Regulatory Impact Assessment

WIRELESS TELEGRAPHY

(LICENCE CHARGES)

JULY 2002

REGULATORY IMPACT ASSESSMENT (RIA)

1. Title: Proposals for consulting on the next stage of spectrum pricing for licences granted under the Wireless Telegraphy Act 1949.

1 (i)

This RIA has been published to support the consultation document: "Spectrum Pricing: Year Five Consultation". It concerns changes that will be made through the Wireless Telegraphy (Licence Charges) Regulations 2002 (the Regulations) proposed to come into force in July 2002.

2 (i) The issue and objective

Issue:

Using powers under Section 1 of the Wireless Telegraphy Act 1998 (the 1998 Act), the Secretary of State for Trade and Industry aims to continue the process of phasing in new pricing arrangements for radiocommunication licences by making new fee Regulations. The consultation document "Spectrum Pricing: Year Five" published by the Radiocommunications Agency in January 2002 details how the Agency determined pricing levels for the sectors covered in this RIA. Copies of the consultation document can be obtained from the Agency's website at www.radio.gov.uk or by contacting the Information and Library Service of the Radiocommunications Agency, Wyndham House, 189 Marsh Wall, London, E14 9SX, Tel: 020 7211 0502, Email: library@ra.gsi.gov.uk. The Regulations make changes to the fees in the following sectors with effect from July 2002 (including fee increases and decreases):

- Public Telecommunications Services (including Common Base Stations)
- Fixed Point to Point Links (including Scanning Telemetry)
- Programme Making and Special Events
- Satellite links
- Private Business Radio
- Maritime (Ship Fixed Licence).

Objectives:

The objectives of the proposed Regulations are:

- to further extend the principles of spectrum pricing into other appropriate sectors
- to increase the economic efficiency of the finite resource of the radio spectrum and
- where possible, to simplify the licensing structure.

2 (ii) Risk assessment:

Available radio spectrum is coming under increasing pressure as a result of growing demand. Access to spectrum is essential if economic growth is to be sustained. Cost-recovery based arrangements provide little or no incentive for spectrum to be used efficiently. They encourage inefficient hoarding and create self-perpetuating shortages. The sectors covered by these proposals are those in which actual or potential spectrum congestion is evident.

3 (i) Options

Now that the four previous sets of substantive fee Regulations made under the 1998 Act are in force, there are now two possible options that could be followed:

Option 1:

To bring forward new fee Regulations as proposed in the attached consultation document, based on spectrum pricing principles.

The impact of this option is detailed below.

Option 2:

To leave licence fees that have not yet been subject to spectrum pricing principles frozen at current levels

This option allows some further control of demand by regulation (e.g. by limiting the number of licences on issue or increasing spectrum sharing - but not altering any licence fees or not introducing any new licence classes). Ultimately congestion can be expected to impose its own limits on spectrum demand. The impact would be to make it increasingly difficult to introduce new services, and would prevent pricing being used as a tool to promote good spectrum management.

3 (ii) Issues of equity and fairness

The underlying concept of spectrum pricing (Option 1) is that fees should be based on the amount of spectrum used and on the value of the spectrum to users, not on recovering the cost of administering licences. Whilst this change will result in fee increases for some services, it will also result in fee decreases for users and services which either do not use much spectrum and/or use it efficiently. In some cases, users will have a choice between continuing with their current arrangements or switching to alternative radio services that have lower fees. Because the proposed fee increases are carefully focused on areas of congestion, or exclusive use of spectrum, most users who share spectrum in the many non-congested areas will enjoy reductions.

Where there are large increases, they have been phased over a number of years, so that business plans are not disrupted and users can mitigate the effects, e.g. by adapting their use of spectrum.

A common approach is being taken to calculate fees based on the use of standard building blocks (e.g. the Standard Tariff Units or link reference fees) for calculating the value of spectrum as a raw material in each band. This approach was explained in detail in the September 1999 Consultation Document "Spectrum Pricing: Implementing the Third Stage and Beyond".

