

LEGISLATION API

Intro (Website onscreen)

The www.legislation.gov.uk website is the official UK website providing access to legislation documents.

The Legislation API is the basis for the website functionality. It also provides open access to the underlying legislation data for re-use – we actively encourage reuse of our data!

We'll have a quick look at the website functionality first to see what the API needs to support.

The content on the website is mostly legislation documents of various types. There are two ways you can find legislation documents:

- Browse – You can browse <http://www.legislation.gov.uk/browse> the different legislation types and view lists of documents by year and type, <http://www.legislation.gov.uk/ukpga> and <http://www.legislation.gov.uk/ukpga/1995> .
- Search - You can also search for legislation documents, title=public records, <http://www.legislation.gov.uk/all?title=public%20records> .

Legislation documents are complex, highly structured documents and there are a number of ways to view them:

- Table of Contents – The table of contents allows users to navigate through the document, <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/contents> . You can view the whole document or a section of the document, <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8> .
- Version Types - We hold two different types of document version. The “Original – as enacted” version is the document as it was originally passed by parliament, <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8/enacted> . The “Revised” versions are versions of documents that have been created by the TNA Legislation Editorial Team. They incorporate additional metadata to show which sections of the document are in force and changes to the document sanctioned by other items of legislation.
- Timeline – For revised documents you can see the versions available <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8?timeline=true> and view the document as it stood at different points-in-time.
- Formats – The base format for legislation data is XML, conforming to our schema – Crown Legislation Mark-up Language. We make this data available on the website (if you know how where to look) <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8/data.xml> . In addition to the XML and XHTML formats. We provide a generated PDF format, <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8/data.xml> , an alternative XML format, Akoma Ntoso is an international legal XML standard, <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8/data.ahn> , an HTML5 serialisation of the Akoma Ntoso XML <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8/data.html> and an un-styled HTML version <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/section/8/data.xht> .

All these other formats are served by dynamically converting the CLML XML as needed. (We support content negotiation.) Everything displayed for each format is based on the content of the XML data. If it's not in the XML, or derivable from it, then it can't be displayed. We can change the transforms to display data differently as needed. The transforms are publicly available for (re)use in the legislation GitHub repository <https://github.com/legislation/legislation/>.

Search result/list pages <http://www.legislation.gov.uk/all?title=public%20records> are available as either XHTML or ATOM feeds <http://www.legislation.gov.uk/all/data.feed?title=public%20records> (a lot more data available in the underlying feed than gets displayed in browser – view source).

Legislation Document Structure - (Slide 1)

The Legislation API is a RESTful API and its core is the legislation URI scheme.

Our general principle is to create a comprehensive scheme that can provide a URI for every data resource or rendition we may need to display or refer to – we even want URIs for things that we don't have or that are not physical pages as we may want to use the URI to be able to refer to them within our data and system configurations too.

We need to have a URI for each level of the document structure, whole document, parts and individual sections.

Legislation XML Document Structure - (Slide 2)

We follow the XML document structure to create a scheme for division levels.

Functional Requirements for Bibliographic Records (FRBR) - (Slide 3)

As well as describing all the levels of document structure we want to be able to describe the different versions of documents (and all versions of divisions of documents).

To model these concepts we have based our scheme on an entity relationship model created by the International Federation of Library Associations and Institutions (IFLA), called Functional Requirements for Bibliographic Records (FRBR).

In this model:

Work is a "distinct intellectual or artistic creation", for example, Hamlet is a work.

Expression is "a specific form that a work takes when realized", for example an expression of Hamlet would be the text of Shakespeare's first draft, and another would be the text of the first printed edition.

Manifestation is "the physical embodiment of an expression of a work", for example the paper version of the first edition of Hamlet, another would be a scanned PDF version of the current version in print.

Item is "a single exemplar of a manifestation", for example the copy of the book in the British library would be one item the copy of the same edition in your local library would be another item.

FRBR for Legislation Documents - (Slide 4)

Applying this model to legislation we can think of each document as a Work. The versions of the Work are Expressions and the renditions of these Expressions in different formats are Manifestations.

The Work and Expression levels are abstract, they don't exist but we will want URIs for all levels. We don't worry about Items for the website as each time a website page request is completed we effectively create another Item.

