FIDIS

Future of Identity in the Information Society

Title:	"D1.11: Identity Law Survey, Migrating from the Database to a Wiki"
Author:	WP1 / WP5
Editors:	Leo van der Wees (TILT) Denis Royer (JWG)
Reviewers:	Thierry Nabeth (INSEAD)
Identifier:	D1.00
Type:	[Report]
Version:	1.00
Date:	Wednesday, 06 May 2009
Status:	[Final]
Class:	[Public]
File:	fidis-wp1-del1.11.law_db_wiki.doc

Summary

This document describes the joint effort of WP1 and WP5 to transform and to migrate the ID Law Survey database into a Wiki. It first describes the rational for this transformation (offering more flexibility and easier access and editing to the broad public).It then describes the Wiki's technical infrastructure, and the improvement in the Wiki engine that had to be added. It finally makes a short presentation of the resulting Wiki (structure and content)

This wiki is available at:

- http://identitylaws.fidis.net or
- http://www.fidis.net/interactive/wiki-on-id-related-law/

Copyright Notice:

This document may be copied, reproduced, or modified in whole or in part for any purpose. In addition to copy, reproduce, or modify this document in whole or part, an acknowledgement of the authors of the document and all applicable portions of this copyright notice must be clearly referenced.

PLEASE NOTE: This document may change without notice – Updated versions of this document can be found at the FIDIS NoE website at www.fidis.net.

Members of the FIDIS consortium

1.	*Goethe University Frankfurt*	Germany
2.	*Joint Research Centre (JRC)*	Spain
3.	*Vrije Universiteit Brussel*	Belgium
4.	*Unabhängiges Landeszentrum für Datenschutz (ICPP)*	Germany
5.	*Institut Europeen D'Administration Des Affaires (INSEAD)*	France
6.	*University of Reading*	United Kingdom
7.	*Katholieke Universiteit Leuven*	Belgium
8.	*Tilburg University[1]*	Netherlands
9.	*Karlstads University*	Sweden
10.	*Technische Universität Berlin*	Germany
11.	*Technische Universität Dresden*	Germany
12.	*Albert-Ludwig-University Freiburg*	Germany
13.	*Masarykova universita v Brne (MU)*	Czech Republic
14.	*VaF Bratislava*	Slovakia
15.	*London School of Economics and Political Science (LSE)*	United Kingdom
16.	*Budapest University of Technology and Economics (ISTRI)*	Hungary
17.	*IBM Research GmbH*	Switzerland
18.	*Centre Technique de la Gendarmerie Nationale (CTGN)*	France
19.	*Netherlands Forensic Institute (NFI)[2]*	Netherlands
20.	*Virtual Identity and Privacy Research Center (VIP)[3]*	Switzerland
21.	*Europäisches Microsoft Innovations Center GmbH (EMIC)*	Germany
22.	*Institute of Communication and Computer Systems (ICCS)*	Greece
23.	*AXSionics AG*	Switzerland
24.	*SIRRIX AG Security Technologies*	Germany

---

[1] Legal name: Stichting Katholieked Universiteit Brabant
[2] Legal name: Ministerie Van Justitie
[3] Legal name: Berner Fachhochschule

Versions

Version	Date	Description (Editor)
0.1	09.10.2008	• Initial release (Leo van der Wees)
0.2	31.03.2009	• Added technical description and changes related to the dr_wiki software package being used for the wiki on ID-related Law • Re-edited document with regard to intro and related topics
0.3	30.04.2009	• Added screenshots of the website. • Redone formatting of document
0.4	30.04.2009	• Version for the internal review
1.0	06.05.2009	• Final delivery version

Foreword

FIDIS partners from various disciplines have contributed as authors to this document. The following list names the main contributors for the chapters of this document:

Chapter	*Contributor(s)*
1 Executive Summary	Leo van der Wees (TILT), Denis Royer (JWG)
2 Introduction: Identity Law Survey	Leo van der Wees (TILT)
3 Thoughts on the Migration: From Survey to Wiki	Leo van der Wees (TILT)
4 Technical Background	Denis Royer (JWG)
5 Content of the Wiki	Leo van der Wees (TILT)
6 Conclusion	Denis Royer (JWG)

Table of Contents

1 Executive Summary

This document describes the joint effort of WP1 and WP5 to transform and to migrate the ID Law Survey database elaborated as part of FIDIS (FIDIS deliverable D5.1) into a Wiki.

