



GSME response to RSPG public consultation on secondary trading of rights to use spectrum

2 April 2004

GSME¹ welcomes the Radio Spectrum Policy Group public consultation on secondary trading rights to use spectrum. In general, GSME believes that the current spectrum management regimes enable a certain amount of flexibility regarding changes in use subsequent to changes in the market and demands of other spectrum users. However, GSME also believes that the current spectrum management regime is limited in its flexibility to respond quickly and effectively to market demands. The introduction of secondary trading could offer additional value to the spectrum users, and increase efficiency of spectrum usage.

However, to ensure that spectrum trading is successfully implemented and harmonised as far as possible throughout Europe, GSME strongly believes that open and transparent debate regarding technical and competition must be held at European level with all interested parties. The global success of mobile communications, based on the GSM system, is widely due to the harmonisation of spectrum allocation and technology development at a European level.

GSME has responded to the broader questions raised in the consultation regarding spectrum trading, however, GSME also believes that prior to the implementation of spectrum trading in Europe, there are some fundamental policy concerns that must be resolved, such as the future allocation of licence exempt spectrum and the introduction of underlay technologies, such as ultrawide band (UWB).

We have already seen 450MHz of spectrum at 5GHz designated as licence exempt spectrum following debate at a global level. Fundamentally, it is not possible to 'claim back' licence-exempt spectrum for use at a later date and to this end, the whole industry must be certain that any spectrum allocated as licence exempt will not lie fallow, interfere with other licensed users or provide consumers with uncertain services.

GSME is aware that there is currently considerable debate at a European level on the implementation of UWB technologies. UWB transmits data at very high speeds by spreading transmissions over a wide range of frequencies (GHz) at very low powers. One of the most frequently cited aspects of UWB is the ability to communicate below the noise floor, often referred to as 'underlay'. In theory, this implies that UWB

¹ GSM Europe is the European interest group of the GSM Association, the premier global body behind the world's leading wireless communications standard. GSM Europe represents around 143 operators in 50 countries/areas in Europe and counts around 440 million subscribers.



could operate in the same bands as licensed spectrum without causing any harmful interference. However, a number of studies have highlighted the possibility of UWB causing significant interference to licensed bands.

GSME fully supports the publication of the recent Mandate from EC to CEPT/ ECC on the 'Harmonisation of radio spectrum use for UWB applications in the European Union' requesting a final report by November 2004. However, GSME believes that, at European level, further consideration must be given to the possible impact and benefits of underlay technologies before the implementation of spectrum trading.

General questions

GSME believes that successful implementation of an effective spectrum trading regime could bring many benefits to spectrum users. In the longer term, spectrum trading could enable increased flexibility in business planning by allowing spectrum users to trade underused spectrum or purchase spectrum to assist in implementing end to end solutions, in turn ensuring that spectrum does not lie fallow.

However, to realise the benefits outlined above, and to ensure that spectrum users feel confident in trading their spectrum (and their neighbours trading their spectrum) detailed consideration must be given to the mitigation of harmful interference. Detailed technical studies must be submitted by the trading parties for approval by the relevant NRA and must be open to scrutiny and challenge before any change of use or trade is allowed. The absence of such studies or opportunity to challenge will create an environment where there is uncertainty in business planning for spectrum users, which could lead to the unsuccessful implementation of spectrum trading. In some instances, where a change of use is being considered, it may be deemed appropriate for the NRA to hold a public consultation.

It is clear that some tranches of spectrum are more valuable in the types of services they enable to be provided to consumers. GSME believes that further detailed consideration will be needed in these bands to ensure that market risks are identified and possible mechanisms introduced to reduce any possibility of abuse.

To ensure that trading is beneficial to consumers, businesses and radio-users, some basic guidelines should be considered, such as:

- transparency, fair and open processes,
- no distortion of competition, and
- consideration of allocation mechanisms and initial prices paid for spectrum.

Finally, GSME does not believe that spectrum trading is appropriate for ISM or other licence exempt, short range spectrum.



Scope of trading – change of use, reconfiguration

GSME believes that, due to the possibility of significant harmful interference effects between users, consideration has to be taken when enabling any change of use, and should only be allowed following completion of relevant studies.

GSME believes that, in order for spectrum trading to be successful and instil confidence in its users, trading should be introduced in a stepped manner after public consultation by the national spectrum management authority on a by a case-by-case-approach. Change of use should be allowed at a later date. . There are clearly many issues, including competition ones, surrounding the change of use of spectrum and/ or reconfiguration. A first trading regime could confer property rights on the existing users of spectrum and allow those users to trade spectrum where there is no change of use or reconfiguration.

Following the successful implementation of such a restricted trading regime, and after further informed debate, and consideration of the experiences, a more complex form of trading could be introduced.

GSME believes that the absence of such debate will cause uncertainty both for new and existing operators and could jeopardise the smooth transition to a spectrum trading environment.

GSME also believes that the current GSM Directive may not enable change of use of spectrum and therefore needs amendment or abrogation before spectrum trading may be implemented in the GSM900 bands.

Role of the spectrum management authority

GSME believes that, to some extent, the role of the spectrum management authority has to continue on a similar basis to its existing fundamental role when spectrum trading has been fully implemented, particularly in the following areas:

- ensuring that spectrum continues to be harmonised on an international basis, where relevant;
- monitoring and control the usage of spectrum in order to ensure interference-free and efficient usage of spectrum and avoidance of hoarding and anti-competitive solutions;
- maintaining responsibility for all aspects of interference management (including policing and dispute resolution), and
- establishing and maintaining an assignment table of spectrum use, both before and after any trade, and including available or unassigned spectrum.



However, the role of the spectrum management authority will also need to be sufficiently flexible during and after the transition phase to encourage and facilitate the implementation of spectrum trading.

GSME expects the spectrum management authority to facilitate trading by implementing appropriate mechanisms (e.g. on line registration) or licensing market makers/ brokers and to give approval for trades to take place, taking all relevant information into account (and consulting where necessary) to avoid distortion of the relevant market(s).

Competition aspects

GSME strongly believes that there is no need to create sector specific regulation and that existing competition law should be used to manage disputes by reference to the downstream market(s).

Community aspects

GSME believes that the Commission can assist in the implementation of spectrum trading by fostering debate at a European and Member State level. Such debate will help to create certainty for operators and manufacturers and ensure a level playing field continues to be developed for all spectrum users. GSME believes that operators offering similar services should be subject to the same obligations.

Additionally, GSME believes that the Commission can assist in ensuring that spectrum continues to be harmonised at a global level and, wherever possible, to ensure economies of scale and take up of services and roaming

GSME Europe, 2nd April 2004