



HOUSE OF COMMONS

# Open Source: Parliamentary Search

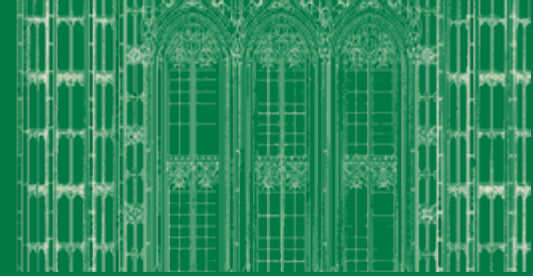
Steve Wise  
House of Commons Library





## Parliamentary Search: What is it?

- POLIS (1980-2005) → PIMS (2005-2012) → Core Parliamentary Information Management Framework Programme (CPIMF, 2012-)
- OWLIM Triple Store & RDF – procedural data repository
- Indexing – librarians, indexers & taxonomy experts
- Bespoke indexing tool, Smartlogic taxonomy/thesaurus manager
- Procedural application → Indexing → Parly Search
- Parly Search = Lucene / Solr + Ontology Manager
- Why Lucene / Solr?
  - we were already using it for something else!



## Digression: What is RDF?

- Resource Description Framework
- Linked data standard
- Describes data using subject, object & predicate
- Example: Steve's email is [wisesa@parliament.uk](mailto:wisesa@parliament.uk)
  - Subject = Steve
  - Predicate = 'has email address'
  - Object = [wisesa@parliament.uk](mailto:wisesa@parliament.uk)
  - 3 components, so called a 'triple'
- Semantic query language - SPARQL



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## **Parly Search: What does it look like?**

[Advanced search](#) | [Popular searches](#)

Exclude full text

## Welcome to Parliamentary Search

In Parliamentary Search you can find Parliamentary material, European scrutiny and information, as well as Research briefings published by the Commons and Lords Libraries, and by POST. For more details on content and coverage, see the [About Search](#) page.

### Search Tips:

- Limit your search to a particular category of information using the tabs at the top of this screen.
- Find out more about your search results by switching the View from Default to Summary or Detailed

[Parliamentary Search training courses](#) - open to all Intranet users - are provided by the Commons Library.

If you experience problems accessing Parliamentary Search, or notice issues with the data or potential bugs, then please contact the PDS Service Desk on Ext.2001 or email [digitalsupportdesk@parliament.uk](mailto:digitalsupportdesk@parliament.uk).

## Laid papers for 17-19 session currently unavailable in Search

Laid papers and Statutory instrument records for the new Parliament are currently unavailable in Search

Records for laid papers (Command papers, White papers, Commons papers, etc...) and Statutory instruments for the 17-19 session are currently unavailable in Parliamentary Search. A new papers laid application was built which did not include a feed to provide laid papers to Parliamentary Search.

Deposited papers and House of Lords papers for this session are available in Search as they are

# Advanced Search

[About Search](#)  
[Search Help](#)

*your query will appear here as you type below...*

[Quick search](#) | [Clear all](#)

Exclude full text

Search

## Text searching

### Search for content with:

all of these words

anywhere

this phrase

anywhere

one or more of these words

anywhere

none of these words

anywhere

## Content type

[Clear types](#)

- Early day motions
- European scrutiny and information
- Legislation
- Members' contributions
- Parliamentary committees
- Parliamentary papers
- Parliamentary proceedings
- Parliamentary questions
- Research briefings

## Additional filters

As you select content types to include in your search, more filters that are applicable to those types will appear in this section.

Date

Session

17/19  
16/17   
15/16   
14/15

Subject

Reference

Member/Author

Legislature

House of Commons  
House of Lords

Legislation

Search

## Popular searches

The options below offer a quick and easy way to run popular search queries. Selecting an option from the list will take you to a simple menu where you can enter your search criteria. The results of your query will be shown in the Parliamentary Search results page. You can make further refinements to your query from the results page. To export your results, select from the options presented at the top of the results page.

Please see the Search homepage for the latest information on any currency issues, or visit the [Parliamentary Search currency page](#).

[Return to Search homepage](#)

### [Tabled questions by Member](#)

Search by Member for oral or written questions tabled in the Commons for which no answer has been published. For written questions tabled in the Lords, search by Member for questions tabled from the 14/15 session for which no answer has been published.

