Proposal for the IGD-TP Knowledge Management Portal

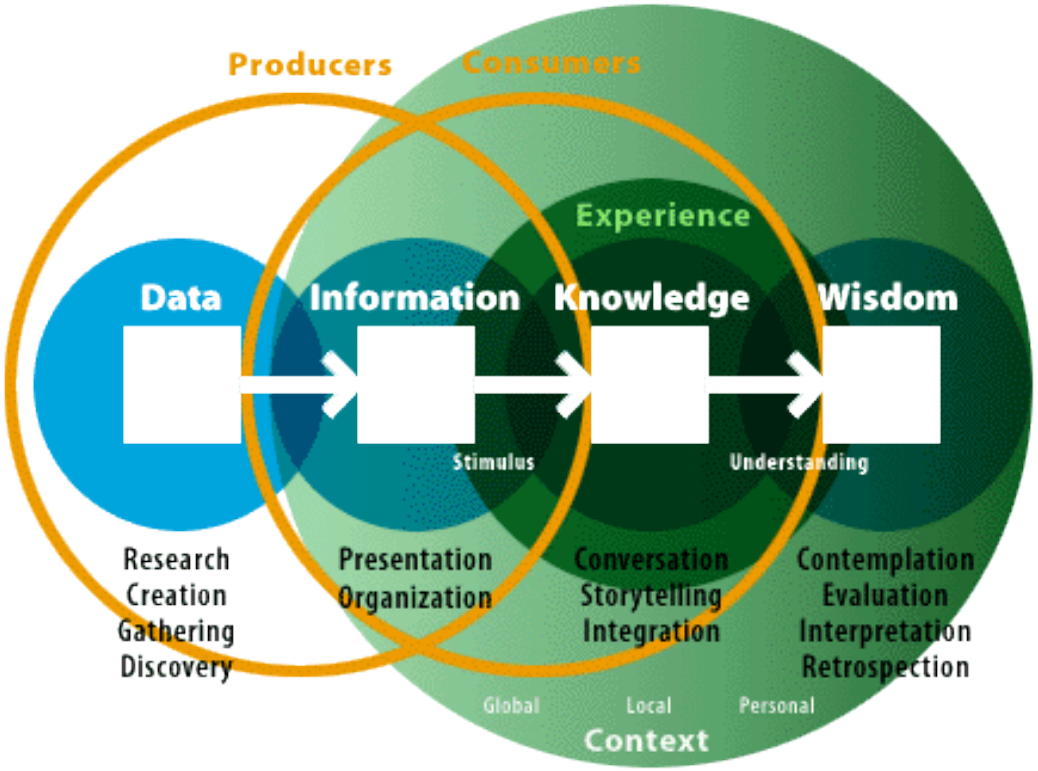
IGD-TP EXCHANGE FORUM N°4
Prague Congress Centre
October 29-30, 2013

Posiva Oy
Juhani Palmu
Project Manager
Corporate Support, Information & Security Management
juhani.palmu@posiva.fi

KNOWLEDGE MANAGEMENT

KM - Knowledge Management

- What is knowledge?



Source: http://www.nathan.com

KM - Knowledge Management

- What is knowledge?

- Knowledge Management is the discipline of enabling individuals, teams and entire organisations to collectively and systematically create, share and apply knowledge, to better achieve their objectives“.

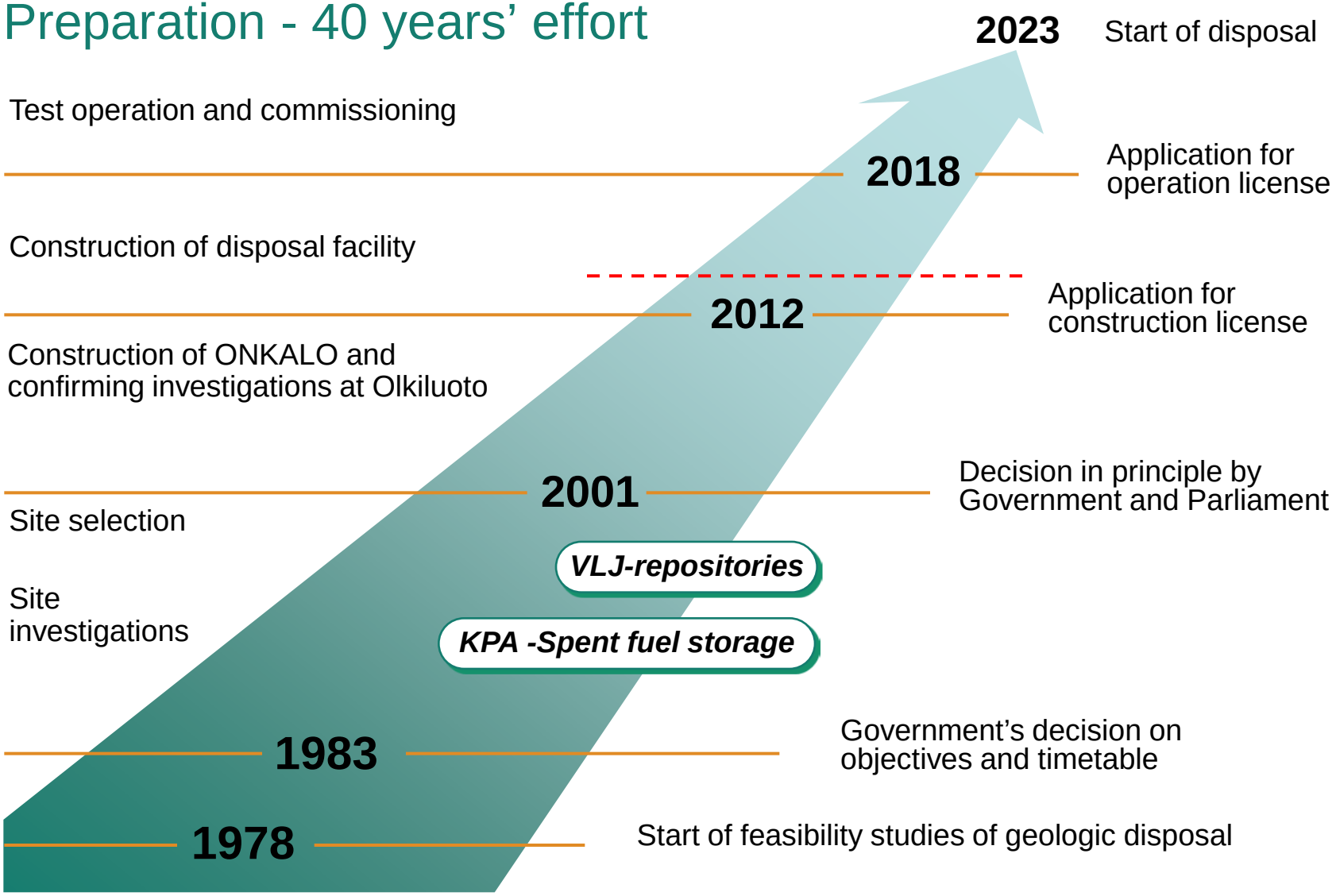
Ron Young, CEO/CKO Knowledge Associates International

KNOWLEDGE MANAGEMENT SYSTEMS

POSIVA

Olkiluoto Island

Final Disposal of Spent Fuel in Finland
Preparation - 40 years' effort



KMS - Knowledge Management System

- On the long term horizon one challenge in knowledge management within nuclear waste management is how to preserve the basic knowledge of the final disposal activities in next decades and at least the next century while employees and generations will change.

- The threat is that the final disposal activities will be interrupted if any doubt of absence for the long term safety analysis will arise or the fundamentals of the analysis will not be remembered or understood.

KMS - Knowledge Management System

- The ultimate challenge in knowledge management is to transfer the undocumented tacit information to be utilised for the organisation while personnel will leave organisation or will retire.

