User Experience Guide
For CESSDA ERIC Tools and Services

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Version History

Version	Release Date	Comment
3.0.0	April 2019	Added DOI, license and telephone number.
02.00	December 2018	Contents reviewed and typos corrected.
01.06	N/A	Moved to new document template.
01.05	N/A	Added paragraph re “naming” of languages. Added paragraph re Tool Branding Kit.
01.04	N/A	Updated screenshots to feature latest branding.
01.03	N/A	Added paragraph re “deep linking” and added term to glossary.
01.02	N/A	Renamed “PaSC” to “Data Catalogue”. Added disabled state handling. Added tooltip interface component.
01.01	N/A	Minor edits to emphasise purpose of document. A focus on experience rather than design. Updated images and wireframes.
01.00	November 2017	Initial documentation added based on preliminary feedback and user group discussion.

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Introduction

Scope

This document describes the general user experience for CESSDA ERIC tools and search applications, based on initial feedback and user group discussion. Content is subject to change as new requirements are assessed, implemented through development cycles, and reviewed by end user testing.

It is recognised that applications may be developed by separate CESSDA members with varying goals and target audiences. It is the intention of this document to provide a technical framework to unify user interface interaction across the CESSDA ERIC brand. This will improve ease of use and provide familiarity as users switch between applications.

The visual design, branding and styling of interfaces, as well as the underlying architecture and technologies used for implementation, are beyond the scope of this document. The decision of which frameworks or software languages to use will remain with individual development teams. It is assumed that applications will have web based interfaces.

Wireframes and visual examples are provided to illustrate functionality only. Styling follows CESSDA ERIC branding guidelines, however this document does not intend to enforce any particular look and feel.

General Considerations

Navigation

All pages within an application should be displayed in a single browser window. Use of pop-ups is discouraged as functionality may be impeded by advertising blockers installed by end users. Modal windows are preferred when wishing to display overlaid content.

Hyperlinks and buttons linking to external resources should open their content in a new browser window (or tab). This will allow users to return to the search application and continue browsing.

If feasible for the tool, the initial landing page of an application should consist of a search results list, which has been retrieved using a default query. This approach exposes data to the end user immediately without having to start interaction, and also provides some initial content to populate the page.

Disabled states

User interface elements such as buttons should clearly distinguish their active vs disabled states. Use of colour, opacity and alternative mouse cursors (when hovering over element) can be used to this effect. If the disabled state is temporary, then the element can remain visible with the disabled style applied. If the disabled state is permanent (i.e. it will never change for a specific user during their browsing session – such as insufficient permissions) then the element should be hidden entirely.

Responsiveness

Where possible, efforts should be made to support different devices with varying screen resolutions. Use of responsive design along with SVG based graphics for retina displays is recommended.

Layout

Search based applications should follow a conventional layout for familiarity. A header provides branding along with a search box for querying data. The main content follows a two column design, with filters on the left and search results on the right.

