



# D8.9 Report: Interactive Knowledge Impact Report According to EU Impact Assessment Guidelines

Deliverable: D8.9 Report: Interactive Knowledge Impact Report According to EU Impact Assessment Guidelines

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Interactive Knowledge Stack for Semantic Content Management Systems

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## IKS in a Nutshell

“Interactive Knowledge Stack” (IKS) is an integrating project targeting small to medium Content Management Systems (CMS) providers in Europe providing technology platforms for content and knowledge management to thousands of end user organizations. Current CMS technology platforms lack the capability for semantic web enabled, intelligent content, and therefore lack the capacity for users to interact with the content at the user’s knowledge level. The objective of IKS therefore, is to bring semantic capabilities to current CMS frameworks. IKS puts forward the “Semantic CMS Technology Stack” which merges the advances in semantic web infrastructure and services with CMS industry needs of coherent architectures that fit into existing technology landscapes. IKS will provide the specifications and at least one Open Source Reference Implementation of the full IKS Stack. To validate the IKS Stack prototype solutions for industrial use cases ranging from ambient intelligence infotainment, project management and controlling to an online holiday booking system will be developed.

## 1 Executive Summary

This report provides an evaluation of the impact that IKS and its related projects had on the CMS community. Impact metrics have been selected from online analytics tools (i.e. website visits, unique visitors, page views, page views per visit, average visit duration, bounce rate and percentage of new visits) as well as EU assessment guidelines, feedback from the third EU review meeting and Information Systems research (i.e. technology impact, business impact, research impact, educational impact, impact on CMS community, sustainability of project results and on going activities beyond 2012, benefits of semantic-enhanced CMS). Data used for this impact evaluation was taken from online access to websites relevant to IKS and the IKS Impact Assessment Survey 2012 conducted at the end of 2012. Results indicate that IKS and its related projects have generated almost 360 000 page views over the course of the last six months in 2012. This together with the graduation of Apache Stanbol from its incubator status in 2012 can be interpreted as a remarkable impact of the project. Moreover, results of the IKS Impact Assessment Survey 2012 indicate that the combination of semantic technologies and CMS are able to provide several benefits such that semantic-enhanced CMS are recommended to a high degree. Additionally, technological impact, business impact and educational impact of IKS results are rated at a notable degree, too. All in all, it can be therefore concluded that IKS was a successful EU project.

## 2 Introduction

Task brief 8.9 of the description work is formulated as follows: “For each of the tasks of this work package, we will use and – if necessary – develop impact metrics to support the EC in assessing the effectiveness of the ICT work programme, by providing a detailed analysis of this project's impact. We will estimate and analyse the impact given by collaboration with communities, e.g., W3C and open source communities, but also by detailed tracking of online access to provided project results (project web site, hosted content on sites, such as youtube.com etc.). Evaluations of online data will be fed back to the project team for improvements.” (p. 81f)

The overall goal of this deliverable is therefore to report on the impact of the IKS project on the relevant stakeholders and CMS developer communities. In order to achieve this goal, relevant impact metrics are identified and employed in the IKS project. These metrics can be reused as an impact assessment instrument for future evaluations of EU projects and thus, can support the EC in the assessment of the effectiveness of the ICT work program in general.

The remainder of this deliverable is structured as follows. In the next chapter, general impact metrics for web access are provided and particular results of web access to IKS-related websites are provided. These results illustrate the impact of IKS with regard to online visibility and reachability. Then, assessment metrics related to technological impact, business impact, research impact, educational impact, impact on relevant stakeholders, sustainability of project results and on going activities beyond projects and benefits of semantic-enhanced CMS are provided in Chapter 4. Impact results of an online survey – the IKS Impact Assessment Survey 2012 – are reported here as well. A brief summary of this report is provided in the final chapter.

### 3 Web Access to Relevant IKS Websites

This chapter first delineates the approach on how web access of IKS-related websites was tracked in order to investigate online visibility and reachability of the project. In a second section, the results of web access are described in detail.

#### 3.1 Method

Because IKS investigates semantic technologies in content management systems (CMS) and in particular web-based CMS, the following indicators were used to measure the impact of IKS in the Web, i.e. these indicators are approximations for online visibility and reachability of the project results:<sup>1</sup>

1. **Visits:** The number of visits to a website over a specified time period.
2. **Unique Visitors:** The number of unique visitors represents the amount of unduplicated (counted only once) visitors to a website over a specified time period.
3. **Page Views:** The total amount of pages viewed over a specified time period. Repeated views of a single page are counted, too.
4. **Pages / Visit:** The average number of pages viewed during a visit to a website over a specified time period. It is also known as Average Page Depth. Repeated views of a single page are counted, too.
5. **Average Visit Duration:** The average time duration of a session over a specified time period.
6. **Bounce Rate:** The percentage of single-page visits (i.e. visits in which the person left a website from the entrance page, for example, because she has found the relevant information) over a specified time period.
7. **Percentage of New Visits:** An estimate of the percentage of first time visits over a specified time period, as made by Google.

In addition to these indicators, country statistics (i.e. the location from which the IKS-related websites were accessed) were also used to evaluate the impact of the IKS project with regard to international reach and visibility.

For the purpose of web access evaluation, overall seven IKS-related websites were tracked via Google Analytics<sup>2</sup> from the 1<sup>st</sup> of July 2012 until the 31<sup>st</sup> of December 2012. The relevant websites with their URLs and brief descriptions are listed in Table 1. Screenshots of these websites are provided from Figure 1 to Figure 7.

<sup>1</sup> The description of the indicators was adopted from Google Analytics (<http://www.google.com/analytics>)

<sup>2</sup> <http://www.google.com/analytics>

<sup>2</sup> <http://www.google.com/analytics>

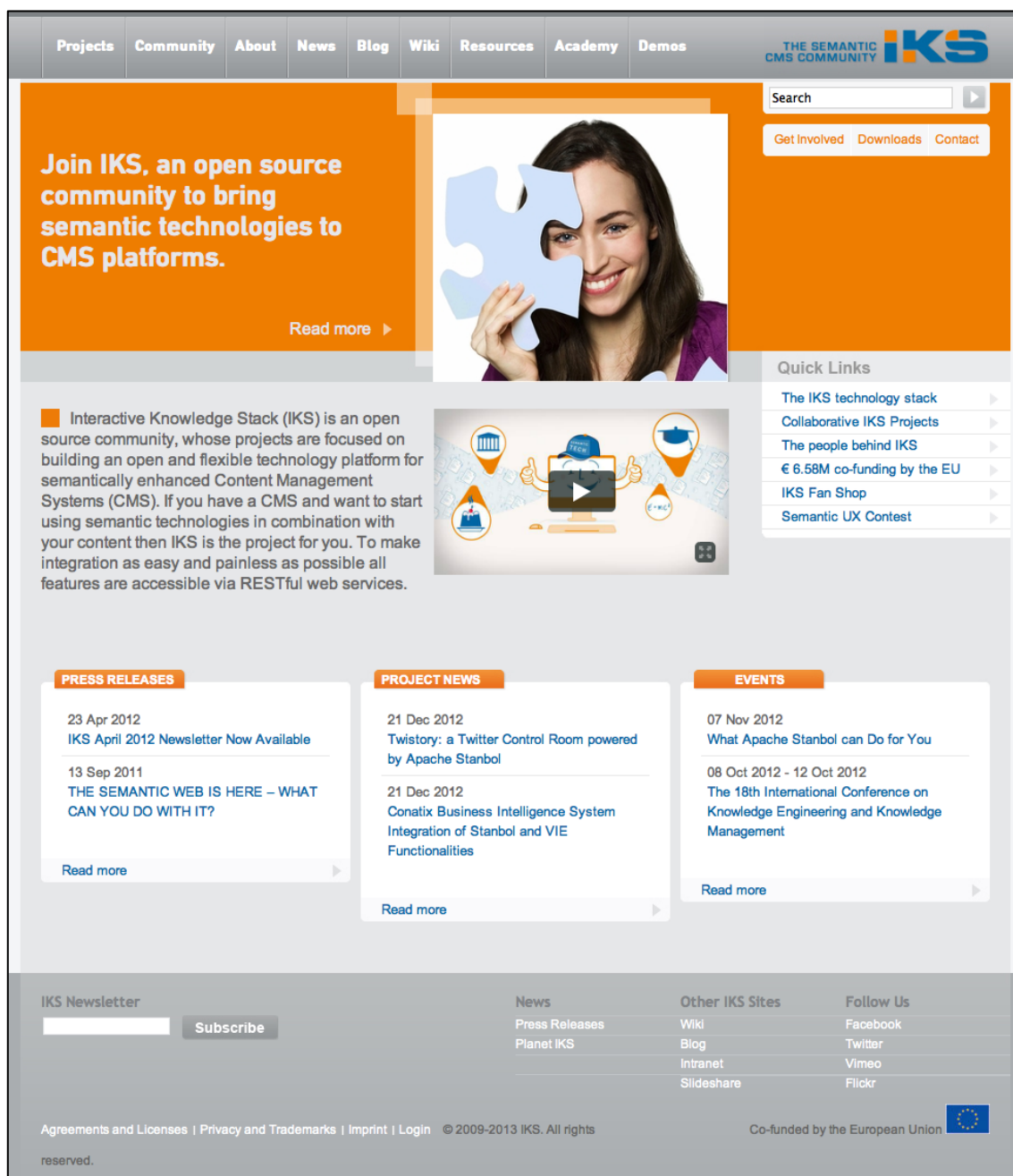
## D8.9 IKS Impact Assessment

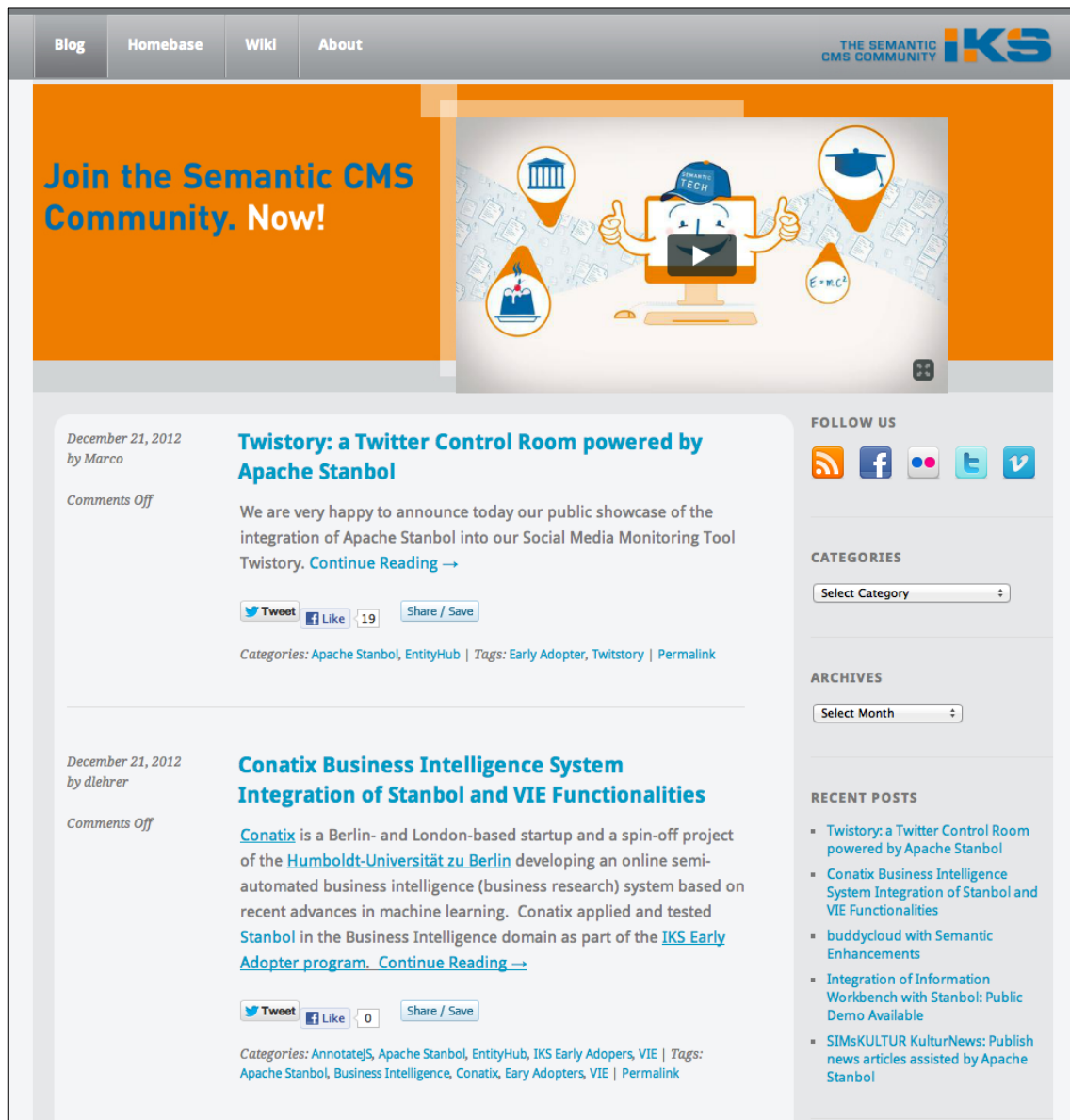
Table 1. Name, URL and description of the seven websites that were tracked

| # | Name                       | URL                                                                                                                                                                                                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | IKS Website                | <a href="http://www.iks-project.eu">http://www.iks-project.eu</a>                                                                                                                                                 | This is the public website of the IKS project (in contrast to <a href="http://www.interactive-knowledge.org">www.interactive-knowledge.org</a> which is only for internal purposes). This website contains all information with links to the IKS blog, the IKS Wiki, the IKS Deliverables, etc. relevant to CMS developers and customers who are interested in the project.                                                                                                                                   |
| 2 | IKS Blog                   | <a href="http://blog.iks-project.eu">http://blog.iks-project.eu</a>                                                                                                                                               | The official IKS blog. This blog is used to announce new releases of the IKS code or to report on current issues and results of the IKS project as well as on achievements within the IKS community.                                                                                                                                                                                                                                                                                                          |
| 3 | IKS Code Repository        | <a href="http://code.google.com/p/iks-project">http://code.google.com/p/iks-project</a>                                                                                                                           | This is the open source code-base of IKS. This repository contains the sources that assemble the IKS reference implementation which consists of software artifacts from the VIE and the Apache Stanbol projects.                                                                                                                                                                                                                                                                                              |
| 4 | Apache Stanbol             | <a href="http://incubator.apache.org/stanbol">http://incubator.apache.org/stanbol</a> (until October 2012) <sup>3</sup><br><a href="http://stanbol.apache.org">http://stanbol.apache.org</a> (after October 2012) | This is the official website of Apache Stanbol, a project that was initiated in IKS. It provides a set of reusable components for semantic content management. Apache Stanbol's intended use is to extend traditional content management systems with semantic services. Other feasible use cases include: direct usage from web applications (e.g. for tag extraction/suggestion; or text completion in search fields), 'smart' content workflows or email routing based on extracted entities, topics, etc. |
| 5 | Vienna IKS Editables (VIE) | <a href="http://viejs.org">http://viejs.org</a>                                                                                                                                                                   | This is the official website of the Vienna IKS Editables (VIE), a semantic interaction Framework that was initiated in IKS. It provides VIE.js a JavaScript library for implementing decoupled Content Management Systems and semantic interaction in web applications.                                                                                                                                                                                                                                       |
| 6 | Create                     | <a href="http://createjs.org">http://createjs.org</a>                                                                                                                                                             | This is the official website of Create, a web editing interface that was initiated in IKS. Its core is Create.js, a comprehensive web editing interface script for Content Management Systems. It is designed to provide a modern, fully browser-based HTML5 environment for managing content. Create can be adapted to work on almost any content management backend.                                                                                                                                        |
| 7 | Hallo                      | <a href="http://hallojs.org">http://hallojs.org</a>                                                                                                                                                               | This is the official website of Hallo, a web editor that was initiated in IKS. It provides access to Hallo.js, a simple web editor script. Instead of cluttered forms or toolbars, one can edit web content as it is.                                                                                                                                                                                                                                                                                         |

<sup>3</sup> The results reported here are based on this Apache Stanbol URL

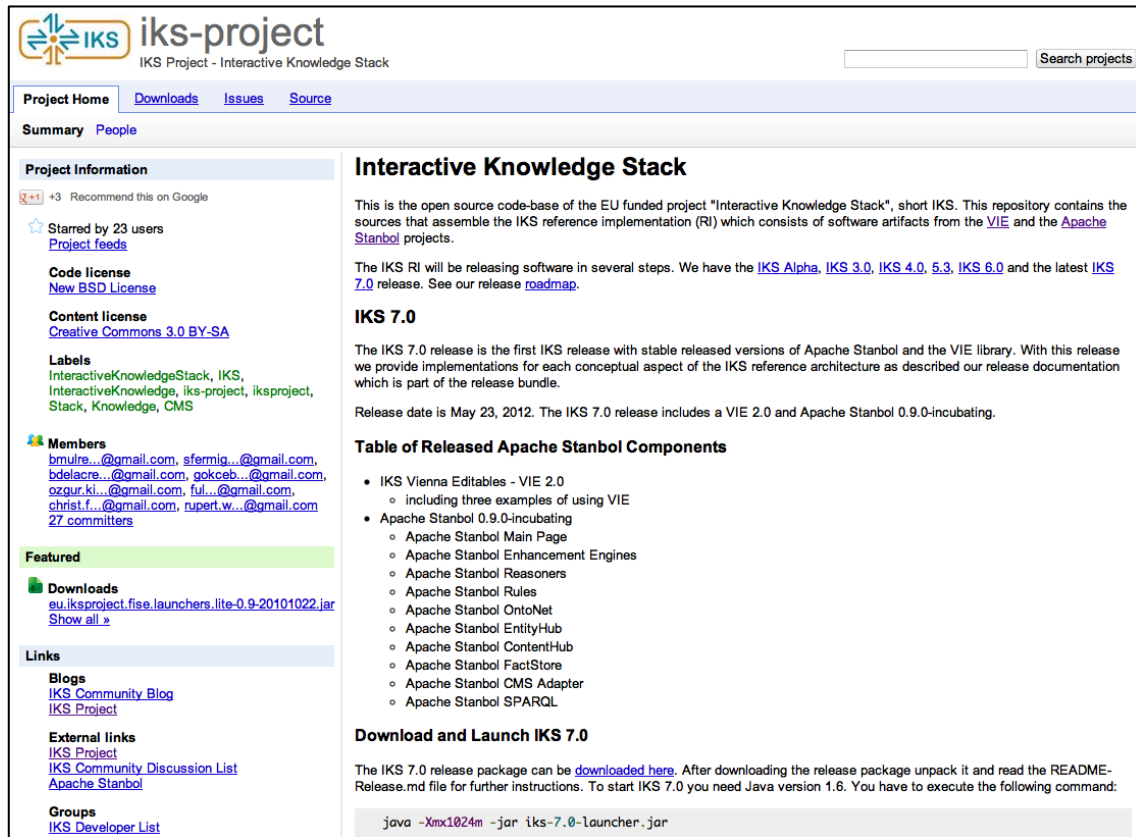
## D8.9 IKS Impact Assessment

Figure 1. Screenshot of the IKS project website (<http://www.iks-project.eu>)