KMS - Knowledge Management System

- Solutions for the final disposal of spent nuclear produced in Finland have been under research since late 1970's.

- This work has been co-ordinated by Posiva since 1996 and by its' preceding organisations until then.

KMS - Knowledge Management System

- The extensive documentation in several formats covers this scientific and technical foundation for the concept of the geological disposal of high radioactive uranium waste to the Finnish bedrock.

- Due to the historical reasons of general development of documentation procedures during last decades, a major part of this documentation have been archived only in paper form and thus have not been accessible in digital ways.

KMS - Knowledge Management System

- The first step for the KMS in Posiva has been to organise the contents of the research work and reports to be utilised in digital form and in much more intuitively approached way by using new and more enhanced technologies compared to conventional documentation management systems.

- The implementation of the KMS was launched in web based KMS portal, which combines report based information from the internal document management system.

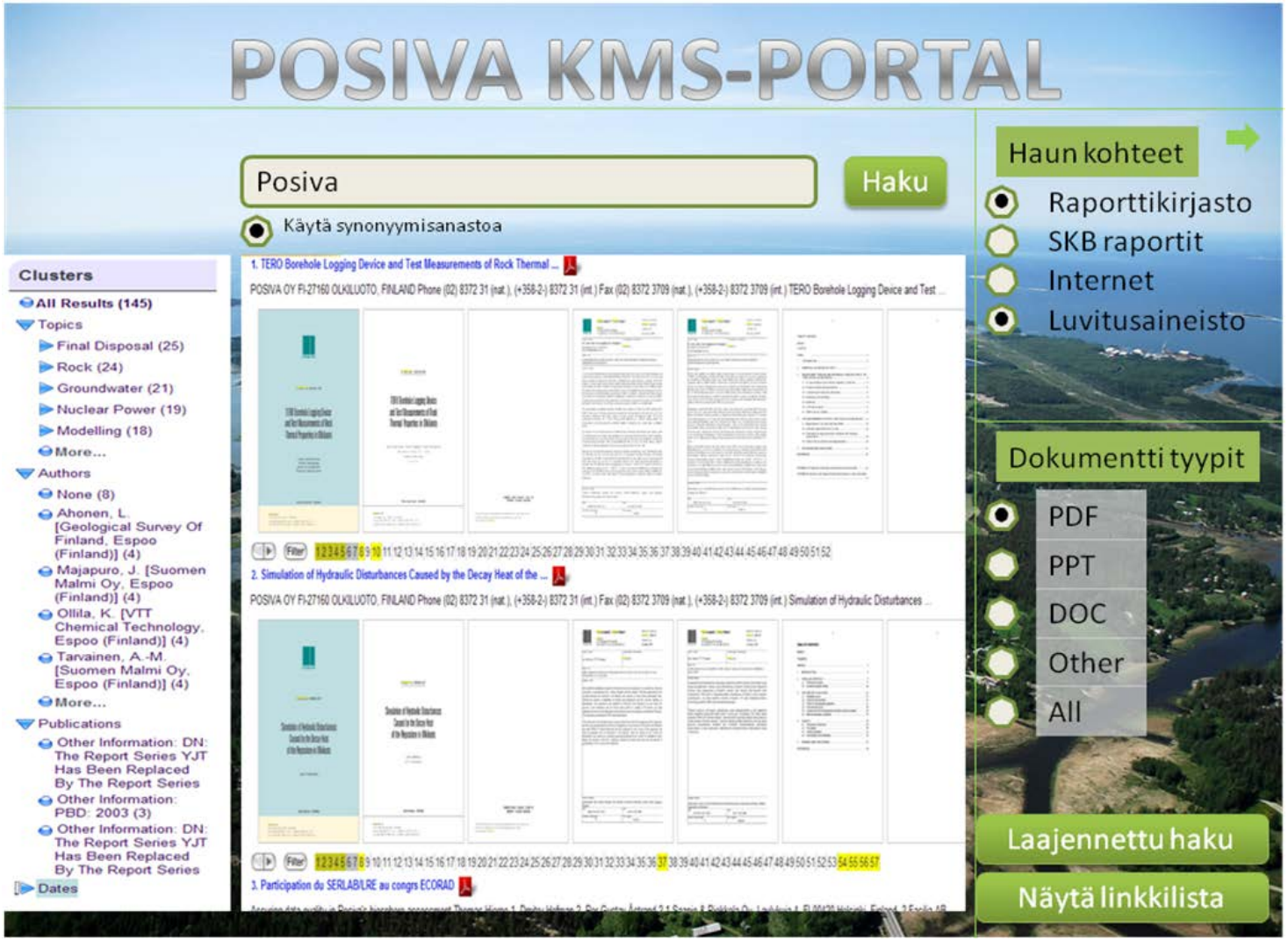
KMS - Knowledge Management System

- Paper reports since 1979 (ca 2400 pcs) have been scanned, optically character recognised and filed in pdf/A form. All of ca 3400 reports have been stored in current conventional documentation management system.

