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**D1.3 ConsumerCases and EULinksChecker interface design**

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### Abstract (for dissemination)

This document presents the early prototypes of the ConsumerCases web application and the EULinksChecker add-in tools. The prototypes illustrate the basic functionalities and interface features of the end-user applications to be developed within the EUCases project. They have been prepared in parallel with the elaboration of a detailed software project documentation in order to visualise and prove the basic concepts of both applications as well as to allow the partners to demonstrate their functionality and get feedback from potential users.

### Keywords

interface, design, web application, add-in, plug-in

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Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.
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Executive Summary

The ConsumerCases web application and the EULinksChecker add-in are the most visible outcomes of the EUCases project.

ConsumerCases is a domain specific online legal information system providing multilingual access to EU and national legislation and case law as well as to other open data legal resources (articles, commentaries, bills, administrative guidelines). At the final stage, the system will comprise legal contents from the EU and the six project Member States (Austria, Bulgaria, France, Germany, Italy and the United Kingdom) in the area of consumer law.

Incorporating the results of the user requirements analysis, ConsumerCases will offer the following main functionalities via a multilingual interface:

**Browsing** EU and national legislation and case law by subject (keywords), by type of document and by country and jurisdiction;

**Searching** – next to the simple search option the user will be able to construct a variety of complex search queries. Documents can be accessed also with multilingual search by query expansion in other languages;

**Viewing** legal documents and extracting knowledge – well-structured and interlinked texts allow easily getting a list of all referring court decisions to a given provision without losing the context.

For presenting the basics of the GUI an early prototype of the ConsumerCases application has been developed. The only goal of this prototype is to create user interfaces that show what the web application will look like without having to build the software or the underlying functionality. This means that the published version is only mock-up software in where some of the functions are not working at all or produce fake results for illustration purposes.

The prototype is published at: [http://eucases.apis.bg](http://eucases.apis.bg).
Login into the mock-up is done by entering the hardcoded username ‘alex’ and password ‘1’.

A more detailed description of the functionalities can be assessed in the APPENDIX I: ConsumerCases Web Application - Functional Specification by User Stories.
**EULinksChecker** will be developed as a series of installable add-ins which can be integrated in the following software products:

- Internet browsers – Google Chrome, MS Internet Explorer, Mozilla Firefox;
- Text editors – MS Word, Open Office Writer;
- PDF viewers – Adobe Reader.

**EULinksChecker** will require a constant and stable online connection with the EUCases Linking Platform and its linking repository.

Again, based on the results of the user requirements analysis, the main functionalities offered by the add-in will be:

- Recognition of the current document language;
- Detection and mark-up (highlighting or underlining) of legal citations in the currently displayed document, which refer to (provisions of) EU or national legislation and/or case law;
- For each found legal citation the user can:
  - See the text of the referred legal provision/act;
  - See a list of other relevant legislative acts and/or case law (e.g. other court decisions citing the same act/provision);
- Detection and mark-up (highlighting) of all string expressions in the currently displayed document, which have been recognised as (legal) terms in the EuroVoc taxonomy or Syllabus ontology;
- For each found term the user can see its legal definition (if such exists) and a list of legal documents classified with the same term;
- Export an XML file containing the following data from the currently displayed document.

The installation of the interface prototype is published on the web site of the EUCases project at the following address: [http://eucases.eu/uploads/media/EULinks_Checker_Add-in_MSWord_Prototype_Final.zip](http://eucases.eu/uploads/media/EULinks_Checker_Add-in_MSWord_Prototype_Final.zip).

A more detailed description of the functionalities of the EULinksChecker add-in can be found in APPENDIX II: EULinksChecker Add-in Tools - Functional Specification by User Stories.
1 Description of the functionality of the applications

1.1 ConsumerCases application

1.1.1 Service concept and content coverage

The ConsumerCases application is a domain specific online legal information system providing multilingual access to EU and national legislation and case law as well as to other open data legal resources (articles, commentaries, bills, administrative guidelines). The system will comprise the following legal contents from the EU and the six project Member States (Austria, Bulgaria, France, Germany, Italy and the United Kingdom) in the area of consumer law:

- **EU primary and secondary legislation** – metadata (the so called “bibliographic references” in EUR-Lex) and full texts in XML-format of all legal instruments in force as well as of the repealed legislative acts, incl. historic versions (in all 5 project languages);
- **EU case law** – metadata and full texts of the decisions of the EU Court of Justice (in all 5 project languages);
- **National legislation** – metadata and full texts of the legislative acts in the area of consumer protection law will be processed in all 5 project languages. If available as open data, repealed and historic versions will be included;
- **National case law** – metadata and full texts of the court decisions in all 5 project languages
- **Legal doctrine articles** – to the extent such articles are available as open data.

