

BBC Vision for the Future Internet PPP

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BBC R&D Overview

- BBC Research & Development:
 - 150 staff (including 120 research engineers)
 - Budget of c. £13m per annum, of which £1m is revenue from licensing of IPR and collaborative projects
 - Federated organisation across two laboratories
 - R&D North (currently BBC Manchester HQ moving to Media City UK Salford Quays)
 - R&D South (Centre House at the heart of the BBC in London W12)
- Part of Future Media & Technology
 - Director of FM&T – Erik Huggers
- Research is enshrined within the BBC's Charter to
 - Maintain the BBC's position as a centre of excellence for R&D in broadcasting and related technologies
 - Development of “open standards”

The role of BBC R&D

- To challenge the accepted thinking - *Research*
- To change through implementing new technologies – *Development*.
- Early warning system: creating options to mitigate future risks
- Problem solving “army”: ability to apply key resources, expertise and knowledge
- Maintaining the BBC’s sphere of influence both within the UK and internationally.
- Technology seen as the ‘enabler’ for:
 - new services, new functionality, increased efficiencies
- To facilitate the BBC’s strong commitment to partnerships within our industry through the research, development and deployment of novel technology.
 - EU and UK Technology Strategy Board collaborative funded projects.
 - Targeted partnerships with academia and industry.
 - Contract research and PhD studentships.
 - Sharing our research assets to help fulfil our public service remit – Open Standards.

A few of our key achievements... to date!

- 1951 – World's first TV standards converter
- 1962 – First colour transatlantic TV transmission
- 1965 – First tests of PAL colour TV transmission
- 1968 – Standards converter used for Mexico City Olympics
- 1969 – BBC1 starts colour transmissions
- 1971 – World's first demo of digital stereo audio recording
- 1972 – CEEFAX launched
- 1988 – RDS launched
- 1990 – First trial of DAB
- 1991 – NICAM stereo launched on BBC2
- 1995 – DAB launched
- 2000 – World's first digital radio camera demonstrated at NAB
- 2002 – Freeview launched
- 2007 – HDTV trial
- 2008 – Freesat launched
- 2008 – DVB-T2 Specification finalised, world-first to have signals on-air (29th June!). Freeview HD has just launched using this technology.
- 7 Queen's Awards + 4 Emmys

