

Science in Parliament

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LHCb UK Student Meeting, 22nd November 2018



What is the UK Parliament
UK Parliament and Government
Legislation; Select Committees; Libraries
Who uses research at the UK Parliament

What is the UK Parliament?









House of Commons

House of Lords

The Monarch

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What does the UK Parliament do?

- Represents the people
- Checks and challenges the work of the Government (scrutiny)
- Makes and changes laws (legislation)
- Debates the important issues of the day (debating)
- Checks and approves Government spending (taxes and budgets)



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What is the UK Government?

The party or parties who can command the confidence of the House of Commons forms the Government.

The Government:

- runs public departments and public services (e.g. Home Office, NHS)
- proposes new laws to the UK Parliament
- is accountable to Parliament





Parliament ≠ **Government**

UK Parliament



- Commons, Lords and Monarch
- Holds Government to account
- Makes laws
- Enables the Government to raise and spend money

UK Government



- Some MPs and some Lords, chosen by the Prime Minister
- Runs Government departments and public services
- Is accountable to Parliament

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Policymakers



Wide range of people involved in making policy.

- Government
 - Ministers
 - Civil servants
- Parliament
 - MPs
 - Peers
 - Representatives at devolved administrations (National Assembly of Wales, Scottish Parliament, Northern Ireland Assembly)

The business of Parliament

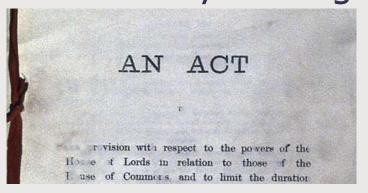


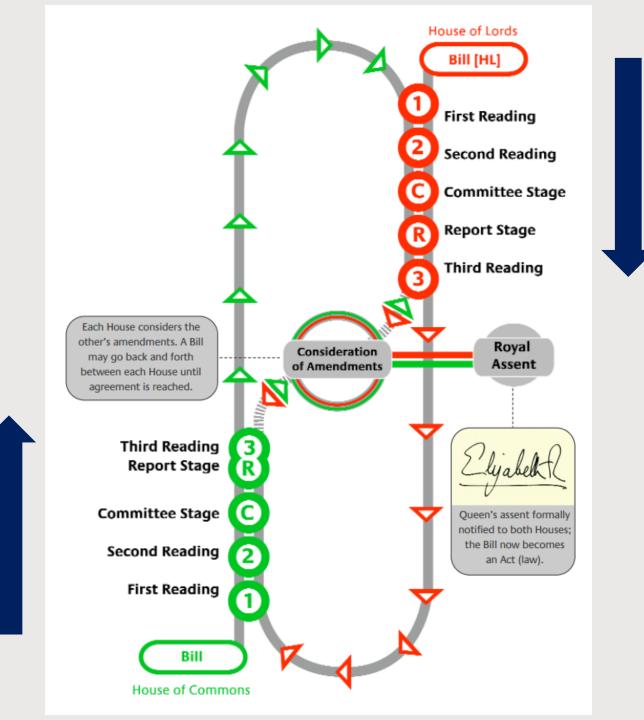
- Chambers
 - Debates
 - Questions
 - Statements
 - Legislation
- Committees
 - Select Committees
 - General Committees (legislative committees)





- Most new legislation is introduced by the Government
- All legislation must be scrutinised by both Houses of Parliament
- Members suggest changes ("amendments") at particular stages throughout the legislative process
- All Bills before Parliament can be viewed and tracked at <u>www.parliament.uk</u> – including Bill documents, explanatory notes, amendments, committee minutes and Library briefings









Select Committees

- Both Houses establish Select Committees to conduct inquiries and to produce reports on a range of matters, from the conduct of Government to specialist subject areas
- Invite evidence from witnesses
- Government must respond to Select Committee reports





Select Committees: getting involved

- Committees issue a "call for evidence"
- Committees also send out updates on Twitter
- Respond by submitting written evidence this may lead to an invite to give oral evidence
- Committees sometimes appoint a specialist adviser when expertise is needed to inform oral evidence sessions or shape a report. Advisers are usually academics/expert practitioners
- You could offer to host a visit for a Select Committee
- Suggest a subject for a Select Committee inquiry to the Clerk or to Members of that Committee



Commons and Lords Libraries

- Provide specialist impartial information and briefing service for MPs, Peers, their staff, committees and staff of the Houses
- Produce wide range of briefing material
- Work tends to be reactive and responsive to questions from Members, business in each House and current affairs.
- Briefings available online at <u>www.parliament.uk</u> under research publications



Who uses research in the UK Parliament?