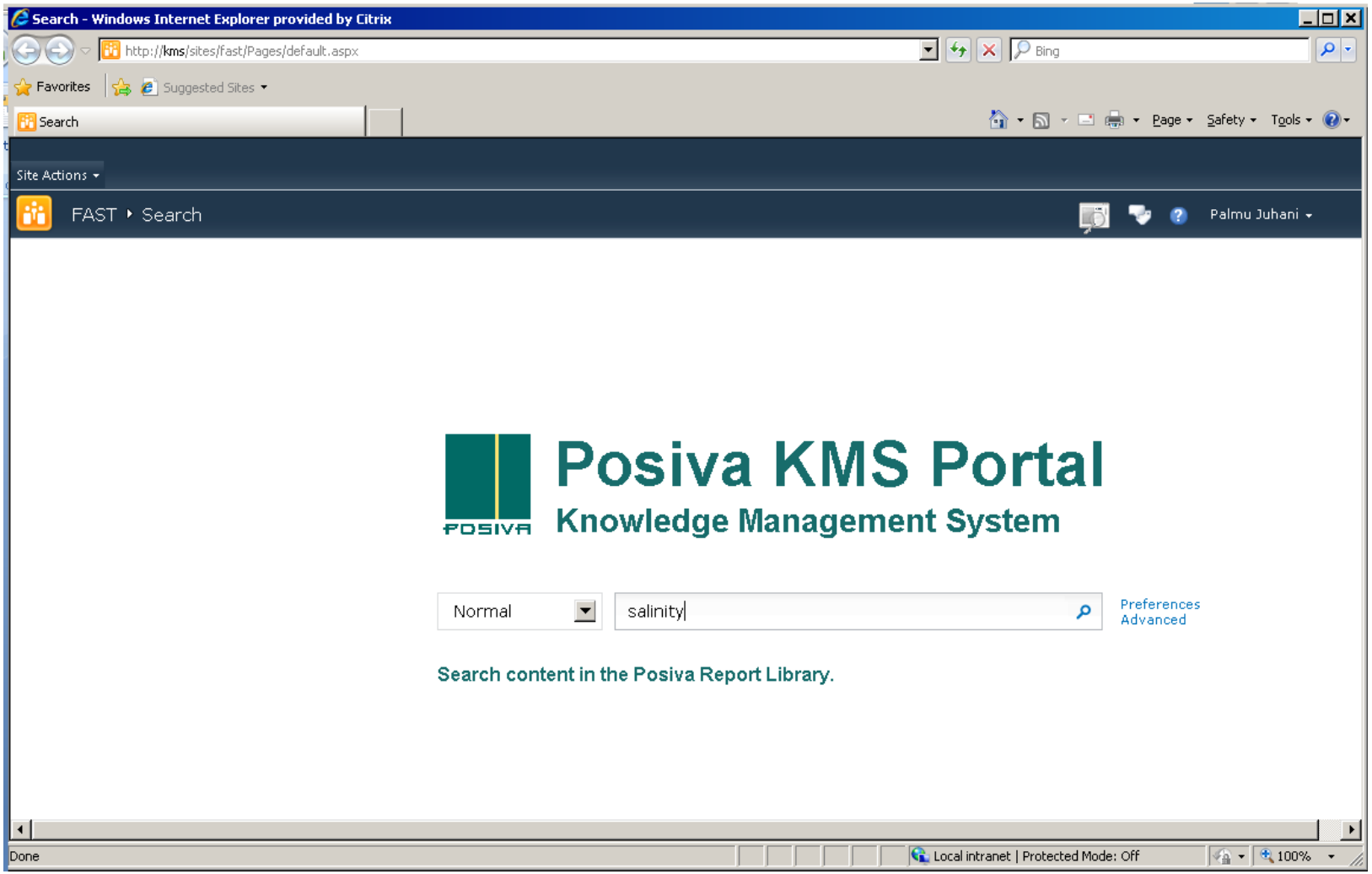
KMS - Knowledge Management System

- The implementation of the KMS has been launched in production in visualised web based KMS ontology portal, which is available for personnel in Posiva and also for the trusted external parties including consultants and the local authority.

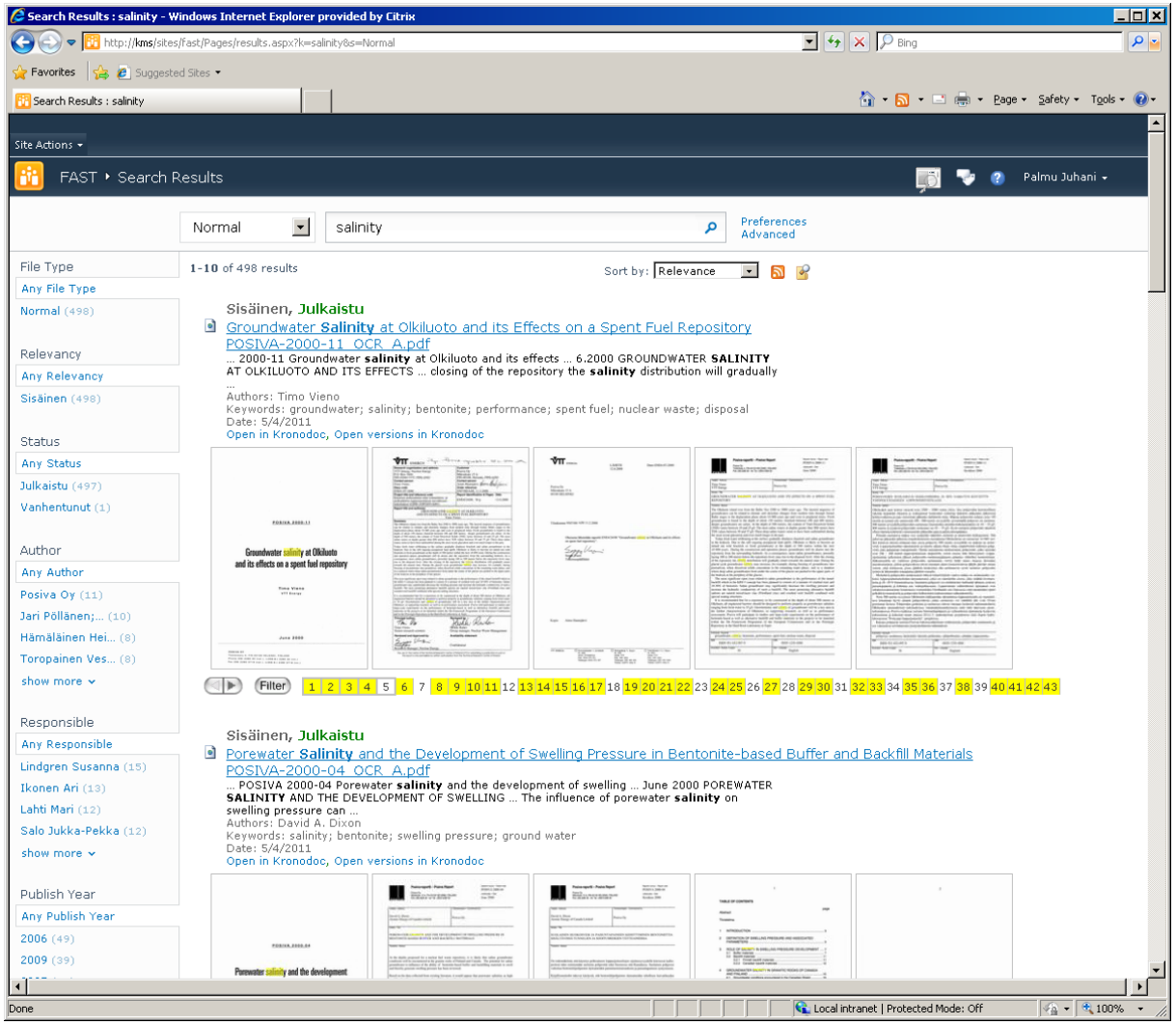
Future Outlook of the Posiva KMS Portal



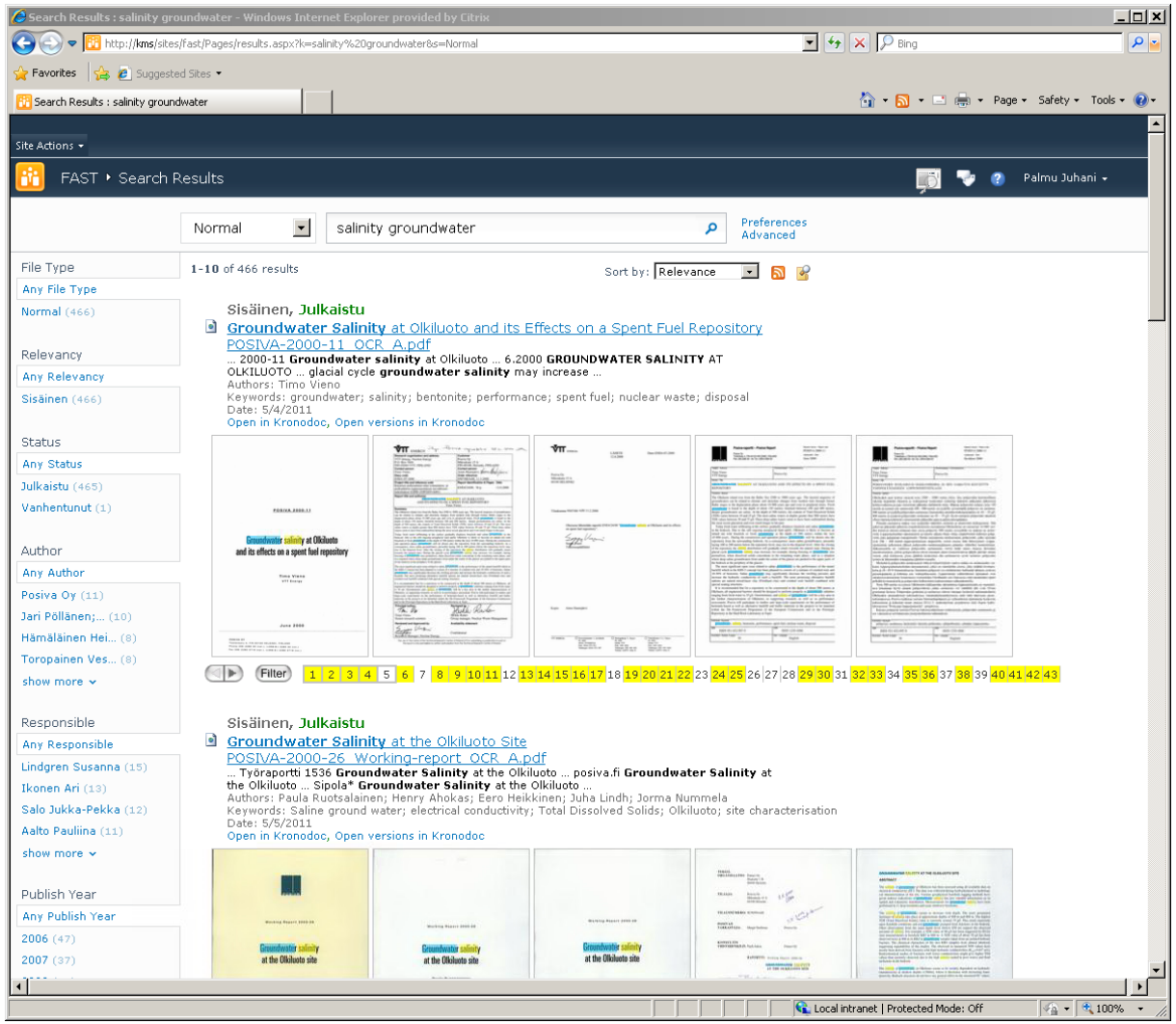
Realised Outlook of the Posiva KMS Portal