### [Tabled written questions by answering body](#)

Search by answering body for written questions tabled in the Commons for which no answer has been published. For written questions tabled in the Lords, search by answering body for questions tabled from the 14/15 session for which no answer has been published.

### [Parliamentary questions](#)

Search for Oral and/or Written questions, filtered by session and legislature. Further refinements, e.g. by Subject, by Member or Department, can be made from the results page.

### [Members' contributions](#)

Search for Members' contributions, filtered by session, legislature and Chamber/Committee.

# Advanced Search

[About Search](#)  
[Search Help](#)

BREXIT ((**type**:"Parliamentary committees") OR (**type**:"Parliamentary questions") OR (**type**:"Research briefings"))  
**session**:17/19 **legislature**:"House of Commons"

[Quick search](#) | [Clear all](#)

Exclude full text

Search

## Text searching

### Search for content with:

all of these words

BREXIT

anywhere

this phrase ?

one or more of these words

none of these words

## Content type ?

[Clear types](#)

- Early day motions
- European scrutiny and information
- Legislation
- Members' contributions
- Parliamentary committees
- Parliamentary papers
- Parliamentary proceedings
- Parliamentary questions
- Research briefings

## Additional filters

As you select content types to include in your search, more filters that are applicable to those types will appear in this section.

Date ?

Session ?

Subject ?

Reference ?

Member/Author ?

Legislature

Legislation ?

Chamber/Committee

- 17/19
- 16/17 ^
- 15/16 v
- 14/15

- House of Commons
- House of Lords

General committees



oe:"Research briefings")) session:17/19 legislature:"House of Commons" x x Search

New search | Advanced search | Popular searches  Exclude full text

Content type ?

- Members' contributions (198)
  - Business questions (13)
  - Oral answers to questions (4)
- Oral questions (185)
  - Proceeding contributions (13)
- Parliamentary questions (646)
  - Business questions (13)
  - Oral questions (185)
  - Written questions (448)

Date ?

- 2017 (646)

Subject ?

- Brexit (613)
- EU nationals (125)
- Immigration (104)
- EU countries (46)
- UK trade with EU (37)
- Trade agreements (37)
- British nationals abroad (35)
- Staff (34)
- Agriculture (27)
- Migrant workers (24)
- more

Publisher

- House of Commons (646)

Search within  BREXIT ((type:"Parliamenta...

Showing 1 - 10 of 646 results (0.156 seconds) Results per page 10 View Default Sort by Date

Export as: [spreadsheet](#) · [document](#) · [rank and tally list](#)

Select: [?](#) [all on page](#) · [toggle page selection](#) · [clear all selected](#)

Home Office: Brexit

To ask the Secretary of State for the Home Department, how much and what proportion of her Department's expenditure has been identified as relating to its work on the UK leaving the EU in 2017-18.

31 Jul 2017 | Written questions | Answered | House of Commons | 5626  
Asked by: Williams, Hywel | Answered by: Brandon Lewis | Department: Home Office

Attorney General: Brexit

To ask the Attorney General, what amount of the Law Officers' Departments' annual expenditure is allocated to work relating to the UK's exit from the EU.

27 Jul 2017 | Written questions | Answered | House of Commons | 5370  
Asked by: Williams, Hywel | Answered by: Jeremy Wright | Department: Attorney General

Attorney General: Brexit

To ask the Attorney General, how many staff in the Law Officers' department have responsibilities relating to the UK's exit from the EU.

27 Jul 2017 | Written questions | Answered | House of Commons | 5143  
Asked by: Williams, Hywel | Answered by: Jeremy Wright | Department: Attorney General

Skilled Workers: Vacancies

To ask the Secretary of State for Education, pursuant to the Answer of 26 June 2017 to Question 233, what steps are being taken to ensure that ongoing skills gaps of all types are filled.

27 Jul 2017 | Written questions | Answered | House of Commons | 3006  
Asked by: Green, Kate | Answered by: Anne Milton | Department: Department for Education

Department for Communities and Local Government: European Union (Withdrawal) Bill

To ask the Secretary of State for Communities and Local Government, what estimate his Department has made of the potential number of Acts or parts of Acts that will be subject to repeal as a result of provisions in the European Union (Withdrawal) Bill.