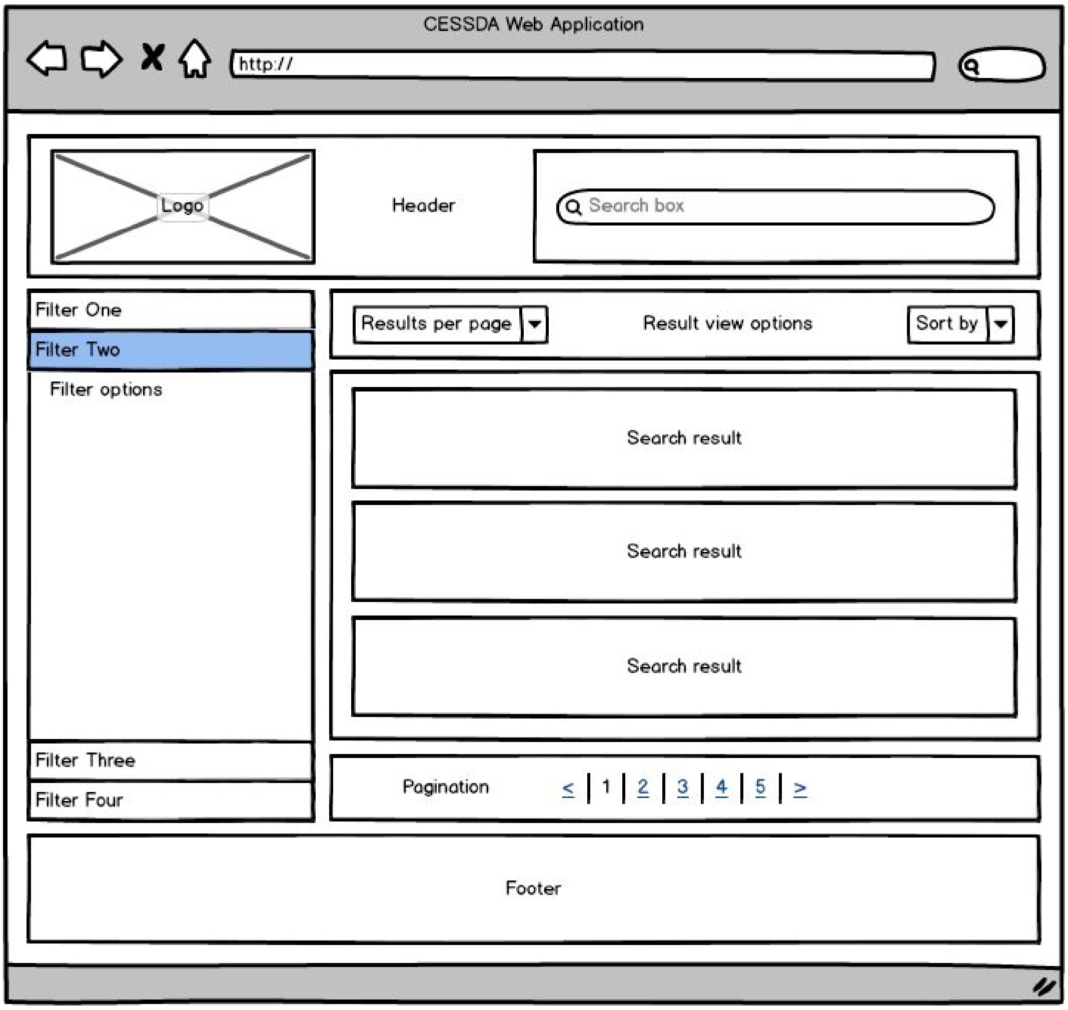
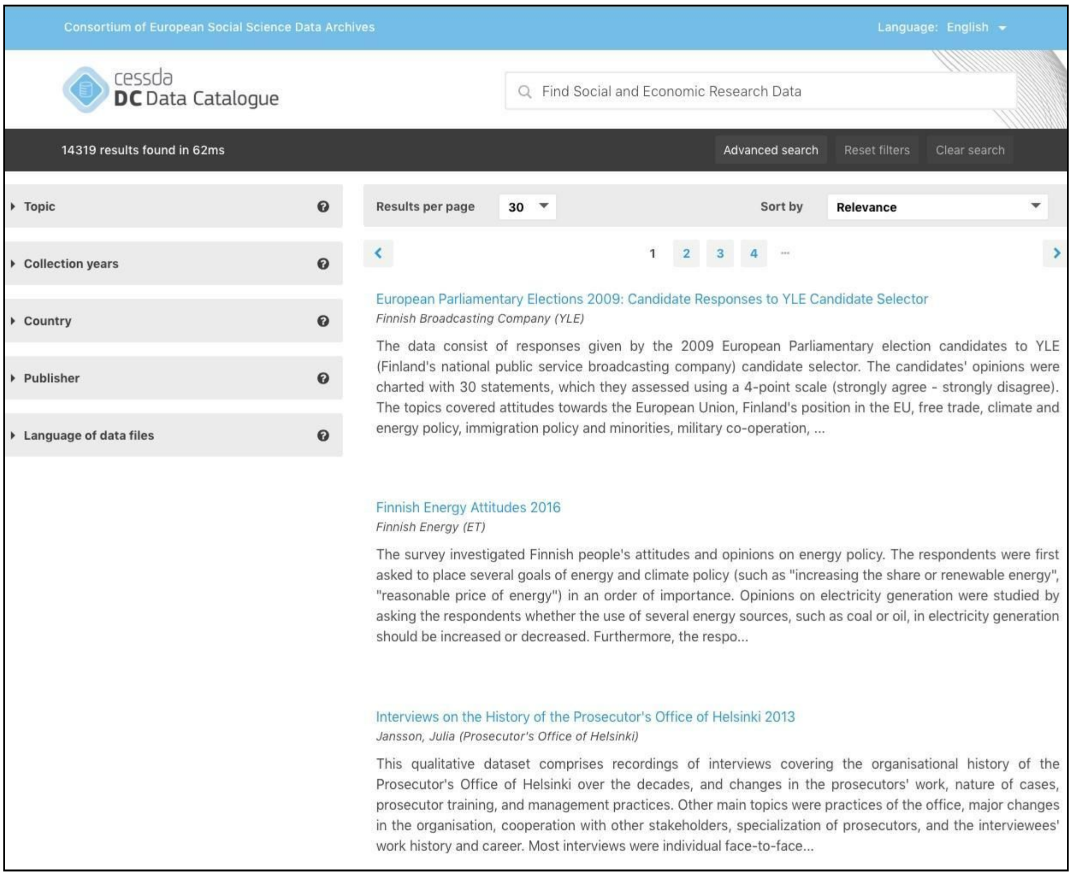