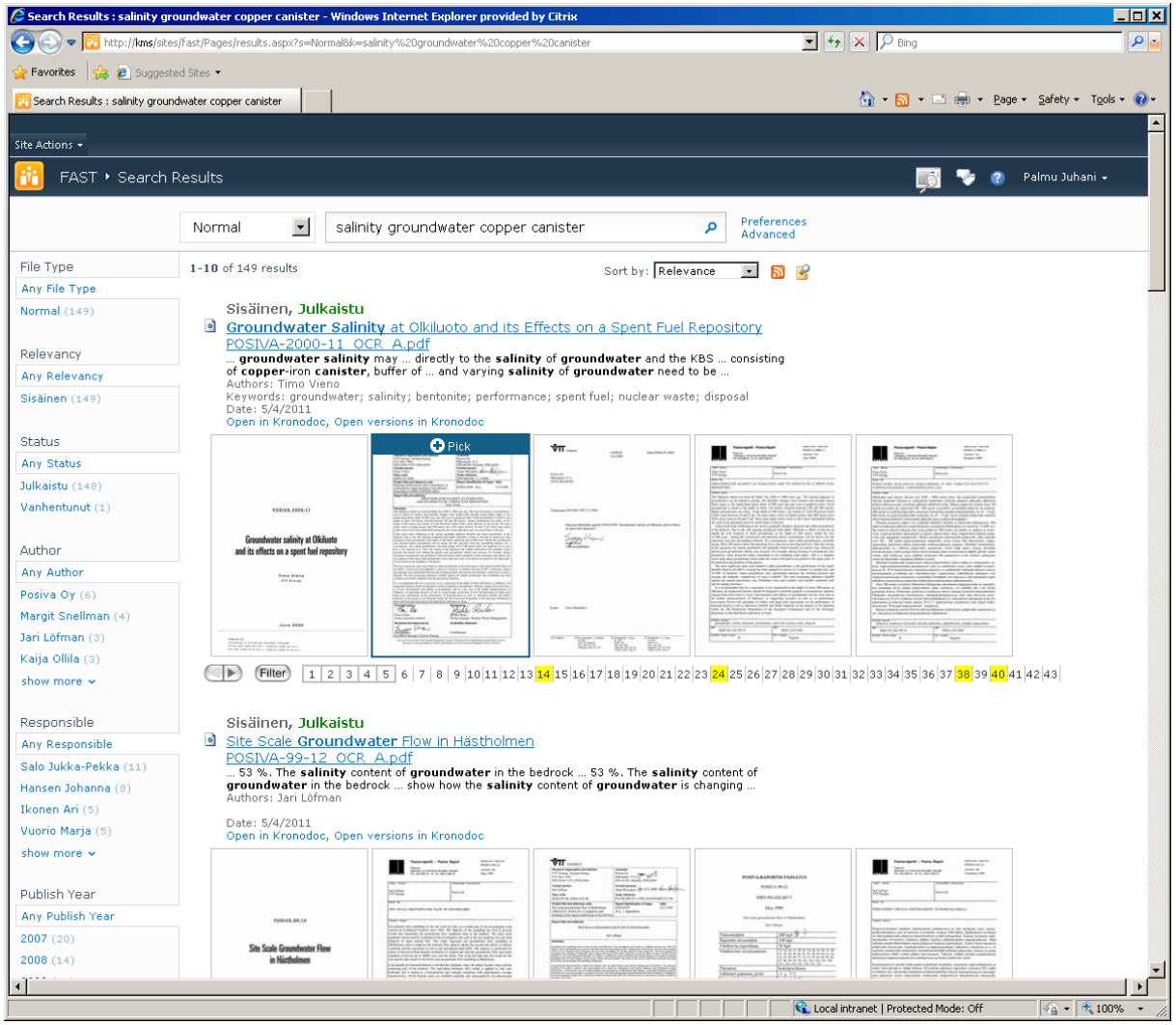
Realised Outlook of the Posiva KMS Portal



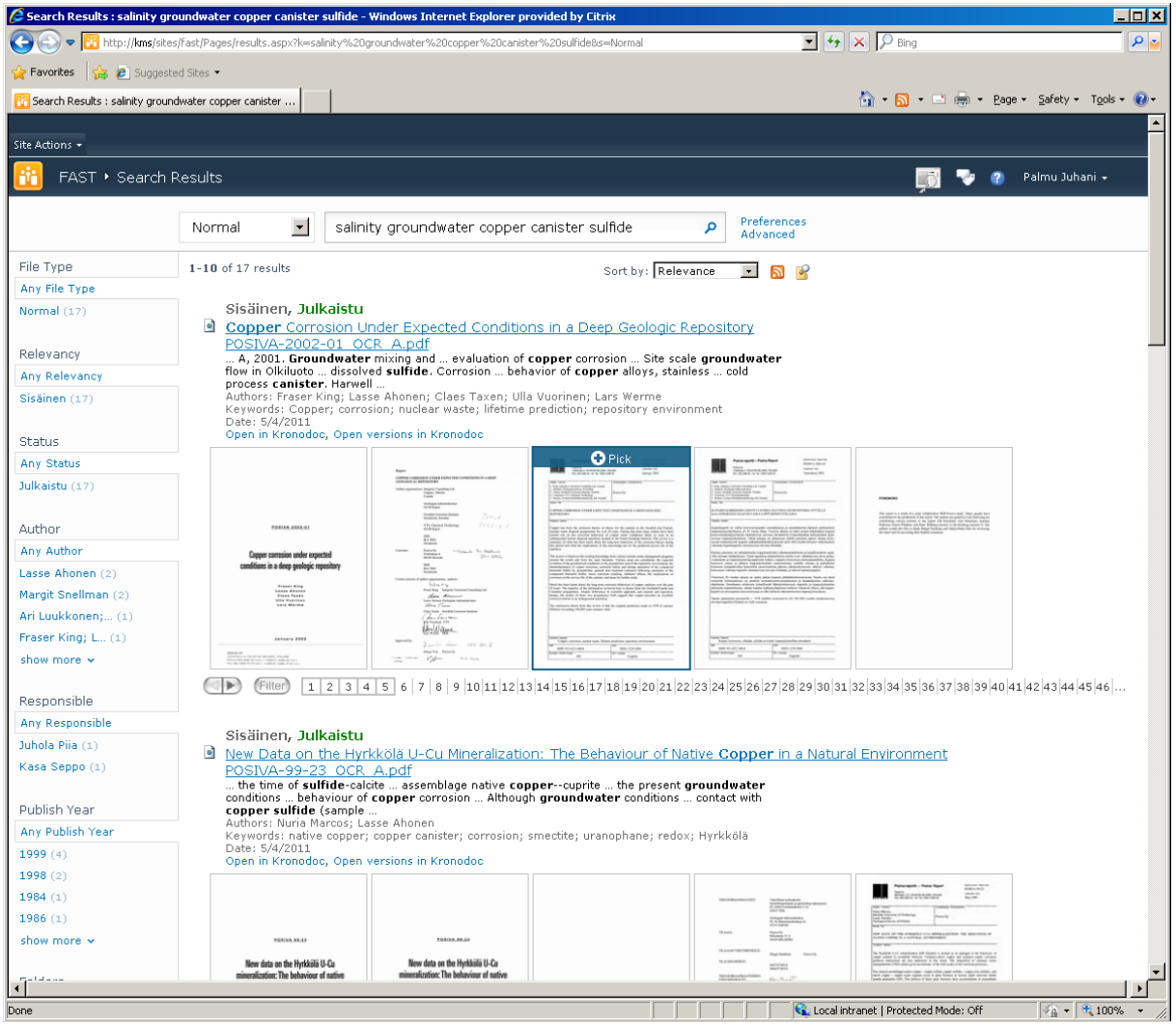
Realised Outlook of the Posiva KMS Portal



