



## **A Communications Review for the Digital Age Response from Research in Motion (RIM)**

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### **Introduction**

RIM welcomes the Communications Review and the opportunity to comment at this stage in the review process. We agree that the time is right for a wide-ranging review of the present legislation, given the tremendous rate of change since the passage of the last Communications Act.

We acknowledge the very clear and open way in which DCMS is proceeding with this review and intend to play a full part in responding and working with the government to produce an optimum solution to the communications policy issues the UK faces.

We particularly welcome the Review's emphasis on questions of spectrum. Although it is not clear at this stage whether that is a matter for any forthcoming Bill, it is clear that spectrum issues are of increasing importance as the number of smart devices continues to increase and user expectations grow. We have commented in particular on those issues below.

### **About RIM**

#### **Company Overview**

Research In Motion (RIM), a global leader in wireless innovation, revolutionised the mobile industry with introduction of the BlackBerry solution in 1999. The company was founded in Canada by Mike Lazaridis in 1984, while he was studying at the University of Waterloo, Ontario. Lazaridis, who invented the BlackBerry, remains co-CEO, based in RIM's global headquarters in Waterloo.

RIM now operates across 175 countries on over 550 wireless networks. It employs over 16,000 staff and has sold in excess of 150 million BlackBerry smartphones, making it the top-selling smartphone in the US and the number one smartphone in many markets around the world.

The company has achieved 200,000% internal growth since its IPO in 1996. In August 2009, Fortune magazine named RIM the world's fastest growing company following an 84% increase in its annual revenues to \$11 billion.

RIM invests approximately \$1billion per year (FY 2010) in R&D. Almost 5,000 of the company's employees work in R&D, with dedicated facilities in Germany, Canada, the United States and the United Kingdom.

#### **RIM in the UK**

The UK is RIM's second largest market in the world and the company's headquarters for the entire Europe, Middle East and Africa (EMEA) region are in Slough. RIM has over 1,000 UK employees based in Slough, Egham, Glasgow, and a Birmingham R&D facility. Flexible and mobile working enables a network of home workers to be employed across the country.



Research In Motion indirectly supports over 2,000 Independent Software Vendors (ISVs) through the BlackBerry ISV Alliance Programme, which provides technology developers and entrepreneurs technical advice and marketing support when they develop for BlackBerry.

The Alliance Programme drives innovation and creativity in the UK's digital industries, encouraging joint working between BlackBerry experts and other high-tech companies like the location-based application developer TrackaPhone.

BlackBerry Alliances also offer valuable support to technology entrepreneurs and small software companies. By providing not only technical resources but sales and marketing support, the Alliance allows expert and specialist companies to develop as businesses.

**Q1. What could a healthier communications market look like? How can the right balance be achieved between investment, competition and services in a changing technological environment?**

In principle RIM supports a lightly-regulated communications market which allows healthy competition, entrepreneurship and innovation to flourish.

One important part of a future market in communications is an active and competitive market in spectrum. In our view an active and competitive spectrum market would include:

- regulations that promote and do not impede the buying and selling of spectrum properties
- inappropriate, artificial barriers based on type of service, use or user have been removed
- ownership of spectrum properties change on a regular basis. This would include those within a service as well as those between services e.g. fixed spectrum being used for a mobile service and mobile for fixed<sup>1</sup>
- spectrum is not held for long periods of time without being used or used in an inefficient manner
- sufficient spectrum is available to meet the market demand
- evolving technologies which use spectrum in more efficient ways for both networks and user applications.

A healthy spectrum market is essential for a healthy communications market. RIM believes that it is critical that the UK government recognises its importance and develops policies that will enhance it.

A healthy communications market would be heavily utilised for government requirements and services. That investment will improve services for citizens, drive innovation, and enhance the long-term success of the UK telecommunications industry.

**Q2. What action can be taken to facilitate greater innovation and growth across the wider competition regime, and how can deregulation help achieve this?**

We have two observations on this question.