4 (i) Identification of the benefits

The steps for spectrum pricing proposed in Option 1 will have the benefit of promoting efficient and effective use of the radio spectrum. Indeed the recent Independent Review of Radio Spectrum Management[1] noted that users will have an incentive to alter spectrum usage if they face a charge for the spectrum. These incentives will include examining the spectrum they need and potentially releasing unused spectrum or using less congested parts of the spectrum, with a lower spectrum price. Consequently, Option 1 will increase the economic efficiency of the radio spectrum, provide new entrants with access to spectrum to provide new innovative services, as well as allow existing users to expand and improve the quality of their radio service. Ultimately, Option 1 could lead to lower fees for many licensees and should facilitate customer choice.

The only benefit of Option 2 would be a short term saving of effort required in setting new fees and associated changes to information systems in the Radiocommunications Agency (RA). Freezing fees at current levels might be seen by many customers as a benefit, but it would be decidedly short term as, over time, customers would find that they were unsuccessful in obtaining any new services (because there would be no more spectrum to allocate). Additionally, there would be more degradation of the quality of assignments.

4 (ii) Quantifying and valuing the benefits

The benefits of **OPTION 1** (spectrum pricing) are:

- The proposals would encourage more efficient use of the radio spectrum, resulting in sizeable economic gains in terms of wealth creation, consumer benefits and jobs. More spectrum would become available for existing services to grow and for new services to be introduced. This in turn would have a direct impact on GDP and jobs and the resulting increase in competition would benefit consumers by leading to lower prices and increased choice and quality of products and services.

- The proposals would also encourage investment in more spectrally efficient technologies, which would result in additional spectrum becoming available for re–use, and would encourage the introduction of new services to both businesses and customers.

Fixed Links

RA proposes to take the fourth and final step in the spectrum pricing process by decreasing fees for efficient links and those in uncongested area. Fees in uncongested

[1] Review of Radio Spectrum Management by Professor Martin Cave p.102 para.7.10

areas will benefit from further reductions; fees in congested areas using mature technology will increase by between £25 and £775 per link. The overall impact to the customer of this change is likely to be neutral, if the same number of licences were to be issued. The planned deregulation of the 58 GHz Unco-ordinated band will remove the current £50 annual licence fee charged for each link (saving a range of operators some £25,000 per annum in total). As a deregulatory measure the Agency will replace an already light regulatory regime for the 58 GHz Band to a licence exempt regime as a deregulatory measure.

Scanning Telemetry

RA proposes to introduce fees broadly in line with those for the Private Business Radio sector. This is to ensure a fair and equitable pricing regime across all users of the radio spectrum and promote more efficient use of the radio spectrum. The effect will be to reduce fees for the water industry by £120,000. But, assuming that the gas and electricity industries retain all the exclusive channels assigned to them, this sector will see an increase of around £230,000 over the current annual fee levels for the industry as a whole. Non-utility users will see an increase from £40 per station to £410 for each channel used.

Satellite Links

RA proposes to introduce spectrum pricing principles to all satellite links which will place them on an equitable basis with terrestrial fixed links. The revisions being proposed will reflect industry requirements and stimulate more efficient use of spectrum. In the case of the proposed new Network licence product there will be significant reduction from current fee levels.

Public Telecommunications

RA proposes to complete the phased increases for the UK, Channel Islands and Isle of Man cellular telephony operators and other public mobile operators. This will better reflect the value of the spectrum used, encourage spectrum efficiency and promote the use of more spectrally efficient technologies using fewer channels. Fees will increase to reflect national exclusive use of spectrum. RA also proposes to implement the final phase of increases for Common Base Stations but also proposes to introduce some changes to address specific issues on a band-by-band basis e.g. redefining areas from congested to non-congested and reviewing the discount to take account of shared use. This will results in some decreases in fees.

Programme Making and Special Events

For the programme-making sector, RA proposes to replace the current Request Channels, known as “season tickets”, to a fixed fee carnet system named “Multi Use Type Channels 1 and 2”, which will allow customers to predict their costs more accurately.