House of Commons Select Committees

House of Commons Library

House of Lords Select Committees

House of Lords Library

Legislation – particularly Public Bill Committees

POST

MPs' researchers

Peers' researchers

All Party Parliamentary Groups



POST
Who works in POST: research teams, staff
What POST does: Horizon scanning, reactive advice, knowledge exchange, training
Fellowships at POST
Get involved with POST

POST



- Bridging research and policy
- Science in the broadest sense of the word
- To ensure that the best available research evidence feeds into the legislative process and scrutiny of Government







- Early 1980s: The office was first suggested
- 1989: POST was launched (with charitable funding)
- 1992: POST was adopted as a Parliamentary body (subject to regular reviews)
- 2001: POST was established as a permanent institution (funded by Parliament)

POST's research teams



Biological sciences and health





Physical sciences and computing

Energy and environment





Social sciences









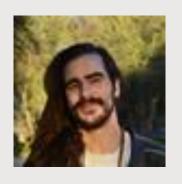
































- Partnering with academia and industry to ensure the best available evidence is incorporated into policy
- Organising timely advice to be presented to Parliamentarians
- Synthesising research evidence into summaries accessible to policy-makers
- Training the next generations of policymakers and policy-wise researchers

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What POST does: activities

UK ParliamentPOST

- Horizon scanningPOSTnotes
- Reactive advice to Committees and the Libraries
 - POSTbriefs
 - Ad hoc assistance
- Knowledge Exchange external to Parliament
 Brokering service academia, industry, learned societies
 Training and informing
 Widening participation
- Knowledge Exchange internal to Parliament
 Embedding research evidence use & appraisal

 - Events
- TrainingPOST Fellowships
 - Academic Fellowships



Horizon scanning

UK Parliament POST

POSTnotes

- Primary, flagship product
- Topics: less evidence, more controversial, developing areas
- Horizon scanning (1 year)
- Interviews to support literature (more grey, less primary/secondary)
- 4 pages at present
- Chosen/prioritised by POST Board
- Main customers: all internal & external
- Extensive peer review



Online Information and Fake News



engines and social media platforms are an increasingly popular way of accessing news and information. This note considers how people access news online, how algorithms (sequences of instructions) and social networks influence the content that users see, and options for mitigating any negative impact.

In 2017, the proportion of UK adults consuming news online exceeded those who watched news on TV (74% versus 69%). Meanwhile, a smaller proportion read news in print (41%), compared to in 2013 (59%), 12 Social media platforms (F1)(602) and Internet search engines can help users to find the items that they consider most interesting or useful by filtering content. Some suggest that filtering could lead to users seeing only content that conforms to their preexisting opinions. 34 Others argue that users still see more diverse views than, for example, via print, TV or radio. 17 Internationally, politicians, journalists and others have raised concerns about false information online, and the effect that it available data is limited. 19 may have on political events such as elections. 63 This POSTnote explores:

- how people in the UK access and share news online
- the effects of filtering
- the factors driving take news and its effects approaches to addressing the challenges.
- Accessing and Sharing News Online

People can either access online news directly - via websites or applications (apps) - or through intermediaries such as social media platforms, Internet search engines and news aggregators (that select and present news from multiple sources). Content is created not only by traditional news. providers, but also by other organisations and individuals.

Overview

- Social media platforms and Internet search engines have made it easier to produce, distribute and access information online.
- These technologies, combined with user behaviour, filter the content that users see. Some studies suggest that this limits users' exposure to attitude-challenging information, while others argue that users still see a wider range of information than offline.
- Online fake news has the potential to confuse and deceive users, and is often financially or politically motivated.
- ■UK efforts to address these issues are largely led by industry and focus on fake news. They include better identification, fact-checking and user education.

The Reuters Institute and Ofcom found that the websites or apps of TV and radio companies are the most popular source of online news in the UK. 1.10 For instance, 47% of UK adults who accessed news online (surveyed in 2017) said that they had used BBC News online in the past week." People are increasingly using social media to access news in the UK; 1,11 41% of adults asked in 2017 reported using it as a source for news in the past week, up from 20% in 2013.13 Search engines are also key for finding news; 36% of adults who accessed news online in 2016 did so via a search engine, up from 18% in 2013.10/2 Children's online news consumption may differ from adults', however the

Facebook (39 million UK users) and Twitter (22 million UK users)14,16 are the most popular social media sources of news in the UK (Table 1). They have two main features that provide content

- a personalised list containing material from the user's connections (e.g. friends, followers or "liked" pages):
- a list of popular (trending) topics from the site (Box 1).