1.1.2 Main functionalities

The ConsumerCases application will offer its users the following main functionalities via a multilingual interface:

1) **Browsing** EU and national legislation and case law:
   - By subject (keywords) – the user can retrieve documents by navigating them using a subject matter classifier, the Syllabus ontology¹ or EuroVoc thesaurus² as an index;
   - By type of documents – legislative acts (laws, by-laws, etc.), judicial acts (decisions, orders, preliminary rulings, etc.), legal doctrine articles;
   - By country and jurisdiction;

2) **Searching** – next to the simple search option the user will be able to construct a variety of complex search queries. Documents can be accessed also with multilingual search by query expansion in other languages, using the translation of descriptors in EuroVoc, the multilingual terminology of the Syllabus ontology and open source translation tools like Moses³, trained on the EU multilingual parallel corpus of JRC⁴.

³ [http://www.statmt.org/moses/](http://www.statmt.org/moses/)
3) **Viewing** legal documents and extracting knowledge – the users will benefit from the well-structured and interlinked texts which allow them, for instance, easily to get a list of all referring court decisions to a given provision without losing the context.

A more detailed description of the functionalities of the ConsumerCases application was elaborated during the phase of user requirements analysis in the form of user stories (see [APPENDIX I: ConsumerCases Web Application - Functional Specification by User Stories](#)).

### 1.2 EULinksChecker add-in tools

#### 1.2.1 Basic concepts

EULinksChecker will be developed as a series of installable add-in tools (applications), which can be integrated in the following most popular software products:

- Internet browsers – Google Chrome, Internet Explorer, Mozilla Firefox;
- Text editors – MS Word, Open Office Writer;
- PDF viewers – Adobe Acrobat Reader.

The add-ins will offer two valuable features to its users:

1) They will assist them to retrieve information from context related web legal resources when browsing, viewing or writing plain legal texts through checking for legal citations to EU and national legislation and case law, establishing links to the cited legal documents and offering additional links to other documents either referring to the same legal provisions or court decisions or having similar legal contents (e.g. legal doctrine articles in the relevant domain).

2) They will allow them to save in XML file the browsed, viewed or written legal text together with the established links to free legal resources, such as EUR-Lex and/or national legal portals. In addition to the first feature this second functionality will be especially useful for public or private legal open data providers and publishers.

#### 1.2.2 Main functionalities

The proper work of EULinksChecker will require a constant and stable online connection with the EUCases Linking Platform and its linking repository. The main functionalities offered by the add-in tools will be:

- Recognition of the current document language;
- Detection and mark-up (highlighting or underlining) of legal citations in the currently displayed document, which refer to (provisions of) EU or national legislation and/or case law;
- For each found legal citation the user can:
  - See the text of the referred legal provision/act;
  - See a list of other relevant legislative acts and/or case law (e.g. other court decisions citing the same act/provision);
- Detection and mark-up (highlighting) of all string expressions in the currently displayed document, which have been recognised as (legal) terms in the EuroVoc taxonomy or Syllabus ontology;
- For each found term the user can see its legal definition (if such exists) and a list of legal documents classified with the same term;
- Export an XML file containing the following data from the currently displayed document:
  - Text of document with established hyperlinks to the referred legislation and case law (hyperlinks could be optionally targeted either to the EUCases Linking Platform or to the official EU and national open data portals);
- Legal terms;
- Found legal citations (list of URNs);
- List of relevant EU or national legislation and/or case law (list of URNs);
- List of relevant other documents (e.g. legal doctrine articles).

A more detailed description of the functionalities of the EULinksChecker add-in tools was elaborated during the phase of user requirements analysis in the form of user stories (see “APPENDIX II: EULinksChecker Add-in Tools - Functional Specification by User Stories”).
# 2 Interface design of the applications

## 2.1 ConsumerCases application

### 2.1.1 Preliminary remarks

The functionality of the ConsumerCases web application has been already described in details in section 1.3 – “User requirements for the EUCases applications”, subsection 1.3.1 “ConsumerCases application”, and in section 2 – “Functional specification”, subsection 2.10 “ConsumerCases application”. Therefore, in the following we only focus on the manner in which the above discussed features will find their realisation in the design of the application, i.e. as a graphical user interface (GUI).