Private Business Radio

Spectrum pricing has been introduced to most of this sector on a rolling basis since 1998. RA has simplified the licence classes to aid customer understanding and fees generally have been reduced apart from in heavily congested areas. The proposals for this sector are therefore minimal:

- the phased increase in fees for Road construction licences to £2,000;
- for UK General simplex channel RA proposes to introduce a flat rate three yearly licence for access to a number of pre-assigned frequencies;
- RA also proposes to introduce a Private Business Radio Channel Access procedure for the transmission of data messages, which will allow the Agency to maintain specific grades of service through improved assignment methods.

The overall impact of these changes is expected to be a small increase in fees for Road Construction licensees reflecting national coverage.

Maritime

RA proposes to introduce a new five-yearly Ship Fixed radio licence for SOLAS vessels to match the five-year cycle for other regulatory requirements. This will be a deregulatory measure.

OPTION 2 Freezing fees might be seen at first sight to be a benefit by some businesses. However there would be no long-term benefit to the management of the UK spectrum, or consequently to the UK economy, and therefore no value that can be quantified. Option 2 would impose costs on the economy in terms of economic benefits foregone, would also result in less choice for customers to review their services and decide to change to other, more efficient and therefore cheaper services. Freezing fees would not take into account the rapidly changing demand for spectrum and could deny efficient users and new entrants access to spectrum.

5(i) Business Sectors Affected

The proposals affect a wide range of different uses of spectrum, from programme makers to large national operators of mobile telephone networks. The following text summarises the sectors affected by the proposals:

Fixed Links- provide the point-to point wireless infrastructure for about 300 operators of major wired or wireless networks, including fixed and mobile telephony or broadcasting, and a few private networks for major industries.

Scanning Telemetry- provides telecommand and data communications for the water, gas and electricity industries and also non-utility industries. Around 60 licences have been issued in total to a wide range of operators.

Public Telecommunications including Common Base Stations- covers networks ranging from mobile telephony services to more specialist data networks targeting mobile business needs. About 30 licences are issued to public operators and over 900 to specialist common base station operators who provide community business radio subscriber services (e.g. small businesses such as delivery services).

Satellite Links- provide the link between an orbiting satellite and the earth. They are used by major international broadcasting and telephony companies to enable global access to news events, and programmes as well as providing international telephone communications.

Private Business Radio- covers virtually every sector of the economy and public service ranging from the smallest to the biggest firms and organisations. There are over 55,000 current licences ranging from utilities to the health services, from transport to large and small industry, security to retail and many other types of business. Typically, a utility might have a national or regional network; a taxi firm or local baker might have a wide area system; and a supermarket might have an on-site system at each store.

Programme Making and Special Events- covers the television broadcasters, organisers of major events such as the British Grand Prix and the Grand National as well as major cultural events. This is a very dynamic and wide-ranging sector of radio.

Maritime Sector- covers maritime safety of life and distress radio use and leisure activities.

5(ii) Compliance cost for a 'typical' business

Additional compliance costs will arise from the fact that increased licence fees will be payable by some spectrum users for multiple use or for the use of exclusive or congested spectrum. Charges will be kept to the minimum required to achieve efficient use of the radio spectrum, and increases will vary considerably according to each individual use of radio. However licence fees are usually a small component of the running costs faced by most businesses.

The only significant increases are for public telecommunications sector; in the data and paging licence classes (to reflect the economic value of this sector). The increases are around £1 million for 2002/2003 if they keep the same amount of spectrum. Common Base Station operators will see increases in congested areas although these areas are being redefined as non-congested. Scanning Telemetry users will see some increases in fees to broadly match fee levels in the Private Business Radio sector. Details of the full impact of these proposals were submitted to Parliament in the Cost Compliance Assessment that accompanied the passage of the Wireless Telegraphy Act 1998. The fixed links sector will see price increases for mature equipment but also decreases for efficient technology and the overall effect will be neutral. Satellite Earth Station operators will generally see their fees fall by around 50%.