It first describes the rational for this transformation (offering more flexibility and easier access and editing to the broad public).

It then describes the Wiki's technical infrastructure, and the improvement in the Wiki engine that had to be added.

It finally makes a short presentation of the resulting Wiki (structure and content).

This wiki is available at:

- http://identitylaws.fidis.net/ or

- http://www.fidis.net/interactive/wiki-on-id-related-law/

2 Introduction

The aim of this document is to describe the migration of the ID Law Survey database elaborated as part of FIDIS (FIDIS deliverable D5.1) into a Wiki. The Wiki approach indeed provided a more flexible way to manage the ID law database than the more traditional *database approach* that was originally used. In particular it offered the possibility to make this database more available to a large audience, and even to involve external participants in the authoring of its content.

2.1 The Identity Law Surveys database

The Tilburg Institute for Law, Technology, and Society (TILT) has published three law surveys in the past few years. Bert-Jaap Koops started his Crypto Law Survey in 1997[4], Simone van de Hof added to that a Digital Signature Law Survey in 1999[5], and the one launched latest was the Identity Law Survey that was conducted as part of the FIDIS project[6] (deliverable D5.1) in 2005.

These surveys set-up by TILT are all connected to new laws related to emerging technologies that are used worldwide.

The information being made available by the surveys is useful for various parties. Governments working on laws related to new technologies can find many examples in this database that can be relevant to their work. For instance, they can be informed about laws being drafted in other countries. Researchers are getting insights into laws being developed worldwide. They can use the material provided by the surveys to do comparative research and to write articles and opinions on the development of the law.

The fact that researchers as well as governments can inform themselves better on the topics dealt with in the surveys makes it also possible to streamline rules and regulations on those topics worldwide. Since the survey is concerned with technologies, which are introduced and used worldwide, benefits can be assumed on a global scale.

The FIDIS project elaborates on identity in an European setting. The technology, as well as the project and the participating researchers tend to be border-crossing which makes it perfect for a survey. And the countries participating in the European Union for just a short while can learn from the solutions chosen in other (European) countries.

2.2 The Identity Law Surveys initial database and its limitations

The Tilburg Institute for Law, Technology, and Society (TILT) of the Tilburg University (WP5) had experience in setting up surveys and therefore was made responsible for launching one on Identity Law in the work program of the FIDIS project. In Tilburg, surveys on Crypto Law[7] and Digital Signature Law were already available.[8] The set-up of an Identity Law survey did not differ substantially from those two already available, which made the work to be done relatively easy.

---

[4] Crypto Law Survey, Bert-Jaap Koops, Tilburg University, http://rechten.uvt.nl/koops/cryptolaw/.
[5] Digital Signature Law Survey, Simone van der Hof, Tilburg University, http://dsls.law.uvt.nl/.
[6] Available at http://identitylaws.fidis.net or http://www.fidis.net/interactive/wiki-on-id-related-law/
[7] Crypto Law Survey, Bert-Jaap Koops, Tilburg University, http://rechten.uvt.nl/koops/cryptolaw/.
[8] Digital Signature Law Survey, Simone van der Hof, Tilburg University, http://dsls.law.uvt.nl/

Frankfurt University (WP1) set-up the initial technical infrastructure, importing the data on identity laws available from TILT to the FIDIS servers. While working on technical issues the correspondents of the survey (cf. Chapter 7) were contacted and asked to go through the data already being available. Furthermore, they were requested to update the data if necessary and to send the updated data to Tilburg to be stored in the new Identity Law Survey database.

This procedure appeared to be inefficient. Correspondents had moved to other places, other jobs, or for other reasons were difficult to be contacted. Also, some correspondents for all sorts of reasons informed Tilburg not to be available anymore acting as a correspondent for the Identity Law Survey. In some cases they provided FIDIS with a new correspondent; in other cases Tilburg had to look for new correspondents themselves. Lastly, the participation of the correspondents for updating the survey required from Tilburg an important effort in contacting them, and urging them to provide the updates.