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<sup>1</sup> RIM is not suggesting that the oversight of services be removed or are irrelevant but rather that regulation be focused on orderly growth instead of by use or user. Traditionally services (in the ITU sense) have been used as a way to protect spectrum holders from interference – with convergence new ways must be found to protect spectrum holders.



First, as noted above, RIM is a major investor in R&D. Such investment is highly mobile in a globalised economy.

We therefore strongly support government efforts to promote UK R&D, as exhibited in the UK R&D tax credit, which should be kept under close review to ensure that it is fit for purpose and is genuinely achieving its goal of increasing and maintaining R&D investment in the UK.

Second, deregulation should help the markets (citizens and consumers) drive how communications services and therefore spectrum is used. Regulation, to the extent possible, should not be based on previous or future assumptions of service or technology. However appropriate regulation, including spectrum harmonisation, is still critical for orderly growth and innovation in the UK telecommunications industry.

**Q3. Is regulatory convergence across different platforms desirable and, if so, what are the potential issues to implementation?**

Convergence has, for some time, been an important part of RIM's technological and commercial realities. We believe that the pace of convergence is accelerating. This phenomenon is driven by several key factors, including:

- the online delivery of traditional broadcasting and film content
- a blurring within industry of the former bright-line distinction between legacy media markets and new media markets
- widespread broadband penetration and participation by all members of society
- the rapid uptake of end-user devices (including smartphone and tablet devices such as RIM's BlackBerry and PlayBook products) to access a full suite of communications, media, information and entertainment services
- the expectation that content should be available at any time and any place for entertainment, business and government.

These developments clearly imply the need for a more converged regulatory system.

**Q4. What barriers can be removed to facilitate greater exports and inward investment and make the UK more globally competitive in digital communications?**

This is a broad question which covers a number of factors which we can deal with in turn.

The first is a skills and education barrier. RIM depends on being able to recruit people with the right technical skills, which may be scarce in the UK. Part of that deficiency can be made up by stimulating a response from the education system. Our BlackBerry Academic Partnership programme is intended to help this process.

Second, we work with small businesses throughout the UK in order to enable them to act as suppliers to RIM and continued government support and engagement on this important area is vital to increase competitiveness. For our part, we are a partner in Start-up Britain and are working with Enterprise Nation to help entrepreneurs with advice and support.



As noted above, RIM indirectly supports over 2,000 Independent Software Vendors (ISVs) through the BlackBerry ISV Alliance Programme, which provides technology developers and entrepreneurs with technical advice and marketing support when they develop for BlackBerry.

Third, we will need from time to time to recruit skilled staff from outside the European Union. To restrict our ability to do so, as current government policy seems intended to do, does not mean that we instead employ UK staff with lesser or different skills: it means investment in R&D moves from the UK to other countries which have more flexible migration systems. That is presumably not an intended consequence of government policy.

Fourth, government intervention, both through investment in innovative on-line and mobile government services, and through spectrum harmonisation at European and international level, will stimulate a healthy and growing UK telecommunications market.

**Q5. What further market and regulatory developments would lead to widespread take-up of superfast broadband? What regulatory action would government need to take to make superfast broadband more readily available in a) urban areas; and, b) rural areas?**

As the government has acknowledged, mobile and wireless broadband must be an integral part of any delivery of super-fast broadband. As such our input to question one is relevant to this point: there should be as few barriers to the access of spectrum to meet demand for broadband as possible. Growth of mobile data services is extremely rapid - international traffic grew 2.6 times in 2010, and in 2011 mobile data internet traffic will exceed fixed line for the first time (source: Cisco Systems Mobile Data Traffic Forecast). In the UK, mobile data traffic grew by 240% between 2009 and 2010 (source: Ofcom).

We also note the important role that the migration of government services online will have in creating a market for superfast broadband. Government services should be in future digital by default. The market penetration of smartphones and tablets (some 16 million devices in the UK) is now such that the potential user base for government services which are accessible at any place or time is now enormous.

**Q6. What are the competing demands for spectrum, how is the market changing and how can a regulatory framework best accommodate any rapidly changing demands on spectrum and market development?**

Demand for spectrum is driven by the exponential growth in mobile broadband. Tablet computers, for example, generate five times as much data traffic as one smartphone (source: Cisco Systems). There is a strong possibility of a looming spectrum crunch as these demands increase and much more spectrum will be required to meet these demands.