URI Scheme Overview - (Slide 5)

There are three types of URIs used on <http://www.legislation.gov.uk> to represent legislation:

1. Identifier URIs (Works)
2. Document URIs (Expressions)
3. Representation URIs (Manifestations)

Identifier URIs - (Slide 6)

Identifier URIs generally follow the template:

`http://www.legislation.gov.uk/id/{type}/{year}/{number}[/section]`

The legislation type, year and series number are the components required to uniquely identify an item of UK legislation, e.g. the identifier URI for Act of the Scottish Parliament 2014, number 2 is:

<http://www.legislation.gov.uk/id/asp/2014/2>

The identifier URI for section 3 of the same document is:

www.legislation.gov.uk/id/asp/2014/2/section/3

As mentioned this type of URI corresponds to the FRBR concept of a Work. It refers to all versions and formats of the legislation document (or section). Note the id component that identifies it as a Work URI.

As the Work is an abstract concept, in practice navigating to an identifier URI will result in a redirection to an appropriate Document URI. Which we'll look at next, e.g.

<http://www.legislation.gov.uk/id/asp/2014/2> re-directs to
<http://www.legislation.gov.uk/asp/2014/2>

Document URIs #1 - (Slide 7)

Document URIs are used to refer to a particular version of an item of legislation, they generally follow the template:

`http://www.legislation.gov.uk/{type}/{year}/{number}[/section][/{authority}][/{extent}][/{version}]`

Legislation changes over time as amendments to it are applied, e.g. the consolidated version of the Pesticides Act 1998 (c. 26) that was valid on 2005-01-01:

www.legislation.gov.uk/ukpga/1998/26/2005-01-01

This type of URI relates to the Functional Requirements for Bibliographic Records (FRBR) concept of an “expression”.

Again, in practice navigating to an identifier URI will result in a redirection to an appropriate representation URI.

Document URIs #2 - (Slide 8)

In some cases versions of legislation from different publishers are available. The publishing authority can also be explicitly specified. The SLD system mostly publishes revised legislation. Example: The version of 2000 Northern Ireland Act chapter 5 created by the “SLD” authority.

<http://www.legislation.gov.uk/nia/2000/5/sld>

Some legislation is available in more than one language, e.g. The Welsh language version of Welsh Statutory Instrument, 2014 No. 595.

<http://www.legislation.gov.uk/wsi/2014/595/made/welsh>

Document URIs #3 - (Slide 9)

Options are also provided to describe versions that appear without any revisions , e.g. the version is as made or enacted. Example: The original version of UK Public General Act 2014 chapter 1.

<http://www.legislation.gov.uk/ukpga/2014/1/enacted>

Provision for different versions of legislation applying for different areas of the UK. Example: The version of section 16 of the Wildlife and Countryside Act 1981 (c. 69) that applies to Scotland.

<http://www.legislation.gov.uk/ukpga/1981/69/section/16/scotland>

Versions containing amendments or text that has yet to come into force, e.g. the legislation version is prospective. Example: The prospective version of the Digital Economy Act 2017 (c. 30).

<http://www.legislation.gov.uk/ukpga/2017/30/prospective>

Representation URIs #1 - (Slide 10)

Representation URIs are used to refer to a particular format of an item of legislation, they generally follow the template:

`http://www.legislation.gov.uk/{type}/{year}/{number}
[/{section}][/{authority}][/{extent}][/{version}]/data.ext`

Representation URIs relate to the Functional Requirements for Bibliographic Records (FRBR) concept of a “manifestation”.

Identifier and Document URIs redirect to representation URIs. Unless another version is explicitly specified the representation returned is always the xhtml for the most recent consolidated version of the document available.

Available formats are:

- XML conforming to the Crown Legislation Mark-up Language (CLML)
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.xml>

- XHTML generated from the CLML XML
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.htm>

Representation URIs #2 - (Slide 10)

- PDF generated from the CLML XML
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.pdf>
- HTML with no styling generated from the CLML XML
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.xht>
- Akoma Ntoso XML generated from the CLML XML
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.akn>
- HTML5 serialisation of the Akoma Ntoso XML
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.html>

Representation URIs #3 - (Slide 11)

Additionally there are URIs for RDF metadata extracted/dervied from the XML data and feeds for search results:

- RDF metadata about the legislation
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/data.rdf>
- ATOM legislation lists for search results
e.g. <http://www.legislation.gov.uk/ukpga/2010/data.feed>

In the future we are looking to extend this scheme to provide metadata relating to legislation from a new linked data service that is independent to that stored in the document. Some expected URIs are below:

- Future Linked Data API providing metadata about legislation
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/metadata/data.xml>
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/metadata/data.ttl>
e.g. <http://www.legislation.gov.uk/ukpga/2010/1/metadata/data.rdf>