Figure 1. Search layout wireframe



European Parliamentary Elections 2009: Candidate Responses to YLE Candidate Selector

Finnish Broadcasting Company (YLE)

The data consist of responses given by the 2009 European Parliamentary election candidates to YLE (Finland's national public service broadcasting company) candidate selector. The candidates' opinions were charted with 30 statements, which they assessed using a 4-point scale (strongly agree - strongly disagree). The topics covered attitudes towards the European Union, Finland's position in the EU, free trade, climate and energy policy, immigration policy and minorities, military co-operation, ...

Finnish Energy Attitudes 2016

Finnish Energy (ET)

The survey investigated Finnish people's attitudes and opinions on energy policy. The respondents were first asked to place several goals of energy and climate policy (such as "increasing the share or renewable energy", "reasonable price of energy") in an order of importance. Opinions on electricity generation were studied by asking the respondents whether the use of several energy sources, such as coal or oil, in electricity generation should be increased or decreased. Furthermore, the respo...

Interviews on the History of the Prosecutor's Office of Helsinki 2013

Jansson, Julia (Prosecutor's Office of Helsinki)

This qualitative dataset comprises recordings of interviews covering the organisational history of the Prosecutor's Office of Helsinki over the decades, and changes in the prosecutors' work, nature of cases, prosecutor training, and management practices. Other main topics were practices of the office, major changes in the organisation, cooperation with other stakeholders, specialization of prosecutors, and the interviewees' work history and career. Most interviews were individual face-to-face...

Figure 2. Search layout example for CESSDA Data Catalogue

Note that v1.2 of the Tool Branding Kit (containing fonts, HTML, CSS etc files) is available from bit.ly/tool_branding_1_2. This should be used by developers as a first step towards creating a User Interface that conforms to the CESSDA Branding Guidelines, especially in respect to headers and footers.

Internationalisation

Some applications may be required to support multiple languages. This can include one or more of the following.

- Ability to change language of user interface.
- Ability to change language of content displayed in search results. This would require support for searching in multiple languages also.
- Ability to change language of data available for download.

Where possible, efforts should be made to streamline and unify the process of language selection. For example, changing the language of the user interface could also automatically switch the language of search results. If feasible, when changing the language of displayed content, the user interface should also switch to the same language. A message should be displayed if a particular translation is not available.

The default language should be English.

The ‘naming’ of languages in language choices in CESSDA user interfaces should be done in an uniform manner, using either the full language names in appropriate language (e.g. English, Englisch), or the two-letter ISO codes regardless of language (e.g. en, de). Full names are recommended for filters.

Interface Components

Search Box

The search box should allow users to enter text for their query. When text is provided, autocomplete/suggestions can be shown to aid users with their search. When empty, placeholder text is visible indicating the primary purpose of search and the type of data indexed.

Additional information can be displayed underneath the search box such as number of results found. Options for advanced search, resetting filters and clearing search are visible if required.

If possible, search results are automatically returned and updated as users input their query. If technological limitations prevent auto submission, then a search button may be added to the right of the input box for users to click when ready.

