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**Contributor(s)** | Anna Triantafillou (ATC)
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Executive Summary

This document is an accompanying report to the Demonstrator of the Intermediate Integrated Prototype of the YDS Platform. This prototype includes a full set of functionalities covering all three pilots of the project. It also incorporates feedback received during the evaluation of the first prototype and of course encapsulates all the achievements and updated tools and components coming from the other work packages.

More specifically, this prototype presents a new approach on exploring and searching of available data via a redesigned user interface. New pages have been created and others have been updated in order to create a clear and easily understood path for a user inside the YDS platform. Semantically enriched data have led to the creation of advanced visualisation tools and a more sophisticated customisation infrastructure offered by WP4. This deliverable describes how these come together to an integrated prototype which offer users the opportunity to discover and remix information from various sources in order to increase collaboration and participation to the common goal of increased transparency and awareness of the public financial flows.

The main architectural and deployment aspects of the YDS platform have not changed significantly since the first prototype but are described in the current document once more for completeness. Changes with respect to the previous version are highlighted in the deliverable’s body and mainly include:

1. Updated way of receiving platform statistics
2. New ways to explore data, mainly via the Dashboard pages
3. Updated search interface
4. User-generated content inside the platform through the YDS DataStories
5. A comprehensive privacy policy and legal notice stemming from the work done regarding the Ethics of the project
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1 Introduction

1.1 Purpose and scope

This deliverable aims to provide an overview of the intermediate release of the YDS prototype. To this end, the report describes shortly the implementation aspects of the prototype and elaborates on the updates with respect to the first version. The current new and updated functionality is explained in the form of a user guide which includes screenshots of the prototype accompanied by descriptions of the offered capabilities.

1.2 Approach for work package and relation to other work packages and deliverables

The WP5: YDS Platform Integration aims at providing the implementation aspects for the delivery of the YDS components integration in a unified platform. The design of the YDS platform is driven from the user requirements definition and the technical specifications as delivered by the WP2: Conceptual Architecture, User Needs Analysis and Design.

Following the implementation of the individual modules in WP3: Data Layer and WP4: Customisation of Platform Modules, this WP delivers an integrated view of the YDS platform to act as the test-bed for setting the YDS pilots in WP6: Pilots Deployment and Evaluation and validating the results in real life scenarios. The content presented in this deliverable is subject to refinements and modifications, based on the progress of the technical work packages, as well as during the validation and evaluation phases of the project.

1.3 Updates with respect to deliverable D5.2

The Intermediate Integrated Prototype is the evolution of the First Integrated Prototype that was delivered at the end of the first year and reported at D5.2 [1]. The updates of this version are based on the received user feedback and also on the advancements of the Data Modelling, the APIs and the visualisation components of WP3 and WP4. Moreover, the ethical assessment on data privacy and data handling resulted in relevant statements that have to be accepted by the platform users.

These updates are listed below:

1. There is an updated way of receiving platform statistics, via a project hosted platform which strengthens data privacy
2. There are new ways to explore data, mainly via the Dashboard pages. There is currently one Dashboard page per pilot case
3. There is an updated search interface which also includes an advanced search mechanism
4. Users can generate content inside the platform through the creation of the YDS DataStories which consist of textual information combined with visualisations of YDS data
5. A comprehensive privacy policy and a legal disclaimer are available and users have to accept them before becoming members of the YDS platform

1.4 Structure of the deliverable

This document reports on the activities and effort placed in the integration of the various technologies and tools provided by the WP3: Data Layer & WP4: Customisation of Platform Modules towards delivering the intermediate release of the functional YDS Integrated prototype. The integration effort is guided by the Agile Software Development methodology, aiming to progress the development work in parallel teams and regularly integrating their output, based on a well-defined design.
The scope of this document is to act as appendix to the current version of the YDS integrated prototype and, as such, it is structured as follows:

- Section 2 provides an overview of the system architecture and the YDS orchestrator component
- Section 3 presents a user guide with the main functionality of YDS platform
- Section 4 concludes this report and presents the next steps for the final release of the YDS integrated prototype.
2 Overview of the YDS Platform

The components comprising the YDS platform are described in details in the updated versions of the deliverables of WP3 and WP4, namely D3.7 Data Harvesters v2.0 [2], D3.10 Open Data Repository v2.0 [3], D4.4 Platform Customisation Infrastructure & Components v2.0 [4] and D4.7 Applications and Components v2.0 [5].