Internet Search Engines

Globally, Google, Bing and Yahoo are the most-used search engines, with estimated monthly visitors of 1.6bn, 400m and 300m respectively. 16 Users typically type a query into a computer (or ask a question via a voice-activated platform

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Reactive advice to Committees and the Library

POSTbriefs

- Topics: yield to systematic review and evidence synthesis
- Responsive
- Few, if any, interviews
- Digital first
- Primarily to support committee inquiries, secondarily to support library sections
- Main customers: committees
- Academic-style peer review





Knowledge exchange – external to Parliament

The Knowledge Exchange unit supports the exchange of information and expertise between researchers and the UK Parliament.

- Contact, advice and training for academics, including regional event series
- Facilitating and strengthening engagement between UK Parliament and diverse groups of researchers
- Online resources: <u>www.parliament.uk/</u> <u>research-impact</u>
- Liaison with Research England on REF and KEF



Research impact at the UK Parliament

Everything you need to know to engage with Parliament as a researcher.

What interests Parliament?



Why engage with Parliament?





Parliament and the Research Excellence Framework

Find out more about Parliament and the 2014 and 2021 Research Excellence Framework exercises.

UK ParliamentPOST

How Parliament uses research



Ways to engage with Parliament



What does the UK Parliament do?



Find out more about the role of Parliament.

www.parliament.uk/research-impact

How to guides



Training and events ber 22, 18

Academic fellowships



Get in contact with Parliament

Researchers' stories



Find out first-hand what it's like to engage with Parliament from academics who have done so.



Knowledge exchange – internal to Parliament

POST events provide a forum for researchers and parliamentarians to meet, exchange knowledge and ideas and form relationships

Recent topics include:

- The science of managing UK fisheries
- Why scrutinising evidence matters
- LGBT+ health inequalities
- Sleep and health
- Rise of experimental Government





Training

POST Fellowships:

PhD students Run with Research Councils, learned societies and charities

Parliamentary Academic Fellowship Scheme:

Specific research projects issued by Parliament, or project proposed by academic

Currently under evaluation – see webpage for next opportunities

House of Commons/PSA Academic Fellowship Scheme: Senior political and social scientists researching Parliament Currently under evaluation – see webpage for next opportunities

https://www.parliament.uk/academic-fellowships



POST Fellowships



- www.parliament.uk/postfellowships
- Fellows have gone on to policy jobs in government, research councils and learned bodies.
- Fellowship placements also available at SPICe, Welsh Assembly, NI assembly (RaISe), Royal Society, Centre for Science and Policy, GO-Science, Government Departments (DfE, DCMS, Home Office etc), Academy of Medical Science, Food Standards Agency, Public Health England, Scottish Environment Protection Agency, Sentencing Council, Youth Justice Board for Eng and Wales, HM Courts and Tribunal Services...



The Application Process

- I applied through the <u>RCUK policy internship scheme</u>
 - STFC only funds POST and the Government Office for Science
 - 1 STFC fellow per year at each
- Application deadline ~August, interviews ~October
- Material needed
 - Sample POSTnote (2 page limit)
 - CV
 - Answers to application questions (~1,500 words)
- Time consuming application <u>start early</u>
- Happy to offer advice to potential applicants

My POST Fellowship



- I worked at POST for three months from April to June 2018
- My POSTnote topic was the security of UK telecommunications





The Topic











Researching and Writing



- Reading press releases, Government reports...
- 2. Interview 20-35 experts
 - Lead Government department, regulator, industry experts, academics...
- 3. Write and (re)write
 - Balance the views of different organisations
- 4. Peer review
 - Send the note to experts for comment



Acknowledgements

POSTnotes are based on literature reviews and interviews with a range of stakeholders, and are externally peer reviewed. POST would like to thank interviewees and peer reviewers for kindly giving up their time during the preparation of this briefing, including:

- British Geological Survey*
- Broadband Stakeholder Group*
- BT*
- Centre for the Protection of National Infrastructure*
- Civil Contingencies Secretariat*
- David Happy, Telint*
- Department for Digital, Culture, Media & Sport*
- EE*
- Electronic Communications Resilience and Response Group*
- European Subsea Cables Association*
- Institution of Engineering and Technology*
- International Cable Protection Committee*
- International Telecommunication Union*
- John Stonehouse, Aurum Globe*
- Met Office*
- National Audit Office*
- National Cyber Security Centre*
- Ofcom*
- Openreach*
- Professor Alwyn Seeds, University College London*
- Professor David Hutchison, University of Lancaster*
- Professor Mischa Dohler, King's College London*
- Professor Rahim Tafazolli, University of Surrey*
- Professor Timothy O'Farrell, University of Sheffield*
- Rishi Sunak, MP*
- Royal United Services Institute*
- TalkTalk*
- TechUK*
- Three*
- Vodafone UK*