2.3 The Adoption of a Wiki-based system

These limitations of the traditional database approach as well as the availability of new tools that have appeared as part of the advent of the Web 2.0, led to considering the adoption of a wiki for managing the content of the ID Law database.

Indeed a Wiki makes updating the content much easier (it integrates an appropriate create/edit workflow) and in particular promised to relieve the pressure of the correspondents by allowing them to update data of the Identity Law. Survey whenever they wanted and instantaneously. Moreover, a Wiki appeared to be more adapted to deal with the semi-structured nature of the available ID Law data.

More specifically, a wiki-based approach would bring flexibility with regard to:

- Easier editing of content, as additional information can be added on the spot without having a fixed frame/skeleton if additional information is available
- Users are offered an easy to use interface for adding/changing data, in order to extend the database about the missing data
- The resulting data in the wiki can be exchanged between different kinds of wikis (Many wikis use the same syntax)

Frankfurt University (WP1) migrated the survey database into a wiki-based system. In a next step, TILT in collaboration with WP1 assessed the conversion and modified the resulting wiki-pages where necessary. Also, an authors' guide was written for correspondents willing to add data to the wiki.

The wiki has been launched and is available at http://identitylaws.fidis.net or http://www.fidis.net/interactive/wiki-on-id-related-law/

2.4 Structure of this document

The next part of this document provides an analysis that was conducted for migrating the database to a wiki (Section 3). It then describes the technical aspects related to the Wiki and the migration, and in particular presents the extensions that needed to be implemented (section 4). Furthermore, it briefly presents the results of this process, and in particular indicates the overall structure of the content (section 5).

3 Migrating the Survey into a Wiki: an Analysis

An internal analysis was conducted to assess the transformation of the initial Survey database into a Wiki.

3.1 The Initial Situation

The analysis found that the main disadvantage of the initial survey system was its centralisation. This system was coordinated by a single editor, who had to create and coordinate the network of correspondents, and do the updating of the content in the system once he had received it. Practically, the editor had to contact the different correspondents regularly to ask them whether or not the information in the survey they are responsible for was still accurate, and to provide updates if it was not the case. These correspondents did not always respond immediately, due to holidays, sabbatical leaves, changes of jobs, etc., making it necessary to ask them several times before getting an answer. Such a process proved to be very time consuming for the editor and very ineffective.

The maintenance of the content also included the identification of all the broken hyperlinks making reference to the external resources, etc, which requiring additional effort from the editor and from the correspondents. As a result, the maintenance of this database required an overwhelming effort that was difficult to sustain.

3.2 Web 2.0: New Tools for Supporting Collaboration

At the time the Identity Law Survey was setup in Tilburg a new trend developed in the use of the World Wide Web. This trend aimed the sharing of information and the generating of content on the web by the users themselves. This trend is being referred to as Web 2.0.

The trend resulted, amongst others, in sites for blogging, video sharing (with services such as YouTube) and social networks (with services such as FaceBook, Hyves or LinkedIn)..

An important technology that appeared in this context with regard to collaboration was the Wiki. A wiki is a page or collection of web pages designed to enable anyone who accesses it to contribute or modify content. Wikis are often used to create collaborative websites and to power community websites. Wikipedia[9], the free encyclopaedia on the World Wide Web, undoubtedly is the best-known wiki in the world represents an illustration of the good functioning of the approach: millions of users are using this system, and several hundred thousands having contributed in the content.

3.3 From Survey to Wiki – An Analysis

A wiki-based tool seemed perfect for building surveys worldwide on various topics, so the idea rose to change the platform of the Identity Law Survey as it was developed so far. It was to be transformed from a centrally organised straightforward database-driven web site consisting of several pages, into a wiki being maintained and developed further by Identity Law experts in the European Union and other parts of the world.

The adoption of a Wiki, would bring several advantages. First, the burden of maintaining the Law Survey would no longer rely upon a single person or organisation. Second, it would even allow visitors to contribute to the creation and modification of the content, resulting of a better quality of this content (Wilkinson & Huberman 2007) .

---

[9] Wikipedia: www.wikipedia.org

3.3.1 Motivation to participate

However an important question to be answered is whether or not the legal community interested in Identity Law would be willing to put effort into a wiki, since lawyer's time is often limited. In The Netherlands for instance have a few (serious) legal blogs[10] which allow people to react, and that are not very active. Also JurisPedia[11], a legal wiki that originates from international initiative, appears to be quite disappointing so far, the Dutch version of Wikipedia often providing better legal related content[12].