To this end, this deliverable includes only a short description of the YDS architecture and the Orchestration Component as a reference point for the reader.

2.1 System Architecture Overview

The high level system architecture of the YDS platform presents all the integrated components that are placed in a logical view which presents the inputs of the system, the Front-end components and the Back-end modules and tools that support them.

Following the requirements of the pilots and the internal reporting of the evaluation results on the first prototype, the YDS platform system architecture has been refined to reflect the latest technical developments that satisfy the aforementioned needs. The following figure presents a high level logical view of the platform.

![YDS System Architecture](image)

Figure 1: YDS System Architecture - Logical View

As seen in the figure above, the end users interact with the platform’s web interface and mobile applications by searching for data or consuming them via the provided API. They also generate content that is stored back to the
platform and connected to the underlying data model. This interaction takes place through the front-end components of the YDS platform, which are in turn supported by the backend components. The components at the backend are also responsible to manage data storage and retrieval from the relevant databases. The YDS logical components are placed in a three-layered Architecture, as shown below.

In this layered structure, the top layer consists of the Interaction Layer, which enables the communication with the target end users. This layer includes components which offer a graphical user interface to enable the users to interact with the rest of the YDS platform and environment components by using a web browser or a mobile device respectively. Furthermore, future applications and tools that will be developed will be put in this layer as well.

The Business Logic Layer hosts the components responsible for the business logic of the YDS platform. This is the part of the system that encodes the real-world business rules and determines how data can be created, displayed, stored and changed. More precisely, this layer hosts parts of the software components that compose the Authentication/Authorisation service, the “Communication & API” provision and also the functional components (e.g. data harvesters, personalisation).

The Data Access Layer contains the storage engines which are responsible for providing data access functionalities to the upper layer components. The complex YDS Data Model is implemented in the relevant RDF-based Open Data Repository (which employs Virtuoso for storing linked data, and which additionally contains infrastructure for supporting various operations on data, including querying through APIs, caching, indexing, searching, etc.) and additional support databases (such as relational databases like MySQL), which are used for
supporting components and applications, the YDS platform, the help desk, the market place, and all content management needs of the YDS platform beyond linked data.

2.2 YDS Orchestration Component

The YDS platform is implemented using a pre-existing solution that incorporates many useful features, the Drupal framework\(^1\). Drupal is a free software package that allows you to easily organize, manage and publish your content, with an endless variety of customization. It is free, there are no licensing fees or per registered user fees associated with it. In addition, the code to the application is open and available to all. Through an intuitive, menu-driven interface, Drupal can be used to easily create new sites or web applications with extended functionality and features:

- **Versatile** - Drupal is an open source web application framework ideal for creating, deploying and managing interactive web, intranet and extranet sites
- **Easy to Use** - Drupal is designed to make it easy for administrators, content editors, developers, and designers to manage all aspects of their web assets. Wizards, content sensitive help, and a well-researched user interface provide a smooth user experience.
- **Feature-rich** - Drupal comes loaded with a set of built-in features that provide exceptional functionality. Web design, content management, security, and membership options are all easily managed and customized through simple, browser-based tools.
- **Scalable** - Drupal has proven itself repeatedly in the field on sites with over a million pages, and at over 20,000 requests per second. Its core installation handles over 99 percent of use cases, while free optimization tools and a large base of Drupal-trained administrators address the other one percent.
- **Secure** - Drupal is used by thousands of high profile web sites and is subject to rigorous security testing both by the Drupal Community and by security experts around the world. Drupal's core code has been proven to prevent common security vulnerabilities such as those defined by the Open Web Application Security Project (OWASP).

The internal architecture of Drupal consists of 5-layers structuring the information flow as depicted in the following schema.

\(^{1}\) [https://www.drupal.org/project/framework](https://www.drupal.org/project/framework)
A brief description of the 5 layers is presented below:

- The collection of nodes—the data pool is at the base of the system. Before anything can be displayed on the site, it must be input as data.

- The next layer up is where modules live. Modules are functional plugins that are either part of the Drupal core (they ship with Drupal) or they are contributed items that have been created by members of the Drupal Community. Modules build on Drupal's core functionality, allowing the customization of the data items (fields) on node types, setting up a forum, programmatically sorting and display of content (custom output controlled by user-defined filter) and more.