**Figure 2. Screenshot of the IKS Blog website (<http://blog.iks-project.eu>)**

## D8.9 IKS Impact Assessment



**iks-project**  
IKS Project - Interactive Knowledge Stack

Project Home | Downloads | Issues | Source

Summary | People

### Project Information

+3 Recommend this on Google

Started by 23 users  
[Project feeds](#)

**Code license**  
[New BSD License](#)

**Content license**  
[Creative Commons 3.0 BY-SA](#)

**Labels**  
[InteractiveKnowledgeStack](#), [IKS](#),  
[InteractiveKnowledge](#), [iks-project](#), [iksproject](#),  
[Stack](#), [Knowledge](#), [CMS](#)

**Members**  
[bmulre...@gmail.com](#), [sfermig...@gmail.com](#),  
[bdeacre...@gmail.com](#), [gokceb...@gmail.com](#),  
[ozgur.ki...@gmail.com](#), [ful...@gmail.com](#),  
[christ.f...@gmail.com](#), [rupert.w...@gmail.com](#)  
[27 committers](#)

### Featured

**Downloads**  
[eu.iksproject.fise.launchers.lite-0.9-20101022.jar](#)  
[Show all »](#)

### Links

**Blogs**  
[IKS Community Blog](#)  
[IKS Project](#)

**External links**  
[IKS Project](#)  
[IKS Community Discussion List](#)  
[Apache Stanbol](#)

**Groups**  
[IKS Developer List](#)

## Interactive Knowledge Stack

This is the open source code-base of the EU funded project "Interactive Knowledge Stack", short IKS. This repository contains the sources that assemble the IKS reference implementation (RI) which consists of software artifacts from the [VIE](#) and the [Apache Stanbol](#) projects.

The IKS RI will be releasing software in several steps. We have the [IKS Alpha](#), [IKS 3.0](#), [IKS 4.0](#), [5.3](#), [IKS 6.0](#) and the latest [IKS 7.0](#) release. See our release [roadmap](#).

### IKS 7.0

The IKS 7.0 release is the first IKS release with stable released versions of Apache Stanbol and the VIE library. With this release we provide implementations for each conceptual aspect of the IKS reference architecture as described our release documentation which is part of the release bundle.

Release date is May 23, 2012. The IKS 7.0 release includes a VIE 2.0 and Apache Stanbol 0.9.0-incubating.

### Table of Released Apache Stanbol Components

- IKS Vienna Editables - VIE 2.0
  - including three examples of using VIE
- Apache Stanbol 0.9.0-incubating
  - Apache Stanbol Main Page
  - Apache Stanbol Enhancement Engines
  - Apache Stanbol Reasoners
  - Apache Stanbol Rules
  - Apache Stanbol OntoNet
  - Apache Stanbol EntityHub
  - Apache Stanbol ContentHub
  - Apache Stanbol FactStore
  - Apache Stanbol CMS Adapter
  - Apache Stanbol SPARQL

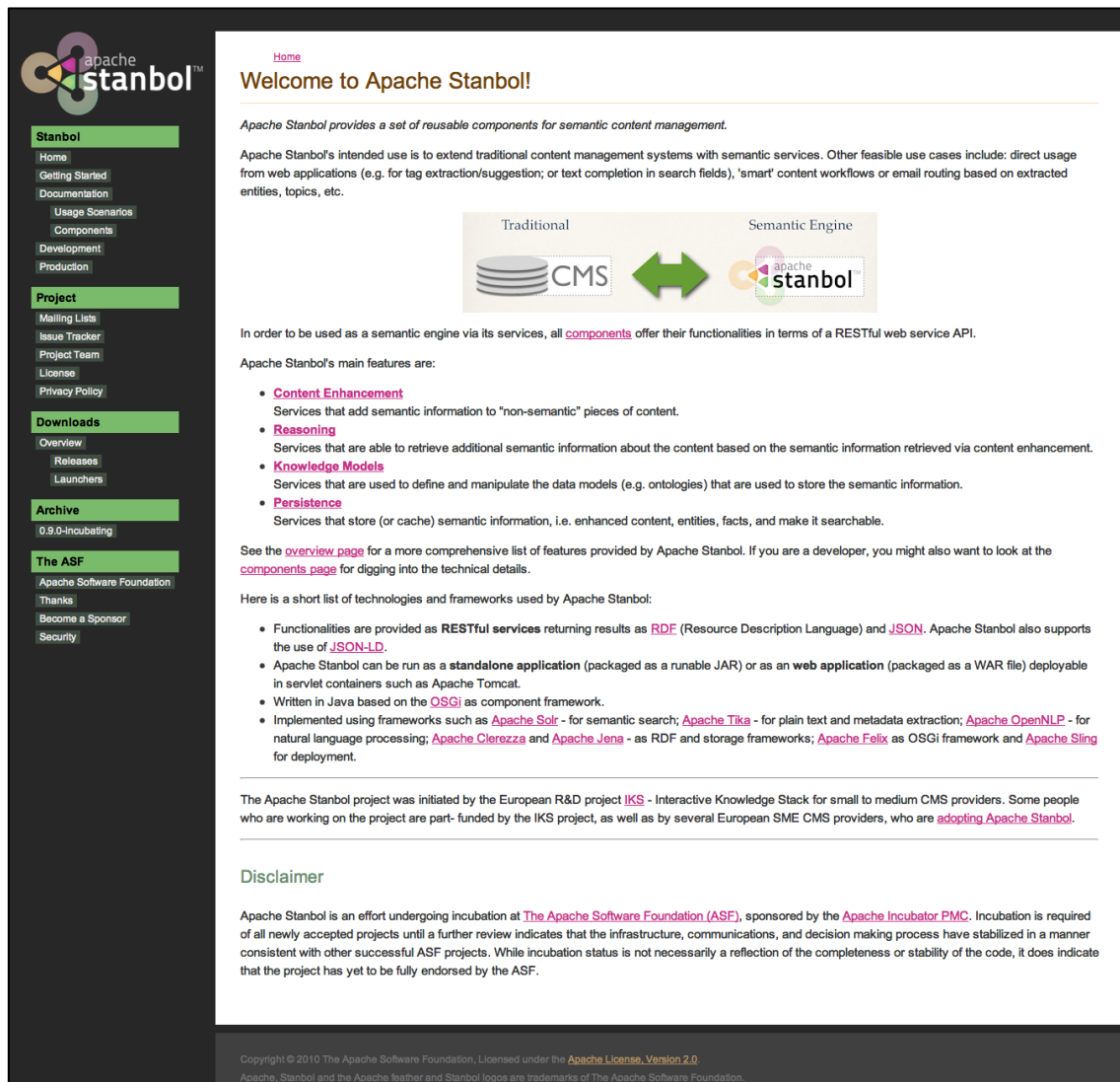
### Download and Launch IKS 7.0

The IKS 7.0 release package can be [downloaded here](#). After downloading the release package unpack it and read the README-Release.md file for further instructions. To start IKS 7.0 you need Java version 1.6. You have to execute the following command:

```
java -Xmx1024m -jar iks-7.0-launcher.jar
```

Figure 3. Screenshot of the IKS Code Repository (<http://code.google.com/p/iks-project>)

## D8.9 IKS Impact Assessment



**Stanbol**

- Home
- Getting Started
- Documentation
  - Usage Scenarios
  - Components
- Development
- Production

**Project**

- Mailing Lists
- Issue Tracker
- Project Team
- License
- Privacy Policy

**Downloads**

- Overview
- Releases
- Launchers

**Archive**

- 0.9.0-incubating

**The ASF**

- Apache Software Foundation
- Thanks
- Become a Sponsor
- Security

## Welcome to Apache Stanbol!

Apache Stanbol provides a set of reusable components for semantic content management.

Apache Stanbol's intended use is to extend traditional content management systems with semantic services. Other feasible use cases include: direct usage from web applications (e.g. for tag extraction/suggestion; or text completion in search fields), 'smart' content workflows or email routing based on extracted entities, topics, etc.



In order to be used as a semantic engine via its services, all [components](#) offer their functionalities in terms of a RESTful web service API.

Apache Stanbol's main features are:

- Content Enhancement**  
Services that add semantic information to "non-semantic" pieces of content.
- Reasoning**  
Services that are able to retrieve additional semantic information about the content based on the semantic information retrieved via content enhancement.
- Knowledge Models**  
Services that are used to define and manipulate the data models (e.g. ontologies) that are used to store the semantic information.
- Persistence**  
Services that store (or cache) semantic information, i.e. enhanced content, entities, facts, and make it searchable.

See the [overview page](#) for a more comprehensive list of features provided by Apache Stanbol. If you are a developer, you might also want to look at the [components page](#) for digging into the technical details.

Here is a short list of technologies and frameworks used by Apache Stanbol:

- Functionalities are provided as **RESTful services** returning results as **RDF** (Resource Description Language) and **JSON**. Apache Stanbol also supports the use of **JSON-LD**.
- Apache Stanbol can be run as a **standalone application** (packaged as a runnable JAR) or as an **web application** (packaged as a WAR file) deployable in servlet containers such as Apache Tomcat.
- Written in Java based on the **OSGi** as component framework.
- Implemented using frameworks such as **Apache Solr** - for semantic search; **Apache Tika** - for plain text and metadata extraction; **Apache OpenNLP** - for natural language processing; **Apache Clerezza** and **Apache Jena** - as RDF and storage frameworks; **Apache Felix** as OSGi framework and **Apache Sling** for deployment.

The Apache Stanbol project was initiated by the European R&D project **IKS** - Interactive Knowledge Stack for small to medium CMS providers. Some people who are working on the project are part-funded by the IKS project, as well as by several European SME CMS providers, who are [adopting Apache Stanbol](#).

### Disclaimer

Apache Stanbol is an effort undergoing incubation at [The Apache Software Foundation \(ASF\)](#), sponsored by the [Apache Incubator PMC](#). Incubation is required of all newly accepted projects until a further review indicates that the infrastructure, communications, and decision making process have stabilized in a manner consistent with other successful ASF projects. While incubation status is not necessarily a reflection of the completeness or stability of the code, it does indicate that the project has yet to be fully endorsed by the ASF.

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Apache, Stanbol and the Apache feather and Stanbol logos are trademarks of The Apache Software Foundation.

Figure 4. Screenshot of the Apache Stanbol website (<http://stanbol.apache.org>)

## D8.9 IKS Impact Assessment

Fork me on GitHub



# SEMANTIC INTERACTION FRAMEWORK

VIE.js (*"Vienna IKS Editables"*) is a JavaScript library for implementing decoupled Content Management Systems and semantic interaction in web applications. In short, VIE provides a bridge between [Backbone.js](#) and the semantic web.

With VIE you can easily interact with RDFa-annotated content on your pages, as well as connect with various semantic services like [Apache Stanbol](#) and [DBpedia](#).

All entities you deal with are managed in a centralized collection, and VIE provides ways to deal with namespaces, relations between entities, and if needed, your content type system.

VIE is used as the basis for a wide variety of tools ranging from [content annotators](#) to full front-end editing interfaces and [semantic browser extensions](#). You can find many of these from the *Widgets* section of this site.

[Download 2.1.0 \(minified\)](#)
[Download 2.1.0 \(debug\)](#)

In addition to the examples below, you can also try out [VIE on jsFiddle](#).

|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <h3>EXAMPLES</h3> <ul style="list-style-type: none"> <li>• <a href="#">Find the capital of Mongolia</a></li> <li>• <a href="#">Get enhancements for text</a></li> <li>• <a href="#">Height of the Eiffel Tower</a></li> <li>• <a href="#">Load the schema.org ontology</a></li> </ul> | <h3>WIDGETS</h3> <ul style="list-style-type: none"> <li>• <a href="#">Form generator</a></li> <li>• <a href="#">Autocomplete</a></li> <li>• <a href="#">Create.js</a> content editing</li> <li>• <a href="#">Annotate.js</a></li> </ul> | <h3>DOCUMENTATION</h3> <ul style="list-style-type: none"> <li>• <a href="#">VIE 2.1.0 API documentation</a></li> <li>• <a href="#">Towards IKS v2.0</a></li> <li>• <a href="#">Semantic UI development with VIE</a></li> <li>• <a href="#">VIE 2.0 introduction</a></li> </ul> | <h3>DEVELOPMENT</h3> <p>VIE.js development is coordinated on GitHub, using <a href="#">Travis CI</a> for Continuous Integration</p> <p>Join the <a href="#">mailing list</a> or the <a href="#">#iks FreeNode channel</a> to discuss VIE.js.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

VIE.js is [free software](#) developed by [IKS Project](#) and co-funded by the European Union

Figure 5. Screenshot of the Vienna IKS Editables website (<http://viejs.org>)

## D8.9 IKS Impact Assessment

Create.js is now integrated in systems like Drupal 8, TYPO3 Neos, Symfony CMF, and OpenCms. Read more [in the interview](#).

**m Create**

Make anything editable

Create.js is a comprehensive web editing interface for Content Management Systems. It is designed to provide a modern, fully browser-based HTML5 environment for managing content. Create can be adapted to work on almost any content management backend.

The user interface philosophy behind Create is simple: all content that you are allowed to change becomes editable, right there on the page you're reading. Any modifications you make are retained in your browser and can be sent back to the CMS with a push of a button.

With Create, it is time to stop filling forms and to start communicating with your web audience.

**Try it now**

[With Hallo Editor](#)

[With Aloha Editor](#)

[Download 1.0.0alpha2](#) [Change Log](#) [Integration Guide](#)

**Edit in place**  
With Create.js you're always editing your content right where it is shown, exactly the way it is shown.

No need to fuss around with admin interfaces or to second-guess how your finalized content will look like on a page.

**Free and Open Source**  
Create.js is built and maintained as a free software project under the liberal MIT license.

This allows it to be used in any environment, open or proprietary, without any unnecessary restrictions.

**Works with any CMS**  
Create.js has been written in JavaScript so that it can be integrated as the web editing interface on top of any Content Management System.

CMSs like OpenCms, Symfony CMF, and Midgard have already integrated Create. Will your system be the next?

Create.js is **free software** developed by **Henri Bergius** and the **Midgard Project** in collaboration with **IKS** and co-funded by the European Union

[Fork me on GitHub](#)

Figure 6. Screenshot of the Create website (<http://createjs.org>)

## HALLO — DISTRACTION-FREE WRITING FOR THE WEB

Hallo is the simplest web editor imaginable. Instead of cluttered forms or toolbars, you edit your web content as it is. Just you, your web design, and your content.

Actually, this text you're reading has Hallo loaded. To try it out, just click here and start writing. If you want to make more comprehensive modifications, just select some text.

### WHAT HALLO IS NOT

Hallo is not **TinyMCE** or **Aloha Editor**. Hallo isn't Microsoft Word, or even Google Docs. It is just the most simple and pleasurable web writing tool imaginable, available to be included into any web application under the liberal MIT open source license.

[Download 1.0.0](#)[Markdown demo](#)[Annotation demo](#)

### DEVELOPING HALLO

Hallo is still in the early stages of its life and not quite yet ready for real-world use. If you're interested in contributing, simply fork the **Hallo repository on GitHub** and send **pull requests**. Make sure to check out the **current list of issues**.

The Hallo editor operates as a **jQuery UI** plugin and has been written in **CoffeeScript** for the sake of simplicity. CoffeeScript is a beautiful little language that compiles into JavaScript.

**Hallo.js** is **free software** developed by **Henri Bergius** for the **IKS Project** and co-funded by the European Union

Figure 7. Screenshot of the Hallo website (<http://hallojs.org>)

## 3.2 Results

The descriptive statistics of web access for the seven IKS-related websites are listed in Table 2. An overview of website visits per month are depicted in Figure 8. Furthermore, a country rank of web access is provided in Table 3. Figure 9 to Figure 15 depict the country of origin, of web access to the seven IKS-related websites overall.

By considering these tables and figures, it becomes obvious that IKS and its related projects Apache Stanbol, VIE, Create and Hallo are visible almost all over the world but are being followed primarily from Europe and the United States. Users interested in the IKS project have generated almost 360 000 page views in six months.