Do lawyers have less affinity with technology and therefore do not use technical platforms as blogs and wikis? Probably not! After all, today's young lawyers have used all sorts of digital tools during their studies, and are therefore proficient in to use of information technology tools.

Are lawyers not willing to share knowledge or opinions? That also seems not be the case, since (in The Netherlands) lawyers more than ever publish on firm blogs, in newspapers, on legal portals, etc. So it seems they are willing to 'give away' information, so why not on a wiki?

3.3.2 Reliability of the information

Another issue which might play a role in the success of a wiki on Identity Law is the reliability of wikis. An issue often discussed[13] and that has been the object of many controversies (Chesney 2006). If literally the whole world is able to adjust and add lemmas to a (legal) wiki, it might be the case that a wiki might contain mistakes. On the other hand, if the wiki works as it should work, those mistakes should be repaired at a certain moment in time. A certain level of alertness is always necessary, but that is also the case in the paper world.

A threshold could be build into a wiki avoiding every passer-by to add data by requiring a registration and appointing a moderator. However, opponents state that wikis loose strength as a result of such measures. Anarchy is what makes sources of knowledge as wikis powerful. Finally, it would be an error to believe that Wikis are not regulated, evidence demonstrating exactly the contrary, as show in (Lakhani & McAfee 2007), which describes how the terms Entreprise 2.0 was "rejected" from Wikipedia after much debates.

3.4 Maximising the Chances of Success

Having said that, it is clear the switch of platform has certain risks. However, to avoid the wiki not being used a few measures have been taken to reduce the risks of failure in the case of this new wiki.

Because of the fact the technology might be unknown a short guideline was written and made available via the wiki. This guide explains visitors how to change data, and how to add pages.

---

[10] Blog Nederlands Juristenblad, <www.njblog.nl>, and blog NRC Handelsblad,
<weblogs.nrc.nl/weblog/uitspraak/>.
[11] JurisPedia, <www.jurispedia.org>.
[12] See for example Lijst van rechterlijke uitspraken (Nederland),
<nl.wikipedia.org/wiki/Lijst_van_rechterlijke_uitspraken_(Nederland)>.
[13] Wat is de waarde van kennisbanken op internet?, ZBC Consultants (<www.zbc.nu>, search for *kennisbanken internet*).

Since there are numerous types of wiki software[14] available, which all have their peculiarities, this probably improves the chances of the wiki to be used and updated.

Also, the complete structure of pages is created in the wiki. This means that all topics are mentioned, even if not all topic pages contain data, so that the Wiki does not look empty to the first visitors. This makes the wiki more update-friendly. After all, since the topics are already in the wiki only data need to be added to the topic pages. This in combination with the guideline should avoid that the technology itself will be a threshold for visitors to update or change the wiki.

Next to this, and so as to avoid the cold start effect, the wiki does not start with blank pages. Quite a few pages contain data. This invites people to browse through the wiki and to start changing data.

Also the correspondents who used to deliver input for the original survey will be mentioned on the wiki giving the wiki a certain status. Those correspondents are also kindly requested to keep maintaining the parts of the wiki, which were originally their parts in the survey.

---

[14] List of wiki software, Wikipedia, <en.wikipedia.org/wiki/List_of_wiki_software>.

4 Technical Infrastructure

4.1 Introduction

In order to provide a community with a collaborative information system infrastructure for rapidly creating and editing content, wikis do not only need to provide the technical means needed by their user but must implement guidelines to regulate the collaborative creation and management of content as well.

On the technical side, then, Wikis are based on a Wiki software component that allows users to very easily create, edit, and link Web pages, using a standard Web browser. Single pages in a Wiki are referred to as a 'Wiki page'. The entire body of pages, which are usually highly interconnected via hyperlinks, is called 'the Wiki'. The editing of the Wiki is based on the use of a simple markup-language in which an editor can easily specify the formatting (such as headings, bullets and so on) of Wiki pages, and also to hyperlink them with one another via the terms included in this page. Wikis also usually offer other functionalities for facilitating the coordination of different authors such as: locking the content of pages under edition; content versioning and history (the system archives the different version of the Wiki page); discussion pages (a Wiki page may have an associated page for discussion); and so on.