- At the next layer, we find blocks and menus. Blocks often provide the output from a module or can be created to display whatever we want, and then can be placed in various spots in the template (theme) layout. Blocks can be configured to output in various ways, as well as only showing on certain defined pages, or only for certain defined users. Menus are navigators in Drupal, which define the content coming on each defined menu path (relative URL). Menus are a core element of Drupal which provides access to all the pages created in Drupal.

- The next layer includes the user permissions. This is where settings are configured to determine what different kinds of users are allowed to do and see. Permissions are defined for various roles, and in turn, users are assigned to these roles in order to grant them the defined permissions.

- On the top layer, we have the site theme (the "skin"). This is made up predominantly of XHTML and CSS, with some PHP variables intermixed, so Drupal-generated content can go in the appropriate spots. Also included with each theme is a set of functions that can be used to override standard functions in the modules in order to provide complete control over how the modules generate their mark-up at output time. Templates can also be assigned on-the-fly based on user permissions.
The YDS platform is developed based on the functionalities and facilities available in all these 5 layers. The design of the portal provides an eye-pleasing and easy to use GUI to the end user, in order to help him/her exploit the functionalities offered by the platform. This design follows the principles of Drupal themes and is completely compatible with all the elements of the platform. Moreover, the Access Control Management needs identified by the user requirements are implemented using the role and permissions management capabilities of Drupal.

Menus, modules and custom nodes (content types) were specifically created and configured in order to realize the platform’s functionalities. Extensive use of core modules was used for the development of standard portal capabilities such as searching, webpage authoring, content ordering etc., whereas Drupal’s community contributed modules and custom ones are used in order to deliver specific functionalities as described in the next paragraph.

2.3 Platform statistics

The statistics regarding the visitors of the website will be constantly recorded and stored, using the Piwik analytics platform\(^2\). Piwik is open-source and its main advantage is that the data ownership remains 100% at the YDS project. This is due to the fact that Piwik is deployed on an owned server and therefore data don’t get sent to third-party servers outside the project’s reach. This ensures the user privacy protection and makes YDS transparent as regards to data policies and personal information collection.

Moreover, Piwik provides all standard statistics reports, real-time data updates and many customisable features that can offer an accurate view of the traffic of the platform and can be customized to the project’s needs.

2.4 Compatibility with Browsers

The benefit of creating a web application with browser compatibility is that it improves a website’s reach and cuts down on loss in performance. Browser compatibility can be also described as the potential of a web browser to efficiently display the HTML code and carry out the scripts on web pages. In order to reach maximum of performance and efficient display of the HTML code we focused on developing the YDS platform to be compatible with the latest versions of the following web browsers:

- Mozilla Firefox 45 or higher
- Google Chrome 50 or higher
- Apple Safari 9.0 or higher
- Microsoft Internet Explorer 11.0 or higher

2.5 Physical Deployment

Based on the logical design of the YDS architecture presented in the section 2.1, this section elaborates on the physical deployment of the YDS platform and the configuration of the actual YDS components. The physical structure of the YDS initial prototype is depicted in Figure 4 below. Key stakeholders of the YDS platform are the end-users, namely Journalists, Developers, Citizens and the System Administrator. All stakeholders are using an access point in order to utilize the YDS platform. More specifically, citizens and journalists can use the YDS mobile app to see information about public projects around them,

\(^2\) https://piwik.org
comment on them and also view other people’s opinions. Moreover, they will be using the YDS platform through a web browser running on their PC/Laptop which will be also the major point of interaction for developers and the System Administrator. Each end user will use the YDS platform from distance, as such, the communication will be initiated over an internet connection between the user’s mobile device and/or browser and the YDS platform.

Furthermore, the YDS platform is hosted on the same subnet and the components will run on the same server machine. Using this topology, we manage to ensure smooth and uninterrupted communication between the various software components. In order to ease the development process and ensure a stable environment for user testing, two servers have been configured to serve the needs of the YDS platform. The production server will be the one with a higher number of resources in terms of memory, CPU power and disc space. Only tested, stable versions of the various components will be available in this server. On the other hand, the development server will host testing versions of the components and will be used mainly by the technical partners of the project in order to test latest versions of their components and experiment with new functionalities before releasing them to the production environment.
3 User Guide

3.1 Introduction
The following section presents a User Guide for the intermediate release of the YDS platform. The platform can be accessed at the following public URL: http://platform.yourdatastories.eu

3.2 The YDS Platform sitemap
The following list presents a top level sitemap of the YDS platform at its current status. The listed pages are in fact the items that can be found at the main menu of the platform:

- Home
- Dashboards
  - Public Projects
  - International Trade and Development Assistance
  - Public Contracts
  - Country Comparison
- Search
- DataStories
  - Create Data Story (only Register Users)
  - My Datastories (only Register Users)
  - My Data Rules (only Register Users)
- Marketplace
  - Marketplace Item
  - Add Marketplace item (only Register Users)
- Help Desk
  - Forum
    - Create New Topic (only Register Users)
  - Q & A
    - Create new Question (only Register Users)

3.3 YDS platform user guide
Screenshots of the main pages are presented in the following sub-sections and describe the main functionalities of the platform. All the pages except the ones of the Marketplace and the Help Desk have been updated or are completely new. Nevertheless, the user guide provides descriptions of all the pages for completeness.

3.3.1 Home
The home page presents the users with two main available actions. The first one is labelled ‘Search composite information on public contracts’ and the second one is labelled ‘See International Trade & Development
Assistance’. These are both links to the respective dashboards which will be analysed in the following paragraphs. Moreover, users are able to view the most popular marketplace items, to access the main tools of the platform in the “What we offer” section, to view some statistics about the available datasets and data sources in the “YDS Statistics” section, to view some testimonials about YDS and also the consortium of the project.

The footer of the page displays a list of the latest tweets of the YDS twitter account in the “Latest tweets” section, the contact details of the project in the “Contact Us” section and lets users send a message to the YDS administrator through a message form.
It must be noted that the footer also provides links to the Privacy Policy and the Legal Disclaimer of the YDS platform. Users have to accept them before creating a new account as can be seen in the next figure.
3.3.2 Dashboards

The Dashboard pages have been developed during the second year of the project in order to cover the needs of an easy way to browse the available data and identify meaningful relations among them. There are currently four dashboards available that cover data coming from all three pilots. The main idea of every dashboard is to offer users a set of generic filters on the data, e.g. geographical location and time period, display visualisations of various formats on this data and let the users save this data in order to create their DataStories. The dashboards are interactive pages which get automatically updated every time a user changes a filter or selects one of the available options. They allow users to drill down from higher level data information such as country down to detailed information such as the details of a specific contract between a public authority and a contractor. Following the linked data nature of YDS, every entity of the YDS Model which appears in any of the sections of the dashboards is provided as a link so as to let the users navigate from one entity to another and traverse the YDS graph of connected entities in any way they like.

The following paragraphs present a brief overview of these four dashboards. Deliverable D4.7 contains analytical descriptions of all the elements inside the dashboards.
3.3.2.1 ‘Public Projects’ Dashboard

This dashboard contains data related to Greek Public Projects which has been harvested by Diavgeia\(^3\) and NSRF\(^4\) which are the two biggest governmental sources of open data in Greece. The main idea behind this dashboard is to allow users search for public projects (coming from NSRF) and find all involved organisations as well as the related financial and non-financial decisions (coming from Diavgeia).

Users can firstly set the filters at the upper side of the dashboard by selecting a region of Greece, the respective buyer and seller organisations and the time period.

At the next region of the Dashboard, the visualisations area gets updated with data matching the filters set above. Users can switch between different types of visualisations and save the ones they like better. A list with the selected filters is visible at all times at the right side of the visualisations.

![Figure 8 Public Projects Dashboard - Filters & Visualisation](image)

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\(^3\) [https://diavgeia.gov.gr/](https://diavgeia.gov.gr/)

\(^4\) [https://www.espa.gr](https://www.espa.gr)
More details for the projects can be found at the next table titled ‘View Data’. A ‘show details’ link is also available which opens even more details about the selected project as seen at the figure below.

Figure 9 Public Projects Dashboard - View Projects & Details

The details include basic financial elements of the project, related sub-projects and also every associated financial or non-financial decision about this project. Moreover, other informational tables such as the contractors list and the total budget of the subprojects are displayed further down the page and help the user get a full overview of the project’s status.
This dashboard presents information about aid and trade activities of the Netherlands and Zimbabwe based on data coming from Official Development Assistance and International Trade activities for the two countries. The main idea for this dashboard is to give users the ability to select beneficiary and benefactor countries and see every aid and trade activity between them.