For presenting the basics of the GUI an early prototype of the ConsumerCases application has been developed. The only goal of this prototype is to create user interfaces that show what the web application will look like without having to build the software or the underlying functionality. This means that the published version is only mock-up software in where some of the functions are not working at all or produce fake results for illustration purposes.

The prototype is published at: [http://eucases.apis.bg](http://eucases.apis.bg).

Login into the mock-up is done by entering the hardcoded username ‘alex’ and password ‘1’.

### 2.1.2 User interfaces of the application functions

In the following we present the user interfaces of the main functions of the ConsumerCases web application.

#### 2.1.2.1 Login

The login screen contains a login part and a service description part. In this screen user must enter valid username and password in the respective fields.
The pressing of the login button after that leads to username and password verification, and, if successful – to the application home screen.

2.1.2.2 Main menu
The main menu is positioned on the top of the screen.

It is available throughout the application usage and provides access to the following functions:

- **Home** – When clicking the home button the user is transferred to the initial (home) screen of the application which appears immediately after login.
- **Recent documents** – When clicking the home button the user is transferred to the ‘Recent Documents’ screen which in fact is a Document list with the 100 recently opened documents by the user appearing in descending order (last opened are at the top of the list)
- **Logout** – Using this function logs out the current user and redirects him or her to the login screen.
- **Change interface language** – By using this function the user changes the Interface language to the selected one. The interface languages are the 5 project languages: English, German, French, Italian and Bulgarian.

2.1.2.3 Search

1) **Simple search**

The simple search function allows the user to perform quick searches by entering a search query in the search bar and pressing the search button.

The result is a list of documents containing the search expression (see Document list function below).

2) **Advanced search**

The advanced search allows the user to perform specialised search in legislation or case law by specifying exact search criteria based on document metadata. As the metadata of legislative documents differs from metadata of judicial documents, the user interface offers separate advanced search dialogs for searching in legislation and in case law. These dialogs appear by clicking the respective buttons under the search bar.
a) Search cases

The ‘Search cases’ advanced search dialog allows the user to enter a search query in the search bar and simultaneously to define one or more search criteria for more precise searches in case law.

The search criteria are the following:

- **National / ECLI Identifier** – national or ECLI identification number of the case
- **Parties** – names of the parties in the case
- **Courts** – selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”
- **Period** – defines a time period in which the cases have been rendered
- **EuroVoc terms** – one or more terms selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”
- **Syllabus terms** – one or more terms selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”
- **Subject matter fields** – one or more terms selectable from other dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”.

If the user presses the ‘Search’ button search is performed in the case law by all the criteria chosen with logical operator AND between them. If the user presses the ‘Clear’ button, all the fields in the dialog are cleared. The ‘Close’ button hides the dialog.

b) Search legislation

The ‘Search legislation’ advanced search dialog allows the user to enter a search query in the search bar and simultaneously to define one or more search criteria for more precise searches in legislation.
The search criteria are the following:

- **National / ELI Identifier** – national or ELI identification number of the legislative act
- **Year, Month, Day, Page Nr.** – date and page Nr. of the official publication of the act
- **Jurisdiction** – one or more terms selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”
- **EuroVoc terms** – one or more terms selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”
- **Syllabus terms** – one or more terms selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”
- **Subject matter fields** – one or more terms selectable from another dialog. This dialog is shown with the button “?” and the field is cleared with the button “X”

If the user presses the ‘Search’ button search is performed in the legislation by all the criteria chosen with logical operator AND between them. If the user presses the ‘Clear’ button, all the fields in the dialog are cleared. The ‘Close’ button hides the dialog.

**c) Additional dialogs**

These dialogs allow the user to make multiple choices from hierarchical classification structures when defining advanced search queries. There are four additional dialogs shown with the button “?” from the ‘Search cases’ or ‘Search legislation’ advanced search dialogs:

- **Jurisdiction dialog** – user can chose which legislation collections to be searched – of the EU and/or any of the six EU Member States. By clicking the checkboxes user selects / deselect items. When user clicks the OK button all the selected items are put in the appropriate search field. Then the dialog is closed. Clicking Close just closes the dialog.