26 Jul 2017 | Written questions | Answered | House of Commons | 5988  
Asked by: Lake, Ben | Answered by: Jake Berry | Department: Department for Communities and Local Government

Department for Digital, Culture, Media and Sport: European Union (Withdrawal) Bill

You are here: Parliament home page > Parliamentary business > Publications & records > Written Questions and Answers and Written Statements > Department for Communities and Local Government: European Union (Withdrawal) Bill:Written question - 5988

- Publications & records
- Written Questions and Answers and Written Statements
- Written questions and answers
- Written statements
- Daily Reports

# Department for Communities and Local Government: European Union (Withdrawal) Bill:Written question - 5988

Q Asked by **Ben Lake** (Ceredigion) Asked on: 18 July 2017

Department for Communities and Local Government © 5988

## Department for Communities and Local Government: European Union (Withdrawal) Bill

To ask the Secretary of State for Communities and Local Government, what estimate his Department has made of the potential number of Acts or parts of Acts that will be subject to repeal as a result of provisions in the European Union (Withdrawal) Bill.

A Answered by: **Jake Berry** Answered on: 26 July 2017

Government departments have been analysing the UK statute book and directly applicable EU law in areas of responsibility to enable an assessment of the scale of the changes needed. This is likely to include the repeal, but also the amendment, of provisions in Acts but we are not in a position to give a sense of scale at this time.

In the Government White Paper on the Repeal Bill, published on 30 March 2017, we estimated around 800-1,000 EU-exit Statutory Instruments will be required.

BREXIT Search

New search | Advanced search | Popular searches

Exclude full text

**Your filters** [clear all]

- Research briefings
- Brexit

Search within  BREXIT

Showing 1 - 10 of 158 results (1.078 seconds)  
 Results per page 10 View Default Sort by Date  
 Export as: [spreadsheet](#) · [document](#) · [rank and tally list](#)  
 Select: [?](#) [all on page](#) · [toggle page selection](#) · [clear all selected](#)

**Content type**

- European scrutiny and information (26)
- Legislation (10)
- Members' contributions (18285)
- Parliamentary committees (261)
- Parliamentary papers (290)
- Parliamentary proceedings (336)
- Parliamentary questions (5260)
- Research briefings (158)
  - Commons Briefing papers (55)
  - Commons Debate packs (22)
- Lords Briefing packs (41)
- Lords In Focus (9)
- Lords Library notes (27)
  - POSTnotes (4)

**Date**

- 2017 (103)
- 2016 (55)

**Subject**

- Brexit (158)

[Brexit: a reading list of post-EU Referendum publications by Parliament and the Devolved Assemblies](#)  
 @parliament.uk | @commonslibrary BRIEFING PAPER Number 07912, 2 August 2017 **Brexit: a reading list of post- EU ... Publications**  
 2 **Brexit: a reading list of post-EU Referendum publications by the UK Parliament ... ISej** 33 3. NIA Committees 35 4 **Brexit: a reading list of post-EU Referendum publications by the UK**  
 02 Aug 2017 | Commons Briefing papers | CBP-7912

[European Union Committee Report: Brexit: UK-Irish Relations](#)  
 European Union Committee Report: **Brexit: UK-Irish Relations** Debate on 5 September 2017  
 01 Aug 2017 | Lords Briefing packs - Debates | LBP-2017-0069

[The UK's contribution to the EU budget](#)  
 on and after **Brexit** Number CBP 7886, 9 June 2017 2 Contents Summary 3 1. The UK and the EU budget 4 ... for the rebate? 11 3.  
 UK payments to the EU on and after **Brexit** 12 3.1 A payment on leaving the EU 13 European ... contribution of £7.1 billion between  
 2010 and 2014. **Brexit** and the UK's contribution The UK will remain  
 31 Jul 2017 | Commons Briefing papers | CBP-7886

[Brexit: the exit bill](#)  
 @parliament.uk | @commonslibrary BRIEFING PAPER Number 8039, 31 July 2017 **Brexit: the exit bill** By Matthew Keep ... of the  
 settlement? 2 **Brexit: the exit bill** Contents Summary 3 1. Introduction 4 2. The EU's position 6 ... phase of **Brexit** negotiations, under  
 the title of the 'single financial settlement' (the settlement  
 31 Jul 2017 | Commons Briefing papers | CBP-8039