Creating the Future Internet of Europe together – BBC's Vision

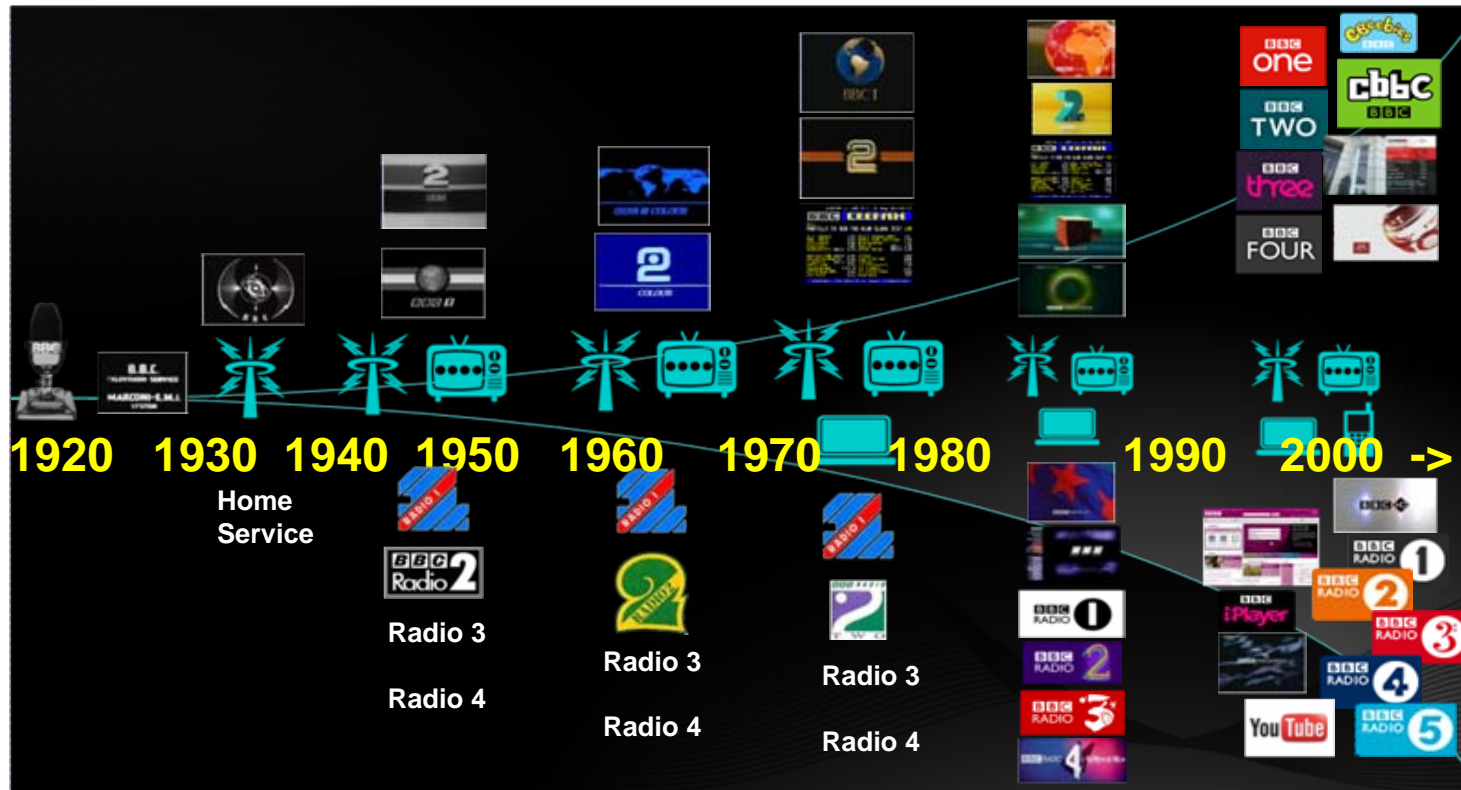


Create a large-scale, pan- European Content platform to unlock Europe's potential for creation, search, viewing, exchange, contribution and distribution of live and archived, digital content and build innovative services for future economic growth

This involves creating and demonstrating

- **The Network:** Networks and smart distribution systems with access to media backbones and broadcast networks as part of the Future Internet topology
- **The Content, Interfaces/APIs & Services:**
 - Smarter Content including large-scale archive sets and information for enhanced interactive, personalised, participatory hybrid services, across different networks and multiple platforms, including mobile, online and 3D
 - Open interfaces and APIs for a consistent and engaging user experience and to enable 3rd party applications and SME growth, including from other mainstream web partners

Content and Networks are interlinked and BBC has capability and expertise in both



BBC is both an editorial and engineering organisation and the value that we create and the problems that we solved during our history are where these have come together – taking a holistic end-to-end approach to content/service creation, delivery and consumption

BBC expertise, capability and possible contribution to System Track

Our expertise

- Technical experts with track record in successfully
 - developing, prototyping and launching digital platforms and services
 - leading and contributing to the development of open standards
 - working in collaborative international projects and partnerships
- Proven track record of end-to-end system development of delivery platforms and services, including on-line, digital TV and interactive services
- Track record in delivering innovative solutions across usage areas (e.g. 1978 Queen's Award)

Our research infrastructure

- Digital content services and platforms test-beds for prototyping and demonstrations

Our potential contribution

- Networks and distribution systems
- Trial infrastructure for proof of concept and large scale trials
- Access to intranet media backbones as part of future internet topology
- Access to broadcast networks as part of future internet topology

BBC expertise, capability and possible contribution to Content Usage Area

Our expertise

- Proven expertise in new media content production & management systems and their requirements
- Proven track-record developing open standards, interfaces and open APIs for digital content
- Leading and contributing to system demonstrators, test-beds and trials
- Technical Teams with expertise working in innovative content production and user-experience trials

Our research infrastructure

- Media Content and service prototyping facilities and access to real-world content for trials
- User-experience laboratory, behavioural science test facilities and expertise
- Digital content archiving and management of test-bed facilities

Our potential contribution

- Large-scale editorial demonstrators across Europe including cross-border, common themed programmes along our educate, entertain and inform public remit (e.g. big sport event, environment and innovation in Europe)
- Hybrid services that utilise different networks in synchronised propositions
- Large-scale archive data sets
- Open interfaces and APIs for consistent and engaging User experience
- Interfaces and APIs to enable 3rd party applications, including SMEs and other web partners.

Key, overarching principals and FI PPP Governance - BBC perspective

- FI PPP should build on Open standards and interoperable services
- There are requirements around accessibility to ensure that content and services are open and are widely and easily accessible to and usable by all sectors of the community, including the disabled and the elderly
- Any open social network interface should consider issues of trust
- Governance, DRM and cross-border licensing are certainly crucial to consider, and whilst a practical and pragmatic, immediate support as part of the PPP is welcome, there needs to be a rethink about the rules, together with key stakeholders including broadcasters and other industry players in the context of the debate on copyright review and regulatory framework

Improve Clarity on FI PPP Management, including

- Overall Programme Management
- IPR management across FI PPP projects and phases
- Success Criteria and risk management of cross-project and cross-phase delivery

Thank You

Further contact details:-

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