

**Consultation on the Work Programme of the Radio Spectrum
Policy Group**

Response of:



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Summary

Vodafone welcomes the creation of the Radio Spectrum Policy Group (RSPG). It believes that it is imperative that the Group address the key policy framework issues that face spectrum management, rather than get embroiled at this time in discussion of specific short-term issues. Without a clear framework, industry cannot understand the likely future supply conditions for a strategically important asset. To that end.

Vodafone believes there are three priorities that the Group should begin debating:

- **2G licence renewal**, the terms for which will have significance across the mobile industry and could, if inappropriate, create substantial uncertainty and disruption in the market;
- **Spectrum liberalisation** whereby users would not be constrained in the use of technology under their licence except to the extent that technical limitations must apply because of interference concerns;
- **Spectrum trading and underlay rights**. Determining the extent to which property rights and individual authorisations should exist within a secondary market will have fundamental repercussions for proposed underlay technologies. Europe needs to be clear on the application of a secondary market.

Vodafone recognises that the RSPG has produced an indicative list of issues and a case can be made for all items on the list. However, the Group should not be allowed to spread itself too thinly across issues and needs to manage its resources to ensure the fundamental policy debates are aired. It almost goes without saying that spectrum users, such as industry and companies like Vodafone, should be included in the debate. The current transparency of the RSPG's work is heartening and the dedicated web site promises to be a useful tool for inclusive debate.

Introduction

The Radio Spectrum Policy Group (RSPG) promises to be an important forum in which significant policy issues affecting the supply and use of an economically valuable resource, spectrum, can be debated. Vodafone welcomes the opportunity to provide comment on the proposed work programme of the RSPG. This consultation and the excellent public web site produced for the RSPG are encouraging indications of the transparency in which the policy debates of the group will proceed. Vodafone stands ready to assist policy makers in their deliberations and to participate in any sub-working groups should that be helpful.

Scope of the RSPG

Vodafone believes that it is vitally important that the RSPG is free to discuss far reaching strategic considerations acting on the spectrum market. It would be unfortunate if the group simply became a talking shop in which current issues were raised without any identification of a strategic vision first. Consequently, our views on the work programme are coloured by a desire that policy makers address strategically important concerns.

Strategic priorities for the RSPG

The indicative list of policy issues to be considered by the RSPG is lengthy. From a pan-European mobile operator's viewpoint, the principal issues that need to be addressed are:

i. 2G Licence renewal

2G mobile licences expire at different times across Europe. Indeed, within individual countries, different 2G operators face different expiry dates. France and Portugal are already considering the terms to apply to 2G licence renewal in their markets. During the next ten years, other Member States will face the same deliberations. Vodafone considers that it would be valuable for the RSPG to consider in detail the appropriate processes and conditions to apply to licence renewal. Issues that might be addressed include:

- the timing of renewal decisions. Uncertainty over licence renewal may distort optimal capital expenditure given that 2G technology is expected to play an important role for many years to come. Early decisions on renewal will help commercial planning;
- the application or otherwise of fees for the renewal of spectrum. Any discussion may include the appropriateness of levying fees given the efficient use to which 2G spectrum is currently being put. The form of any fee is also important as upfront fees may limit the funds available for investment. Smoothing fees over the life of the licence may require consideration;
- the degree to which flexibility in technology use will be permitted;
- the process by which licences may be renewed. For example, should the regulator offer the licence to the incumbent user and, only if it is refused, offer it to the wider market?

It is imperative that the RSPG, regulators generally and industry understand the ramifications of renewal options so that regulatory errors can be avoided. Given the strategic importance of access to spectrum, Vodafone believes that 2G renewal justifies early consideration by the RSPG.

2G licence renewal is not currently included on the indicative list of policy issues.

ii. **Spectrum liberalisation**

Currently licensees are constrained in the technology they may use. To foster early adoption of innovative technologies, it is appropriate to consider whether the licensing system can be liberalised to permit operators to change or amend the technologies they are using under any spectrum licence. Issues that arise include:

- interference management (particularly at national borders);
- dispute resolution procedures where a change or amendment in technology causes perceived undue interference;

- the degree to which harmonisation of technologies deployed in specific bands must be retained for a single market;
- competition consequences of permitting incumbents to change their technology use.