The first section of the dashboard provides the options to select between aid or trade activities, to choose the country of interest and to define the time period. The following sections include the visualisations and the analytical table view of the data which offer the same functionalities as described for the previous dashboard.
Finally, the ‘Show details’ button reveals the extended information for the selected aid or trade activity. This information includes data about the individual transactions, the amounts per sector, the total activities between countries, etc. Saving visualisations is always an option for registered users as mentioned previously.
Figure 12 Int’l Trade & Development Assistance - Aid/Trade Activity Details
3.3.2.3 ‘Public Contracts’ Dashboard

The Public Contracts Dashboard presents data harvested from Tenders Electronic Daily (TED) which is an online catalogue of European public procurements. The data are covering contracts mainly related to public construction works in Ireland and Greece which are the two relevant pilot countries. The main idea of the dashboard is to let the users see all the public contracts of the two countries together with the European contractors that undertook their execution. The details cover the CPV (Common Procurement Vocabulary) of the contracts, the buyers and sellers as well as the notices associated with every contract.

![Public Contracts Dashboard](image)

**Figure 13 Public Contracts Dashboard - Filters and Visualisation**

The logic of using the dashboard remains the same as with the aforementioned dashboards. The users can select the countries of their interests on an interactive map of Europe and then set a time period.

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The visualisations below the filters will get automatically updated with details about amounts per country, seller organisation, buyer organisation and CPVs.

The detailed table of contracts is available right after the visualisations with the ‘Show Details’ link opening a new section with the full details of the selected contract and its associated notices as depicted in Figure 14 below.
Figure 14 Public Contracts Dashboard - Contract Details
3.3.2.4 ‘Country Comparison’ Dashboard

This Dashboard is oriented towards two specific countries and their comparison on the amounts spent on public contracts based on TED data. The two countries are Ireland and Greece which are the two project pilots dealing with public works. The idea of this Dashboard is to select two countries and analyse and compare their contracts in terms of CPVs and amounts spent.

The first section of the dashboard presents two maps which let the user select the countries to compare. A time period filter is also available and can be defined by users. The next sections of the dashboard include visualisations of amounts per CPV in donut charts, data grids and bubble charts. The dashboard is logically split in two vertical halves, one for each country. This way the visual comparison of the available charts is easier and lets users quickly discover interesting information about the money spent in these countries.
Country Comparison Dashboard

Figure 15 Country Comparison Dashboard
3.3.3 Search

The search page provides users with the opportunity to use a traditional free-text search box in order to perform queries on the YDS data. The evolution of this page during the development of the intermediate integrated prototype consists of separating the main concepts of the data into different tabs and also provide an advanced search mechanism per concept. This way, users can have an initial idea of the kind of data that exist in the system, namely Public Projects, Trade Activities, Aid Activities and Public Contracts. Moreover, there is a set of additional filters which is available on the right sidebar of the page and can be used to further refine the search results. Figure 16 shows the search page.

![Search Page](image)

Figure 16 Search Page

The advanced search mechanism presented in Figure 17 below, offers users a graphical interface to create complex queries on the data. All the metadata fields of each concept are exposed through this interface and users can combine them to as much complex rules as they wish. For example, the figure below depicts a query that searches for Trade Activities having currency in amounts in U.S Dollars and also having been performed after the financial year of 2010.
The search results contain a ‘Show Details’ link which opens a new page with all the details of the select result. In the previous example, clicking show details on a result would open a new page with the details of the selected Trade Activity. This can be seen in the following image.

Figure 17 Advanced Search Page
DataStories can be considered the final step of the journey of a user in YDS platform. Having used all the previous tools in order to search for data and save them to the data library, users can utilise the gathered information and create a DataStory. A DataStory is in fact a type of article which contains textual content accompanied by data visualisations which prove the writings of the story. They can also contain multimedia content like images, tweets which are relevant for the story and also links to external sources. Figure XX below presents a sample DataStory, which contains a data visualisation and a properly-formatted tweet.
The DataStories can either be public or private. The public ones are presented in the ‘DataStories’ page and can be viewed by any visitor of the platform. Visitors can also use the tag cloud to find relevant stories and also see the latest comments by other users on existing DataStories.
**Figure 20 Public DataStories**
3.3.4.1 Create DataStories

The creation of DataStories is only available to registered users of the YDS platform. The ‘Create DataStory’ page includes a simple text editor and a panel where all saved visualisations are visible to the story creator. Adding a visualisation to the story is as simple as clicking the ‘Add to story’ button which embeds the visualisation in the text editor without losing its interactive features.