On the non technical side, Wikis propose a set of principles, processes and guidelines that can be used to regulate and coordinate the knowledge authoring and diffusion process in the community of the users making use of these Wikis. This includes, but is not limited to, the description of practices to be used for content creation, e.g. templates that ensure that all wiki web pages will have a common structure. Another important aspect is to address issues that can occur in collaborative authoring contexts such as correcting errors, disambiguating terms, resolving disputes, or addressing vandalism. Wiki usually provide, in addition to a version history, a "discussion page", on which authors and editors can discuss changes. More advanced policies for quality management can be implemented e.g. by a hierarchical user model (with "normal" contributors and "editors" who can undo or prevent changes of a web page version).

4.2 Setting-up of the Wiki System

The dr_wiki extension of the TYPO3 content management system was used to power the ID Law Survey Wiki. This wiki has also tried implementing the non-technical principles described previously.

In a first step, the requirements for the migration of the contents of the database were collected, in order to offer the required functionality.

Based on the described changes of the *dr_wiki* software, a general restructuring of the data entry and storage was made possible. As discussed in FIDIS deliverable D1.2[15], the general structure of the website is segregated into a public and an internal area, allowing for data separation. However, in order to reuse the already entered data of the wiki for the public and the internal website, the structure outlines in **Fehler! Verweisquelle konnte nicht gefunden werden.** was built:

---

[15] Available at http://www.fidis.net/resources/deliverables/other/#c1802
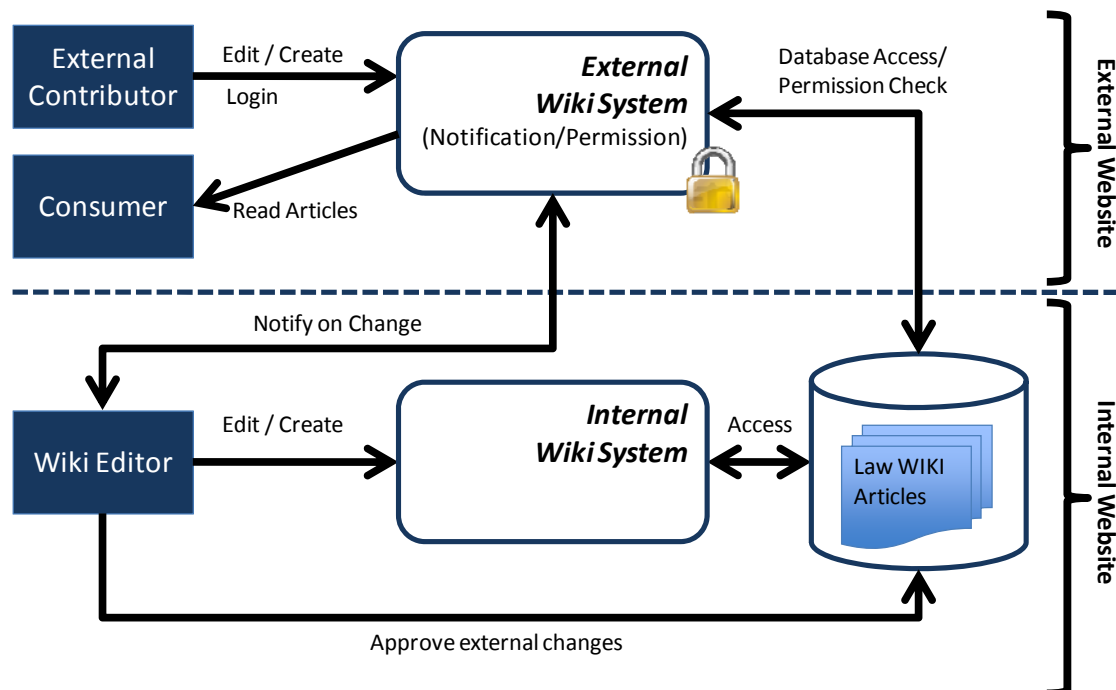
Figure 1: Structure of the ID-Law Wiki System.