**Table 2. Descriptive statistics for IKS-related websites from July 2012 to December 2012**

| # | Name                       | Visits         | Unique Visitors | Page Views     | Pages / Visit | Avg. Visit Duration <sup>4</sup> | Bounce Rate (%) | New Visits (%) |
|---|----------------------------|----------------|-----------------|----------------|---------------|----------------------------------|-----------------|----------------|
| 1 | IKS Website                | 6 773          | 5 088           | 21 378         | 3.16          | 02:19                            | 53,18           | 73,03          |
| 2 | IKS Blog                   | 12 099         | 7 385           | 21 296         | 1.76          | 01:53                            | 70,50           | 59,02          |
| 3 | IKS Code Rep.              | 1 118          | 433             | 1 946          | 1.74          | 00:55                            | 77,10           | 35,96          |
| 4 | Apache Stanbol             | 23 218         | 11 938          | 74 322         | 3.20          | 03:45                            | 52,74           | 50,16          |
| 5 | VIE                        | 7 172          | 4 657           | 16 964         | 2.37          | 02:15                            | 60,71           | 64,50          |
| 6 | Create                     | 52 752         | 39 561          | 136 197        | 2.58          | 02:02                            | 41,32           | 74,08          |
| 7 | Hallo                      | 33 708         | 26 619          | 86 189         | 2.56          | 01:51                            | 38,75           | 78,95          |
|   | <b>Total (all sites)</b>   | <b>136 840</b> | <b>95 691</b>   | <b>358 292</b> | <b>n/a</b>    |                                  |                 |                |
|   | <b>Average (all sites)</b> | <b>n/a</b>     |                 |                | <b>2,47</b>   | <b>02:14</b>                     | <b>59,26</b>    | <b>59,46</b>   |

**Table 3. Location rank of web access to IKS-related websites. Note: Country Code<sup>5</sup> (Visits), Aggregated data from July 2012 to December 2012**

| # | Name           | 1. Rank    | 2. Rank    | 3. Rank    | 4. Rank    | 5. Rank    | 6. Rank    |
|---|----------------|------------|------------|------------|------------|------------|------------|
| 1 | IKS Website    | DE (957)   | AT (644)   | US (624)   | IT (529)   | FR (522)   | UK (358)   |
| 2 | IKS Blog       | DE (1 962) | US (1 593) | AT (1 179) | IT (903)   | FR (664)   | UK (623)   |
| 3 | IKS Code Rep.  | US (202)   | IN (103)   | UK (93)    | DE (65)    | IT (56)    | CN (54)    |
| 4 | Apache Stanbol | DE (3 714) | US (3 298) | IT (1 600) | FR (1 431) | AT (1 309) | UK (1 254) |
| 5 | VIE            | DE (1 424) | US (1 051) | FR (515)   | CH (432)   | AT (359)   | UK (339)   |
| 6 | Create         | US (9 349) | DE (5 766) | FR (3 274) | UK (2 871) | BR (1 924) | IN (1 828) |
| 7 | Hallo          | US (7 454) | FR (3 264) | DE (2 413) | ES (2 402) | UK (1 968) | CA (1 080) |

<sup>4</sup> The format is mm:ss

<sup>5</sup> [http://en.wikipedia.org/wiki/List\\_of\\_Internet\\_top-level\\_domains](http://en.wikipedia.org/wiki/List_of_Internet_top-level_domains)

## D8.9 IKS Impact Assessment

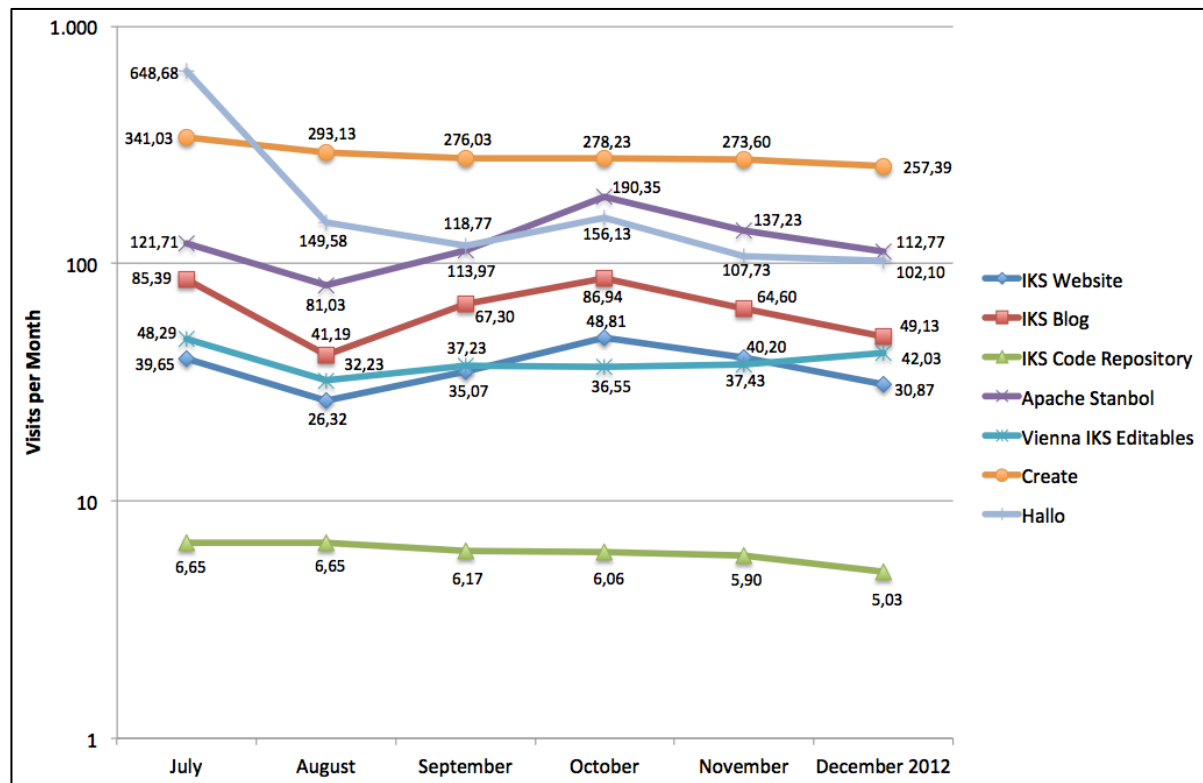


Figure 8. Visits per Month for IKS-related websites from July 2012 to December 2012<sup>6</sup>

<sup>6</sup> The relatively low amount of visits per month of the IKS Code Repository may be caused by two facts. First, the actual implementation work is done via code versioning systems that are not tracked by Google Analytics. Second, the IKS Code Repository provides an aggregated download for the IKS reference implementation. However, developers are probably more interested in the individual components of the IKS-related projects (e.g. Apache Stanbol, VIE, etc.) and thus, they rather browse to these dedicated websites.

## D8.9 IKS Impact Assessment

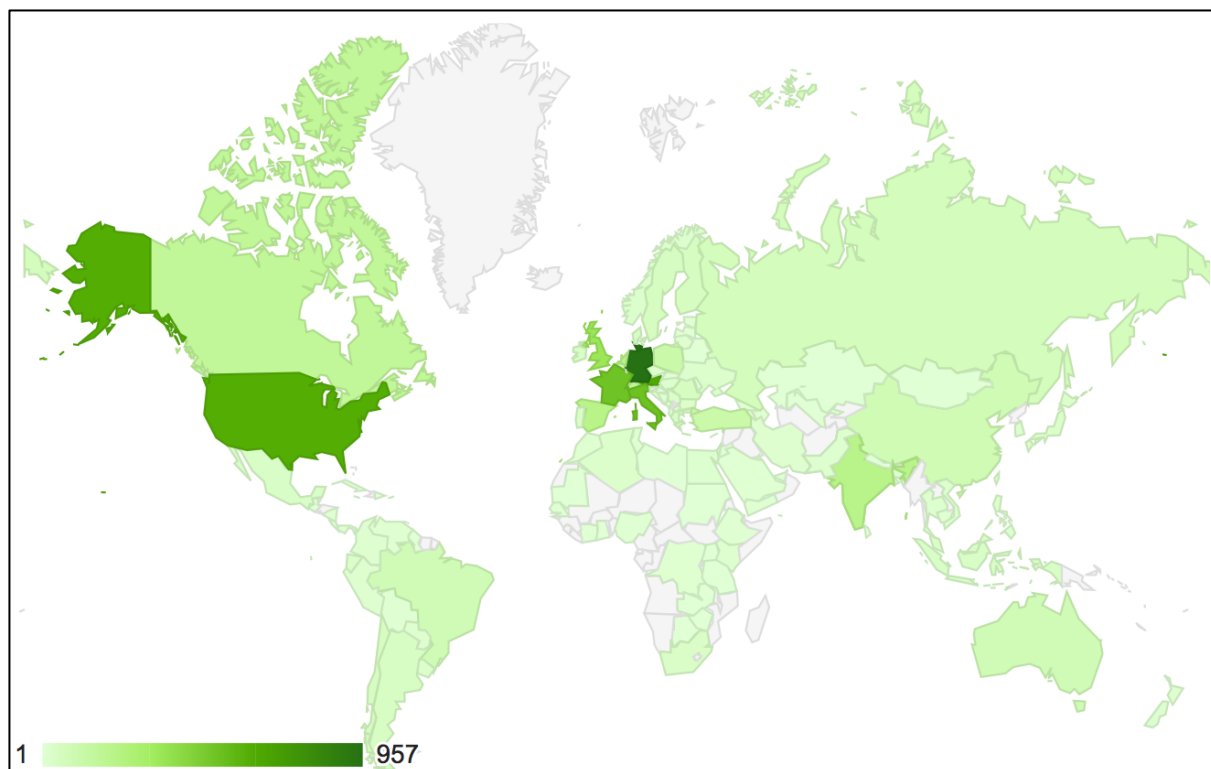


Figure 9. Location of web access to the IKS project website (<http://www.iks-project.eu>)

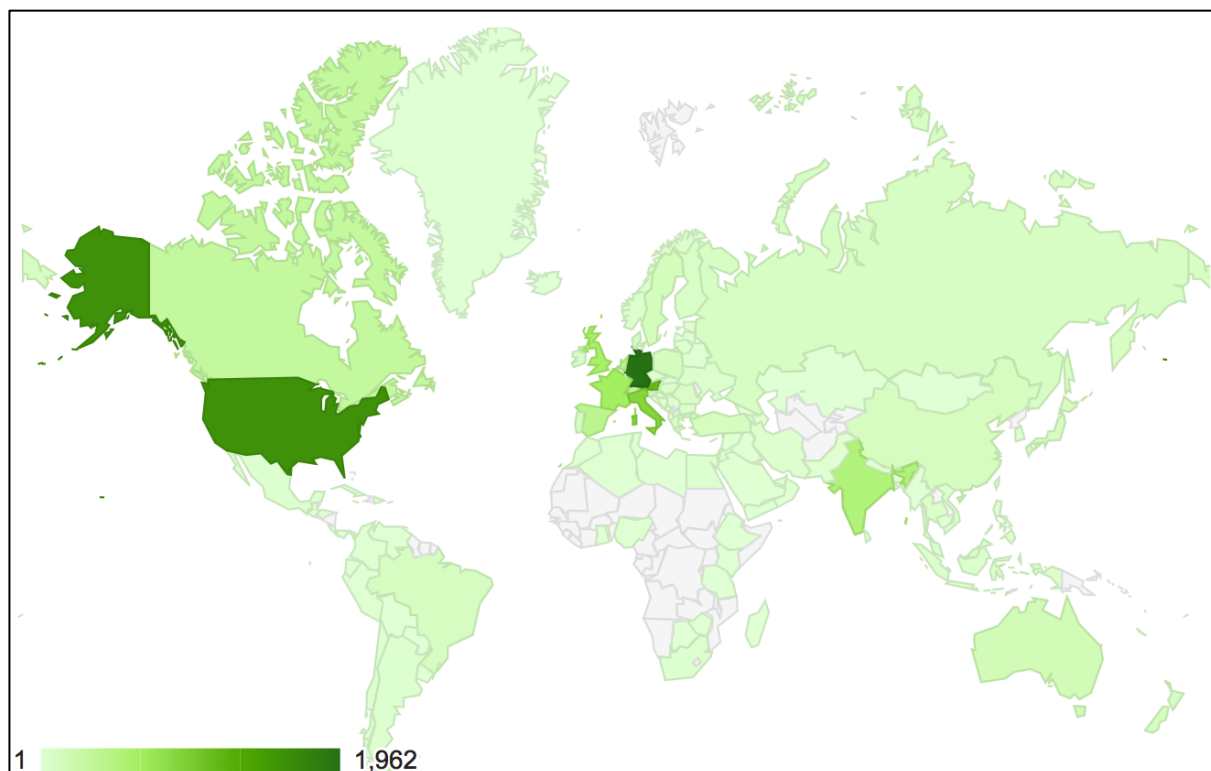


Figure 10. Location of web access to the IKS Blog website (<http://blog.iks-project.eu>)

## D8.9 IKS Impact Assessment

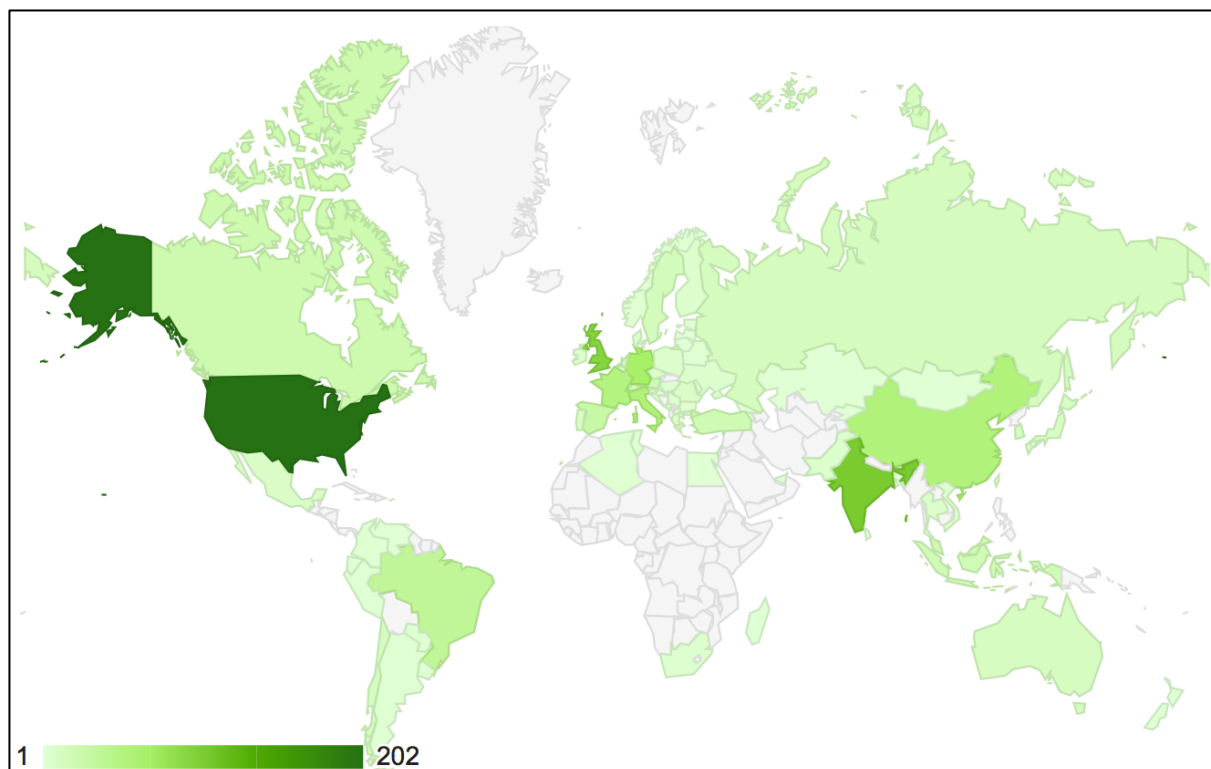


Figure 11. Location of web access to the IKS Code Repository (<http://code.google.com/p/iks-project>)

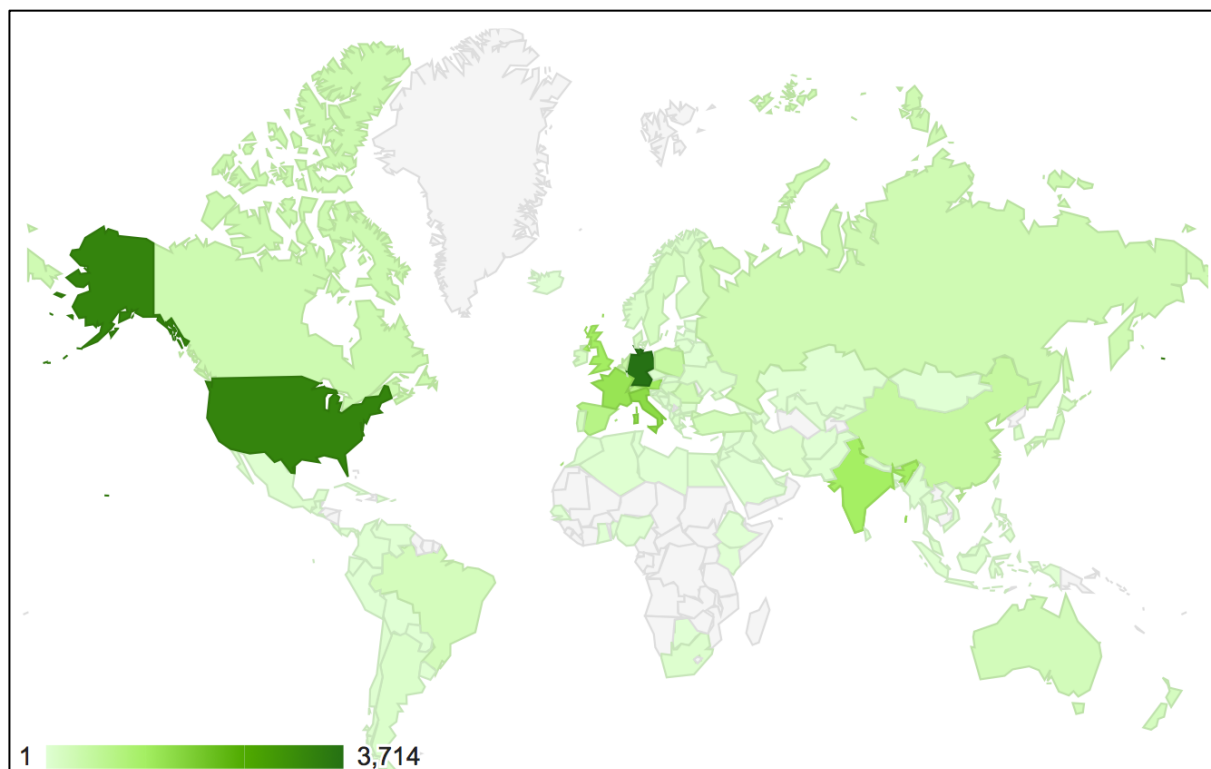


Figure 12. Location of web access to the Apache Stanbol website (<http://stanbol.apache.org>)