[Brexit and data protection](#)  
 @parliament.uk | @commonslibrary BRIEFING PAPER Number 7838, 27 July 2017 **Brexit and data protection** By John ... protection  
 after **Brexit** 2 **Brexit** and data protection Contents Summary 3 1. Background 5 2 ... 3 Implementation and advice 9 3. Data protection  
 after **Brexit** 10 3.1 The UK as a "third country" 10 Cover  
 27 Jul 2017 | Commons Briefing papers | CBP-7838

[Brexit: devolved legislature business](#)  
 concerning **Brexit** in the devolved legislatures in Northern Ireland, Scotland and Wales, comprising debates ... Debates, etc. that  
 include the implications/consequences of **Brexit** in their discussions of a policy area ... , but are not primarily about **Brexit**, are not  
 included.  
 31 Jul 2017 | Commons Briefing papers | CBP-7915

**BREXIT**



[New search](#) | [Advanced search](#) | [Popular searches](#)  Exclude full text

**Your filters** [clear all]

Brexit

**Date**

**Subject**

**Corporate author**

- Politico (87)
- Times Higher Education (81)
- UK Constitutional Law Association (42)
- Guardian (26)
- Round Table: The Commonwealth Journal of International Affairs (15)
- Inside Housing (15)
- European Law Review (14)
- Times (13)
- Centre for European Reform (13)
- Financial Times (11) more

**Section**

- International Affairs and Defence Section (215)
- Social Policy Section (178)
- Parliament and Constitution Centre (55)
- Home Affairs Section (32)
- Business and Transport Section (28)
- Economic Policy and

Search within  BREXIT

Showing 1 - 10 of 496 results (0.046 seconds) Results per page 10 View Default Sort by Date

[CEBR: hard Brexit could 'severely limit' construction market | News | Inside Housing\(£\)](#)  
27 Oct 2017 | Research material  
Corporate author: Inside Housing

[The impact of Brexit on children: Key policy recommendations for the new government that Parliament considers the impact of Brexit on the rights of children and young people and urges the Government](#)  
28 Jul 2017 | Research material  
Corporate author: Children's Rights Alliance for England

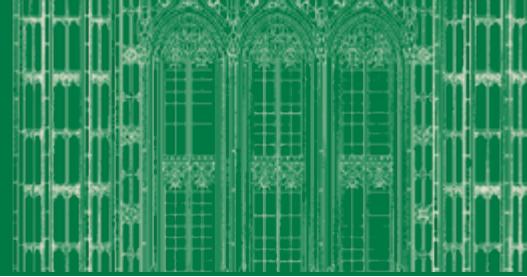
[Reality bites: the Brexit negotiations seen from the other side of the Channel](#)  
The assumption that the EU27 are willing to accept any Brexit deal is misguided.  
24 Jul 2017 | Research material  
Corporate author: epc.eu

[Brexit and the threat to Northern Ireland](#)  
20 Jul 2017 | Research material | Issue 115, August/September 2017  
Corporate author: CER Bulletin

[Why the EU Charter of Fundamental Rights Needs to Remain Part of the UK's Legal Arrangements Post the UK's Exiting the European Union: An Introduction](#)  
Briefing note on the EU Withdrawal Bill with particular reference to the EU Charter. Prepared by Jonathan Cooper OBE.  
17 Jul 2017 | Research material  
Corporate author: Doughty Street Chambers

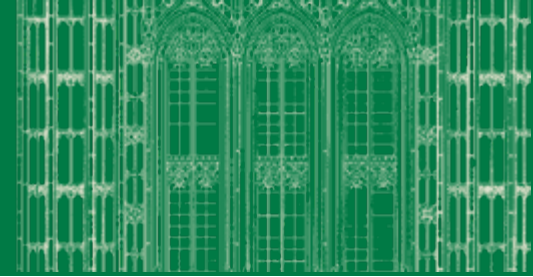
[Cambridge plans postgraduate growth to counter financial worries](#)  
University cites Brexit as factor causing financial uncertainty – but also as recruitment  
13 Jul 2017 | Research material  
Corporate author: Times Higher Education

[Cambridge set to seize on 'Brexit opportunities' by increasing postgraduate intake](#)  
The University of Cambridge will increase its postgraduate student intake in a bid to offset the continued downturn in its financial outlook