The data of the ID-Law wiki itself is stored in the database parts of the backend. By linking this data to the wiki plug-in responsible for the display of the data on the public website, this data can be used as well. Also, by using the permission handling of the wiki software, external users can edit pages, once they are logged in.

4.3 Additional enhancements

Based on the initial description, the following main requirements for the extended wiki were identified:

- Categorisation of pages to allow for an easy navigation

- Notification of changes to the wiki editor

4.3.1 Categorisation

In order to offer an easy way to cluster specific pages together, a categorisation mechanism was necessary. Categories provide automatic indexes that are useful as tables of contents. Based on the approach taken by MediaWiki, a namespace-based categorisation was integrated into the wiki software. In order to add a category to a page, a user simply has to add a category wiki link by convention, at the end of the page):

```
[[Category:Name]]
```

One has to substitute the actual name of the category in place of *Name*. To be specific, in order to add an article called "Albert Einstein" to the category "People", one would edit the article and add "[[Category:People]]" (no quotes) into its page source somewhere. Also any number of category links is possible for a wiki page. The category links themselves are parsed from the body of a wiki age and displayed on the bottom of a page in a category box, allowing for an easy access.

By clicking on the links in the category box, the user is taken to the related category page, offering an alphabetical list of pages belonging to a certain category.

In the IMS wiki, the categorisation of pages is especially used for linking the IMSs to the Types and Tiers of IMS. Moreover, further groupings related to other properties are possible, such as specific laws (cf. Chapter 5).

4.3.2 Change Notification

In order to allow the wiki editors to easily manage changes from external contributors (user), an email-based workflow system and notification systems was developed and integrated into the *dr_wiki* software (as of version 1.8.0). Whenever a user adds or edits a page, the wiki editor gets a notification email. Optionally, the wiki system hides the changed wiki page from being publically displayed and notifies the user that his/her changes have been submitted for review by the editor (cf. **Figure 2**).
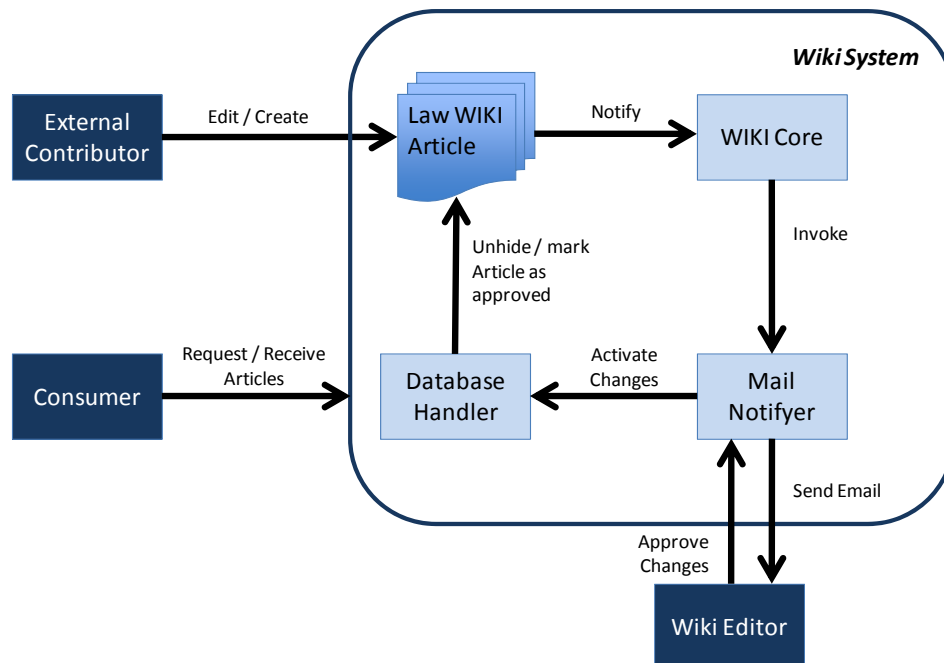

Figure 2: Internal Structure of the Notification System for the ID-Law Wiki.

Besides the rendered HTML body of the wiki page and the data of the contributing user (email, username, etc.), the sent email also contains links to approve the changes or delete a page directly (e.g. in cases were spam was submitted by a user).