![Create YDS Story](image)

Figure 21 Create DataStory

3.3.4.2 My DataStories

All the DataStories that a user has created can be found under the ‘My DataStories’ page. This page presents a timeline of the DataStories authored by the currently logged-in user so as to help him/her easily retrieve a story created in the past. Figure 22 below depicts a timeline of DataStories.
3.3.4.3 My Data Rules

The Data Rules are actually sets of search filters created by users using the same graphical interface as the one used in the advanced search mechanism described some paragraphs before. The filters consist of the metadata fields of every concept in the YDS data model. Users can define their filters and after that let the system know where they want to receive notifications at (e.g. email, twitter) and how often.
The following figure presents the form to create such a rule.

![Create YDS Rule Form](image)

**Figure 23 Create Data Rule**

It must be noted that the users must select the concept on which they want to run their rule upon because the filters are automatically adjusted to reflect the metadata of each particular concept.

Furthermore, users are able to see all the rules they have created together with some basic information under the ‘My Data Rules’ page (Figure 24). This page also contains the link to the Data rule creation form.
3.3.5 Help Desk

Help desk is a set of tools (FAQs, Forum and Q&A) that are provided to all users in order to get informed about the YDS platform, the provided services and tools. In the help desk, the users are able to view a number of frequently asked questions. Most of these questions derive as popular questions from the Q&A section. Also, in this page there are three quick access links (1) for easy navigation through the help desk tools.
3.3.5.1 **Forum**

In the forum page the anonymous users are able to view the forum and some statistics about the forum threads. However, only the registered users are able to create new post messages in the community forum.
Figure 26: Forum page

After log-in, the user is able to access the forum page and click on a forum thread (discussion) (Figure 27).
The user is able to view the topics of the forum and get some quick statistics about each topic. Furthermore, the user is able to select a topic and view/join the discussion on the selected topic.
Figure 28: Topic page
Another functionality that is provided to the users through the forum is to create new topics/threads. By clicking the button “New Topic” the platform drives the user to the “New topic” page where the user selects the forum for the new topic and provides the subject and the body of the topic/thread (Figure 29).

![New Topic page](image)

**Figure 29: New Topic page**

### 3.3.5.2 Q & A

In the Q&A page, the anonymous users can view the Questions and Answers raised by Registered Users and Community Experts. Also, non-registered users are able to view some statistics about the number of Views, Answers and Votes per Question (Figure 30).
By clicking the “+ Ask Question” button, a register user is able to create a new question in the Q&A page by providing the Question’s title and description (Figure 31).
Figure 31: New Question for the Q&A page

3.3.6 Marketplace

As an anonymous user goes to the YDS Marketplace is able to see a list of components and services that are created using the YDS facilities and data (Figure 32).
By clicking on a Marketplace item, the platform drives the user to a new page with the details of the marketplace item (Figure 33).
3.3.6.1 New Marketplace Item

Another feature of the platform is to provide - only to the registered users - the functionality to add new Marketplace items. By clicking the “+ Add Marketplace Item” button the platform drives the users to a page where they can create a new item (Service or Application). Accordingly, the users have to fill-in a web form with all the necessary details of the new item and submit for approval to the platform’s administration (Figure 34).
Figure 34: New Marketplace item page
4 Conclusions and Next Steps

This deliverable is the accompanying report of the second version of the YDS Integrated Prototype. This version includes a complete set of functionalities covering the needs of all the pilots and enabling the YDS stakeholders to test and evaluate at a great extent the concepts and knowledge conveyed by the project. The data discovery became easier through the provision of dashboards that allow drilling down to data through a graphical environment. Moreover, the concept of DataStory was introduced as the last step of a user’s journey inside the YDS platform, thus revealing the potential of the project’s performed activities and derived knowledge.

The integration of new components, as well as the updates of existing ones was a straightforward process and proved the flexibility and extensibility of the platform. The architecture allowed for easy adaption of new capabilities and functionalities developed in the context of WP3 and WP4 and made it possible to quickly present the users with the latest updates through a continuous delivery of new releases. This way, most of the user feedback was addressed and the platform capabilities evolved to match most of the user needs.

The next steps include continuous updating of the YDS platform prototype according to the feedback that will be received during the intermediate evaluation period, as well as the ongoing work in the technical WPs. Intermediate releases are planned to continue during the final year of the project so as to facilitate the project time plan and the needs of the other WPs in view of the final release which is officially planned by M36 of the project (January 2018).
5 References