## Advantages of Lucene Solr for Parly Search

- Implemented on Parliament's website – experience
- Simple to set up a development version / test-bed
- Lots of other users – readily available skill in marketplace
- Plenty of resources available to train developers/support staff
- Search algorithm: able to control, easy to modify, able to plug in our own taxonomies as facets
- Not as processor/server/memory-hungry as previous search engine
- Functional, flexible and fast
- Reliable



## Some links:

- Public beta version of Parliamentary Search
  - <http://search-material.parliament.uk/>
- Information on Apache Lucene /Solr
  - <http://lucene.apache.org/solr/>
  - [https://en.wikipedia.org/wiki/Apache\\_Solr](https://en.wikipedia.org/wiki/Apache_Solr)
- Information on Smartlogic Semaphore/Ontology Editor
  - <https://www.smartlogic.com/products>



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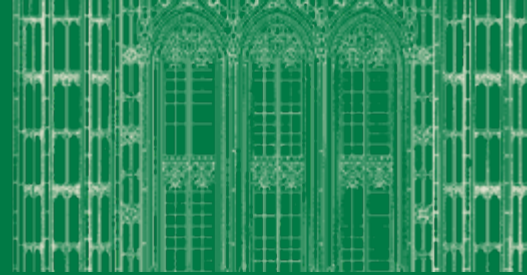
**Thank you –  
any questions?**

Steve Wise  
[wisesa@parliament.uk](mailto:wisesa@parliament.uk)





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**Some other search examples:**



## Popular searches: Parliamentary questions

[About Search](#)  
[Search Help](#)

Search for answered Oral and/or Written questions. Further refinements, e.g. by Member or Department, can be made from the results page.

[Popular searches](#)

**Parliamentary Questions**

Questions  Oral  Written  Both

OPQ type  Lead  Supplementary  All

Legislature  House of Commons  House of Lords  Both

Session

- 17/19
- 16/17 ^
- 15/16
- 14/15
- 13/14 v
- 12/13

Search

Parliamentary Search is updated with new questions from the Table Office at the end of each day, and with answers as they are published.

Note that as information systems have evolved over the years, approaches to storing information relating to Parliamentary material have also changed. This can mean that the data provided in rank and tally lists are not strictly comparable over time. Please see the Contents and Coverage section of the [About Search](#) page for further guidance. If you have a query about this service, please contact the Library via email to [hclibrary@parliament.uk](mailto:hclibrary@parliament.uk) or by phone on x3666.

estions")) status:answered legislature:"House of Commons" session:17/19 x Search

New search | Advanced search | Popular searches  Exclude full text

- Content type ?
- Legislative stage ?
- Legislation ?
- Legislature
- Session ?
- Date ?
- Member
- Tabling member ?
- Asking member ?
- Party ?
- Lead member's party ?
- Department ?
- Subject ?

Search within  ((type:"Oral questions") O...

Showing 1 - 10 of 7229 results (1.969 seconds) Results per page 10 View Default Sort by Date  
Export as: [spreadsheet](#) · [document](#) · [rank and tally list](#)  
Select: [all on page](#) · [toggle page selection](#) · [clear all selected](#)

[Personal Records: Disclosure of Information](#)

To ask the Minister for the Cabinet Office, whether the Government has the capacity to provide citizens with all the data it holds on them.

02 Aug 2017 | Written questions | Answered | House of Commons | 5301  
Asked by: Onwurah, Chi | Answered by: Caroline Nokes | Department: Cabinet Office

[Passports](#)

To ask the Secretary of State for the Home Department, how many passport applications processed by the Passport Office missed the three week target for processing in each month between 1 January and 30 June 2017.

01 Aug 2017 | Written questions | Answered | House of Commons | 5754  
Asked by: Hanson, David | Answered by: Brandon Lewis | Department: Home Office

[EU Nationals: Disability](#)

To ask the Secretary of State for the Home Department, how many EU citizens residing in the UK have a disability.

01 Aug 2017 | Written questions | Answered | House of Commons | 4350  
Asked by: Crawley, Angela | Answered by: Brandon Lewis | Department: Home Office

[Health Services: Reciprocal Arrangements](#)

To ask the Secretary of State for Exiting the European Union, with reference to paragraph 49 of his Department's policy paper entitled Safeguarding the position of EU citizens in the UK and UK nationals in the EU, published on 26 June 2017, what healthcare arrangements have been set out in EU Regulations and domestic law for UK nationals and EU citizens that the Government will seek to protect and guarantee.