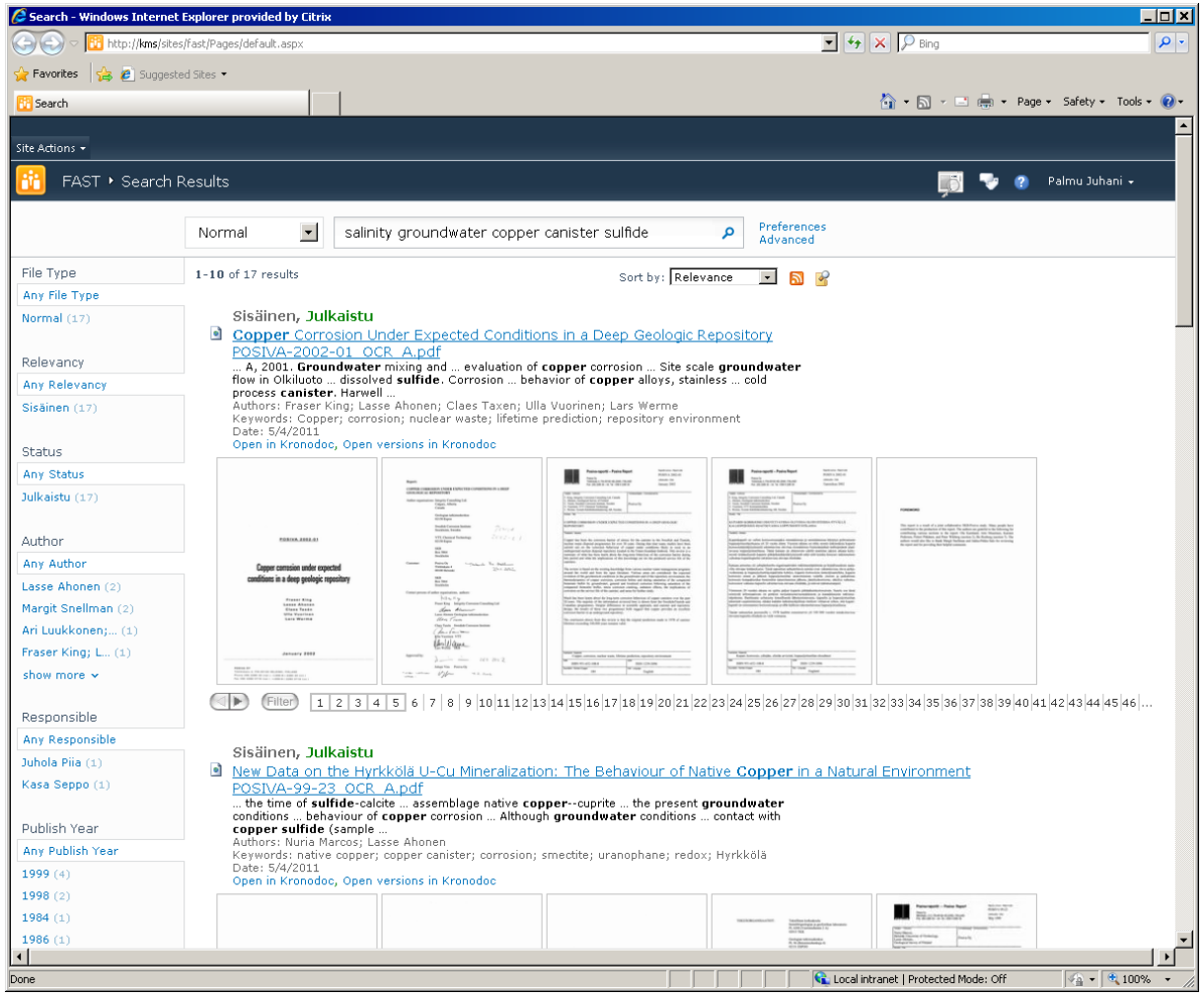
Realised Outlook of the Posiva KMS Portal



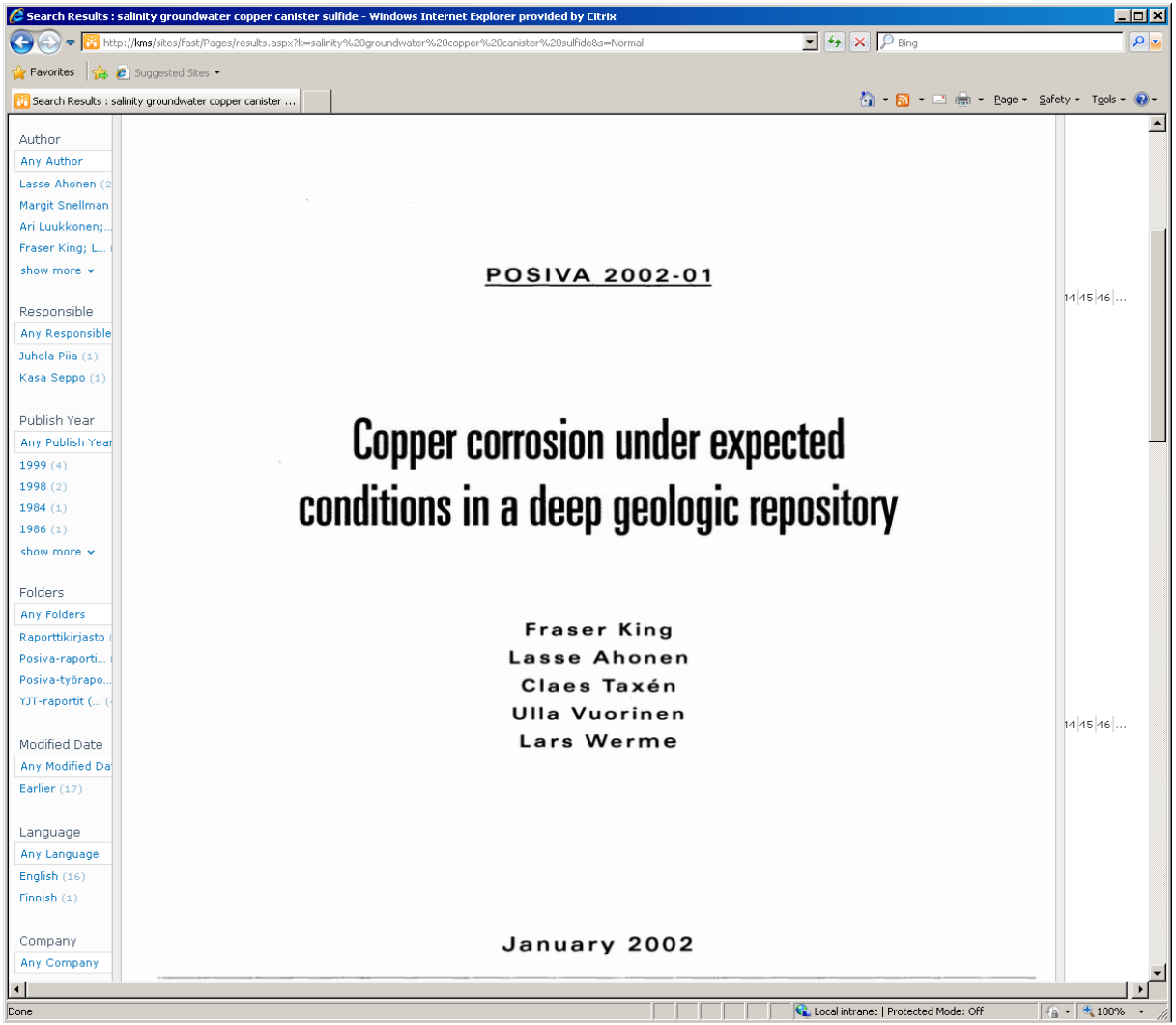
Realised Outlook of the Posiva KMS Portal