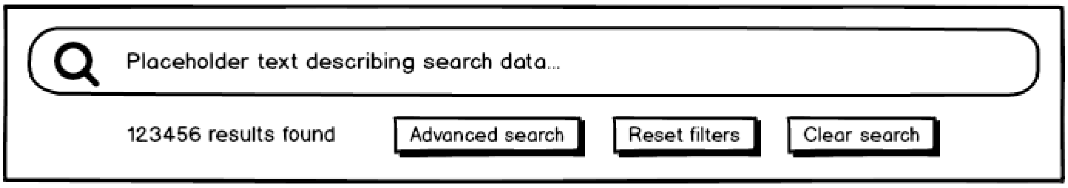


Figure 3. Search box wireframe

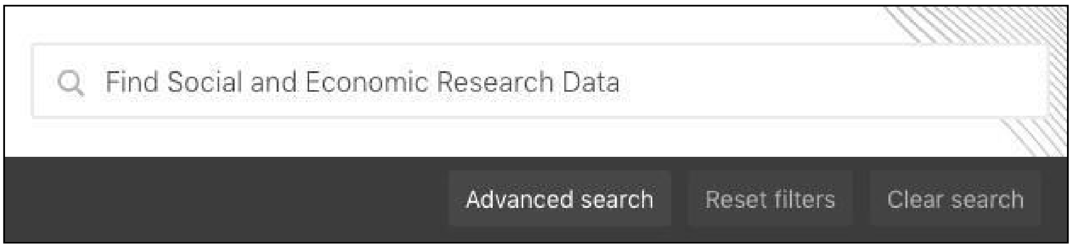
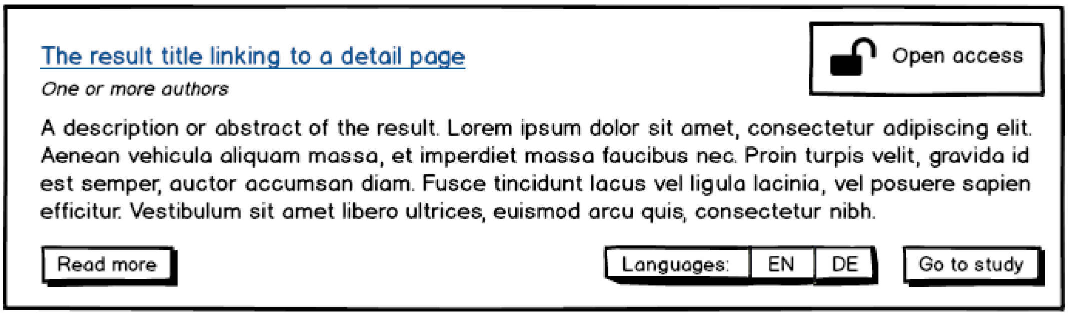


Figure 4. Search box example for CESSDA Data Catalogue

Search Result

A search result should display content relevant for that data. This will depend on the type of information indexed however it is expected that all data will have some form of title. Information such as availability or access rights can also be displayed alongside the title if relevant. Underneath the title, a description or abstract should be provided. For long descriptions, content should be truncated to 500 characters with the option of viewing the remaining text.

The title will link to a detail page containing more information for that record. The bottom of each result can contain additional actions such as expanding to read more text, viewing metadata in a particular language and linking to the data source (i.e. study). Deep linking will be used throughout, so that search results are reflected in the URL (which can be bookmarked or shared, as required).

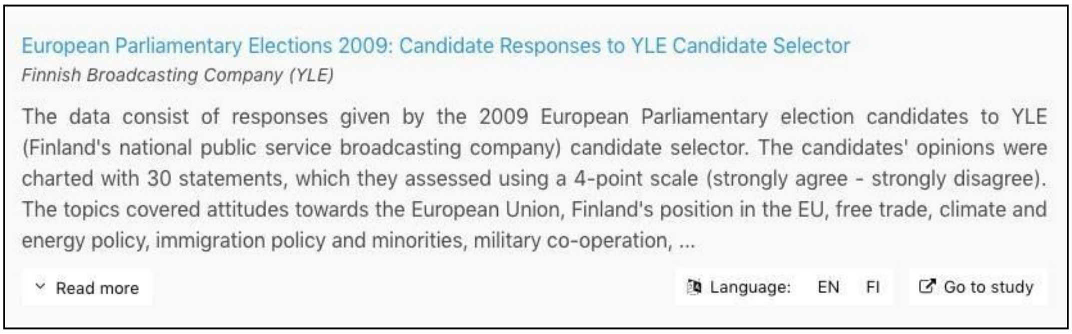


The result title linking to a detail page

One or more authors

A description or abstract of the result. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean vehicula aliquam massa, et imperdiet massa faucibus nec. Proin turpis velit, gravida id est semper, auctor accumsan diam. Fusce tincidunt lacus vel ligula lacinia, vel posuere sapien efficitur. Vestibulum sit amet libero ultrices, euismod arcu quis, consectetur nibh.

Figure 5. Search result wireframe



European Parliamentary Elections 2009: Candidate Responses to YLE Candidate Selector

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Figure 6. Search result example for CESSDA Data Catalogue

Result View Options

Options should be provided for customising how results are displayed within the application. Examples include changing the number of results displayed per page and modifying the current sorting algorithm. These should be presented in a drop-down select control.