The End Result

- Publicly available on Parliament website
- Featured in the National Cyber Security Centre <u>Weekly Threat Report</u>







POSTNOTE

Number 584 August 2018

Security of UK Telecommunications



Telecommunications networks are essential for the day-to-day running of UK businesses and public services, but concerns have been raised recently over their security. ¹⁻³ This POSTnote outlines the threats to these networks, the ability of networks to cope with disruption, and possible protective measures.

Background

UK businesses, government agencies and other bodies are dependent on telephone and internet services provided by telecommunications (telecoms) networks to carry out daily operations. *Telecoms networks also provide services integral to the health and social life of the population. *5 The Government has recognised telecoms as one of 13 critical national infrastructure (CNI) sectors — a term signifying infrastructure that is pivolal to the functioning of the UK.6

The UK's Chief of the Defence Staff recently highlighted the threat posed by submarines to undersea telecoms cables, following reports of an increase in Russian submarine activity near the cables: A Undersea cables connect different countries together, transmitting an estimated 97% of all global communications and over \$10 trillion of financial transactions every day. \$1.0 UK telecoms companies are also increasingly targeted by cyber-attacks, with 66% reporting a rise in attacks targeting personal data between 2016 and 2017. I In addition, the CEO of the National Cyber Security Centre confirmed that there have been Russian cyber-attacks against UK telecoms companies. ¹²

The Government classifies threats to CNI as physical, cyber or personnel-related. ¹³ Physical attacks occur when damage is caused by physical means, for example if cables are cut by an attacker. Cyber-attacks occur when a computer system is hacked or disrupted. Personnel threats arise from

Overview

- Telecommunications networks face a range of physical and cyber threats that may be malicious, non-deliberate or naturally occurring.
- Concerns have recently been raised about the security of the undersea cables that carry 97% of global communications.¹
- The Communications Act 2003 requires telecommunications companies to maintain the security and resilience of their networks.
- While there is no mandated security and resilience standard for telecommunications, Ofcom provides guidance on how companies can meet their obligation.
- Resilience methods include investing in duplicates of infrastructure and installing back-up power supplies.

employees who create opportunities for physical or cyberattacks through their legitimate access to an organisation's assets. This note focuses on physical and cyber threats to telecoms networks, covering:

- the infrastructure of public telecoms networks and how they are connected internationally:
- physical threats to networks and measures in place to address them; and
- cyber threats and measures to mitigate them.

Telecommunications Infrastructure

Telecoms networks rely on infrastructure to connect users to others in the UK and internationally. Networks comprise two main parts: a 'core' and an 'access' network. 'A core (or 'backbone') network connects telecoms networks and carries large votumes of communication data across the country. There are several different but interconnected core networks owned by BT, Virgin Media and others (including mobile operators).⁴ Core network infrastructure can also be provided by third parties. '413' Access networks connect customers to the core network in a local area, either via cables or wirelessky using radio sionals. ⁴

Fixed-Line Networks

Fixed-line networks provide telephone, TV and broadband internet services (<u>POSTnote 494</u>). Fixed-line core networks (such as those owned by BT and Virgin Media) are made up of telephone exchanges that contain a system of switches to

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Perks

UK Parliament
POST

- Tour of Parliament
- Free roam of Parliamentary estate
- Debates in the Commons or Lords
- Prime Ministers Questions
- Secret entrance to Parliament from Westminster tube
- Many (taxpayer subsidised...) bars and restaurants
- Accommodation and travel expenses



Reflections



- Giving up research for three months can be daunting
 - Ongoing roles like liaisons need to be covered or given up
 - Hard to fit around LTA
 - Good if waiting on MC or stripping
 - Getting back into research was surprisingly quick and easy
- No strings attached way to find out what it's like to work in policy
- Opens doors to policy and science communication jobs





- Apply for a Fellowship
- Contribute to a current note
- Sign up to our mailing list
- Follow us on Twitter: @POST_UK
- Propose a POSTnote
- Attend an event
- See www.parliament.uk/POST for all of the above

Contact us



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