Figure 3 shows the configuration screen for the email notification system of the wiki. Here, the email address of the admin, and the behaviour for the newly created page (hide/not hide) can be entered.
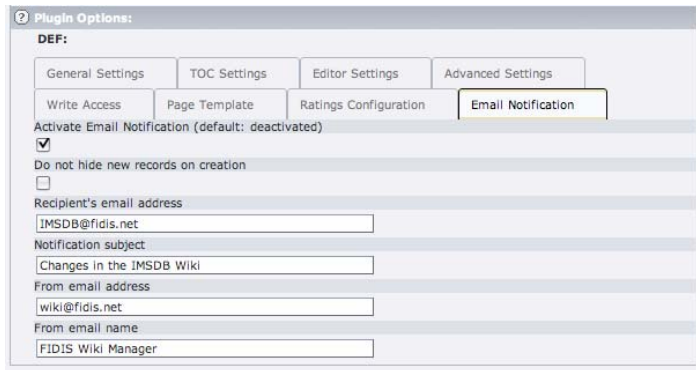
**Figure 3: Plug-In Configuration for the ID-Law Wiki.**

In order to fully use the notification mechanism, a login system was added to the FIDIS website. Accordingly, all external contributors need to sign-up for an account. However, in order to minimise the required data, only the username, real-name, and the email-address are necessary for the sign-up.

5   The ID-Law Wiki

5.1   Overview

The homepage of the wiki can be seen below. If one chooses one of the countries the list of categories for that particular country will be shown. In the future the idea is to be able choose for a category as well, giving a visitor an overview of rules and regulations on a specific identity issue per country.

The Wiki on ID-related law is now publically available at http://identitylaws.fidis.net (short URL) or http://www.fidis.net/interactive/wiki-on-id-related-law/. Further investigation will show, whether the approach taken will be successful. However, having transferred the data and linked the different laws, the editors are confident that the critical mass provided by the old ID-Law Survey database will be a good basis for further work.
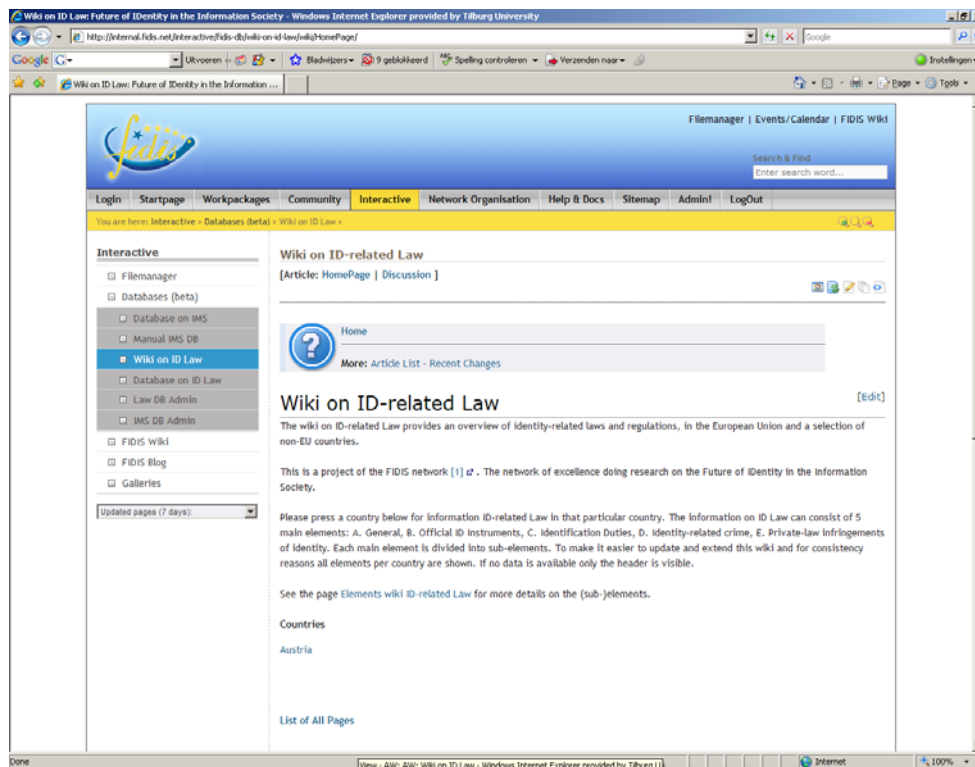
5.2   Initial structure of the content