- Default options for page size are 10, 30, 50 and 150. 30 is initially selected.
- Default options for sorting are by relevance and by title (ascending and descending). The ability to sort by date should also be provided if possible.

If an application supports multiple languages, sorting algorithms must be aware of differing alphabets. For example, this would be relevant when sorting by title (ascending and descending).

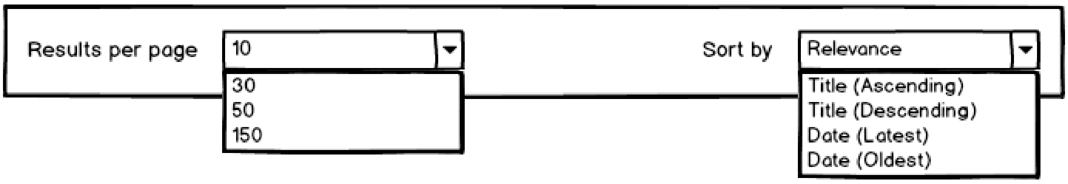


Figure 7. Result view options wireframe

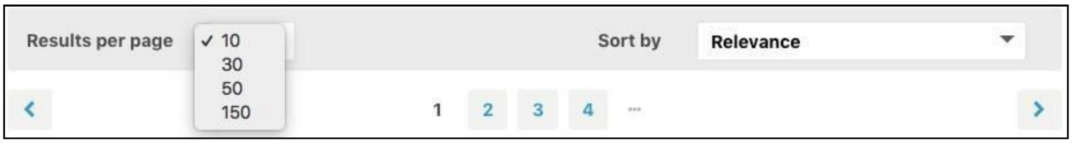


Figure 8. Result view options example for CESSDA Data Catalogue

Filters

Filters should allow search results to be further refined as required. Each filter should be rendered in a collapsed panel in order to reduce clutter and vertical scrolling. All filters will be in a collapsed state on initial page load, unless they have been previously selected.

Filters will be disabled if they are no longer relevant. For example, when querying records, if no results contain information about "Country", then the "Country" filter would be disabled.

Tooltips can be used to display additional text, describing the filter and its purpose.

As filter options are modified, results should be updated automatically if possible without users having to click submit buttons. Filter options will display both a label as well as the number of results returned for that specific option.

The type of user interface control used to render options should depend on the type of data being filtered. Some examples are provided here for several data types.

Date Ranges

Filters referencing date ranges should provide input boxes for manually entering years as text. If possible, interaction can be improved by rendering range sliders which can be dragged by users to select the appropriate year.

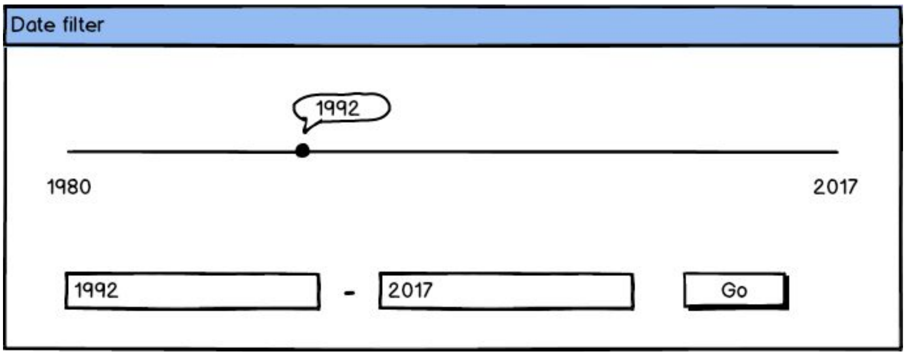
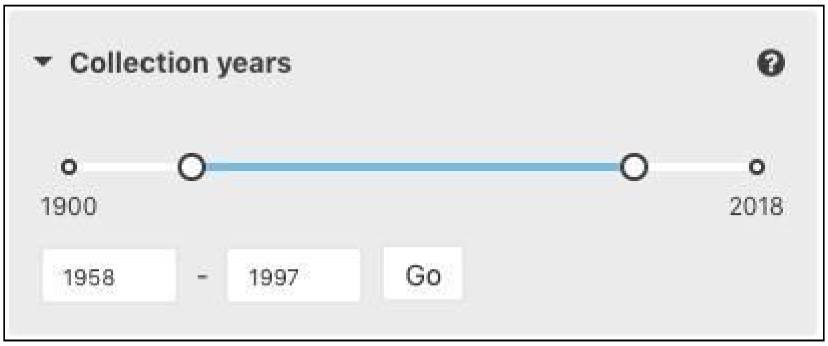


