Scoremodel

Scoremodel is a tool to test the integrity of stored data and is mainly built on the Drambora scheme.It aimed at being user friendly while providing a useful result.

## Data sets

Local data at KIK-IRPA and ICCU will be used.

## Test description

The “scoremode” tool guides the user through the risks and threats to digital materials. It has a series of questions that create a report that points out the strong and weaker points of your digital organization. The report provides recommendations in order to minimise the risks where possible..

These risks are grouped in seven clusters:

1. Organisation and policy: does the preservation of digital files fit the structure and policy of your organisation?
2. Preservation strategy: is it correctly recorded what is being preserved, for whom and in what manner?
3. Expertise and organisation: is the right expertise present in your institution and it it put to good use?
4. Storage management: is the physical storage of the digital files also reliable?
5. Ingest: are the right measures taken whenever a digital object is ingested into your storage system?
6. Planning and control: is the management well prepared? Are all actions retraceable?
7. Access: is access to the digital files properly regulated?

## Results

The tool proved to be user friendly and gave explications and examples during the execution. Both KIK-IRPA and ICCU had positive comments on the tool and appreciated the outcome quoted as “useful and helpful”. However ICCU felt that it could not completely judge as the long term preservation is not the first goal, the mission, the core business of Internet Culturale and of the ICCU in general.

# Conclusion

The use of this tool was a good exercise before starting out on a bigger project like exploring the complete Drambora scheme. Of course there are more tools that check the integrity of quality of (preserved) data and it would be fine to include all those tools in the “services registry.