By transferring data from the Identity Law survey to the wiki once again the initial structure has been assessed. This also led to a new organisation of the contents. Per country the following content can be used for the categorisation in the wiki:

A. General

B. Official ID Instruments

- B1. Official ID Documents

- B2. Official ID Numbers

- B3. Electronic ID

- B4. Obligations to Carry ID

B. Identification Duties

- B1. Show ID - Criminal Law

- B2. Show ID - Other Public Law

- B3. Show ID - Private Law

- B4. Prohibitions of Anonymity

C. Identity abuse

- C1. Theft

- C2. Fraud

- C3. Forgery

- C4. Damage

- C5. Data abuse

- C6. Imposture

D. Private-law infringements of identity

- D1. Tort

- D2. Portrait rights

Under every country mentioned in the wiki, the categories above are mentioned. This doesn't mean under every category data is available. By giving the categories and structure beforehand, the wiki will be consistent and easy to navigate in. Also, it is easy to add data. If a category is empty one only has to add data to a page, and it is not necessary add the category and the page first. This should make the threshold to add data lower.

6 Bibliography

- Chesney Thomas (2006), An empirical examination of Wikipedia's credibility, *First Monday*, volume 11, number 11,

- Hoorn, Esther (2005), JurisPedia en de zichtbaarheid van de rechtswetenschap, Nederlands Juristenblad, 4 november 2005

- Lakhani, Karim R. & Andrew P. McAfee (2007), Case study on deleting "Enterprise 2.0" article, Courseware #9-607-712, Harvard Business School, http://courseware.hbs.edu/public/cases/wikipedia/

- Rusanow, Gretta (2003), Knowledge Management is a Business Imperative, LLRX.com, September 28, 2003, http://www.llrx.com/ features/kmsmarter.htm

- Spek, Sander, Knowledge management by wikis, Institute for Knowledge and Agent Technology, Universiteit Maastricht, www.cs.unimaas.nl/s.spek/wikiposition.pdf

- Wilkinson, D. M., & Huberman, B. A. (2007), Assessing the value of cooperation in Wikipedia, *First Monday*, 12, 4.

- ZBC Consultants, Wat is de waarde van kennisbanken op internet?, <www.zbc.nu>, search for kennisbanken internet

- "D 5.1: A survey on legislation on ID theft in the EU and a number of other countries"

7 Appendix: The Correspondents

The following country correspondents have provided information for the initial Identity Law survey:

- Belgium, Hans Graux, KU Leuven

- Canada, Shaun Brown, Industry Canada

- Czech Republic, Vasek Matyas, Masaryk University, Brno

- Czech Republic, Marek Kumpost, Masaryk University, Brno

- Denmark, Henrik Udsen, University of Copenhagen

- Finland, Tuomas Pöysti, Ministry of Finance and University of Helsinki

- France, Cyril Murie, Eric Freyssinet, Forensic Research Institute of the Gendarmerie Nationale (IRCGN/DCIN)

- Germany, Henry Kraseman, Independent Center for Privacy Protection, Schleswig-Holstein

- Greece, Vagelis Papakonstantinou, PKpartners Law Firm

- Greece, Vassiliki Tsoukala, PKpartners Law Firm

- Hungary, Gábor Hontert, ISRI, Budapest University of Technology and Economics

- Mexico, Cristos Velasco, North American Consumer Project on Electronic Commerce

- Netherlands, Mark Dekker, Tilburg University

- Poland, Marcin Zielinski, Universiteit Utrecht

- Portugal, Ana Oliveira Santos, Coelho Ribeiro & Associados

- Slovakia, Jozef Vyskoc, VAF

- Slovenia, Matej Kovačič, Faculty of Social Sciences, University of Ljubljana, Slovenia

- Spain, Carlos Rodríguez Casal, Joint Research Centre, IPTS

- Sweden, Helena Andersson, Stockholm University

- Switzerland, Emmanuel Benoist, Berner Fachhochschule

- United Kingdom, Peter Sommer, London School of Economics