- **Courts dialog** – for each of the six EU Member States reveals the hierarchical structure of the courts which case law is available in ConsumerCases web application. User can expand and collapse any branch of it by clicking on the triangle in its left. By clicking the checkboxes user selects / deselect items. When user clicks the OK button all the selected items are put in the appropriate search field. Then the dialog is closed. Clicking Close just closes the dialog.
- **EuroVoc dialog** – reveals the hierarchical structure of EuroVoc thesaurus, however restricted to the terms which are related to the consumer law. Selection and deselection of terms and closure of the dialog are performed in the same way as by the Courts dialog.

- **Syllabus dialog** – reveals the hierarchical structure of Syllabus ontology. Selection and deselection of terms and closure of the dialog are performed in the same way as by the Courts dialog.

- **Subject matter dialog** – reveals the hierarchical structure of Subject matter classification. Selection and deselection of terms and closure of the dialog are performed in the same way as by the Courts dialog.
2.1.2.4 Folders
Folders are a hierarchical structure which task is to classify the legal contents of the ConsumerCases web application by different criteria. The classification structure by subject matter was chosen to illustrate the folders structure in the present early prototype of the interface design.

By clicking any triangle on the left user collapses or expands the relevant branch. By clicking on the folder a list of contained documents is displayed.

2.1.2.5 Document list
The Document list component displays on the right side of the screen a list of documents contained in a folder or such that meet the search query criteria. The Document list is shown when the user performs one of the following operations:

- By browsing folders contents – when opening a folder
- By executing search queries
- By executing the Recent documents command.

When user executes a search query the folders on the left side are turned into filters. Only those folders are displayed as filters which contain documents meeting the search criteria. When user selects a filter on the right side the Document list is refreshed to display only the documents in the selected filter that meet the search criteria.
Documents are displayed in the list by the following requisites:

- Icon indicating the type of the document (e.g. legislation or case law)
- Title of the document
- Date of the document
- Optional context of the document which may display where the search words are found in the document if full-text search is performed.

By clicking on the document’s title user opens the text of the document.

The following functions can be performed with the Document list:

1) **Export**

User can export the currently viewed list of documents in several formats:

- PDF
- RTF
- CSV.

The execution of any of these functions creates a file in the corresponding file format and delivers it for download to the user’s browser.

2) **Print**

Using this function opens the Document list into a new browser window and initiates the printing dialog.

3) **Paging**

Document lists are paged for better performance. This means that user can only see one page containing N documents. Navigation between pages is done by using the paging control.
User can:

- Click on a specific page number and open this page
- Go to the first page – by clicking the leftmost button
- Go to the last page – by clicking the rightmost button.

4) Sorting

Sorting of Document list is done by two criteria:

- Property by which the sorting is done:
  - Alphabetically – ordered by document title
  - Relevance – ordered by the relevance to the search query (e.g. documents which contain the search word in the title or more relevant)
  - Date – ordered by the date of the document
- Direction of the sorting
  - Ascending
  - Descending.

By selecting different criteria user initiates resorting of the currently viewed Document list.

2.1.2.6 Document text

The Document text screen appears when the user opens a document from the Document list. The screen is divided in three parts:

- on the left side are buttons offering different functions for working with documents
- on the upper right side is displayed the document metadata, and
- on the bottom right side is displayed the text of the document.

The ConsumerCases web application offers the following functions for working with Document text:
1) **Export**

User can export the currently viewed document in:

- PDF format
- RTF format.

The execution of any of these functions creates a file in the corresponding file format and delivers it for download to the user’s browser.

2) **Print**

Using this function opens the document text into new browser window and initiates printing dialog.

3) **Local search**

Local search is performed in the text of the currently opened document. When the user enters search text in the local search bar and presses the “Enter” button, the occurrences in the text are highlighted. The user has to press one of the buttons “<<” or “>>” so that the previous, respectively the next occurrence of the search string is displayed.

4) **Incoming links to a specific provision**

When the user has opened a document of the type ‘Legislation’ icons indicating the existence of links to its provisions will appear next to those provisions which are referenced (cited) by other documents (e.g. court decisions).