Figure 9. Date range filter wireframe



Collection years

1900

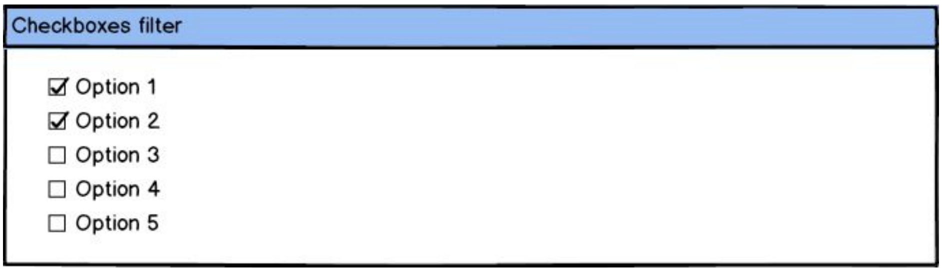
2018

1958 - 1997

Figure 10. Date range filter example for CESSDA Data Catalogue

Pre-defined list containing up to five items

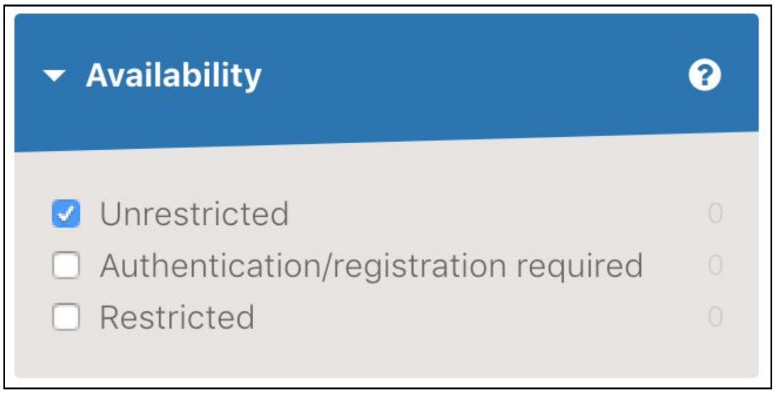
For lists of options with up to five items, checkboxes may be used for selection.



Checkboxes filter

☑ Option 1
☑ Option 2
☐ Option 3
☐ Option 4
☐ Option 5

Figure 11. Checkbox filter wireframe



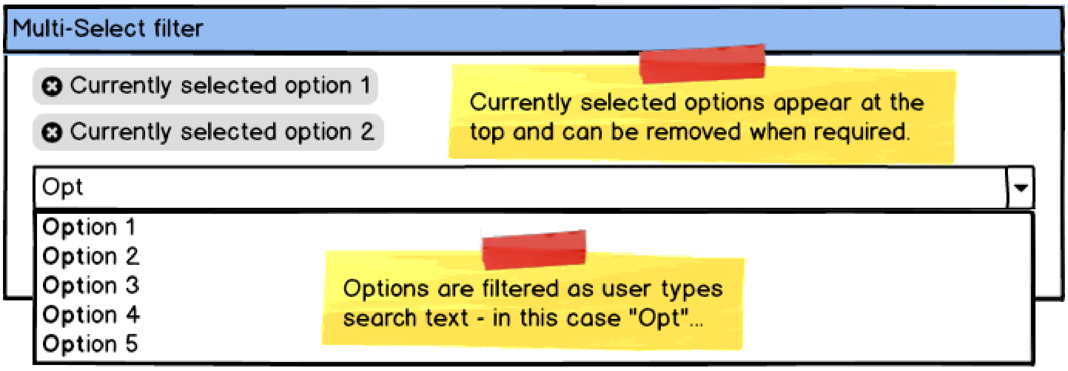
Availability

☑ Unrestricted 0
☐ Authentication/registration required 0
☐ Restricted 0

Figure 12. Checkbox filter example from beta version of CESSDA Data Catalogue

Pre-defined list containing more than five items

For lists of options with more than five items, multi-select controls should be used. These should provide both a list of options which can be vertically scrolled through and selected from, as well as a search box which can be used for filtering the list of options. Currently selected options should appear at the top and can be removed individually as required.



Multi-Select filter
Currently selected option 1
Currently selected option 2
Currently selected options appear at the top and can be removed when required.
Opt
Option 1
Option 2
Option 3
Option 4
Option 5
Options are filtered as user types search text - in this case "Opt"...

