Technology and Regulation

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making communications work for everyone

Contents



Introduction

- 2
- Ofcom as a technology-driven regulator



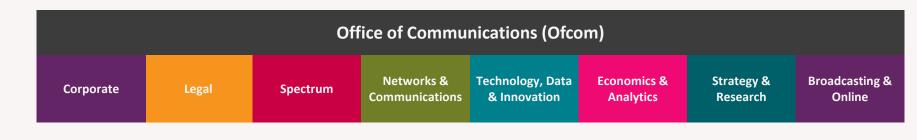
How has NICC addressed the regulatory agenda to date?



Where do we go from here?

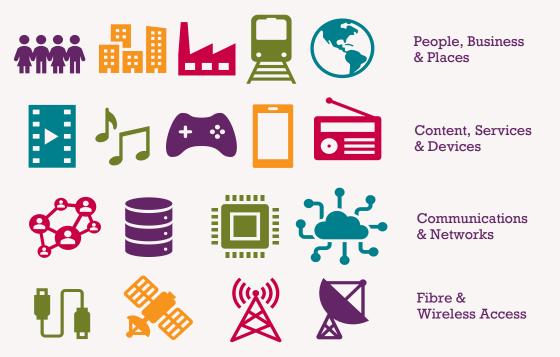
Ofcom as a technology-driven regulator

About Ofcom



Our themes for 2022/23

- Investment in strong, secure networks to ensure high-quality & reliable broadband & mobile networks
- Getting everyone connected so nobody is left behind as services evolve
- Fairness for customers & tackling scams
- Enabling wireless services in the broader economy for the benefit of everyone in the UK
- Supporting & developing UK media helping it to evolve & meet the needs of viewers & listeners
- Serving & protecting audiences from potentially harmful/offensive content, while taking full account of freedom of expression
- Establishing regulation of online safety for our new regulatory responsibilities as the Online Safety Bill proceeds through parliament



The evolving role of technology and data in Ofcom – our vision

The Technology, Data & Innovation Group drives a tech-first regulatory approach in Ofcom, recognised externally as thought leaders

The evolving role of technology and data in Ofcom – our teams

Technology Data and Innovation Group

Data Innovation Hub

- Experimentation and testing innovative ways of working with data
- Prepping large data sets for analysis
- Using advanced techniques to extract insights from complex datasets
- Working with external stakeholders and peers to enable greater collaboration and data sharing

Comms and Media Tech

- Providing technical expertise to policy activities in relation to underlying communications or media delivery networks
- Undertaking own-initiative
 research to identify key
 communications technologies
 with implications for how we
 regulate or for how services are
 delivered to users

Trust and Safety Tech

- Identifying, leading, and influencing the development of technologies, operational standards (technical and process standards)
- Actively promoting innovation that provides trust and safety for citizens online, while influencing service design.

Tech Policy

- Equipping Ofcom to ensure our regulatory approach is driven by technology and data
- Developing our own policies or positions relating to the use of technology and/or data and respond to strategies or policies developed by other bodies, such as governments and DRCF

Wider community of tech and data colleagues working in policy teams

How has NICC addressed the regulatory agenda to date?

NICC has provided key enablers for the development of a competitive telecoms market in the UK

NICC's own initiatives and Ofcom-commissioned work items have been vital.

- NICC has been the technical authority for interconnection and interoperability standards which have supported the development of competition in telephony and broadband services in the UK.
- NICC's current programme of work on initiatives and critical issues mentioned below also reflects their regulatory focus.

| Move to All IP | Stopping Nuisance Calls and Texts | Emergency Call Location | Network Security and Resilience |
|---|---|---|--|
| Migration from legacy telephony systems to IP based telephony. Developing VoIP interconnect guidelines based around IETF SIP standards. Addressing issues associated with services such as 'Telecare' alarms. | Investigating 'CLI authentication' to ensure trust in telephone calls. Successful guidance on blocking of inbound international calls with 'spoofed' UK Numbers. | Ensuring accurate caller location can be provided to the emergency authorities to align with developments in voice technology. Addressing issues on routing of 999/112 calls across IP based telephony networks. | Enabling minimum security standards for interconnecting CPs. Improving 'overload' control to prevent network outages. |
| making communications work for everyon | | | |

Where do we go from here?

How can we best work together?

NICC board is reviewing how it interacts the with Ofcom, DCMS and NCSC We need to be clear about where priorities lie Should we implement a new framework which codifies working arrangements between Ofcom and NICC?

We need to consider if NICC can play a part in addressing how the technical standards obligations in the Ofcom General Conditions should be adapted post-Brexit. What can we do collectively to address the resourcing gap - do we need to reset expectations about existing industry contributions and review how we can broaden the range of contributions from the wider industry?

End

Appendix (Supporting slide on Network Security)

Network Security (Future Focus)

NICC and their support to Ofcom and the industry

Current State of Play

- NCSC, DCMS and Ofcom interact in security standardisation. Typically this is in four key areas ETSI, 3GPP, IETF and ITU.
- This takes time and resource (something of limited quantity) and this constraint drives behaviours such as:
 - Not enough interaction from industry or focus from government.
 - Centre of gravity forming around places where the work actually gets done, and maintained.
- For Telecoms Security, ETSI and 3GPP are the focal points for this critical mass (GSMA to some extent but out of scope here).

Some questions to ask

- Were NICC to propose activity in the area of security, will it be duplication or ground breaking?
- Is it the right place to achieve persistent effect i.e. vendors taking notice, cost neutral and supportive to adoption?
- Can the activity be maintained over the lifetime of the work item/standard? A key challenge for any work.

Given the questions, a focus on security standardisation being done within the centre's of gravity would be the default point but a view should be taken as to how NICC might support this especially where it has an impact on existing NICC areas.