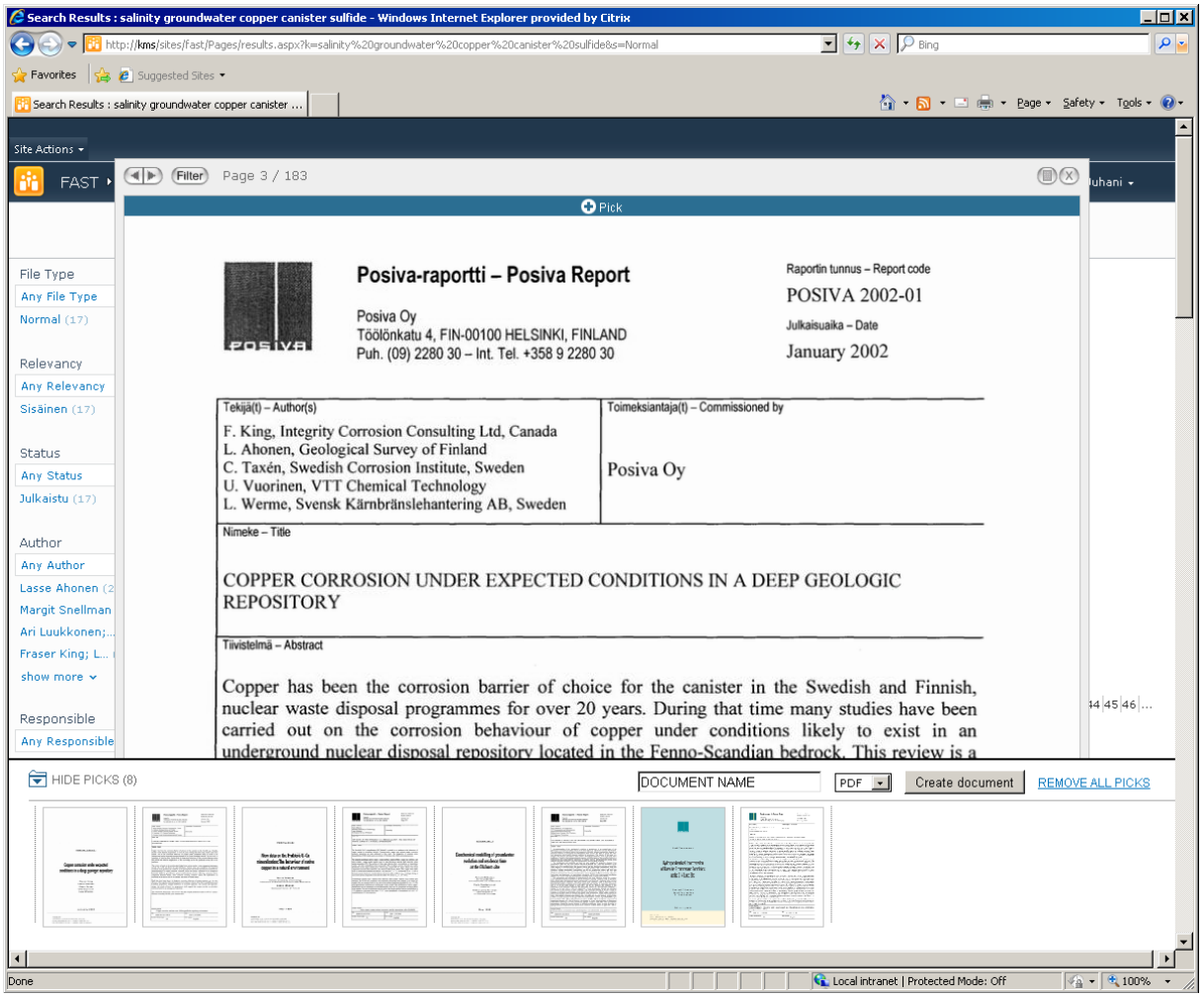
Realised Outlook of the Posiva KMS Portal



Realised Outlook of the Posiva KMS Portal



Realised Outlook of the Posiva KMS Portal



KMS - Knowledge Management System

- The activities for the KMS at Posiva started during 2011 and the Posiva KMS Portal is now completed and in production.

Improved Information Discovery for IGD-TP Organisation Members

IGD-TP Knowledge Management Search Portal

- Based on the development efforts done for the Posiva Final Disposal Knowledge Management Portal, Posiva representative will give a presentation and a demo how this technique could be utilised as form of the Common Knowledge Management Portal of IGD-TP.

- The demonstration stand will be open during all the Wednesday afternoon with Posiva and Documill representatives.

Documill Discovery Content Search

Fastest way to get to the information

SIMPLE

One integrated search to cover all places where you have critical information and content.

POWERFUL

Industry leading search engine searches public web sites, the intranet and wiki pages but also texts inside Microsoft PowerPoint™, Excel™, Word™ and PDF documents.

FAST

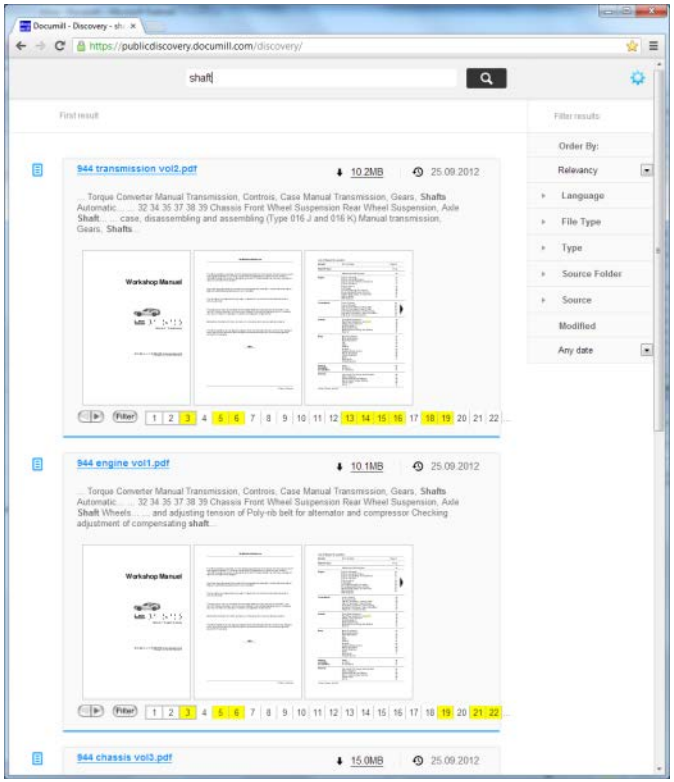
Search results show you the exact pages where the information is in all multi-page documents. You can view the documents in the browser without having jump between programs

Browser interface offers uniquely simple access to information equally from laptops, tablets or smartphones.