31 Jul 2017 | Written questions | Answered | House of Commons | 5866  
Asked by: Blomfield, Paul | Answered by: Mr Steve Baker | Department: Department for Exiting the European Union

[Home Office: Brexit](#)

To ask the Secretary of State for the Home Department, how much and what proportion of her Department's expenditure has been identified as relating to its work on the UK leaving the EU in 2017-18.

31 Jul 2017 | Written questions | Answered | House of Commons | 5626  
Asked by: Williams, Hywel | Answered by: Brandon Lewis | Department: Home Office

## Popular searches: Members' contributions

Search for contributions made by Members during Parliamentary proceedings including oral question time. By default, this report will exclude contributions made by Members acting in the capacity of Speaker or Chair. Oral questions for which no answer has appeared in Hansard are also excluded.

[Popular searches](#)

### Members' contributions

Exclude Oral question time contributions?

Yes  No

Legislature

House of Commons  House of Lords

Chamber/Committee

All  Commons chamber  Westminster Hall

Session

17/19  
16/17 ^  
15/16  
14/15  
13/14 v  
12/13

Search

Note that as information systems have evolved over the years, approaches to storing information relating to Parliamentary material have also changed. This can mean that the data provided in rank and tally lists are not strictly comparable over time. Please see the Contents and Coverage section of the [About Search](#) page for further guidance. If you have a query about this service, please contact the Library via email to [hclibrary@parliament.uk](mailto:hclibrary@parliament.uk) or by phone on x3666.

1 time interventions") (-type:"Oral questions")) session:17/19 member\_ses:\* x Search

New search | Advanced search | Popular searches  Exclude full text

- Content type
- Legislative stage
- Legislation
- Legislature
- Session
- Date
- Member

- Leadsom, Andrea (249)
- May, Theresa (231)
- Javid, Sajid (106)
- Greening, Justine (94)
- Hayes, John (72)
- Rudd, Amber (69)
- Green, Damian (68)
- James, Margot (68)
- Gauke, David (58)
- Shannon, Jim (58)
- Grayling, Chris (57)
- Truss, Elizabeth (51)
- Hammond, Philip (48)
- Bryant, Chris (46)
- Burt, Alistair (46)
- Wishart, Pete (46)
- Fox, Liam (44)
- Gibb, Nick (44)
- Brine, Steve (41)
- Johnson, Diana (41)
- Davis, David (40)
- Newton, Sarah (40)

Search within  type:"Members' contributio...

Showing 1 - 10 of 6728 results (7.578 seconds) Results per page 10 View Default Sort by Date  
Export as: [spreadsheet](#) · [document](#) · [rank and tally list](#)  
Select: [all on page](#) · [toggle page selection](#) · [clear all selected](#)

[Future of the NHS](#)  
<p>That applause is on the record, and I am delighted that my hon. Friend takes that view.</p><p>We see this investment as backing the exemplar STP plans that have been published thus far, and we hope that other areas, whose plans are in less good shape, will be encouraged to look at those that have ...</p>  
20 Jul 2017 | Proceeding contributions | House of Commons | 627 c1104  
Member: Mr Dunne  
[show proceeding](#)

[Future of the NHS](#)  
<p>It was totally unguarded. I am extremely grateful, as I am sure all clinicians and all those who work in the NHS in Dorset will be.</p>  
20 Jul 2017 | Proceeding contributions | House of Commons | 627 c1104  
Member: Richard Drax  
[show proceeding](#)

[Future of the NHS](#)  
<p>I am not keen to hand administrative work to clinicians, but I recognise that there is a role for ensuring that senior clinicians are present and in charge of activity in wards. That is the experience I am seeing as I visit acute hospitals around the country: senior members of staff, normally coming ...</p>  
20 Jul 2017 | Proceeding contributions | House of Commons | 627 cc1103-4  
Member: Mr Dunne  
[show proceeding](#)

[Future of the NHS](#)  
<p>I am listening carefully to the Minister. Would it be naive to say that what we want to see is matron, in the form of Hattie Jacques, back on the wards and to hand far more administrative work, if that is the right phrase, back to clinicians, with whom it originally lay?</p>  
20 Jul 2017 | Proceeding contributions | House of Commons | 627 c1103  
Member: Richard Drax  
[show proceeding](#)

[Future of the NHS](#)