## D8.9 IKS Impact Assessment

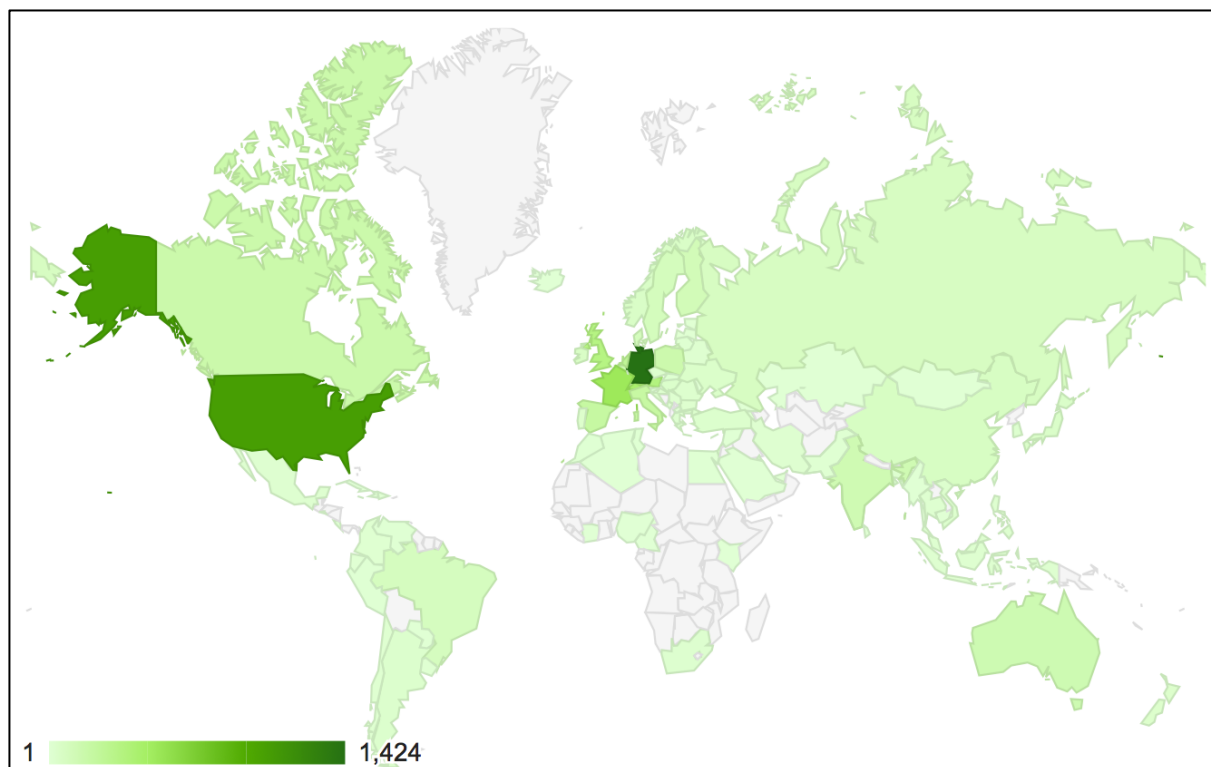


Figure 13. Location of web access to the Vienna IKS Editables website (<http://viejs.org>)

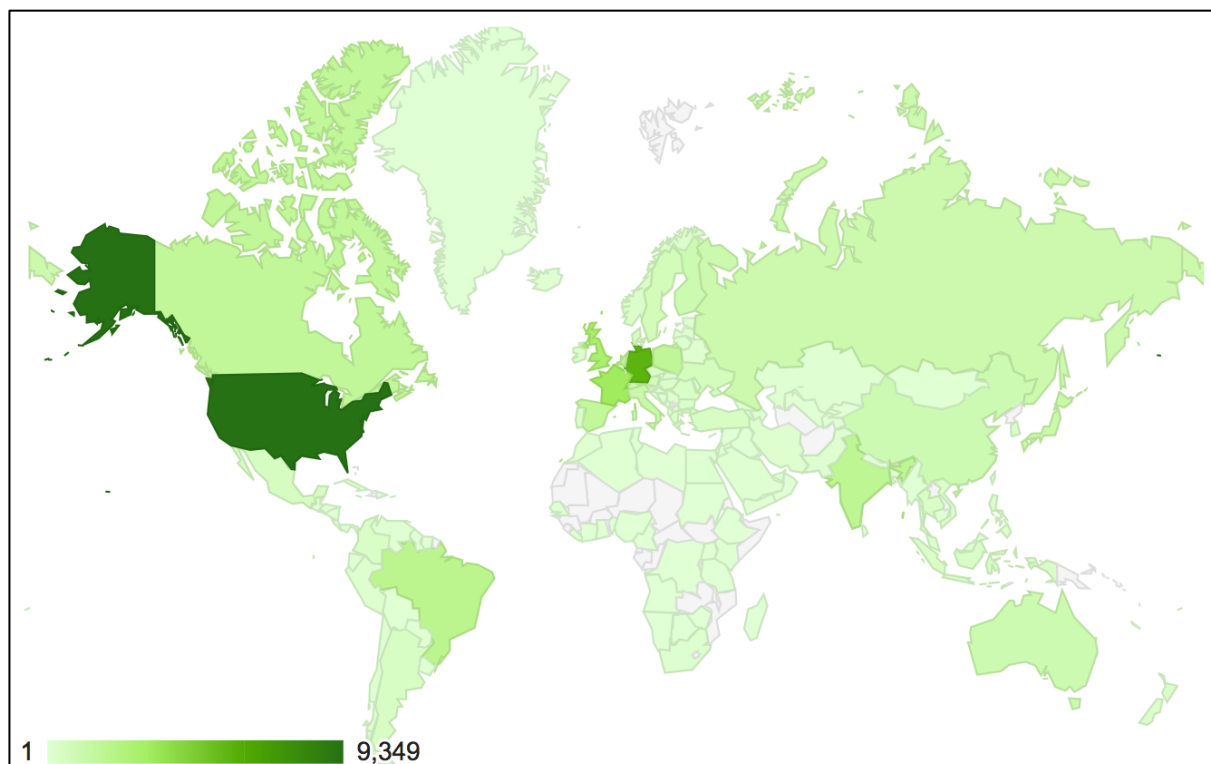


Figure 14. Location of web access to the Create website (<http://createjs.org>)

## D8.9 IKS Impact Assessment

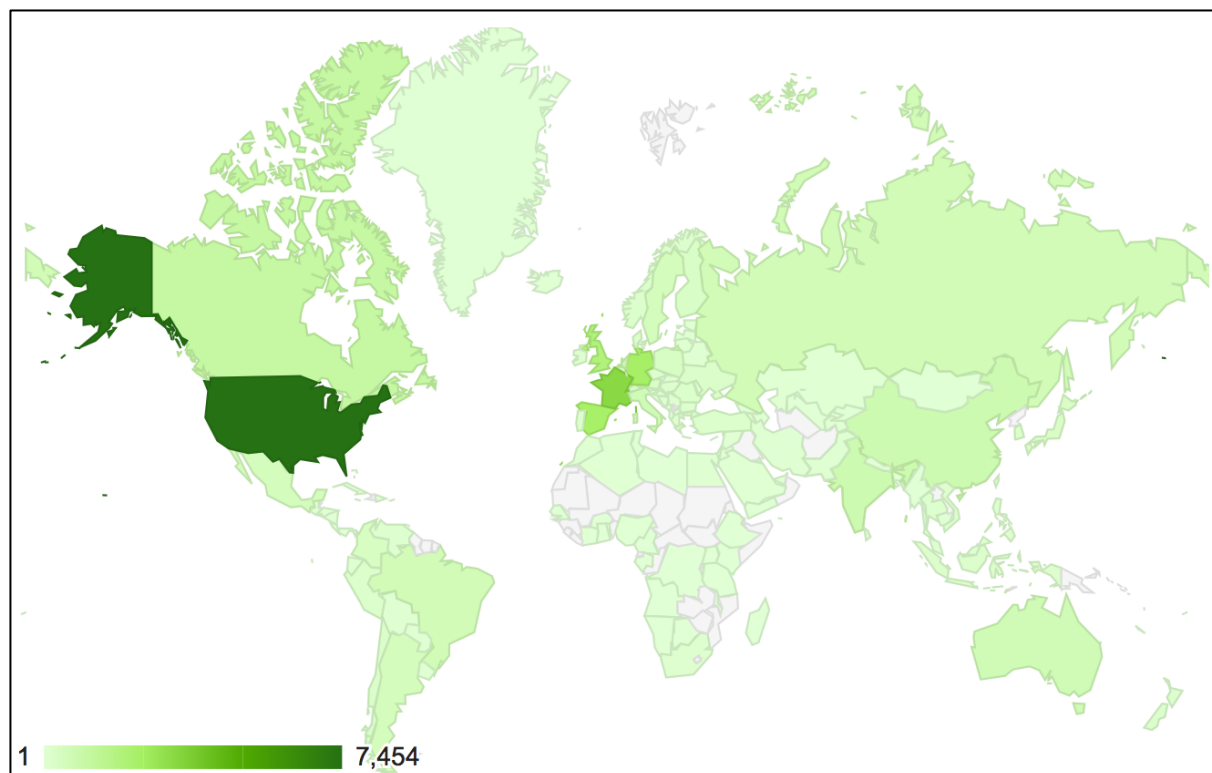


Figure 15. Location of web access to the Hallo website (<http://hallojs.org>)

## 4 IKS Impact Assessment Survey 2012

Consistent with the last chapter, the methodological approach of the IKS Impact assessment Survey is described first in the next section. Then, the results are reported in more detail.

### 4.1 Method

This section starts with an overview of the various audiences that are targeted with the IKS Impact Assessment Survey 2012. Second, the survey instrument with its questionnaire items is provided. Finally, the sampling procedure of the participants is described briefly.

#### 4.1.1 Target Population

In order to measure the impact of the IKS project, the following five populations were targeted with the IKS Impact Assessment Survey 2012:

1. IKS industry partners, i.e. CMS provider companies
2. IKS research partners
3. IKS early adopters, i.e. CMS provider companies
4. Customers of IKS-affiliated CMS provider companies (either customers of IKS industry partners or customers of IKS early adopters)
5. Third-parties interested in IKS that are not formally affiliated

#### 4.1.2 Survey Instrument

The development of the survey instrument was primarily informed by various sources about EU impact assessments (Arnold, 2010; European Commission, 2009; European Commission, 2011; Polt and Vonortas, 2007) and Information Systems research, here in particular work on the utility, adoption and impact of information systems (Davis, 1989; DeLone and McLean, 1992; DeLone and McLean, 2003; Venkatesh and Davis, 2000; Venkatesh et al., 2003; Venkatesh et al., 2012). Furthermore, questionnaire items on sustainability have been incorporated into the survey in response to the reviewers' feedback of the third annual IKS review meeting in 2012.

The survey instrument with its questionnaire items, scales and target population is provided in Table 4

Table 4. In addition to these items, participants were asked to which target population they belong (cf. preceding section), about their primary interest in IKS (e.g. improving a CMS or research on Semantic CMS), their job title and demographics, i.e. gender, age and home country. Finally, they had to rate length and understandability of the survey.

Various Likert-type scales – commonly used in Information Systems research (e.g. Davis, 1989; Kamis et al., 2008; Moore and Benbasat, 1991; Venkatesh et al., 2012) – were used for a diversified answer scheme and only selected IKS-related project categories were adopted in the survey. The underlying goals were to account for common method bias and to keep the interest of the participants (Podsakoff et al., 2003). Accordingly, not all IKS-related projects as described in the preceding chapter on online access have been evaluated separately but only the following three project categories:

## D8.9 IKS Impact Assessment

- (1) IKS (overall), which covers all of the IKS-related projects
- (2) Apache Stanbol and
- (3) Vienna IKS Editables (VIE).

**Table 4. Survey instrument Note: IKS industry partners (IKS-IP), IKS research partners (IKS-RP), IKS early adopters (IKS-EA), customers of IKS-affiliated CMS provider companies (CUS) and third parties interested in IKS (3<sup>rd</sup>P).**

| #    | Construct / Items                                                                                                                                                                                                      | Scale                                                                             | IKS-IP | IKS-RP | IKS-EA | CUS | 3 <sup>rd</sup> P |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|--------|--------|-----|-------------------|
|      | <b>Expertise</b>                                                                                                                                                                                                       |                                                                                   |        |        |        |     |                   |
| EX1  | I am an expert in CMS.                                                                                                                                                                                                 | Seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7) | X      | X      | X      | X   | X                 |
| EX2  | How many years of expertise do you have w.r.t. CMS?                                                                                                                                                                    | Absolute years                                                                    | X      | X      | X      | X   | X                 |
| EX3  | I am an expert in Semantic Technologies.                                                                                                                                                                               | Seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7) | X      | X      | X      | X   | X                 |
| EX4  | How many years of expertise do you have w.r.t. Semantic Technologies?                                                                                                                                                  | Absolute years                                                                    | X      | X      | X      | X   | X                 |
| EX5  | How many years of expertise do you have w.r.t. Semantic CMS?                                                                                                                                                           | Absolute years                                                                    | X      | X      | X      | X   | X                 |
|      | <b>Technology Impact</b><br>As one of your primary interests, you have indicated that you want to improve your CMS or CMS plug-in. Now, please indicate the degree to which [IKS (overall)   Apache Stanbol   VIE] ... |                                                                                   |        |        |        |     |                   |
| TIM1 | ... had already an impact on your product.                                                                                                                                                                             | none (1), some (2), majority (3), completely (4)                                  | X      | X      | X      | X   | X                 |
| TIM2 | ... will probably have an impact on your product during the next two years.                                                                                                                                            | none (1), some (2), majority (3), completely (4)                                  | X      | X      | X      | X   | X                 |
|      | <b>Business Impact</b><br>Please indicate the degree to which the IKS project or its related projects Apache Stanbol and Vienna IKS Editables (VIE) had an impact on...                                                |                                                                                   |        |        |        |     |                   |
| BIM1 | ... your company's market share or sales.                                                                                                                                                                              | no (1), minor (2), major (3), high / strategic impact (4) + qualitative comment   | X      |        | X      |     |                   |

## D8.9 IKS Impact Assessment

| #    | Construct / Items                                                                                                                                                                                                       | Scale                                                                              | IKS<br>-IP | IKS<br>-RP | IKS<br>-EA | CUS | 3 <sup>rd</sup> P |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|------------|------------|-----|-------------------|
| BIM2 | ... the creation of new, potentially commercial, products or services, new business collaborations or agreements.                                                                                                       | no (1), minor (2), major (3), high / strategic impact (4)<br>+ qualitative comment | X          |            | X          |     |                   |
|      | <b>Research Impact</b><br>As one of your primary interests, you have indicated that you are interested in research on Semantic CMS. Now, please indicate the degree to which [IKS (overall)   Apache Stanbol   VIE] ... |                                                                                    |            |            |            |     |                   |
| RIM1 | ... had already an impact on your research activities.                                                                                                                                                                  | none (1), some (2), majority (3), completely (4)                                   | X          | X          | X          | X   | X                 |
| RIM2 | ... will probably have an impact on your research activities during the next two years.                                                                                                                                 | none (1), some (2), majority (3), completely (4)                                   | X          | X          | X          | X   | X                 |
|      | <b>Education Impact</b><br>As one of your primary interests, you have indicated that you are interested in teaching Semantic CMS. Now, please indicate the degree to which [IKS (overall)   Apache Stanbol   VIE] ...   |                                                                                    |            |            |            |     |                   |
| EIM1 | ... had already an impact on your teaching activities.                                                                                                                                                                  | none (1), some (2), majority (3), completely (4)                                   | X          | X          | X          | X   | X                 |
| EIM2 | ... will probably have an impact on your teaching activities during the next two years.                                                                                                                                 | none (1), some (2), majority (3), completely (4)                                   | X          | X          | X          | X   | X                 |
|      | <b>Impact on CMS Purchase Decision</b><br>You have indicated that you are customer of a CMS provider. Now, please indicate the degree to which [IKS (overall)   Apache Stanbol   VIE] ...                               |                                                                                    |            |            |            |     |                   |
| ICD1 | ... had already an impact on whether to keep your existing CMS.                                                                                                                                                         | no (1), minor (2), major (3), high / strategic impact (4)                          |            |            |            | X   |                   |
| ICD2 | ... will probably have an impact on your company's decision to keep your existing CMS.                                                                                                                                  | no (1), minor (2), major (3), high / strategic impact (4)                          |            |            |            | X   |                   |
|      | <b>Impact on CMS Community</b>                                                                                                                                                                                          |                                                                                    |            |            |            |     |                   |
| ICMS | Please indicate the degree to which [IKS (overall)   Apache Stanbol   VIE] had an impact on discussions related to Semantic Technologies in the CMS community?                                                          | Seven-point Likert scale from no impact (1) to strong impact (7)                   | X          | X          | X          | X   | X                 |
|      | <b>Sustainability of IKS Developer Community</b>                                                                                                                                                                        |                                                                                    |            |            |            |     |                   |

## D8.9 IKS Impact Assessment

| #    | Construct / Items                                                                                                                                                                                             | Scale                                                                                                                | IKS-IP | IKS-RP | IKS-EA | CUS | 3 <sup>rd</sup> P |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|-----|-------------------|
| SDC  | Please rate the sustainability of [IKS (overall)   Apache Stanbol   VIE] by indicating the degree of how active the developer community will be over the next three years?                                    | Seven-point Likert scale from no active developer community (1) to very active developer community (7);              | X      | X      | X      | X   | X                 |
|      | <b>Sustainability of Contributions from IKS-affiliated Members</b>                                                                                                                                            |                                                                                                                      |        |        |        |     |                   |
| SCIM | Because you are affiliated to the IKS project and its related projects, please indicate the degree to which your organization is willing to contribute to [IKS (overall)   Apache Stanbol   VIE] beyond 2012. | Seven-point Likert scale from no contribution (1), some contribution (2), major contribution (3), driving-force (4); | X      | X      | X      |     |                   |
|      | <b>Contributions after 2012</b>                                                                                                                                                                               |                                                                                                                      |        |        |        |     |                   |
| CON  | Please provide (A) your primary contribution after 2012 OR (B) your primary reason for no further contributions beyond 2012.                                                                                  | Qualitative comment                                                                                                  | X      | X      | X      |     |                   |
|      | <b>Benefits of Semantic Technologies for CMS</b>                                                                                                                                                              |                                                                                                                      |        |        |        |     |                   |
| BEN  | I think that there are clear benefits of Semantic Technologies for CMS.                                                                                                                                       | Seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7)                                    | X      | X      | X      | X   | X                 |
|      | <b>Recommendation of Semantic-enhanced CMS</b>                                                                                                                                                                |                                                                                                                      |        |        |        |     |                   |
| RE1  | I would generally recommend a Semantic-enhanced CMS to a company that is currently looking for a CMS solution.                                                                                                | Seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7)                                    | X      | X      | X      | X   | X                 |
| RE2  | I am quite certain with my recommendation.                                                                                                                                                                    | Seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7)                                    | X      | X      | X      | X   | X                 |
|      | <b>Repeated Participation in EU project</b>                                                                                                                                                                   |                                                                                                                      |        |        |        |     |                   |
| RPE  | Would you again participate in an EU project such as IKS?                                                                                                                                                     | Yes/No + qualitative comment                                                                                         | X      | X      | X      |     |                   |
|      | <b>General Improvements of EU projects</b>                                                                                                                                                                    |                                                                                                                      |        |        |        |     |                   |
| GIE  | What must be improved with regard to future EU projects such as IKS. Please try to list at least three topics.                                                                                                | Qualitative comment                                                                                                  | X      | X      | X      | X   | X                 |

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The complete survey instrument with introductory page, layout and detailed phrases of the questionnaire items and scales is available in the appendix. Furthermore, the survey is also provided as LimeSurvey<sup>7</sup> file for future adaptations and reuse.