POSIVA SKB nagra. ONDRAF/NIRAS SCK·CEN nwmo SURAO RADIOACTIVE WASTE REPOSITORY AUTHORITY ANDRA La maîtrise des déchets radioactifs Bundesministerium für Wirtschaft und Technologie WIRTSCHAFT. WACHSTUM. WOHLSTAND. fundación enresa COVRA

Optimized search results

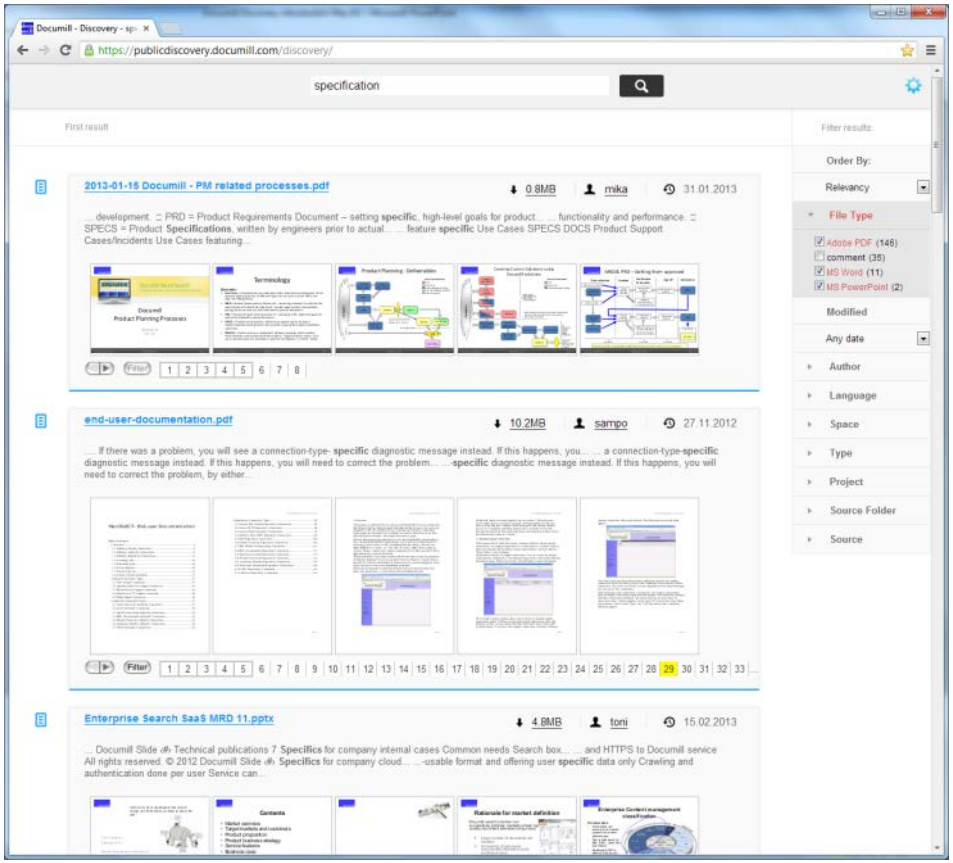
- Refine your search results by:
  - Stemming
  - Case independence or dependence
  - Compound word splitting
  - Synonym library
  - Search query spell checker
  - Priority of content language
  - Priority of content type e.g. title, discription, username etc.



Screen shots are used to illustrate functionality and they do not represent final look and feel

Integrated document previews

- Results show the exact pages where the information is in all main office document types
- Review documents in the browser without having to download them or jump between programs
- Fast and convenient way to offer mobile access to large documents.
  - Previews are technically pictures and will open on all major Internet browsers

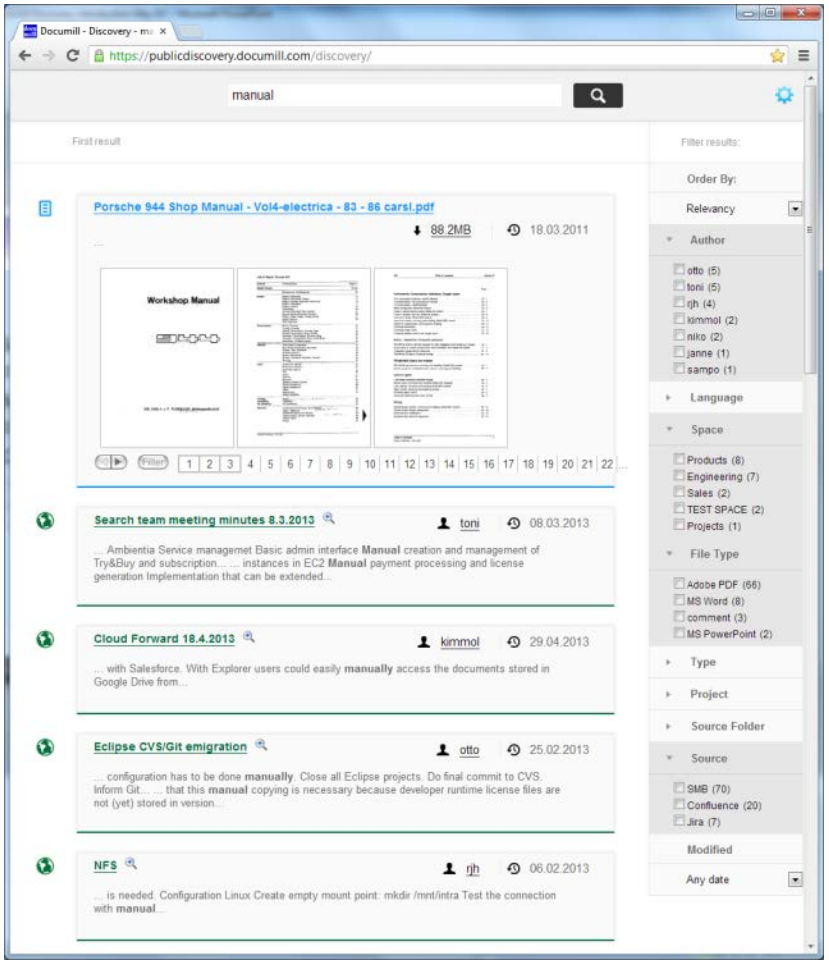


Screen shots are used to illustrate functionality and they do not represent final look and feel