Spectrum liberalisation falls within item (12) "Spectrum refarming and relocation issues" of the indicative policy issues list.

iii. **Spectrum trading and underlay rights**

The UK has already launched an extensive consultation on the introduction of spectrum trading. Provided all the difficulties associated with trading can be adequately resolved – and, at this time, Vodafone is hopeful this will prove to be the case – trading promises to be a fundamental change to the way spectrum is managed today. Trading does, however, rest on the concept of property rights. Yet at the same time, there is a debate arising in the IT world about a "spectrum commons" whereby users might operate in spectrum licensed to another party. The "commons" model relies on underlay rights and is central to the development of Ultra-wideband technology that is receiving lots of media attention. Regulators need to take a cogent view of the desirability of a property rights model and whether underlay rights are consistent with such a model. Issues that might be addressed include:

- the appropriate definition of individual property rights;
- the degree of protection, if any, to be given to underlay rights users;
- the effect underlay rights might have on the liquidity of a spectrum property rights market;
- the enforceability of interference protections.

Spectrum trading is included as an item in the indicative list (item 10) and underlay rights are captured by item (15) on technology developments.

ANSWERS TO THE SPECIFIC QUESTIONS ASKED IN THE CONSULTATION

While Vodafone has detailed what it believes to be the spectrum priorities of the mobile industry, the consultation asked for comments on four areas:

(1) General comments on the indicative list

While 2G licence renewal was not included in the list, the list does appear otherwise to be comprehensive.

Vodafone is not sure to what extent the RSPG should consider radio spectrum requirement for Community policies. Spectrum is an economic asset in the same way as are other assets generally acquired by Governments through open markets. Defining areas of policy that require, as an input, spectrum should not be allowed to deflect from the economic analysis of spectrum policy. Governments should recognise they have two roles: one as a regulator and another as an economic actor in the spectrum market. It is important that these two roles are clearly separated. Where the introduction of secondary markets is desirable as it optimises the efficient use of spectrum, Governments must see their role in terms of an economic actor, buying and selling spectrum in the market; they should not expect privileged access to resources.

(2) Comments on the scope of specific items

While all of the areas detailed are important, Vodafone would like to see the RSPG identify those issues that are fundamental for the policy framework and those issues that can be resolved through the application of the framework. The emphasis at this time should be in addressing the fundamental issues that define the policy framework. In that sense, Vodafone would suggest the following topic areas are fundamental:

- i. 2G licence renewal
- ii. **item 10:** spectrum trading;
- iii **item 12:** spectrum refarming;

- iv. **item 15:** technology developments acting on radio spectrum management;
- v. **item 13:** Allocation guidelines. Spectrum has been allocated to specific services or categories. The new regulatory framework places an emphasis on regulators to make decisions in the context of defined economic markets. The spectrum categories currently used for allocation do not appear to coincide with economic market analysis;
- vi. **item 2:** convergence of wireless electronic communications and broadcasting – indeed convergence generally and the degree to which spectrum can be ring-fenced for specific technologies that act on generic markets;
- vii. **item 16:** international developments – particularly the extent to which the EU can depart from current international obligations.

(3) Comments on the relative importance and priorities in dealing with specific items

Vodafone has outlined the three areas that it believes the RSPG should focus upon and detailed some of the specific issues that arise under each of them. We would like to see the overall emphasis, as noted in answer to question (2), placed on the derivation of a spectrum policy framework. The work of the group cannot be issues oriented without first agreeing the policy framework.

(4) Description of radio spectrum issues of importance to Vodafone

Vodafone is an advocate of spectrum markets. It recognises, however, that spectrum has specific technical characteristics that mean the application of normal market processes may not be simple or even possible. For that reason, Vodafone places a great emphasis on uncovering to what extent spectrum can be managed through the market.

The administrative system of management used today will remain in place for some years to come. Decisions on spectrum for one use can have repercussions for other uses by constraining future supply. Vodafone can expect to be affected by many of the issues identified in the indicative list.

Vodafone is interested in the following items on the indicative list. To help the Commission and RSPG these are listed in something akin to their level of importance for Vodafone:

- i. Spectrum trading **(10)**;
- ii. Spectrum refarming **(12)**;
- iii. Technology developments impacting on radio spectrum management **(15)**;
- iv. Allocation guidelines **(13)**;
- v. Convergence of wireless and broadcast **(2)**;
- vi. Radio spectrum for wireless communications access platforms **(1)**;
- vii. International developments **(16)**;
- viii. Adapting regulatory legacy **(14)**;
- ix. Information on availability and usage of radio spectrum **(11)**;

Less importantly but of operational interest:

- x. Relationship between civil/defence spectrum usage **(17)**;
- xi. Road safety **(4)**
- xii. Space strategy **(3)**;
- xiii. Public protection/disaster relief **(6)**.