

The Confederation of British Industry

Implementing Spectrum Trading

Introduction

1. The CBI welcomes the chance to comment on the Government's consultation on Implementing Spectrum Trading. Our comments are designed to complement those of other industry groups and individual companies, and should not be read as our view of every issue of importance to business. We aim to focus on the overall principals involved in implementing spectrum trading, rather than answering each of the questions on an individual basis. (This response does not comment on the 'Introducing Recognised Spectrum Access' consultation)
2. The CBI believes that implementing spectrum trading is a positive move for the communications sector provided that the Government's objective "**to promote opportunities to access spectrum for innovation and growth, to build a competitive and successful economy and enhance quality of life**" remains paramount. A simple spectrum trading regime could substantially enhance Broadband Britain, increase investment into the industry and create new revenue streams for businesses. If, however, Government allows other factors to predominate, or sees trading as a tax raising opportunity, the result could be detrimental to the development of the market. Rather than increasing the take up of broadband and encouraging innovation, the communications market could become uncompetitive and under-developed.
3. To guarantee the objectives are met, the Government and the regulator must ensure that the right balance is struck between flexibility and regulation. The regulator needs to oversee trading to ensure international harmonisation and prevent interference, but allow licence owners a degree of flexibility to trade and to some extent to innovate outside the reserved spectrum. To ensure this, the Government must consider the following areas:
 - **The harmonisation of spectrum:** the Government must ensure that spectrum trading does not result in poor harmonisation between spectrum use in the UK and internationally.
 - **The role of Ofcom:** Ofcom must take the role of a facilitator in spectrum trading, publishing data and acting as a 'referee, but not becoming too involved with market processes if regulation is to be minimised.
 - **The process of spectrum trading:** there are areas in the consultation which over-complicate the process of trading, including the staggered introduction of trading into different sectors, and others which lack detail. The Government must be sure that complexities and confusion are removed to give companies the necessary confidence to trade.
 - **Reserved Spectrum:** the Government must create a balance between on the one hand reserving spectrum for public safety requirements without hoarding, and on the other hand denying spectrum for potentially innovative technologies and services.

Harmonisation of spectrum

4. Whilst the advantages of spectrum trading are appreciated, the CBI believes that its introduction should be such that UK spectrum remains harmonised with Europe and the rest of the world. Manufacturers of wireless devices fear that decreased possibilities for harmonisation resulting from overly-intricate UK trading rules could result in reduced economies of scales and a consequent loss in market development opportunities overall.
5. To ensure that certain levels of harmonisation are safeguarded, the regulatory body needs to be careful in allowing 'change of use' in spectrum. Allowing spectrum owners to change the use of spectrum could result in a more dynamic market in the UK but could create serious barriers to harmonisation and market dynamics at a European and international level. It could also raise issues of potential interference which need to be managed carefully by the regulator. As a result we believe that further consultations are required before such a step is taken.
6. In the context of harmonisation it is important that trading is not introduced at a rate which puts the UK out of synchronisation with the rest of Europe. The UK Government is already in advance of other EU countries in consulting on implementing spectrum trading and it must ensure that it is not introduced at such a pace as to make it detrimental to the development of the international market. While it has been suggested that aeronautical and maritime spectrum could be traded in a 'second wave' for instance, it is essential that trading is done in the light of international frameworks, and is agreed between governments at an international level.

The role of Ofcom

7. In introducing spectrum trading, the Government is looking to reform the present regulatory environment in which spectrum may only be obtained from the Secretary of State or her contractors to a market-based process. However, there is still an important role for the regulatory body in this new market. Spectrum trading will follow the successful passage of the Communications bill and therefore regulatory duties will lie with Ofcom. A clear role must be defined for Ofcom, with the requirement for sector-specific regulation along side Competition Law.
8. Ofcom must publish an up-to-date and accurate database of existing spectrum, with information on which parts of the spectrum are being used, who owns it and if it is available for trading. It would also be useful if in the case of reserved spectrum it was indicated if it was (or parts of it were) likely to be released within the next 5 years. Such a public and transparent database is vital for those who currently want to trade spectrum, and enables effective future strategy planning. New technologies take a significant time to develop; if operators are to be innovative they must know what spectrum will be available when technologies and services are launched.