Clicking on such an icon executes the “Incoming links to a specific provision” function. As a result on the left side of the screen a list with the documents referring to the chosen provision are displayed. The user can click on any document form this list and to open it in a new browser tab.
5) **Structure**

Most documents of the type ‘Legislation’ and some of the documents of the type ‘Case law’ have a hierarchical structure (e.g. parts, chapters, sections, articles, annexes, etc.). It is displayed as tree on the left side when the button “Structure” is chosen. Each branch can be collapsed or expanded by clicking the triangle next to it. When a specific item is clicked the document is navigated to this specific part.

6) **Versions**

When using this function (by clicking the “Versions” button on the left side) all historic versions of the currently viewed document are listed into ascending by date order. User can select any two of these versions by clicking in the checkbox next to them. Second click deselects the selection.

By pressing the “Compare” button user is redirected to the version compare window (see below) in which the two selected versions are compared.

7) **Incoming links**

This function called by the corresponding button on the left side displays all documents citing the currently viewed one in a list. Clicking on a document from that list opens it in a new browser tab.

8) **Outgoing links**

This function called by the corresponding button on the left side displays all documents cited by the currently viewed one in a list. Clicking on a document from that list opens it in a new browser tab.

9) **Links from case law**

This function called by the corresponding button on the left side displays all documents of the type ‘Case law’ citing the currently viewed one in a list. Clicking on a specific case law document from that list opens it in a new browser tab.
2.1.2.7 Versions comparison

This function is accessible only after the user has chosen the “Versions” function (see pt. 6 above) and has selected two of the listed versions. When in this case the user presses the “Compare” button, a new screen comparing the two merged versions of the document is shown. The comparison is done in the following manner:

- In red are highlighted all the texts that existed in the older versions
- In blue are highlighted all the texts that didn’t exist in the older versions

When user clicks the “>>” button the next difference is highlighted. When user clicks the “<<” button the previous difference is highlighted.

2.2 EULinksChecker add-in tools

2.2.1 Preliminary remarks

The interface prototype is based on the add-in tool to be integrated in the Microsoft Word editor. For the other add-in tools to be developed within the EUCases project (for Open Office Writer, Internet Explorer, Mozilla Firefox, Google Chrome and Adobe Reader) the same or similar interface presentation will be used. However, due to specifics of the development environment of the host application some functions could be realised with different graphical and programming components.

2.2.2 Installation in the host application

EULinksChecker is installed as an add-in (plug-in) in the host application and users can access it where normally they access all the add-ins (plug-ins).

The installation of the interface prototype is published on the web site of the EUCases project at the following address:

In MS Word EULinksChecker will appear as a menu and tool tab on the Ribbon floating pane.

Below is described the sequence of steps that should be followed during installation:

- Run the setup as administrator
- Select ‘Install’
- Click Close
2.2.3 Add-in functions

The EULinksChecker functions can be divided in two groups: own functions and captured functions of the host application. In turn, the own functions can be divided further in main menu and context menu functions.

2.2.3.1 Main menu functions

These functions are called by pressing the buttons on the EULinksChecker toolbar integrated within the host application (on the Ribbon tab in the case of MS Word add-in).

1) Check for links

When user calls this function the following steps are performed:

- A confirmation is required
- The text in the host application is sent via internet to the Front-end Web Service of the EUCases Linking Platform which forward it to the Linking tools and after that to the Tools for classification in the Back-end
- The Linking tools and the Tools for classification recognise and highlight the legal citations and the legal terms related to EU legislation
- Information about the recognized terms and citations is sent back to the add-in
- The add-in highlights (underlines) all recognised citations and terms

2) Remove links

When user calls this function the following steps are performed:

- A confirmation is required
- The add-in removes the highlights (underlining) of all citations and terms recognised with the function “Check for links”.

3) **Insert link**

Before using this function user must have selected a portion of text. Only after that the ‘Insert link’ button becomes active. When this function is used, the user is prompted to enter a URL to an external resource:

![Image of Edit function with URL input dialog]

After entering it the selected text is highlighted and converted to link to the specified resource.

4) **Remove links from selection**

Before using this function user must select a portion of text containing a link or links to a legal citation or term. When this function is used the contained links within the selection are removed.

5) **Save text to XML-file**

When using this function user is required to select path and file name of the text to be exported.
After that the text of the currently opened (viewed) document together with the found legal citations and terms (in the case the “Check for links” function has been already used) is sent to the Front-end Web Service of the EUCases Linking Platform. The service forward it subsequently to the Linking tools, the Tools for classification and the LT2XML conversion tools in the Back-end. Finally, the Front-end Web Service returns back the text in Legal XML format to the EULinksChecker add-in which stores it into previously selected file name and path.