Figure 13. Multi-select filter wireframe

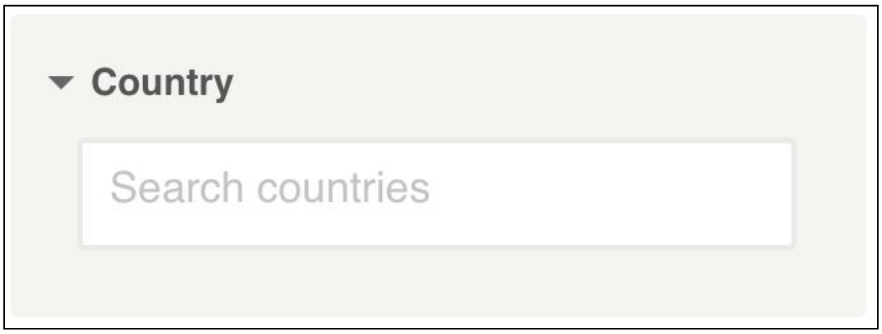


Figure 14. Multi-select filter example for CESSDA Data Catalogue – Initial state

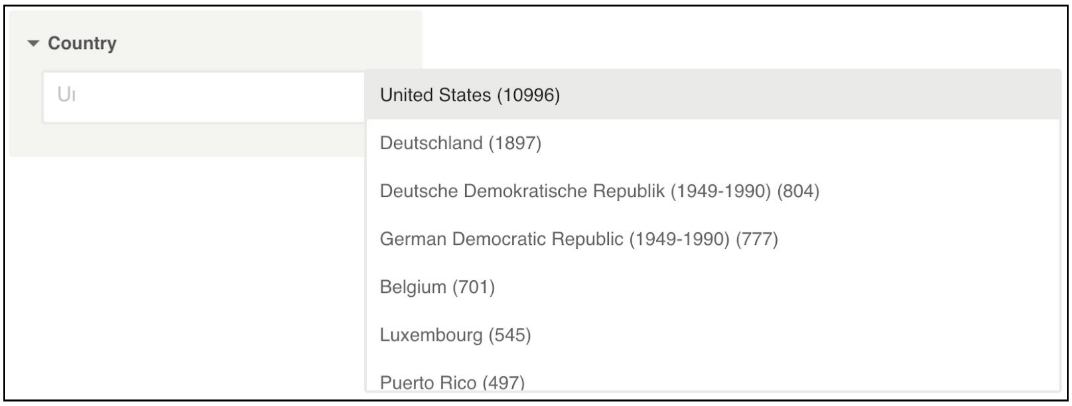
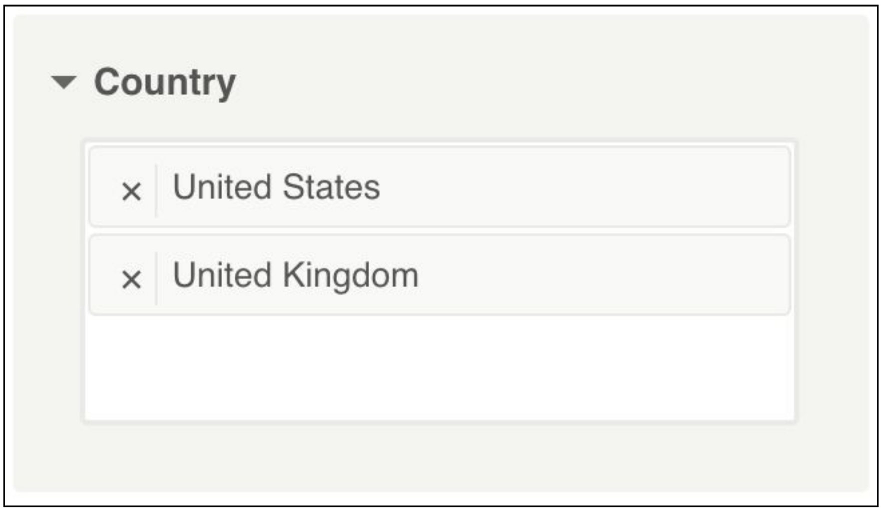


Figure 15. Multi-select filter example for CESSDA Data Catalogue – User starts searching



Country

× United States

× United Kingdom

Figure 16. Multi-select filter example for CESSDA Data Catalogue – With selected options

Tooltips

Tooltips display additional content when hovering over specific elements. They can be used to assist users by providing help in the form of additional documentation or descriptions of user interface elements to which they are linked. They are invisible when the mouse cursor is not hovering over it's related element.