9. Ofcom should also put a review system in place to ensure that spectrum trading is optimised and the overall objectives of innovation and market efficiency are achieved. A review should attempt to identify increases in innovation as well as economic benefits, and to ensure that economic, planning and regional regulatory burdens are not being put on wireless operators in comparison to wireline operators. In many parts of the country where fixed broadband is economically infeasible for telecoms operators, wireless is one of the only possibilities, and any excessive economic burdens could prevent rollout in more rural areas.
10. Ofcom must also act as a 'referee' of last resort for traders to ensure that any trade conforms with existing harmonisation regulation and does not cause difficulties with interference. This will be a particular issue where spectrum is traded near spectrum which is required for *safety and emergency issues* and where any interference could have life or death consequences. It must also carry responsibility for related obligations such as emissions and any alleged health effects.
11. Ofcom, however, should not attempt to act as a broker/wholesaler of spectrum or a middleman between operators, as this may take away a degree of flexibility in, and create distortions of, the market. The role of brokers or wholesalers of spectrum should be taken on by market players who are knowledgeable of existing regulation. The consultation does not make any mention of such players and it is important that greater clarification is given to this, as it is a way in which the Government can encourage flexibility with a degree of regulation.

The process of spectrum trading

12. The process outlined in the consultation document for trading spectrum is over-complex in some areas but in others there are details omitted and issues that are over-simplified.
13. The consultation suggests six modes of ownership, and others concerned with extent and duration, but within these does not recognise dynamic modes of trading such as varying times of day and geographical regions. The large number of modes in itself is a clear indication that the process of spectrum trading is extremely complex and one which it is difficult to predefine. A more efficient method would be not to predefine the modes, but to allow buyers and sellers to decide on the details themselves with the proviso that they provide all relevant details to the regulatory body.
14. Introducing spectrum trading into all sectors of the market from the outset could upset the market, through flooding and increasing the likelihood of interference and dis-harmonisation. However, simplification could occur through the introduction of wholesalers and brokers of spectrum, allowing trading to be introduced to different sectors of the market in a shorter timeframe. Allowing combinations of different areas of the spectrum, would increase the creation of new broadband services and technologies.

15. Also of importance is the lack of detail from the Government regarding taxation and windfall treatment. These taxes should be kept at an absolute minimum. The introduction of such taxes undermines the principal that users should bear the opportunity cost of spectrum if they keep it unused, as they would also remain untaxed. The consequence of this would be that sellers would be less willing to offer spectrum, increasing prices for purchasers.
16. Further clarification is necessary concerning the trading of 'overlay licences'. Whilst the concept of overlay licences is in theory beneficial, as it could allow the re-farming of spectrum to better uses, there is also considerable scope for anti-competitive behaviour if a single entity is able to accumulate a number of licences. There needs to be strong safeguards put in place to protect incumbents, and measures introduced to judge whether new technologies can bring substantial benefits to consumers, rather than just additional income through taxation.
17. The idea of 'frequency trading units' also needs further consideration. Whilst packaging spectrum could ease the process of trading, it would be necessary for the units to differ according to spectrum frequencies, which could in turn add complexity. Further studies about how the units would be measured, and of their overall benefits, is necessary before such an idea is introduced.

Reserved Spectrum

18. The requirement to have reserved spectrum which cannot be traded is an absolute necessity, in order to provide enough spectrum for public safety services and other public policy goals. It is essential, in particular, that safety-critical elements of the spectrum are 'ring-fenced'. Without such regulation there is the risk that UK-based producers will face significantly higher costs for access to safety-critical systems than international competitors, making the running of such systems prohibitive.
19. However, there is a question of how much of that spectrum is strictly required and if any could be released in the future, or leased for an interim period to a commercial player. Flooding the market with 'released' spectrum from the public sector will be detrimental to the market and the pricing of spectrum, but the release of some unused spectrum in staggered amounts could encourage innovative technologies. The regulatory body should publish timetables to indicate when such spectrum might be released and if there is spectrum available to lease for an interim period. Short leases of spectrum could be of great value to new companies who want to provide a service on a short-term basis to gauge its commercial viability.
20. To ensure innovation continues, the regulatory body must also maintain the ISM unlicensed bands for those companies that have ideas but not necessarily the funds to buy spectrum. The spectrum should be considered as reserved spectrum in the same manner as that which is required for public safety measures. Maintaining this spectrum is as important for innovation as the introduction of trading.

Conclusion

21. The introduction of spectrum trading in the UK will allow greater market efficiencies and more innovation, although factors of dis-harmonisation with Europe and the rest of the World are an issue that the regulator must oversee. However whilst regulating harmonisation is important it must not deter the UK Government from working with other EU Governments and the ITU closely to ensure that the right balance is struck. In addition, the UK ambition of developing more efficient international spectrum markets should be proactively pursued with these partners.