2.2.3.2 Captured text functions of the host application

1) Show hint on mouse over

EULinksChecker add-in captures the “show hint on mouse over” function of the host application when the user hovers over a legal citation or term recognised and highlighted with the add-in “Check for links” function. In this case the text of the cited legal provision or the definition of the legal term appears in the hint shown. If the shown text is too long only the first 1000 characters, incl. spaces, will appear.

2) Click on link

EULinksChecker add-in captures the “click on link” function of the host application when the user clicks on a legal citation or term recognised and highlighted with the add-in “Check for links” function. If the click is on a legal citation, a web page in the user’s default browser is opened containing the text of the cited article or document.
If the click is on a legal citation, the opened web page contains the legal definition of the term.

2.2.3.3 Context menu functions

In fact, the appearance of a context menu upon right-click mouse operation is a function of the host application. However, in this context menu the EULinksChecker add-in integrates own functions which allow the user benefit from them without losing the context of his work.

1) Documents referring to this act/provision

This function appears at the top of the context menu by right-click mouse operation after the user has selected a legal citation recognised and highlighted with the add-in “Check for links” function (or by right-click mouse operation after the user has positioned the mouse cursor within the term). When selecting the function, a submenu with following functions appears:

- All documents
- EU Legislation
- EU Case Law
- National Legislation
- National Case Law.
By choosing one of these options the user receives a list of documents from the respective kind referring to the same act or provision. The “All documents” option returns a list of documents from all listed kinds. The list is opened in new window of the default browser.
2) Documents indexed with this term

This function appears at the top of the context menu by right-click mouse operation after the user has selected a legal term recognised and highlighted with the add-in “Check for links” function (or by right-click mouse operation after the user has positioned the mouse cursor within the term). When selecting the function, a submenu with following functions appears:

- All documents
- EU Legislation
- EU Case Law
- National Legislation
- National Case Law.

By choosing one of these options the user receives a list of documents from the respective kind indexed with the legal term. The “All documents” option returns a list of documents from all listed kinds. The list is opened in new window of the default browser.
3) **Insert link**

Before using this function user must have selected a portion of text. Only after that the ‘Insert link’ function appears when performing a right-click mouse operation at the top of the context menu. When this function is used, the user is prompted to enter a URL to an external resource.

4) **Delete link**

This function appears at second position from the top of the context menu by right-click mouse operation after the user has selected a legal citation or term recognised and highlighted with the add-in “Check for links” function (or by right-click mouse operation after the user has positioned the mouse cursor within the term). When using this function the link to the selected legal citation or term is removed.
APPENDIX I: ConsumerCases Web Application
- Functional Specification by User Stories

1. Login part

1.1. As User I want to log into the system by using my correct username and password so that I can use the functionality of the Web Application.

1.2. As User I want to be able to stay logged infinitely in the web application so that I do not enter my username and password again and again in the web application from the same computer.

1.3. As User when I try to open a page X from the web system and I am not logged in, I want to be redirected to the login part, and after successful login, I want to be redirected to the same page X in order to use its functionality.

2. General part

2.1. As User I want to change the interface language among the following options:
- 2.1.1. Bulgarian
- 2.1.2. French
- 2.1.3. German
- 2.1.4. English
- 2.1.5. Italian,

so that I can read the interface items in the selected language.

2.2. As User I want to see my Login name when I am logged, so that I know I am successfully logged into the system.

2.3. As User I want to have links to the following functionalities:
- 2.3.1. Search
- 2.3.2. Recent documents
- 2.3.3. Logout,

in order to use them when I want to.

2.4. As User I want to be able to logout from the system, because I do not want other people to use it on an unattended machine.

2.5. As User I want the system to update regularly on a daily or weekly base its legal contents in the area of consumer law. As User I want to know the date of the last update for each data collection included in the system.

3. Search part

3.1. As User I want to perform quick simple searches in the full texts of all the documents in the database in order to find what I am looking for.

3.2. As User I want to specify the search areas to which the search will be performed:
- 3.2.1. Search in document titles and in the full texts
- 3.2.2. Search in document titles only
- 3.2.3. Search in case summaries only,

in order to refine my search.