However, there are a number of ways that technology can support more efficient uses of spectrum. Some of the newest network technologies for wireless broadband can improve the efficient use of spectrum dramatically if wider channel bandwidths are used. It is conceivable that these technologies will be able to support up to 100 MHz or more of spectral occupancy, in various increments. To achieve these promising efficiencies the government should look for ways to provide



spectrum in larger contiguous bandwidths. This could be supported through longer term refarming plans and in the choice of new bands.

User devices and applications also affect how efficiently network resources are used. Some user applications use half the amount of data that others use to provide the same service. The regulatory framework must be such that it does not preclude efficient technologies.

In order to continue the success of GSM in terms of economies of scale, global roaming and exports it is imperative that the UK place a high priority on aggregation and harmonisation of spectrum – both existing and new potential spectrum. The number of bands that will be expected to be supported in handsets is growing and will impact their size, cost, performance and the ability to roam. Fragmented and non-harmonised bands will increase this challenge (and will decrease the possibility of technology developed for them to be exported or capitalised on). While research and development has overcome many hurdles in supporting multiple technologies and bands, the costs and risks remain high for countries that do not address harmonisation.

Radio frequencies can often take many years to reallocate and are often being used by services other than for mobile voice and data. Therefore RIM promotes regulatory processes that provide for a competitive, open and fluid spectrum market. This would include any measures that allow for spectrum trading, selling, leasing or subdividing. We welcome the government's commitment to increased spectrum access in the future.

**Q7. How should spectrum be managed to deliver our growth objectives whilst also meeting our policy objectives of furthering the interests of citizens and consumers in relation to communications matters?**

See previous responses.

**Q8. How should the UK engage on an EU/International level in relation to spectrum?**

The UK is a leader in the use of spectrum and is well-positioned to take a lead at international level in driving for greater harmonisation, which will stimulate the domestic telecommunications industry as well as driving innovation and exports. It is critical that the UK provide the resources to lead in international organisations such as the ITU and European organisations such as CEPT and the European Union spectrum policy initiatives.

**(Q9. Is the current mix of regulation, competition and Government intervention right to stimulate investment in communications networks? – No response)**

**(Q10. Are there disproportionate regulatory barriers to investment in content? If so, what are they and how can increased investment in UK content production be encouraged? – No response)**

**(Q11: Public service broadcasting – No response)**

**Q12. What barriers are there to innovation in new digital media sectors, including video games, telemedicine, local television and education?**



RIM has worked with health service organisations to realize the benefits of telemedicine both in medical services (like midwifery and organ donation) and social care.

It is clear that the potential - both in terms of improved patient outcomes and efficiencies of service delivery - for further benefits to carers and patients is immense, but these results will only be seen when:

- health services are reconfigured so that patients can receive care in their home and on the move as they spend time with relatives and carers – this will mean fewer hospital-based services, and more community- and home-based care
- incentives are aligned so that commissioners and providers receive financial returns from their investments in telemedicine. Many financial incentives still favour hospital-based intervention over more community- and home-based preventative measures
- patients’ experience of telemedicine is improved, so that it is accessible wherever they may be, rather than seen as a ‘tether to their homes’ – this includes mobilising telemedicine connectivity.

**Q13. Where has self- and co-regulation worked successfully and what can be learnt from specific approaches? Where specific approaches haven’t worked, how can the framework of content regulation be made sufficiently coherent and not create barriers to growth, but at the same time protect citizens and enable consumer confidence?**

RIM has always been committed to working with industry partners, governments and regulators to ensure that content regulation inspires confidence among the public yet does not create barriers to the legitimate needs of adults to access content of their choice.

In general terms we support robust self- and co-regulatory systems which have the advantage of being flexible, based on a detailed knowledge of technical possibilities and limitations, and generally command public confidence. Statutory regulation may on occasion be necessary, but it frequently is unable to keep up with the pace of social and technological change.

[REDACTED]