Generally, all other sectors and those radio users in non-congested areas will have a reduction in their overall fees.

5(iii) Total compliance cost

Total cost compliance for the year 2002-2003 will be £1.3 million. This figure should be realised should customers renew their existing licences using the same amount of spectrum with the revised fee levels.

6 Other Costs

The costs for implementing the proposals will be absorbed within the existing Agency expenditure plans. There is no change in Agency manpower as a result of these proposals; the work will be absorbed within existing staff complements under increased efficiency measures.

7. Competition Assessment

Option 1 is intended to have a pro-competitive effect on the sectors identified for new fee regulations (as noted in Section 2). These sectors use radio spectrum to ultimately provide various radio services to consumers. The new Regulations will increase competition to access spectrum, as well as competition in the supply of radio services. Competition in related markets is likely to be affected too, namely suppliers of equipment and suppliers of alternative services.

The markets affected consist of a number of firms of different sizes and market shares, although existing market structures are likely to change under Option 1. Further, the changes in the licence fees will affect some firms more than others. However as stated before, these changes will have the benefit of increasing economic efficiency of the radio spectrum. Users will have a financial incentive to examine their spectrum, release unused spectrum and provide existing users and new entrants access to spectrum to provide new and innovative products and services.

Option 2 could dampen current and future competition in the sectors outlined in Section 2. Freezing fees could encourage inefficient hoarding, raising the barriers to access spectrum, restricting the level of innovation and delaying the introduction of new services and products. As a result the demand for spectrum would continue to exceed the finite supply.

8 Summary and Recommendations

	Costs	Benefits	Result
Option 1 : Introduce Fees Regulations	£1 million for public telecommunication services. Scanning Telemetry will see total increase of £230k (to gas and electricity industries). No overall increase for fixed links. Overall effect on other sectors will be neutral.	Efficiency of better used spectrum having economic impact with a potential benefit of £1 billion for each new national network facilitated. Second step in removing distortions and unfairness in previously paying pro rata much less for spectrum than private users. Impact for fixed links worth £25 million for each 25% extra capacity released. A clearer licensing regime which will aid customer understand and encourage licence take-up.	Better use of radio spectrum as a national resource which promotes economic growth, consumer benefit and jobs. The package also provides more customer choice.
Option 2 : Freeze fees / services	No immediate cost to existing licensees. Spectrum will continue to become more congested and prevent the introduction of new services, with loss of GDP, consumer benefits and job prospects.	No new benefits likely and no fee reductions for efficient use.	Stagnating use of radio spectrum; reduction in spectrum quality; loss to the UK economy results.

Option 1 is recommended as the most effective means of promoting efficient use of the radio spectrum and that the recommendation is to make the Regulations.

9 Enforcement, sanctions , monitoring and review

The Regulations do not alter the statutory powers to act against the illegal use of radio. However, such action now needs to take into account the provisions of the EU Licensing Directive 97/13/EC, which provides the opportunity for the licensee concerned to make representations to the Agency before a licence is terminated, and also provides that the Agency must act fairly in dealing with licences and licence fees.

These proposals are part of an ongoing programme to introduce spectrum pricing principles to all sectors of radio use. In the Autumn 2000 pre-budget Report, the Government drew attention to spectrum management and the need to make the most use of the radio spectrum. It announced that the Government would commission an independent review to advise on spectrum management principles. The consultation paper “Independent Review of Radio Spectrum Management” by Professor Martin

Cave was published in June 2001. Individual responses to that consultation have been published on the RA website, and views are being taken into account in finalising recommendations. The Review is expected to be completed in early 2002 and it will be presented to the Government. The Government will consider its response (which is expected to be published) thereafter. In as far as the recommendations concern Spectrum Pricing, the Agency will need to decide on future implementation, but this will be without prejudice to any changes proposed for 2002 in this document.

Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed by the responsible Minister

Signature………………………….
Minister of State for E-Commerce and Competitiveness, Department of Trade and Industry

Date………………………………

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