3.3. As User I want to have advanced search options which will allow me:
- 3.3.1. To specify whether I am searching in legislation or case law
3.3.2. To search by choosing one or more metadata criteria, such as:

3.3.2.1. Jurisdiction (EU or a specific member state)
3.3.2.2. Type of document
3.3.2.3. Issuer of the document
3.3.2.4. Language of the document
3.3.2.5. Document/Case number (CELEX Number, National ID number, ELI/ECLI number, natural number)
3.3.2.6. Names of parties (for case law only)
3.3.2.7. Date of document (exact date or time span)
3.3.2.8. Date of publication (exact date or time span)
3.3.2.9. Referred EU legal instruments and provisions (multiple choice – for case law only)
3.3.2.10. Subject matter terms (multiple choice)
3.3.2.11. EuroVoc terms (multiple choice)
3.3.2.12. Syllabus terms (multiple choice)

3.4. As User I want to see in my search results items the following:

3.4.1. Title of the document
3.4.2. Link to the document
3.4.3. Issuer of the document
3.4.4. Issue date of the document
3.4.5. Jurisdiction (country)
3.4.6. Language of the document
3.4.7. Passages from the document showing the context in which the query words are found,
so that I can catch up on the current result.

3.5. As User I want the result list to be separated by pages so it loads fast in my browser.

3.6. As User I want to be able to open each page of the result list so I can have a look at
all the found documents.

3.7. As User I want to see the count of found documents and the exact search query so
that I can possibly refine my search if too many documents are found.

3.8. As User I want to filter the search result document list by the following criteria:

3.8.1. Subject matter by choosing one of the subject terms to which the found documents belong
3.8.2. Document type by choosing one of the document types to which the found documents belong
3.8.3. Language by choosing one of all languages to which the found documents belong
3.8.4. Syllabus term by choosing one of the terms to which the found documents belong
3.8.5. EuroVoc term by choosing one of the terms to which the found documents belong,
so that I can refine my search.

3.9. As User I want to sort (ascending, descending) the search result document list by
one of the following criteria:

3.9.1. Alphabetically
3.9.2. Relevance
3.9.3. Issue date,
so that I can find faster what I am looking for.
3.10. As User I want to be able to print the result list on one of installed printers so that I can have it on hardcopy.

3.11. As User I want to be able to export the result list in CSV format including all the found documents’ titles sorted in the selected order so that I can deal with them in third-party programs.

3.12. As User I want to be able to view and use the classification pane in order to perform searches by using it.

3.13. As User I want to be able to save my searches with all the criteria I have chosen and to order the system to alert me if new documents meet the search criteria set out in saved searches.

4. Classification Pane

4.1. As User I want to be able to see the document classification as a hierarchy in order to use better navigation.

4.2. As User I want to be able to expand/collapse any node in the hierarchy in order to see/hide its sub nodes or the documents classified to them.

4.3. As User I want to be able to hide and show the navigation pane in order to use it when shown or save space when hidden.

5. Document

5.1. As User I want to be able to hide and show all the metadata of the document in order to observe it when shown and save space when hidden.

5.2. As User I want to browse among all the historical versions of the document in order to choose the one in force to the moment of time I am looking for.

5.3. As User I want to be able to print the document on one of the installed printers so that I can have it on hardcopy.

5.4. As User I want to be able to export the document in PDF, HTML or RTF format in order to deal with them in third-party programs.

5.5. As User I want to be notified and able to view all the documents referring to the document in order to read their referring texts.

5.6. As User I want to be notified and able to view all the documents referred by the document in order to read their referred texts.

5.7. As User when I read the text of an EU directive I want to be able to view a list with links to all national execution measures adopted by the EU member states presented in the application so that I can open and read the text of each of them.

5.8. As User when I read the text of any piece of national legislation I want to be able to view a list with links to all EU legal instruments which provisions are implemented with this particular national document.

5.9. As User I want to change the document language (if available) among the following:

5.9.1. Bulgarian
5.9.2. French
5.9.3. German
5.9.4. English
5.9.5. Italian,

so I can read the documents in the selected language.
5.10. As User I want to perform text search in the current document in order to find what I am looking for.

5.11. As User I want to be able to compare two historical versions of the document in order to see which texts are new, which do not longer exist and which are changed in the newer version.

5.12. As User I want to be able to click on a citation (legal reference/link) and open the cited document in order to see its text.