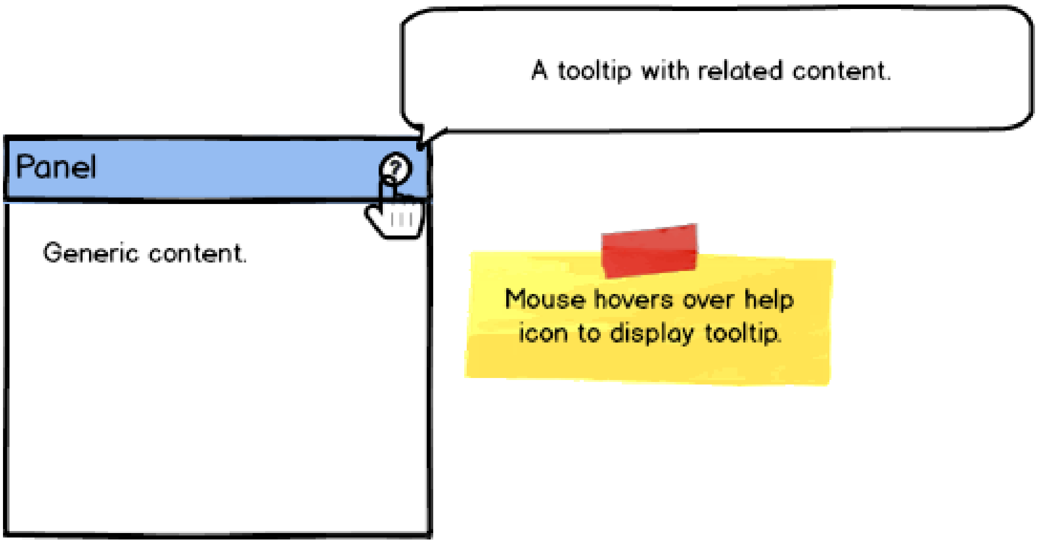
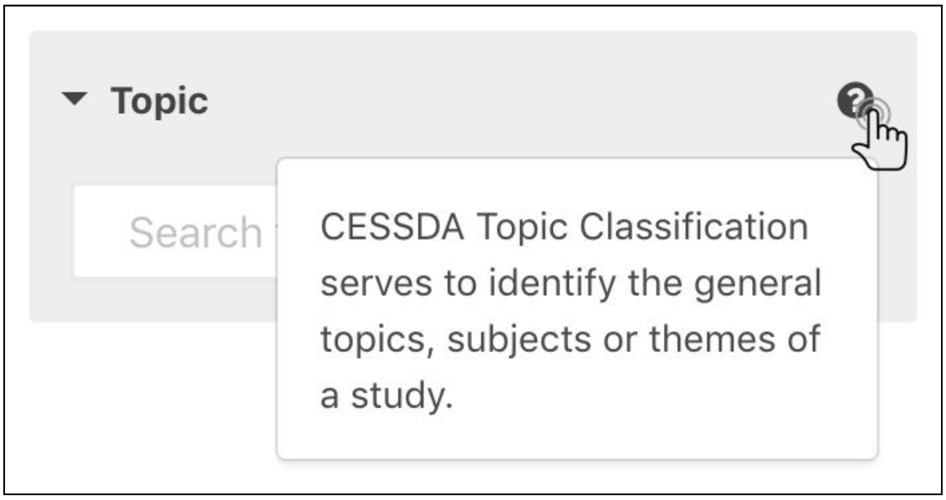

A tooltip with related content.
Panel
Generic content.
Mouse hovers over help icon to display tooltip.

Figure 17. Tooltip wireframe



CESSDA Topic Classification serves to identify the general topics, subjects or themes of a study.

Figure 18. Tooltip example for CESSDA Data Catalogue

Glossary

Term	**Definition**
Deep Linking	“The use of a hyperlink that links to a specific, generally searchable or indexed, piece of web content on a website.” Source: https://en.wikipedia.org/wiki/Deep_linking
Modal	A region of content, usually presented in a box, which appears within the same browser window and overlays the current page content.
Pop-up	A separate smaller browser window which appears on top of the original window. It is usually triggered and displayed by clicking a website link.
Responsiveness	The ability of a website or web application to automatically adjust it’s layout and design, based on the device and screen resolution currently being used.
SVG	Scalable Vector Graphics is an XML-based vector image format for two-dimensional graphics with support for interactivity and animation. Recommended for responsive design as graphics do not lose quality when resized.
User Interface	Describes the look and feel as well as components of an application. In the context of this document, a web based application.