### 4.1.3 Sampling Procedure

Overall, 1298 potential survey candidates were individually invited via email to participate in the IKS Impact Assessment Survey 2012 via email in November 2012 (cf. Appendix for the invitation template). For this purpose, contact information of these candidates was gathered throughout the IKS project. Additionally, personalized reminder emails were sent out to candidates that had not participated two weeks after the invitation was sent. In order to encourage diversity of opinion, several individuals of one organization were invited to participate in the survey.

## 4.2 Results

Overall, 93 subjects filled out the IKS Impact Assessment Survey 2012 completely. Based on the 1298 potential candidates the response rate was therefore 7.16 percent. The participants have indicated that they belong to IKS industry partners (N=12), IKS research partners (N=17), IKS early adopters (N=20), customers of IKS-affiliated CMS provider companies (N=1) and third-parties interested in IKS (N=43). Due to the fact that only one customer of an IKS-affiliated CMS provider company has participated (which affects also anonymity and explanatory power negatively), the responses of that customer are not reported in the remainder of this report. On 7-point Likert scales ranging from strongly disagree (1) to strongly agree (7), the survey was perceived as understandable (N = 92, Mean = 5.41, SD = 1.5, p-value of one-sample t-test and a test value of 4 < .001)<sup>8</sup> and adequate with regard to its length (N = 92, Mean = 2.41, SD = 1.5, p-value of one-sample t-test and a test value of 4 < .001).<sup>9</sup>

A Harman's single factor test was conducted to assess common method variance (Podsakoff et al., 2003; Podsakoff and Organ, 1986). Accordingly, factor analysis was conducted with all common questionnaire items. As a result, several factors with eigenvalues greater than one can be observed and no single factor explains more than 50 percent of the variance. Thus, common method variance can be neglected.

In the following, questionnaire items that were provided to all participants are reported individually for the four key audiences of the IKS Impact Assessment Survey 2012. In addition, results were aggregated for (1) the IKS consortium (i.e. IKS industry partners and IKS research partners) and early adopters and (2) for all subjects that participated in the survey. Then, results of the questionnaire items that were provided to dedicated participants are reported.

### 4.2.1 Demographics and Interests of the Participants

First of all, demographics of the participants are provided in Table 5. Predominately male subjects (95%) with an average age of 36 years participated in the survey. They indicated that they are experts in CMS (with the exception of the IKS research partners and interested third parties) and Semantic Technologies (with the exception of the IKS industry partners and IKS early adopters). This indicates that IKS research partners were primarily responsible to provide knowledge and expertise of semantic technologies to IKS industry partners and IKS

<sup>7</sup> <http://www.limesurvey.org>

<sup>8</sup> Questionnaire item: The instructions of this survey were clear and understandable.

<sup>9</sup> Questionnaire item: I found this survey too long.

## D8.9 IKS Impact Assessment

early adopters. Furthermore, participants of the survey live predominantly in Germany, Austria, Italy and France.

**Table 5. Demographics for IKS industry partners (IKS-IP), IKS research partners (IKS-RP), IKS early adopters (IKS-EA), IKS-affiliated organizations (IKS) and third parties interested in IKS (3<sup>rd</sup>P).** Note: SD = standard deviation. Note:  $p < .05$  (\*),  $p < .01$  (\*\*),  $p < .001$  (\*\*\*) for one-sample t-test (test value = neutral scale value of the Likert scale), ns = not significant, i.e. \* / \*\* / \*\*\* indicates that the mean value lies significantly below (orange background) or above (green background) the neutral scale value.

| Variable                               | IKS-IP<br>(N=12)        | IKS-RP<br>(N=17)        | IKS-EA<br>(N=20)        | IKS<br>(N=49) | 3 <sup>rd</sup> Party<br>(N=43) | Total<br>(N=92) |
|----------------------------------------|-------------------------|-------------------------|-------------------------|---------------|---------------------------------|-----------------|
| <b>Gender</b>                          |                         |                         |                         |               |                                 |                 |
| Male (Freq.)                           | 12 (100%)               | 16 (94.1%)              | 20 (100%)               | 48 (98%)      | 39 (90.7%)                      | 87 (94.6%)      |
| Female (Freq.)                         | 0 (0%)                  | 1 (5.9%)                | 0 (0%)                  | 1 (2%)        | 4 (9.3%)                        | 5 (5.4%)        |
| <b>Age</b>                             |                         |                         |                         |               |                                 |                 |
| Mean (SD)                              | 35.3 (6.1)              | 33.9 (9.9)              | 33.9 (13.8)             | 34.2 (10.8)   | 38.7 (9.3)                      | 36.3 (10.3)     |
| <b>Expertise</b>                       |                         |                         |                         |               |                                 |                 |
| Expert in CMS (1-7)                    | 5.8** (1.3)             | 4.1 <sup>ns</sup> (1.3) | 5.2** (1.5)             | 5.0*** (1.5)  | 4.26 <sup>ns</sup> (2.0)        | 4.6** (1.8)     |
| Years of CMS expertise                 | 8.8 (3.6)               | 4.2 (3.4)               | 7.1 (4.7)               | 6.5 (4.4)     | 6.5 (4.9)                       | 6.5 (4.6)       |
| Expert in Semantic Technologies (1-7)  | 3.8 <sup>ns</sup> (1.5) | 5.0* (1.6)              | 4.7 <sup>ns</sup> (1.5) | 4.6* (1.6)    | 5.1*** (1.6)                    | 4.8*** (1.6)    |
| Years of Semantic Technology expertise | 4.1 (2.9)               | 6.5 (5.5)               | 4.6 (2.8)               | 5.1 (4.0)     | 6.2 (4.8)                       | 5.6 (4.4)       |
| Years of Semantic CMS expertise        | 2.8 (1.8)               | 2.6 (1.3)               | 2.4 (2.1)               | 2.5 (1.8)     | 2.1 (1.8)                       | 2.3 (1.8)       |
| <b>Country</b>                         |                         |                         |                         |               |                                 |                 |
| Rank 1                                 | DE 41.7%                | DE 35.3%                | AT 15.0%                | DE 28.6%      | DE 16.3%                        | DE 22.8%        |
| Rank 2                                 | IT 16.7%                | AT 17.6%                | FR 15.0%                | AT 14.3%      | IT 9.3%                         | IT 10.9%        |
| Rank 3                                 | CH 16.7%                | TR 17.6%                | DE 15.0%                | IT 12.2%      | US 9.3%                         | AT 9.8%         |
| Rank 4                                 | AT 8.3%                 | IT 11.8%                | UK 15.0%                | CH 10.2%      | NL 7.0%                         | CH 8.7%         |
| Rank 5                                 | FR 8.3%                 | AF 5.9%                 | ES 10.0%                | FR 8.2%       | ES 7.0%                         | FR 6.5%         |
| Rank 6                                 | TR 5.4%                 | CH 5.9%                 | CH 10.0%                | TR 8.2%       | CH 7.0%                         | ES 5.4%         |

Moreover, the primary interest of the participants was (1) research on semantic CMS (N=52, 56.5%), followed by (2) improving CMS products and plug-ins and (3) learning more about semantic CMS (each N=45, 48.9%), general interest in IKS-related projects (N=18, 19.6%) and teaching semantic CMS (N=8, 8.7%).

Finally, 18 Chief Executive Officers (CEOs) (19.6%), followed by 16 software architects (17.4%), 14 software developers (15.2%), 13 research associates in computer science or business informatics (14.1%), ten technology consultants (10.9%), five Chief Technology Officers (CTOs) (N=5, 5.4%), four professors in computer science or business informatics (4.3%), two Chief Information Officers (2.2%) and ten subjects with other job activities (10.9%) participated in this survey.

### 4.2.2 Impact Constructs

Detailed quantitative results of the impact constructs are listed in Table 6. In order to provide a fast-check of these statistics, colour schemes are used to indicate negative or low (coded in red) and positive or high (coded in green) ratings of the survey participants. The coloured results indicate significant deviations from the neutral scale values employed in the survey (cf. Table 4). For this purpose, one-sample t-tests were used to calculate the level of significance. Results without a colour scheme do not significantly deviate from the neutral scale values. A summary of these results is provided in the following paragraphs.

First, the current and future **technological impact** of IKS is fair, because – on average – IKS functionality is already integrated into CMSs and CMS plug-ins of IKS-affiliated organizations and interested third parties. Moreover, further IKS functionality will be integrated until 2014, too.

Second, at the end of IKS in 2012, the **business impact** in terms of market share and sales of the current IKS results is still low because IKS functionality is primarily incorporated in beta-versions of CMS and CMS plug-ins. However, a medium business impact is perceived with regard to the creation of new, potentially commercial, products or services, new business collaborations or agreements. In particular, IKS early adopters have rated this sort of business impact significantly high.

Third, artefacts, constructs, models and methods developed and / or applied in IKS had a minor to major **research impact** until the end of 2012. And, in particular, the concepts applied in the Apache Stanbol project will have a major research impact over the course of the next two years for the IKS-affiliated organizations.

Fourth, teaching activities related to IKS concepts are currently incorporated into various curricula. These concepts will also be considered during the next two years. Thus, **educational impact** was rated fair as well.

Fifth, IKS-affiliated participants rate the **impact of IKS on CMS community discussions** significantly positive. Moreover, the majority of all participants perceive CMS community discussions with regard to the Apache Stanbol project significantly high. By contrast, a medium impact on CMS community is perceived regarding VIE. Reasons for the relatively low rankings of VIE may be twofold. First, the VIE module started to be developed later. Second, the “wrong” people may have participated in the survey, i.e. the adoption of VIE by various CMS developer communities such as Typo3 or Drupal seems to be not reflected here.

Sixth, general **sustainability of developer activities** beyond 2012 is rated significantly high for the Apache Stanbol project. On the contrary, future developer activities regarding IKS (overall) and VIE is rated lower in general but significantly high by IKS-affiliated organizations. Furthermore, particular contributions by the participants of the survey are rated rather low. The reason for this result lies primarily in the fact that project funding ends at the end of 2012. Further reasons are provided in Table 8. In addition, details of future contributions of IKS-related partners are provided in Table 7.

Seventh, participants of all categories indicate that there are clear **benefits** of semantic technologies for CMS. Thus, the underlying objectives and rationale of IKS is still evaluated significantly positive at the end of the project. Accordingly, participants would strongly recommend the adoption and use of semantic-enhanced CMSs.

Finally, 98 percent of the IKS-affiliated organizations would **again participate** in an EU project such as IKS (cf. Table 6, row Repeated Participation in EU project). In combination with

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the qualitative feedback provided in Table 9, IKS can be perceived as a successful project in this regard. Only one partner argued that administrative overhead was perceived as too high and thus, participation in a future EU project is currently not considered.

**Table 6. Descriptive statistics for IKS industry partners (IKS-IP), IKS research partners (IKS-RP), IKS early adopters (IKS-EA), all IKS-affiliated organizations (IKS) and third parties interested in IKS (3<sup>rd</sup>P). Note: Mean (SD = standard deviation),  $p < .05$  (\*),  $p < .01$  (\*\*),  $p < .001$  (\*\*\*) for one-sample t-test (test value = neutral scale value of the Likert scale), ns = not significant, i.e. \* / \*\* / \*\*\* indicates that the mean value lies significantly below (orange background) or above (green background) the neutral scale value.**

| ID                          | Construct / Items                  | IKS-IP                  | IKS-RP                  | IKS-EA                  | IKS                     | 3 <sup>rd</sup> Party   | Total                   |
|-----------------------------|------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <b>1</b>                    | <b>Technology Impact</b>           | N=11                    | N=1                     | N=18                    | N=30                    | N=15                    | N=45                    |
| TIM1<br>(now)               | IKS (overall)                      | 2.1* (0.5)              | –                       | 1.8*** (0.5)            | 2.0*** (0.6)            | 1.8*** (0.6)            | 1.9*** (0.6)            |
|                             | Apache Stanbol                     | 2.1* (0.5)              | –                       | 2.1* (0.8)              | 2.1** (0.7)             | 1.9* (0.8)              | 2.0*** (0.7)            |
|                             | VIE                                | 2.5 <sup>ns</sup> (1.2) | –                       | 1.6*** (0.6)            | 1.9** (1.0)             | 1.5*** (0.7)            | 1.8*** (0.9)            |
| TIM2<br>(in two years)      | IKS (overall)                      | 2.0** (0.5)             | –                       | 2.2 <sup>ns</sup> (0.6) | 2.2** (0.6)             | 2.6 <sup>ns</sup> (0.7) | 2.3 <sup>ns</sup> (0.7) |
|                             | Apache Stanbol                     | 2.3 <sup>ns</sup> (0.5) | –                       | 2.6 <sup>ns</sup> (0.7) | 2.5 <sup>ns</sup> (0.6) | 2.5 <sup>ns</sup> (0.6) | 2.5 <sup>ns</sup> (0.6) |
|                             | VIE                                | 2.5 <sup>ns</sup> (1.1) | –                       | 1.9** (0.8)             | 2.2 <sup>ns</sup> (1.0) | 2.3 <sup>ns</sup> (0.7) | 2.2* (0.9)              |
| <b>2</b>                    | <b>Business Impact</b>             | N=12                    | N=0                     | N=20                    | N=32                    | N=0                     | N=32                    |
| BIM1<br>(market share)      | Coverage: All IKS-related projects | 1.8** (0.7)             | –                       | 2.2 <sup>ns</sup> (1.1) | 2.1* (0.9)              | –                       | 2.1* (0.9)              |
| BIM2<br>(new opportunities) | Coverage: All IKS-related projects | 2.3 <sup>ns</sup> (0.9) | –                       | 3.0* (0.9)              | 2.7 <sup>ns</sup> (0.9) | –                       | 2.7 <sup>ns</sup> (0.9) |
| <b>3</b>                    | <b>Research Impact</b>             | N=3                     | N=16                    | N=11                    | N=30                    | N=22                    | N=52                    |
| RIM1<br>(now)               | IKS (overall)                      | 3.1 <sup>ns</sup> (1.0) | 2.8 <sup>ns</sup> (0.7) | 2.4 <sup>ns</sup> (0.7) | 2.6 <sup>ns</sup> (0.7) | 2.2 <sup>ns</sup> (0.7) | 2.4 <sup>ns</sup> (0.8) |
|                             | Apache Stanbol                     | 2.3 <sup>ns</sup> (0.6) | 2.6 <sup>ns</sup> (1.1) | 2.7 <sup>ns</sup> (0.8) | 2.6 <sup>ns</sup> (0.9) | 2.4 <sup>ns</sup> (1.0) | 2.5 <sup>ns</sup> (1.0) |
|                             | VIE                                | 2.3 <sup>ns</sup> (1.5) | 1.9* (1.0)              | 2.0 <sup>ns</sup> (0.9) | 2.0** (1.0)             | 2.0** (0.8)             | 2.0*** (0.9)            |
| RIM2<br>(in two years)      | IKS (overall)                      | 2.3 <sup>ns</sup> (0.6) | 2.8 <sup>ns</sup> (0.8) | 2.7 <sup>ns</sup> (0.6) | 2.7 <sup>ns</sup> (0.7) | 2.4 <sup>ns</sup> (0.5) | 2.6 <sup>ns</sup> (0.6) |
|                             | Apache Stanbol                     | 2.3 <sup>ns</sup> (0.6) | 2.8 <sup>ns</sup> (0.8) | 3.2* (0.8)              | 2.9* (0.8)              | 2.6 <sup>ns</sup> (0.8) | 2.8* (0.8)              |
|                             | VIE                                | 2.0 <sup>ns</sup> (0.0) | 2.1 <sup>ns</sup> (1.0) | 2.4 <sup>ns</sup> (0.9) | 2.2 <sup>ns</sup> (0.9) | 2.2 <sup>ns</sup> (0.7) | 2.2* (0.8)              |
| <b>4</b>                    | <b>Education Impact</b>            | N=0                     | N=3                     | N=1                     | N=4                     | N=4                     | N=8                     |
| EIM1<br>(now)               | IKS (overall)                      | –                       | 2.0 <sup>ns</sup> (1.0) | –                       | 2.5 <sup>ns</sup> (1.3) | 2.3 <sup>ns</sup> (0.5) | 2.4 <sup>ns</sup> (0.9) |
|                             | Apache Stanbol                     | –                       | 2.7 <sup>ns</sup> (0.6) | –                       | 2.3 <sup>ns</sup> (1.0) | 2.0 <sup>ns</sup> (0.8) | 2.1 <sup>ns</sup> (0.8) |
|                             | VIE                                | –                       | 2.7 <sup>ns</sup> (1.2) | –                       | 2.3 <sup>ns</sup> (1.3) | 1.5 <sup>ns</sup> (1.0) | 1.9 <sup>ns</sup> (1.1) |
| EIM2<br>(in two years)      | IKS (overall)                      | –                       | 3.3 <sup>ns</sup> (1.2) | –                       | 2.8 <sup>ns</sup> (1.5) | 2.5 <sup>ns</sup> (0.6) | 2.6 <sup>ns</sup> (1.1) |
|                             | Apache Stanbol                     | –                       | 3.0 <sup>ns</sup> (1.0) | –                       | 3.0 <sup>ns</sup> (0.8) | 1.8 <sup>ns</sup> (0.5) | 2.4 <sup>ns</sup> (0.9) |
|                             | VIE                                | –                       | 2.3 <sup>ns</sup> (1.5) | –                       | 2.0 <sup>ns</sup> (1.4) | 1.8 <sup>ns</sup> (1.0) | 1.9 <sup>ns</sup> (1.1) |
| <b>5</b>                    | <b>Impact on CMS Community</b>     | N=12                    | N=17                    | N=20                    | N=49                    | N=43                    | N=92                    |