5.13. As User I want to be able to move the mouse pointer over a citation and see the cited text so that I know what it is about.

5.14. As User I want to be able to see incoming links (legal references/citations) to the currently opened document so that I can view a list of the citing documents and open each of them.

5.15. As User I want to be able to see outgoing links from the currently opened document so that I can view a list of the cited documents and open each of them.

6. Document structure

6.1. As User I want to be able to see the document structure as a hierarchy in order to use better navigation.

6.2. As User I want to be able to expand/collapse any node in the hierarchy in order to see/hide its sub nodes or a specific part in the document.

6.3. As User I want to be able to hide and show the document structure pane in order to use it when shown or save space when hidden.

7. Provision (Chapter, Paragraph, Article, Letter, Point)

7.1. As User I want to be able to hide and show all the metadata of a legal provision (if any) in order to observe it when shown and save space when hidden.

7.2. As User I want to see proper formatting of the provision with a distinguished title, hyperlinks and legal terms or definitions.

7.3. As User I want to be notified and able to view a list of all the documents referring to the provision in order to open them and read their referring texts.

7.4. As User I want to be notified and able to view a list all the documents referred by the provision in order to open them and read their referred texts.
APPENDIX II: EULinksChecker Add-in Tools - Functional Specification by User Stories

1. Installation

1.1. As User I want to be able to install the add-in over one of the following applications:
   1.1.1. Google Chrome
   1.1.2. Internet Explorer
   1.1.3. Mozilla Firefox
   1.1.4. MS Word
   1.1.5. Open Office Writer
   1.1.6. Adobe Reader,
   so that I can use its functionality in the selected application.

1.2. As User I want to be able to uninstall the add-in from one of the following applications:
   1.2.1. Google Chrome
   1.2.2. Internet Explorer
   1.2.3. Mozilla Firefox
   1.2.4. MS Word
   1.2.5. Open Office Writer
   1.2.6. Adobe Reader,
   because I do not want to use it anymore.

2. Settings

2.1. As User I want to enter and store my user name and password for the EUCases Linking platform so the add-in can connect to the service and use its functionality.

2.2. As User I want to change and store my user name and password for the EUCases Linking platform so the add-in can connect to the service and use its functionality.

3. Functionality

3.1. As User when I haven’t entered my username and password I want the add-in to ask me for them so the add-in can connect to the service and use its functionality.

3.2. As User I want to be able to initiate legal citations and legal terms recognition and their highlighting in the text of the open document/page so I can use them furthermore.

3.3. As User I want to be able to remove highlights from the recognised legal citations and terms in the open document/page because I do not want to use them anymore.

3.4. As User I want to be able to save the document in XML format containing as follows:
   3.4.1. Text of the opened document with established hyperlinks to the referred legislation and case law (hyperlinks could be optionally targeted either to the EUCases Linking Platform or to the official EU and national open data portals);
   3.4.2. Legal terms;
   3.4.3. Recognised legal citations (list of URNs/URLs);
   3.4.4. List of relevant EU or national legislation and/or case law (list of URNs/URLs);
   3.4.5. List of relevant other documents (e.g. legal doctrine articles),
so that I can use this XML file in third party applications.

3.5. As User I want to be able to point to a highlighted legal citation and see the cited legal text in order to know its content.

3.6. As User I want to be able to point at a highlighted legal citation and see other legal documents, such as:
   3.6.1. EU Legislation
   3.6.2. EU Case Law
   3.6.3. National Legislation
   3.6.4. National Case Law
   3.6.5. All documents, citing the same legal text in order to do research.

3.7. As User I want to be able to point at a highlighted legal term and see other legal documents, such as:
   3.7.1. EU Legislation
   3.7.2. EU Case Law
   3.7.3. National Legislation
   3.7.4. National Case Law
   3.7.5. All documents, containing/related to the highlighted legal term in order to do research.

3.8. As User I want to be able to create a link to a specific URN/URL by selecting the referring text and entering the URN/URL so that I can manually establish a reference which was not automatically recognised by the add-in.

3.9. As User I want to be able to edit or remove a link to a URN/URL by pointing at the highlighted text and selecting the edit or remove function so that I can edit or remove this link.

3.10. As User I want to be able to remove the highlight of the legal term by pointing at the highlighted text and selecting the remove function so that I can remove the highlight.

3.11. As User I want to be able to point at a highlighted legal term and see its description / definition / ontology level in order to do research.