Powerful filters to narrow down results

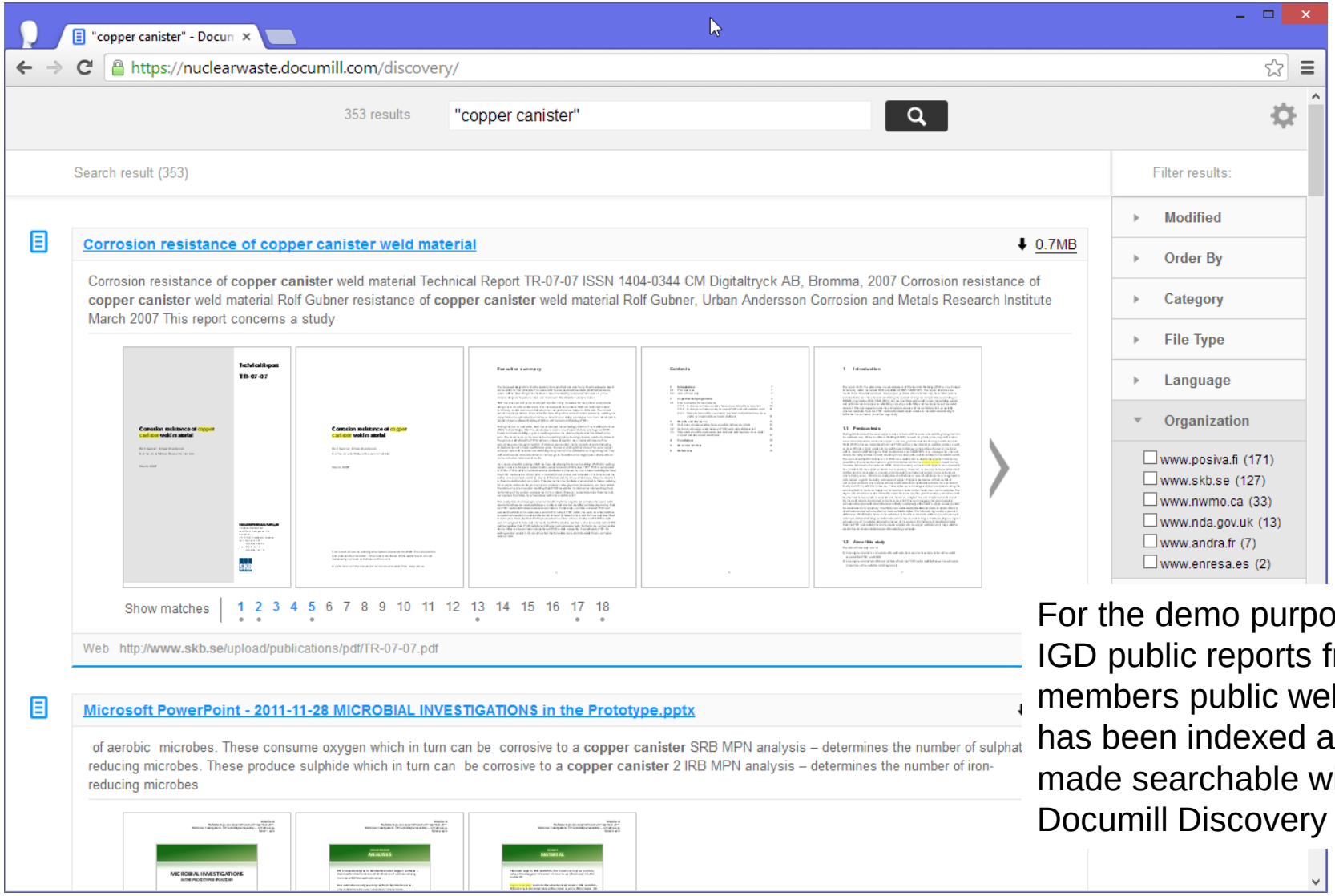
- Filters are a fast way to narrow down results when user knows details about the searched item like author, file type or data system where it is stored
- Search index includes all content and metadata
- Filters are automatically created based on each result set
- Use case example:

  Content type could be contract and it could be filtered or sorted by end date



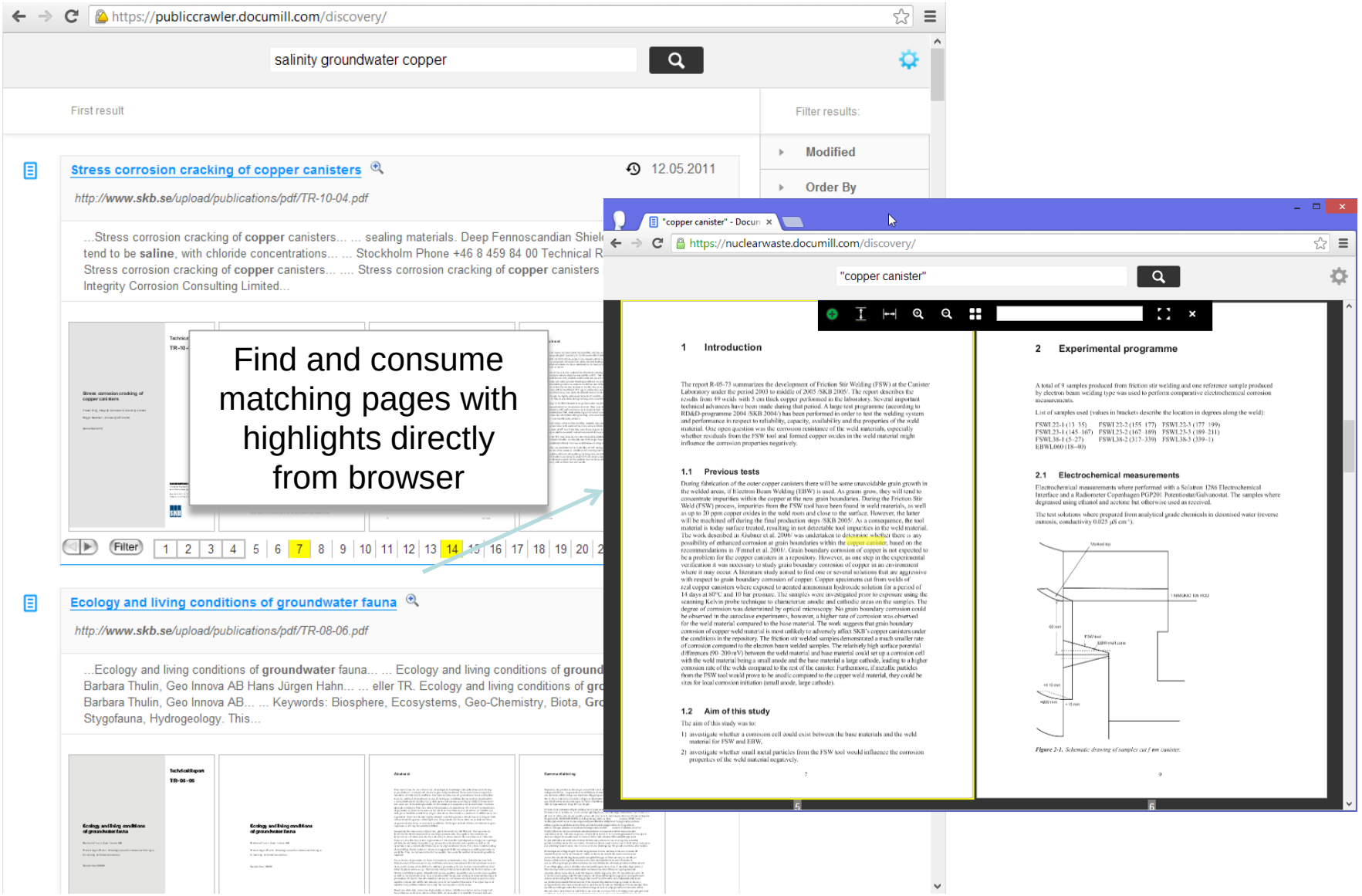
Screen shots are used to illustrate functionality and they do not represent final look and feel

IGD-TP related content search



For the demo purpose IGD public reports from members public web sites has been indexed and made searchable with Documill Discovery

Better and faster content discovery



Proposal for IGD-TP members

- One universal content discovery tool for IGD-TP members publicly available content and reports.
- Documill Discovery crawls and indexes IGD-TP members web sites content and reports into the service.
- Crawling and indexing will be done with the member organisation permission.
- Crawling policies ensures that the index is always updated with when new content is added.
- Service access via user id and password.
- Service fee is 1500 €/year/member organisation.

IGD-TP Knowledge Management Search Portal

- Please visit the demonstration stand and see the prototype of the IGD-TP Knowledge Management Search Portal during the whole Wednesday afternoon.

- In case for further questions, please contact to

JUHANI PALMU
POSIVA OY
E-mail: mailto:juhani.palmu@posiva.fi
Web: http://www.posiva.fi
LinkedIn: http://fi.linkedin.com/pub/juhani-palmu/24/b6/921

TERHO LAAKSO
DOCUMILL OY
E-mail: mailto:terho.laakso@documill.com
Web: http://www.documill.com


POSIVA