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| ID   | Construct / Items                                                  | IKS-IP                  | IKS-RP                  | IKS-EA                  | IKS                     | 3 <sup>rd</sup> Party   | Total                   |
|------|--------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| ICMS | IKS (overall)                                                      | 4.8 (1.4)               | 5.2** (1.5)             | 4.3 <sup>ns</sup> (1.3) | 4.7** (1.4)             | 3.9 <sup>ns</sup> (1.7) | 4.3 <sup>ns</sup> (1.6) |
|      | Apache Stanbol                                                     | 5.5** (1.3)             | 5.7*** (1.3)            | 5.4*** (1.3)            | 5.5*** (1.3)            | 4.3 <sup>ns</sup> (1.9) | 4.9*** (1.7)            |
|      | VIE                                                                | 4.5 <sup>ns</sup> (2.0) | 4.7 <sup>ns</sup> (1.7) | 3.4 <sup>ns</sup> (1.5) | 4.1 <sup>ns</sup> (1.8) | 3.3* (1.8)              | 3.7 <sup>ns</sup> (1.8) |
| 6a   | <b>Sustainability of IKS Developer Community (in general)</b>      | N=12                    | N=17                    | N=20                    | N=49                    | N=43                    | N=92                    |
| SDC  | IKS (overall)                                                      | 4.3 <sup>ns</sup> (1.4) | 3.6 <sup>ns</sup> (1.8) | 3.8 <sup>ns</sup> (1.8) | 3.9 <sup>ns</sup> (1.7) | 3.8 <sup>ns</sup> (1.4) | 3.9 <sup>ns</sup> (1.6) |
|      | Apache Stanbol                                                     | 5.4*** (1.0)            | 5.8*** (1.3)            | 5.2** (1.5)             | 5.5*** (1.3)            | 4.6* (1.5)              | 5.0*** (1.4)            |
|      | VIE                                                                | 4.8 <sup>ns</sup> (1.9) | 5.1** (1.4)             | 4.1 <sup>ns</sup> (1.4) | 4.6* (1.6)              | 3.8 <sup>ns</sup> (1.5) | 4.2 <sup>ns</sup> (1.6) |
| 6b   | <b>Sustainability of Contributions from IKS-affiliated Members</b> | N=12                    | N=17                    | N=20                    | N=49                    | N=0                     | N=49                    |
| SCIM | IKS (overall)                                                      | 2.3*** (1.0)            | 3.8 <sup>ns</sup> (2.0) | 2.9** (1.7)             | 3.1** (1.7)             | –                       | 3.1** (1.7)             |
|      | Apache Stanbol                                                     | 2.8* (1.3)              | 4.3 <sup>ns</sup> (2.3) | 3.5 <sup>ns</sup> (1.7) | 3.6 <sup>ns</sup> (1.9) | –                       | 3.6 <sup>ns</sup> (1.9) |
|      | VIE                                                                | 2.2** (1.3)             | 2.5** (1.7)             | 2.2*** (1.5)            | 2.3*** (1.5)            | –                       | 2.3*** (1.5)            |
| 7    | <b>Benefits</b>                                                    | N=12                    | N=17                    | N=20                    | N=49                    | N=43                    | N=92                    |
| BEN  | ... of Semantic Technologies for CMS                               | 5.5** (1.1)             | 6.4*** (1.3)            | 6.3*** (0.9)            | 6.1*** (1.1)            | 5.7*** (1.6)            | 5.9*** (1.4)            |
| 8    | <b>Recommendation of Semantic-enhanced CMS</b>                     | N=12                    | N=17                    | N=20                    | N=49                    | N=43                    | N=92                    |
| RE1  | Degree of Recommendation                                           | 5.0* (1.5)              | 5.9*** (1.4)            | 5.8*** (1.2)            | 5.7*** (1.4)            | 5.1*** (1.7)            | 5.4*** (1.5)            |
| RE2  | Certainty of recommendation                                        | 5.3** (1.3)             | 6.1*** (1.2)            | 5.5*** (1.4)            | 5.7*** (1.3)            | 5.2*** (1.5)            | 5.4*** (1.4)            |
| 9    | <b>Repeated Participation in EU project</b>                        | N=12                    | N=17                    | N=20                    | N=49                    | N=0                     | N=49                    |
| RPE  | Yes (Freq., %)                                                     | 11 (91.7%)              | 17 (100%)               | 20 (100%)               | 48 (98%)                | –                       | 48 (98%)                |
| RPE  | No (Freq., %)                                                      | 1 (8.3%)                | 0 (0%)                  | 0 (0%)                  | 1 (2%)                  | –                       | 1 (2%)                  |

Table 7. Contributions of IKS-affiliated organizations beyond 2012

| # | Partner / Comment from survey |
|---|-------------------------------|
|   | <b>IKS Industry Partner</b>   |
|   | <b>a) IKS (overall)</b>       |
| 1 | Development time              |
| 2 | Code / integration            |
|   | <b>b) Apache Stanbol</b>      |
| 3 | Development time              |

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| #  | Partner / Comment from survey                                                                                                                                          |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4  | Promotion / usage after 2013                                                                                                                                           |
| 5  | Integration / Real-world use case implementation and feedback                                                                                                          |
| 6  | Requirement input from CMS provider perspective                                                                                                                        |
| 7  | Automated topic classification and corpus trainer / refiner                                                                                                            |
|    | <b>c) Vienna IKS Editables (VIE)</b>                                                                                                                                   |
| 8  | Browser compatibility testing and fixing                                                                                                                               |
| 9  | Code                                                                                                                                                                   |
| 10 | Advanced RDFa services                                                                                                                                                 |
|    | <b>IKS Research Partner</b>                                                                                                                                            |
|    | <b>a) IKS (overall)</b>                                                                                                                                                |
| 11 | Any retrospective requests since we are part of the IKS consortium                                                                                                     |
| 12 | Integration with existing CMSs through Stanbol CMS Adapter.                                                                                                            |
| 13 | Grow together                                                                                                                                                          |
| 14 | Keeping the community on going (Blog, infos, etc.)                                                                                                                     |
| 15 | Promotion / show casing                                                                                                                                                |
| 16 | Enhance compatibility with existing data sets                                                                                                                          |
| 17 | Continued research and teaching in semantic CMS                                                                                                                        |
| 18 | Community support                                                                                                                                                      |
| 19 | Teaching material                                                                                                                                                      |
| 20 | Scientific papers                                                                                                                                                      |
|    | <b>b) Apache Stanbol</b>                                                                                                                                               |
| 21 | Further development on the Enhancers                                                                                                                                   |
| 22 | Implementation w.r.t. components that we are responsible for                                                                                                           |
| 23 | Developing new features for content hub and CMS Adapter / Further development; Usage in Research & Industry project / Code contribution / committing to Apache Stanbol |
| 24 | Add new NL engines                                                                                                                                                     |
|    | <b>c) Vienna IKS Editables (VIE)</b>                                                                                                                                   |
| 25 | Contributions to the editors                                                                                                                                           |
| 26 | Contributions to create.js                                                                                                                                             |
| 27 | General code contributions / development                                                                                                                               |
| 28 | Add speech technology to the widgets                                                                                                                                   |
|    | <b>IKS Early Adopters</b>                                                                                                                                              |
|    | <b>a) IKS (overall)</b>                                                                                                                                                |
| 29 | Bringing semantic technologies to Word Press                                                                                                                           |

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| #  | Partner / Comment from survey                                                                 |
|----|-----------------------------------------------------------------------------------------------|
| 30 | Enhancement Engine or related validators                                                      |
| 31 | Advocacy                                                                                      |
| 32 | Blogging, disseminating                                                                       |
| 33 | Possible tighter integration of IKS Stanbol with our product and extensions related to this   |
| 34 | Partnership                                                                                   |
| 35 | Cooperation for open data                                                                     |
| 36 | Information and hopefully collaboration                                                       |
|    | <b>b) Apache Stanbol</b>                                                                      |
| 37 | Text classification / term mining enhancements                                                |
| 25 | Bringing semantic technologies to Word Press                                                  |
| 26 | Enhancement Engine or related validators                                                      |
| 27 | Advocacy, integration                                                                         |
| 28 | Semantic search                                                                               |
| 29 | Patch and module contribution                                                                 |
| 30 | Testing and dissemination                                                                     |
| 31 | Possible tighter integration of IKS Stanbol with our product and extensions related to this   |
| 32 | Stanbol SaaS, Semantic Alfresco                                                               |
| 33 | Production sites                                                                              |
| 34 | Spanish support                                                                               |
| 35 | Add plug ins to Stanbol                                                                       |
| 36 | Feedback, bug fixes, patches, improved text parsing, refined relevancy rules                  |
| 37 | Application and use                                                                           |
| 38 | OntoNet is likely to remain our focus, also changes w.r.t. Apache Clerezza if part of Stanbol |
|    | <b>c) Vienna IKS Editables (VIE)</b>                                                          |
| 39 | Advocacy, integration, features                                                               |
| 40 | Hallo editor modules                                                                          |
| 41 | Testing and dissemination                                                                     |
| 42 | Production sites                                                                              |
| 43 | We evaluate to try it out and see if users like it                                            |

Table 8. Reasons for no further contributions of IKS-affiliated organizations beyond 2012

| # | Partner / Comment from survey |
|---|-------------------------------|
|   | <b>IKS Industry Partner</b>   |
|   | <b>a) IKS (overall)</b>       |

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| #  | Partner / Comment from survey                                                                                        |
|----|----------------------------------------------------------------------------------------------------------------------|
| 1  | No effort planned                                                                                                    |
| 2  | The official project membership ends with the year 2012                                                              |
| 3  | We would contribute back if there is something we need to develop for a client project                               |
|    | <b>b) Apache Stanbol</b>                                                                                             |
| 4  | No effort planned                                                                                                    |
| 5  | We would contribute back if there is something we need to develop for a client project                               |
|    | <b>c) Vienna IKS Editables (VIE)</b>                                                                                 |
| 6  | Does not benefit our use case (currently)                                                                            |
| 7  | Our current Ajax layer has a mismatch with VIE and would cost too much for our customer to be refactored as a whole. |
| 8  | No effort planned                                                                                                    |
|    | <b>IKS Research Partner</b>                                                                                          |
|    | <b>a) IKS (overall)</b>                                                                                              |
| 9  | No funding                                                                                                           |
| 10 | Leaving current job position                                                                                         |
| 11 | We are no developers                                                                                                 |
|    | <b>b) Apache Stanbol</b>                                                                                             |
| 12 | Leaving current job position                                                                                         |
| 13 | We are no developers                                                                                                 |
|    | <b>c) Vienna IKS Editables (VIE)</b>                                                                                 |
| 14 | We are not actively involved in this project                                                                         |
| 15 | <b>We do not have any Javascript development within the company yet.</b>                                             |
| 16 | Leaving current job position                                                                                         |
| 15 | Not in the primary focus of our work                                                                                 |
| 16 | We are no developers                                                                                                 |
|    | <b>IKS Early Adopters</b>                                                                                            |
| 23 | <b>a) IKS (overall)</b>                                                                                              |
| 17 | No business need                                                                                                     |
| 18 | Other projects                                                                                                       |
| 19 | Not aware of any components in IKS in addition to Apache Stanbol and VIE                                             |
| 20 | IKS is research, once the consortium disassembles, its gone.                                                         |
| 21 | No funding                                                                                                           |
|    | <b>b) Apache Stanbol</b>                                                                                             |
|    | n/a                                                                                                                  |

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| #  | Partner / Comment from survey                         |
|----|-------------------------------------------------------|
|    | <b>c) Vienna IKS Editables (VIE)</b>                  |
| 22 | Not being used                                        |
| 23 | No business need                                      |
| 32 | Our integration primarily concerns Stanbol components |

Table 9. Qualitative results on why IKS-affiliated partners would participate again in an EU project like IKS

| #  | Partner / Comment from survey                                                                                                                                                                                                    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>IKS Industry Partner</b>                                                                                                                                                                                                      |
| 1  | Interesting technology that provides additional value to our core product offering.                                                                                                                                              |
| 2  | Exchange with research                                                                                                                                                                                                           |
| 3  | We had great results that enhanced our core product. It was interesting to collaborate with people from the research side as well as other industrial partners.                                                                  |
| 4  | The collaboration with research partners and other industrial partner in such a project results in new perspectives for the own business and working methods.                                                                    |
| 5  | It provides added value to the company and to the market.                                                                                                                                                                        |
| 6  | IKS helped us very much getting in touch with people and technologies we are really interested in and it helped us bringing our CMS toward a sustainable product of tomorrow.                                                    |
| 7  | Yes, definitely. Because they are mainly research projects which also contributes myself                                                                                                                                         |
| 8  | It was an interesting experience and brought new ideas.                                                                                                                                                                          |
| 9  | This was a very enriching experience and made it possible to transfer new technologies to our platform and teach new concepts to our staff.                                                                                      |
| 10 | It was interesting to get to know many different people working on and with CMS.                                                                                                                                                 |
|    | <b>IKS Research Partner</b>                                                                                                                                                                                                      |
| 11 | Because of the interdisciplinary of the project and the people                                                                                                                                                                   |
| 12 | Interesting requirements                                                                                                                                                                                                         |
| 13 | Long term research                                                                                                                                                                                                               |
| 14 | I have learned lots of new technologies and developed open source software which is beneficial for other people and allows me enlarge my environment by meeting very experienced people who are experts in their research areas. |
| 15 | It was a very successful project with high quality partners.                                                                                                                                                                     |
| 16 | It's a great way to aggregate talent that is otherwise scattered across the EU                                                                                                                                                   |
| 17 | It is a good way to bring research to an industry!                                                                                                                                                                               |
| 18 | It has done a great job merging the needs of the enterprise world with those of researchers, as well as a strong impact on production-quality software, unlike many EU projects.                                                 |
| 19 | Software is published as open source.                                                                                                                                                                                            |
| 20 | You can possibly work together with experts from research and industry.                                                                                                                                                          |

## D8.9 IKS Impact Assessment

| #  | Partner / Comment from survey                                                                                                                                                                                                  |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21 | Allowed for – otherwise impossible – advances in interface development for semantic technologies                                                                                                                               |
| 22 | Transnational and application-oriented research is an enrichment to the scientific as well as to the European community                                                                                                        |
|    | <b>IKS Early Adopters</b>                                                                                                                                                                                                      |
| 23 | It provides us with a way to expand the features and capabilities of our own product that we would not otherwise have as a small company with a limited research budget                                                        |
| 24 | Good technology                                                                                                                                                                                                                |
| 25 | It helped bring together like minded people                                                                                                                                                                                    |
| 26 | A platform for such a new technology is always needed.                                                                                                                                                                         |
| 27 | IKS was really well managed. It provides good tools and materials. Participate in such project is a way to get good innovative tools on the way.                                                                               |
| 28 | Open Source gets created. Because of the Apache Licence I can contribute my work and benefit from the whole community's efforts in return. Also the future impact of my code is much more secure than alone.                   |
| 29 | It is cool! (and I gained a lot)                                                                                                                                                                                               |
| 30 | IKS gave us the opportunity to easily experiment web semantic otherwise hard to achieve for a small company.                                                                                                                   |
| 31 | It provides opportunities for partnerships and makes it possible to develop prototypes of new features, which can later serve as a basis for development of the main product.                                                  |
| 32 | We evolve our product with this kind of projects deliverables                                                                                                                                                                  |
| 33 | We are generally involved in R&D projects as an on-going concern                                                                                                                                                               |
| 34 | We are thinking of project in the Open Data Incubator.                                                                                                                                                                         |
| 35 | Good community and interesting exchanges                                                                                                                                                                                       |
| 36 | IKS combined applied research and development with open source elements. This balance brought a real-world adoption of research results that would not have been possible by research alone.                                   |
| 37 | Widens knowledge base                                                                                                                                                                                                          |
| 38 | Yes, because of the importance of mixing commercial and research competencies for successful and vibrant marketplace. Access to and participation within the EU market, especially the institutional one, is important for us. |

## 4.2.3 Recommendations for Future EU projects

At the end of the survey, the participants were asked to provide at least three recommendations on how to improve the IKS project. Table 10 lists 69 recommendations.<sup>10</sup>

Table 10. Recommended improvements for future EU projects.

| # | Partner / Comment from survey |
|---|-------------------------------|
|   | <b>IKS Industry Partner</b>   |

<sup>10</sup> One-term answers were dropped from this list if the goal of the recommendation was not explicitly stated (e.g. "documentation" without giving any details on how to improve documentation).

## D8.9 IKS Impact Assessment

| #  | Partner / Comment from survey                                                                                                                                                                                                                                                    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Funding issues when a company changes ownership should be avoided.                                                                                                                                                                                                               |
| 2  | At changes of individual partners, faster decisions by the EU Commission                                                                                                                                                                                                         |
| 3  | More flexible schedules / more flexible project plan / Have a more flexible project plan instead of a "Water-fall model" that is fixed at the beginning and then never changed through the 3 years of the project.                                                               |
| 4  | Empower the project officer                                                                                                                                                                                                                                                      |
| 5  | More focus on non-English languages                                                                                                                                                                                                                                              |
| 6  | Less bureaucracy                                                                                                                                                                                                                                                                 |
| 7  | Bringing researchers and industrial developers together in a faster way                                                                                                                                                                                                          |
| 8  | Make the project start faster by organizing brain storming hackathons, coding, demo sessions right at the beginning instead of endless specification meetings to only produce hundreds of pages of documents that nobody wants to read. / More hackathons, more onside workshops |
| 9  | Provide some help (esp. in the beginning) for SMEs with low EU project experience so that the cost calculations are done correctly.                                                                                                                                              |
| 10 | Clearer scope                                                                                                                                                                                                                                                                    |
|    | <b>IKS Research Partner</b>                                                                                                                                                                                                                                                      |
| 11 | EU review meetings should be conducted online                                                                                                                                                                                                                                    |
| 12 | Better targeted development                                                                                                                                                                                                                                                      |
| 13 | Less administrative overhead / Reduce Management overhead / improved project management / less controlling                                                                                                                                                                       |
| 14 | Development of mature software (as performed in IKS)                                                                                                                                                                                                                             |
| 15 | Be even more daring in proposing semantic solutions in fields less regarded by the industry, such as license / policy management and enforcement                                                                                                                                 |
| 16 | Less focus on deliverables but more on integrated and innovative research and results                                                                                                                                                                                            |
| 17 | Keep it easy to spend money on small projects with additional partners to evaluate and improve project results                                                                                                                                                                   |
| 18 | The (initial) effort for writing project proposals should be reduced with respect to the limited success ratio even for proposals of good quality                                                                                                                                |
| 19 | Projects need to be more agile. It should be possible to invite interested companies during the project. Early adopters were a good start, but there is much more potential to that                                                                                              |
| 20 | Encourage equal levels of collaboration when authoring deliverables and scientific publications (the latter seems more confined to the scope of a single project partner).                                                                                                       |
| 21 | Create a more suitable requirements engineering process: less academic with better incentives for industry to participate                                                                                                                                                        |
| 22 | High quality research                                                                                                                                                                                                                                                            |
| 23 | General availability of all results should be mandatory, such as open source code in IKS                                                                                                                                                                                         |
| 24 | Avoid bottlenecks and restrictions of Open source licensing                                                                                                                                                                                                                      |
| 25 | Ensure from the beginning that work packages concerning use cases strictly depend on the products of other WPs and do not reinvent similar solutions from scratch.                                                                                                               |
| 26 | Higher commitment and dedication by project partners / ambitious participants                                                                                                                                                                                                    |

## D8.9 IKS Impact Assessment

| #  | Partner / Comment from survey                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27 | Sustainability of projects results should be supported by the European funding schemes, e.g. by supporting maintenance and further development of project results                                                                                                                                                                                                                                                                                                                                 |
|    | <b>IKS Early Adopters</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 28 | Please make clearer the support infrastructure. There seem to be some support but we cannot find them                                                                                                                                                                                                                                                                                                                                                                                             |
| 29 | Set the goals and objectives clearly                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 30 | Better end user education materials because they cannot imagine this kind of stuff from text                                                                                                                                                                                                                                                                                                                                                                                                      |
| 31 | Clearer separation of research from development: research experiments MUST focus on measuring in big-data experiments to improve the algorithms. Research MUST produce experiment results publishable in high impact journals - research MUST NOT produce working code                                                                                                                                                                                                                            |
| 32 | Public relations support                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 33 | Faster communication with EU / better bureaucracy                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 34 | Focus on potential target audience                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 35 | Not only incentivise early adopters, but also incentivise the participation in the planning phase. This should generate more people who understand the deep details of the system, not only 1-2 lead developers                                                                                                                                                                                                                                                                                   |
| 36 | Long-term maintenance of the results should be supported                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 37 | Focus on solving real-world problems: better research using methods like customer development or lean start-up to interview customers/providers to really find a problem that is commercially relevant. Using user interviews and personas is NOT enough - it allows the researcher still to dive into a topic that is irrelevant. Research must not pick its subject solely by personal interest, Evaluators, professors, and students must follow a real human need when picking their targets. |
| 38 | Webinars and virtual "Hangouts" to ask questions                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | <b>Interested third parties in IKS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 39 | Involve the industry in choosing the topics you are tackling                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 40 | An essential commitment towards development of open source technologies                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 41 | More interaction with business rather than IT / More real final user solutions / Real customer usage / use and clear business demonstrations to make sense to a business users when CMS vendors sell to the companies / clear value proposition / start from somebody's felt problem, not from the technology                                                                                                                                                                                     |
| 42 | Tangible exploitation plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 42 | Better communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 43 | From outside I see it as a good project.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 44 | Implementation of APIs like Saplo                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 45 | Wider reach and advertisement for early adopter program                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 46 | Better dissemination and promotion support from EU                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 47 | I would reach out to more developers in the United States, for example, at Drupalcon                                                                                                                                                                                                                                                                                                                                                                                                              |
| 48 | Projects should be disseminated to companies and companies should obtain advantages from using those companies                                                                                                                                                                                                                                                                                                                                                                                    |
| 49 | Earlier involvement of external community                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 50 | Try to restrict feature bloat                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 51 | Cooperation with existing open source communities                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## D8.9 IKS Impact Assessment

| #  | Partner / Comment from survey                                                                                                                                                                          |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 52 | Talking business language rather than IT language                                                                                                                                                      |
| 53 | Pre-packaged sub project examples                                                                                                                                                                      |
| 54 | Guides to developers                                                                                                                                                                                   |
| 55 | More consideration of previous work (e.g. much digital library work is relevant to Stanbol, but it's not clear that it was taken into account)                                                         |
| 56 | The quality of the software developed in these projects should be taken into account when evaluating them                                                                                              |
| 57 | Much easy to deploy                                                                                                                                                                                    |
| 58 | Events for developers (hacking)                                                                                                                                                                        |
| 59 | Allow reuse of modules outside of the framework, i.e. non-OSGi                                                                                                                                         |
| 60 | Design of a generic connector, for integration purpose                                                                                                                                                 |
| 61 | Multilingual features are essential for semantic projects                                                                                                                                              |
| 62 | IKS did a great job in using existing networks to talk to potential stakeholders. That is crucial for further projects as well.                                                                        |
| 63 | Sub projects get lost - is there sufficient developer community? They should stand on their own outside of any CMS integration - I'm interested in document enhancement using javascript client/server |
| 64 | Standardize technologies, not several technical solutions to same problems                                                                                                                             |
| 65 | Ability to meet domain specific requirements                                                                                                                                                           |
| 66 | I would hold forums at the Online News Association conferences                                                                                                                                         |
| 67 | Projects should all be open source and there should be developers in the community to support them                                                                                                     |
| 68 | A list or web site with use cases and applications                                                                                                                                                     |
| 69 | Do not rely on components that are not mature or under active development                                                                                                                              |

## 5 Summary

In this report, the impact of the IKS project and its related projects was assessed based on online access to relevant websites and the IKS Impact Assessment Survey 2012. It has been shown that IKS and its related projects have generated almost 360 000 page views over the course of the last six months in 2012. This together with the graduation of Apache Stanbol from its incubator status in 2012 can be interpreted as a remarkable impact of the project. Moreover, results of the IKS Impact Assessment Survey 2012 indicate that the combination of semantic technologies and CMS are able to provide several benefits such that semantic-enhanced CMS are recommended to a high degree. Additionally, technological impact, business impact and educational impact of the IKS results are rated at a notable degree, too. All in all, by considering the complementing impact metrics coming from other deliverables (e.g. demos at various conferences, the amount of scientific papers, etc.), it can be therefore concluded that IKS was a successful project in respect to all of its primary goals.

## References

- Arnold, E. (2010) Interim evaluation of the ICT research in the 7th Framework Programme - Catalysing European Competitiveness in a Globalising World. [http://ec.europa.eu/research/evaluations/pdf/archive/fp7-evidence-base/other\\_fp7\\_panel\\_evaluations/interim\\_evaluation\\_the\\_ict\\_research\\_in\\_fp7.pdf](http://ec.europa.eu/research/evaluations/pdf/archive/fp7-evidence-base/other_fp7_panel_evaluations/interim_evaluation_the_ict_research_in_fp7.pdf)
- Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13 (3), 319-339.
- DeLone, W.H. and McLean, E.R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3 (1), 60-95.
- DeLone, W.H. and McLean, E.R. (2003). The DeLone and Mc Lean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19 (4), 9-30.
- European Commission (2009) Impact Assessment Guidelines. [http://ec.europa.eu/governance/impact/commission\\_guidelines/docs/iag\\_2009\\_en.pdf](http://ec.europa.eu/governance/impact/commission_guidelines/docs/iag_2009_en.pdf)
- European Commission (2011) On the Response to the Report of the Expert Group on the Interim Evaluation of the Seventh Framework Programme for Research, Technological Development and Demonstration Activities and to the Report of the Expert Group on the Interim Evaluation of the Risk- Sharing Finance Facility. [http://ec.europa.eu/research/evaluations/pdf/archive/other\\_reports\\_studies\\_and\\_documents/commission\\_response\\_fp7\\_ie\\_report\\_2011.pdf#view=fit&pagemode=none](http://ec.europa.eu/research/evaluations/pdf/archive/other_reports_studies_and_documents/commission_response_fp7_ie_report_2011.pdf#view=fit&pagemode=none)
- Kamis, A., Koufaris, M. and Stern, T. (2008). Using an Attribute-Based Decision Support System for User-Customized Products Online: An Experimental Investigation. *MIS Quarterly*, 32 (1), 159-177.

## D8.9 IKS Impact Assessment

- Moore, G.C. and Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2 (3), 192-222.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88 (5), 879-903.
- Podsakoff, P.M. and Organ, D.W. (1986). Self-Reports in Organizational Research: Problems and Prospects. *Journal of Management*, 12 (4), 531-544.
- Polt, W. and Vonortas, N. (2007) IST Evaluation and Monitoring. [http://www.joanneum.at/uploads/tx\\_publicationlibrary/IST\\_Eval\\_Monitoring.pdf](http://www.joanneum.at/uploads/tx_publicationlibrary/IST_Eval_Monitoring.pdf)
- Venkatesh, V. and Davis, F.D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46 (2), 186-204.
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27 (3), 425-478.
- Venkatesh, V., Thong, J.Y.L. and Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36 (1), 157-178.

## Appendix: Impact Assessment Survey

### A – Email Templates

#### Invitation Email

Subject: Invitation to the IKS - Apache Stanbol - VIE Impact Assessment Survey 2012

Dear **FIRSTNAME LASTNAME**,

You are kindly invited to evaluate the Interactive Knowledge Stack (IKS) project with its related projects Apache Stanbol and Vienna IKS Editables (VIE). This assessment will take less than 13 minutes.

Please participate until **DEADLINE**.

Your participation is voluntary and no individual will be identifiable from the results. To participate, please click on the following link:

**SURVEYURL**

With kind regards on behalf of the IKS consortium

John Pereira, Salzburg Research  
Tobias Kowatsch, University of St. Gallen  
Prof. Dr.-Ing. Wolfgang Maass, Saarland University

--

If you do not want to participate in this survey and don't want to receive any more invitations please click the following link:

**OPTOUTURL**

## D8.9 IKS Impact Assessment

### Reminder Email

Subject: Reminder: IKS - Apache Stanbol - VIE Impact Assessment Survey 2012

Dear **FIRSTNAME LASTNAME**,

Recently we invited you to evaluate the Interactive Knowledge Stack (IKS) project with its related projects Apache Stanbol and Vienna IKS Editables (VIE).

We note that you have not yet completed the survey, and wish to remind you that the survey is still available. It will take less than 13 minutes.

Your participation is voluntary and no individual will be identifiable from the results. To participate, please click on the following link until **DEADLINE**:

**SURVEYURL**

With kind regards on behalf of the IKS consortium

John Pereira, Salzburg Research  
Tobias Kowatsch, University of St. Gallen  
Prof. Dr.-Ing. Wolfgang Maass, Saarland University

--

If you do not want to participate in this survey and don't want to receive any more invitations please click the following link:

**OPTOUTURL**

### Confirmation Email

Subject:

Dear **FIRSTNAME LASTNAME**,

This email is to confirm that you have completed the survey titled **SURVEYNAME** and your response has been saved. Thank you for participating.

If you have any further questions about this email, please contact **ADMINNAME** on **ADMINEMAIL**.

Sincerely,

John Pereira, Salzburg Research  
Tobias Kowatsch, University of St. Gallen  
Prof. Dr.-Ing. Wolfgang Maass, Saarland University

## B – Introductory Part



**The IKS Impact Assessment Survey**  
 November 2012






**Dear Madam/Sir,**

Thank you very much for participating. The objective of this survey is to assess the **Interactive Knowledge Stack (IKS)** with its related projects **Apache Stanbol** and **Vienna IKS Editables (VIE)**. In particular, it is evaluated whether these projects have an impact on your daily activities as ...

- CMS developer,
- CMS customer,
- CMS consultant, or
- Researcher and Lecturer.

Overall, this assessment will take less than 15 minutes.

Your participation is voluntary and all data collected will be kept in a secured location at the University of St. Gallen in Switzerland. The results of the study may be published or presented at professional conferences and journals, but the results will only be presented in aggregated forms. No individual will be identifiable from the results.

We will be happy to answer any questions that you may have about the study. You may contact **Tobias Kowatsch** if you have study related questions or issues.

Thank you for your kind consideration. We hope you will help us with this study by completing the questions on the following pages. Please click the next button below.

With kind regards on behalf of the IKS consortium,



**Prof. Dr.-Ing. Wolfgang Maass**  
 Chair in Business Administration  
 esp. Information and Service Systems  
 Saarland University, Germany



**Tobias Kowatsch M.Sc.**  
 Research Associate  
 Institute of Technology Management  
 University of St. Gallen, Switzerland

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## D8.9 IKS Impact Assessment



**The IKS Impact Assessment Survey**  
 November 2012






**Part 1 of 3: Introductory Questions**

▪ Please start your assessment by rating the following statements.

|                                                                         | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|-------------------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| I am an expert in CMS.                                                  | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| I am an expert in Semantic Technologies.                                | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| I think that there are clear benefits of Semantic Technologies for CMS. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

▪ How many years of expertise do you have with regard to ...

|                        |                      |        |
|------------------------|----------------------|--------|
| CMS?                   | <input type="text"/> | years. |
| Semantic Technologies? | <input type="text"/> | years. |
| Semantic CMS?          | <input type="text"/> | years. |

▪ How are you affiliated to the IKS project?

☐ We are industrial partner of the IKS project.

☐ We are research partner of the IKS project.

☐ We participate in the IKS Early Adopters program.

☐ Our CMS provider is formally affiliated to the IKS project.

☐ We are not formally affiliated to the IKS project.

▪ What is your primary interest in IKS, Apache Standbol or Vienna IKS Editables?

|                                                                                                                                                                 |                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Improving our CMS or CMS plugin<br><input type="checkbox"/> Research on Semantic CMS<br><input type="checkbox"/> Teaching Semantic CMS | <input type="checkbox"/> Learning more about Semantic CMS<br><input type="checkbox"/> I am just curious about these projects.<br><input type="checkbox"/> Other: <input style="width: 80px;" type="text"/> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

▪ Which of the following job descriptions fits best to your current activity?

|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="radio"/> Chief Executive Officer (CEO)<br><input type="radio"/> Chief Information Officer (CIO)<br><input type="radio"/> Chief Technology Officer (CTO)<br><input type="radio"/> Technology Consultant<br><input type="radio"/> Software Architect | <input type="radio"/> Software Developer<br><input type="radio"/> Professor in Computer Science or Business Informatics<br><input type="radio"/> Research Associate in Computer Science or Business Informatics<br><input type="radio"/> Other: <input style="width: 80px;" type="text"/> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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## C – Survey Part for IKS Industrial Partners



**The IKS Impact Assessment Survey**  
 November 2012






**Part 2 of 3: Impact and Sustainability**

▪ As one of your primary interests, you have indicated that you want to improve your CMS or CMS plug-in. Now, please indicate the degree to which the following projects had already an impact on your product.

|                            | Our product integrates none of this project's features. | Our product already integrates some of this project's features. | Our product already integrates the majority of this project's. | Our product has been completely rewritten because of this project's features. |
|----------------------------|---------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                          | <input type="radio"/>                                                         |
| Apache Stanbol             | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                          | <input type="radio"/>                                                         |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                          | <input type="radio"/>                                                         |

▪ Now, please indicate the degree to which the following projects will probably have an impact on your product during the next two years.

|                            | Our product will integrate none of this project's features during the next two years. | Our product will integrate some of this project's features during the next two years. | Our product will integrate the majority of this project's features during the next two years. | Our product will be completely rewritten because of this project's features during the next two years. |
|----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |

## D8.9 IKS Impact Assessment

▪ Please indicate the degree to which the following projects had an impact on discussions related to Semantic Technologies in the CMS community?

|                            | No impact,<br>i.e. this<br>project was<br>never<br>referred to in<br>discussions<br>related to<br>Semantic<br>Technologies<br>in CMS. | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | Strong<br>impact, i.e.<br>this project<br>was almost<br>always<br>referred to in<br>discussions<br>related to<br>Semantic<br>Technologies<br>in CMS. |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                                                |
| Apache Stanbol             | <input type="radio"/>                                                                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                                                |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                                                |

▪ Please rate the sustainability of the following three projects by indicating the degree of how active the developer community will be over the next three years?

|                            | No active<br>developer<br>community<br>at all. | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | Very active<br>developer<br>community<br>with<br>regular<br>releases. |
|----------------------------|------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                 |
| Apache Stanbol             | <input type="radio"/>                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                 |
| Vienna IKS Editables (VIE) | <input type="radio"/>                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                 |

▪ Because you are affiliated to the IKS project and its related projects, please indicate the degree to which your organization is willing to contribute to the following three projects beyond 2012.

|                            | There will be no<br>contribution to<br>this project<br>beyond 2012. | We will<br>contribute to<br>some parts of<br>this project<br>beyond 2012. | We will<br>contribute to<br>major parts of<br>this project<br>beyond 2012. | We will<br>contribute to this<br>project as driving<br>force beyond<br>2012 because of<br>its strategic<br>importance. |
|----------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                               | <input type="radio"/>                                                     | <input type="radio"/>                                                      | <input type="radio"/>                                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                               | <input type="radio"/>                                                     | <input type="radio"/>                                                      | <input type="radio"/>                                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                               | <input type="radio"/>                                                     | <input type="radio"/>                                                      | <input type="radio"/>                                                                                                  |

## D8.9 IKS Impact Assessment

Please provide (A) your primary contribution after 2012 OR (B) your primary reason for no further contributions beyond 2012.

|                            | A: The primary contribution after 2012 will be... | B: The primary reason for no further contributions after 2012 is... |
|----------------------------|---------------------------------------------------|---------------------------------------------------------------------|
| IKS (overall)              | <input type="text"/>                              | <input type="text"/>                                                |
| Apache Stanbol             | <input type="text"/>                              | <input type="text"/>                                                |
| Vienna IKS Editables (VIE) | <input type="text"/>                              | <input type="text"/>                                                |

▪ Please indicate the degree to which the IKS project or its related projects Apache Stanbol and Vienna IKS Editables (VIE) had an impact on your company's market share or sales.

☐ No impact  
☐ Low impact  
☐ Medium impact  
☐ High impact

Please enter your comment here:

 Please provide details as comments.

▪ Please indicate the degree to which the IKS project or its related projects Apache Stanbol and Vienna IKS Editables (VIE) had an impact on the creation of new, potentially commercial, products or services, new business collaborations or agreements.

☐ No impact  
☐ Low impact  
☐ Medium impact  
☐ High impact

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## D8.9 IKS Impact Assessment



**The IKS Impact Assessment Survey**  
 November 2012






**Part 3 of 3: Final Questions**

▪ Please rate the following statements.

|                                                                                                                   | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| 1. I would generally recommend a Semantic-enhanced CMS to a company that is currently looking for a CMS solution. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| 2. I am quite certain with my recommendation above.                                                               | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

▪ Would you again participate in an EU project such as IKS?

☐ Yes, because ...  
☐ No, because ...

Please enter your comment here:

What must be improved with regard to future EU projects such as IKS. Please try to list at least three topics.

1. Improvement   
 2. Improvement   
 3. Improvement

▪ I am ...

☐ Female    ☐ Male

▪ How old are you?

years.

▪ What country do you live in?

▪ Please rate the following statements.

|                                                                | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|----------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| I found this survey too long.                                  | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| The instructions of this survey were clear and understandable. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

Do you have any final comments regarding this survey? Then please use this form:

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## D – Survey Part for IKS Research Partners



**The IKS Impact Assessment Survey**  
 November 2012






**Part 2 of 3: Impact and Sustainability**

▪ As one of your primary interests, you have indicated that you want to improve your CMS or CMS plug-in. Now, please indicate the degree to which the following projects had already an impact on your product.

|                            | Our product integrates none of this project's features. | Our product already integrates some of this project's features. | Our product already integrates the majority of this project's. | Our product has been completely rewritten because of this project's features. |
|----------------------------|---------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                          | <input type="radio"/>                                                         |
| Apache Stanbol             | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                          | <input type="radio"/>                                                         |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                          | <input type="radio"/>                                                         |

▪ Now, please indicate the degree to which the following projects will probably have an impact on your product during the next two years.

|                            | Our product will integrate none of this project's features during the next two years. | Our product will integrate some of this project's features during the next two years. | Our product will integrate the majority of this project's features during the next two years. | Our product will be completely rewritten because of this project's features during the next two years. |
|----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |

## D8.9 IKS Impact Assessment

• Please indicate the degree to which the following projects had an impact on discussions related to Semantic Technologies in the CMS community?

|                            | No impact,<br>i.e. this<br>project was<br>never<br>referred to in<br>discussions<br>related to<br>Semantic<br>Technologies<br>in CMS. | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Strong<br>impact, i.e.<br>this project<br>was almost<br>always<br>referred to in<br>discussions<br>related to<br>Semantic<br>Technologies<br>in CMS. |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                                                                                                                                                      |
| Apache Stanbol             | <input type="radio"/>                                                                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                                                                                                                                                      |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                                                                                                                                                      |

• Please rate the sustainability of the following three projects by indicating the degree of how active the developer community will be over the next three years?

|                            | No active<br>developer<br>community<br>at all. | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Very active<br>developer<br>community<br>with<br>regular<br>releases. |
|----------------------------|------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                                                                       |
| Apache Stanbol             | <input type="radio"/>                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                                                                       |
| Vienna IKS Editables (VIE) | <input type="radio"/>                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                                                                       |

• Because you are affiliated to the IKS project and its related projects, please indicate the degree to which your organization is willing to contribute to the following three projects beyond 2012.

|                            | There will be no<br>contribution to<br>this project<br>beyond 2012. | We will<br>contribute to<br>some parts of<br>this project<br>beyond 2012. | We will<br>contribute to<br>major parts of<br>this project<br>beyond 2012. | We will<br>contribute to this<br>project as driving<br>force beyond<br>2012 because of<br>its strategic<br>importance. |
|----------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                               | <input type="radio"/>                                                     | <input type="radio"/>                                                      | <input type="radio"/>                                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                               | <input type="radio"/>                                                     | <input type="radio"/>                                                      | <input type="radio"/>                                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                               | <input type="radio"/>                                                     | <input type="radio"/>                                                      | <input type="radio"/>                                                                                                  |

Please provide (A) your primary contribution after 2012 OR (B) your primary reason for no further contributions beyond 2012.

|                            | A: The primary contribution after 2012<br>will be... | B: The primary reason for no further<br>contributions after 2012 is... |
|----------------------------|------------------------------------------------------|------------------------------------------------------------------------|
| IKS (overall)              | <input type="text"/>                                 | <input type="text"/>                                                   |
| Apache Stanbol             | <input type="text"/>                                 | <input type="text"/>                                                   |
| Vienna IKS Editables (VIE) | <input type="text"/>                                 | <input type="text"/>                                                   |

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## D8.9 IKS Impact Assessment



**The IKS Impact Assessment Survey**  
 November 2012






**Part 3 of 3: Final Questions**

▪ Please rate the following statements.

|                                                                                                                   | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| 1. I would generally recommend a Semantic-enhanced CMS to a company that is currently looking for a CMS solution. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| 2. I am quite certain with my recommendation above.                                                               | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

▪ Would you again participate in an EU project such as IKS?

☐ Yes, because ...  
☐ No, because ...

Please enter your comment here:

What must be improved with regard to future EU projects such as IKS. Please try to list at least three topics.

1. Improvement   
 2. Improvement   
 3. Improvement

▪ I am ...

☐ Female
 ☐ Male

▪ How old are you?

years.

▪ What country do you live in?

▪ Please rate the following statements.

|                                                                | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|----------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| I found this survey too long.                                  | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| The instructions of this survey were clear and understandable. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

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## E – Survey Part for IKS Early Adopters



**The IKS Impact Assessment Survey**  
 November 2012






**Part 2 of 3: Impact and Sustainability**

▪ As one of your primary interests, you have indicated that you want to improve your CMS or CMS plug-in. Now, please indicate the degree to which the following projects had already an impact on your product.

|                            | Our product integrates none of this project's features. | Our product already integrates some of this project's features. | Our product already integrates the majority of this project's features. | Our product has been completely rewritten because of this project's features. |
|----------------------------|---------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |
| Apache Stanbol             | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |

▪ Now, please indicate the degree to which the following projects will probably have an impact on your product during the next two years.

|                            | Our product will integrate none of this project's features during the next two years. | Our product will integrate some of this project's features during the next two years. | Our product will integrate the majority of this project's features during the next two years. | Our product will be completely rewritten because of this project's features during the next two years. |
|----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |

## D8.9 IKS Impact Assessment

▪ Please indicate the degree to which the following projects had an impact on discussions related to Semantic Technologies in the CMS community?

|                            | No impact, i.e. this project was never referred to in discussions related to Semantic Technologies in CMS. |                       |                       |                       |                       |                       | Strong impact, i.e. this project was almost always referred to in discussions related to Semantic Technologies in CMS. |
|----------------------------|------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------|
|                            | 1                                                                                                          | 2                     | 3                     | 4                     | 5                     | 6                     | 7                                                                                                                      |
| IKS (overall)              | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |

▪ Please rate the sustainability of the following three projects by indicating the degree of how active the developer community will be over the next three years?

|                            | No active developer community at all. |                       |                       |                       |                       |                       | Very active developer community with regular releases. |
|----------------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------------------------------------|
|                            | 1                                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                                                      |
| IKS (overall)              | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |
| Apache Stanbol             | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |

▪ Because you are affiliated to the IKS project and its related projects, please indicate the degree to which your organization is willing to contribute to the following three projects beyond 2012.

|                            | There will be no contribution to this project beyond 2012. | We will contribute to some parts of this project beyond 2012. | We will contribute to major parts of this project beyond 2012. | We will contribute to this project as driving force beyond 2012 because of its strategic importance. |
|----------------------------|------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                      | <input type="radio"/>                                         | <input type="radio"/>                                          | <input type="radio"/>                                                                                |
| Apache Stanbol             | <input type="radio"/>                                      | <input type="radio"/>                                         | <input type="radio"/>                                          | <input type="radio"/>                                                                                |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                      | <input type="radio"/>                                         | <input type="radio"/>                                          | <input type="radio"/>                                                                                |

## D8.9 IKS Impact Assessment

Please provide (A) your primary contribution after 2012 OR (B) your primary reason for no further contributions beyond 2012.

|                            | A: The primary contribution after 2012 will be... | B: The primary reason for no further contributions after 2012 is... |
|----------------------------|---------------------------------------------------|---------------------------------------------------------------------|
| IKS (overall)              | <input type="text"/>                              | <input type="text"/>                                                |
| Apache Stanbol             | <input type="text"/>                              | <input type="text"/>                                                |
| Vienna IKS Editables (VIE) | <input type="text"/>                              | <input type="text"/>                                                |

▪ Please indicate the degree to which the IKS project or its related projects Apache Stanbol and Vienna IKS Editables (VIE) had an impact on your company's market share or sales.

☐ No impact  
☐ Low impact  
☐ Medium impact  
☐ High impact

Please enter your comment here:

? Please provide details as comments.

▪ Please indicate the degree to which the IKS project or its related projects Apache Stanbol and Vienna IKS Editables (VIE) had an impact on the creation of new, potentially commercial, products or services, new business collaborations or agreements.

☐ No impact  
☐ Low impact  
☐ Medium impact  
☐ High impact

Please enter your comment here:

? Please provide details in the comments field.

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## D8.9 IKS Impact Assessment



**The IKS Impact Assessment Survey**  
 November 2012






**Part 3 of 3: Final Questions**

▪ Please rate the following statements.

|                                                                                                                   | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| 1. I would generally recommend a Semantic-enhanced CMS to a company that is currently looking for a CMS solution. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| 2. I am quite certain with my recommendation above.                                                               | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

▪ Would you again participate in an EU project such as IKS?

☐ Yes, because ...

☐ No, because ...

Please enter your comment here:

What must be improved with regard to future EU projects such as IKS. Please try to list at least three topics.

1. Improvement

2. Improvement

3. Improvement

▪ I am ...

☐ Female    ☐ Male

▪ How old are you?

years.

▪ What country do you live in?

▪ Please rate the following statements.

|                                                                | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|----------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| I found this survey too long.                                  | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| The instructions of this survey were clear and understandable. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

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## F – Survey Part for CMS Customers



The IKS Impact Assessment Survey  
November 2012



## Part 2 of 3: Impact and Sustainability

▪ As one of your primary interests, you have indicated that you want to improve your CMS or CMS plug-in. Now, please indicate the degree to which the following projects had already an impact on your product.

|                            | Our product integrates none of this project's features. | Our product already integrates some of this project's features. | Our product already integrates the majority of this project's features. | Our product has been completely rewritten because of this project's features. |
|----------------------------|---------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |
| Apache Stanbol             | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |

▪ Now, please indicate the degree to which the following projects will probably have an impact on your product during the next two years.

|                            | Our product will integrate none of this project's features during the next two years. | Our product will integrate some of this project's features during the next two years. | Our product will integrate the majority of this project's features during the next two years. | Our product will be completely rewritten because of this project's features during the next two years. |
|----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |

▪ You have indicated that you are customer of a CMS provider. Now, please indicate the degree to which the following projects had already an impact on whether to keep your existing CMS.

|                            | This project had no impact on whether to keep our existing CMS. | This project already had a minor impact on whether to keep our existing CMS. | This project already had a major impact on whether to keep our existing CMS. | This project already had a strategic impact on whether to keep our existing CMS. |
|----------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                           | <input type="radio"/>                                                        | <input type="radio"/>                                                        | <input type="radio"/>                                                            |
| Apache Stanbol             | <input type="radio"/>                                           | <input type="radio"/>                                                        | <input type="radio"/>                                                        | <input type="radio"/>                                                            |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                           | <input type="radio"/>                                                        | <input type="radio"/>                                                        | <input type="radio"/>                                                            |

## D8.9 IKS Impact Assessment

▪ Now, please indicate the degree to which the following projects will probably have an impact on your company's decision to keep your existing CMS.

|                            | This project will have no impact on whether to keep our existing CMS. | This project will have a minor impact on whether to keep our existing CMS. | This project will have a major impact on whether to keep our existing CMS. | This project will have a strategic impact on whether to keep our existing CMS. |
|----------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                 | <input type="radio"/>                                                      | <input type="radio"/>                                                      | <input type="radio"/>                                                          |
| Apache Stanbol             | <input type="radio"/>                                                 | <input type="radio"/>                                                      | <input type="radio"/>                                                      | <input type="radio"/>                                                          |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                 | <input type="radio"/>                                                      | <input type="radio"/>                                                      | <input type="radio"/>                                                          |

▪ Please indicate the degree to which the following projects had an impact on discussions related to Semantic Technologies in the CMS community?

|                            | No impact, i.e. this project was never referred to in discussions related to Semantic Technologies in CMS. |                       |                       |                       |                       |                       | Strong impact, i.e. this project was almost always referred to in discussions related to Semantic Technologies in CMS. |
|----------------------------|------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------|
|                            | 1                                                                                                          | 2                     | 3                     | 4                     | 5                     | 6                     | 7                                                                                                                      |
| IKS (overall)              | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |

▪ Please rate the sustainability of the following three projects by indicating the degree of how active the developer community will be over the next three years?

|                            | No active developer community at all. |                       |                       |                       |                       |                       | Very active developer community with regular releases. |
|----------------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------------------------------------|
|                            | 1                                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                                                      |
| IKS (overall)              | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |
| Apache Stanbol             | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |

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## D8.9 IKS Impact Assessment



**The IKS Impact Assessment Survey**  
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**Part 3 of 3: Final Questions**

▪ Please rate the following statements.

|                                                                                                                   | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| 1. I would generally recommend a Semantic-enhanced CMS to a company that is currently looking for a CMS solution. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| 2. I am quite certain with my recommendation above.                                                               | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

**What must be improved with regard to future EU projects such as IKS. Please try to list at least three topics.**

1. Improvement
2. Improvement
3. Improvement

▪ I am ...

☐ Female    ☐ Male

▪ How old are you?

years.

▪ What country do you live in?

▪ Please rate the following statements.

|                                                                | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|----------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| I found this survey too long.                                  | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| The instructions of this survey were clear and understandable. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

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## D8.9 IKS Impact Assessment

G – Survey Part for Interested 3<sup>rd</sup> Parties



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**Part 2 of 3: Impact and Sustainability**

▪ As one of your primary interests, you have indicated that you want to improve your CMS or CMS plug-in. Now, please indicate the degree to which the following projects had already an impact on your product.

|                            | Our product integrates none of this project's features. | Our product already integrates some of this project's features. | Our product already integrates the majority of this project's features. | Our product has been completely rewritten because of this project's features. |
|----------------------------|---------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |
| Apache Stanbol             | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                   | <input type="radio"/>                                           | <input type="radio"/>                                                   | <input type="radio"/>                                                         |

▪ Now, please indicate the degree to which the following projects will probably have an impact on your product during the next two years.

|                            | Our product will integrate none of this project's features during the next two years. | Our product will integrate some of this project's features during the next two years. | Our product will integrate the majority of this project's features during the next two years. | Our product will be completely rewritten because of this project's features during the next two years. |
|----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| IKS (overall)              | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                 | <input type="radio"/>                                                                 | <input type="radio"/>                                                                         | <input type="radio"/>                                                                                  |

▪ Please indicate the degree to which the following projects had an impact on discussions related to Semantic Technologies in the CMS community?

|                            | No impact, i.e. this project was never referred to in discussions related to Semantic Technologies in CMS. |                       |                       |                       |                       |                       | Strong impact, i.e. this project was almost always referred to in discussions related to Semantic Technologies in CMS. |
|----------------------------|------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------|
|                            | 1                                                                                                          | 2                     | 3                     | 4                     | 5                     | 6                     | 7                                                                                                                      |
| IKS (overall)              | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |
| Apache Stanbol             | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                                                                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                                                                                  |

▪ Please rate the sustainability of the following three projects by indicating the degree of how active the developer community will be over the next three years?

|                            | No active developer community at all. |                       |                       |                       |                       |                       | Very active developer community with regular releases. |
|----------------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------------------------------------|
|                            | 1                                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                                                      |
| IKS (overall)              | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |
| Apache Stanbol             | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |
| Vienna IKS Editables (VIE) | <input type="radio"/>                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>                                  |

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## D8.9 IKS Impact Assessment



**The IKS Impact Assessment Survey**  
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**Part 3 of 3: Final Questions**

▪ Please rate the following statements.

|                                                                                                                   | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
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| 2. I am quite certain with my recommendation above.                                                               | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

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▪ What country do you live in?

▪ Please rate the following statements.

|                                                                | 1 -<br>strongly<br>disagree | 2                     | 3                     | 4                     | 5                     | 6                     | 7 -<br>strongly<br>agree |
|----------------------------------------------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| I found this survey too long.                                  | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |
| The instructions of this survey were clear and understandable. | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>    |

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