

**The 3 Group Europe**

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**3 Group's response to  
the Commission's consultation on the review of the  
telecoms regulatory framework**

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## Introduction

This paper sets out the response of the 3 Group (“*the 3 Group*”) businesses in Europe to the Commission’s consultation on the review of the telecoms regulatory framework.

The 3 Group is part of the Hutchison Whampoa Limited (HWL) telecommunications division, and operates under the ‘3’ brand in the following EU Member States: Austria, Denmark, Ireland, Italy, Sweden and the UK. The HWL telecoms division, comprising the 3 Group and Hutchison Telecommunications International, is the first global 3G operator, with 3G licenses in 10 countries<sup>1</sup>. Our 3G services were first rolled out in March 2003. The HWL Group had more than 13.5 million 3G customers globally and 11.5 million in Europe as of 23 August 2006. The 3 Group is one of the fastest growing telecoms businesses in Europe.

## Summary

This review is of considerable importance to the 3 Group. It comes at a time when the 3 Group businesses are seeking to secure and consolidate their positions but find they are facing a regulatory regime that is increasingly hostile to new entrants and smaller operators. In addition, by changing the way spectrum is managed, the Commission’s consultation proposes fundamental changes to the regulatory and business environment for mobile operators in the EU.

In this paper, the 3 Group focuses on three important areas that the review should address.

- i. **The continuing role for ex ante regulation.** Ex ante regulation remains necessary in telecoms markets to ensure all operators and especially those with weaker market positions can get access and interconnection to essential inputs from their competitors. When applying the regulatory framework, national regulators and the Commission should have in mind the wider objective to ensure sustainable competition, rather than concentrate solely on narrow market failures. The 3 Group is concerned that the focus on market reviews is detracting from regulators’ role in promoting sustainable infrastructure competition.
- ii. **Converged and bundled services.** Incumbent operators are able to distort competition in mobile markets by offering converged and bundled services that are impossible or unprofitable to replicate. The Commission should ensure regulators have the tools to investigate and remedy leveraging of dominance from fixed to mobile markets.
- iii. **Spectrum management.** The 3 Group supports more coordination at the EU level. However, this should be accompanied by more open and participative processes. There is scope for introducing market mechanisms into the management of spectrum, but, like any market, it will require rules to work effectively and efficiently and, in particular, to avoid interference, promote harmonisation and ensure fair competition.

The 3 Group also responds to other proposals in the Commission’s consultation as appropriate.

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<sup>1</sup> As well as the 6 EU Member States listed above, HWL has 3G licences in Australia, Hong Kong, Israel, and Norway.

## I. THE CONTINUING NEED FOR EX ANTE REGULATION

*Ex ante regulation remains essential to enable infrastructure competition*

Ex ante regulation is essential for the proper functioning of telecoms markets, and will remain so for the foreseeable future. Telecoms is a network industry. The interconnect arrangements in telecoms makes these markets different to other sectors of the economy – competitors are also each other’s suppliers and customers, and those competitors control bottlenecks and interfaces. This means there is huge scope for competitors to behave in an anti-competitive way so as to harm the competitive position of their rivals. This is especially so for established operators wanting to harm new entrant and smaller operators that do not have the same scale economies, where they can refuse or delay interconnection, or make it available on disadvantageous terms. Market power is not just about the ability to raise prices, it is also about the ability to exclude rivals by raising their costs.

The report by Cave, Stumpf and Valletti for the Commission observes that:

*‘With respect to (first-mover advantage and exclusionary behaviour), this aspect is particularly relevant during the transition phase from 2G to 3G services as those network operators with a 3G licence but no 2G infrastructure may be at a disadvantage against incumbent operators while they roll out their networks. The potential problem that arises here is that, in the absence of appropriate intervention, the entrants may become too weak, or even exit the market, and competition could not fully develop.’<sup>2</sup>*

The report makes clear that ongoing regulatory intervention is necessary, and especially so to ensure the survival of 3G-only infrastructure competitors.

The Commission should recall that one of the original purposes of ex ante regulation was to promote competition wherever possible by enabling new operators to enter the market and compete with the incumbents. That role only ceases when the entrant is sufficiently established to benefit from similar scale economies as its rivals and so is able to compete on an equal footing. If regulators withdraw too early, the new entrant remains vulnerable to the first mover advantages and exclusionary behaviour referred to in the Cave, Stumpf and Valletti report.

*New entry benefits consumers*

New entry, or the threat of it, remains an important spur to established operators. It leads to lower prices and stimulates innovation.

In those markets where the 3 Group has entered, following its entry, customer have benefited from lower prices and innovative services. It is notable that 3G services are most developed in Member States in which the 3 Group entered. For example, Austrian consumers were able to get 3G services one year before their German counterparts.

Entry and the threat of new entry makes collusive oligopolistic structures, which would otherwise be the default in many mobile markets, difficult to maintain. This should be a particular concern

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<sup>2</sup> Page 85, A Review of certain markets included in the Commission’s Recommendation on Relevant Markets subject to ex ante regulation, An independent report by Martin Cave, Ulrich Stumpf and Tommaso Valletti, July 2006.

for competition authorities as the European mobile sector seems to be consolidating around a few large groups. The Commission and national regulators should not assume that there is long-term sustainable competition in the mobile sector. There is still a need for intervention to prevent the emergence of dominance or collusive oligopolistic structures.

*New entrants and smaller operators are struggling to make an impact*

The need for continued intervention is evident from the trends in the European mobile sector. Many recent entrants are struggling to make a significant impact and to gain the scale economies that ensures their viability.

In several EU Member States the ‘challenger’ operators have been unable to become sufficiently established to threaten the incumbents and instead they remain weak. For example, in Denmark, TDC’s market share is largely unchanged from 5 years ago and Telia and Orange struggled to make a significant impact, with the result that they have now merged. In Germany, E-plus and O2 have fought for the 20% market share not held by T-Mobile and Vodafone, and made little impact on the positions of their 2 larger rivals. In the Netherlands, Orange and T-Mobile have barely increased their market shares over 5 years and Vodafone’s has declined, leaving KPN’s market position largely unchanged, even before its acquisition of Telfort. In Austria, Mobilkom’s market share has declined by around 5 percentage points in 5 years and the success of tele.ring was mainly at the expense of T-Mobile. Elsewhere, in France, Portugal and Sweden the incumbent mobile operator has been able to retain its market position despite the presence of smaller challengers. This is already leading to consolidation and market exit.

The instances are too many to be attributed to bad marketing or other failings on the part of operators. A regulatory environment that disadvantages challengers – the smaller and new entrant operators – and therefore infrastructure competition is partly to blame.

*The Commission should examine how it can enable infrastructure competition*

The underlying reason that regulation is failing is that the Commission and regulators are no longer emphasising the role of ex ante regulation in supporting sustainable infrastructure competition. Where the Commission and national regulators are promoting entry it is service provider entry, whether through bit stream access (fixed) or MVNO access (mobile). An example of this is ComReg’s proposed remedy to a lack of effective competition in mobile access and call origination in Ireland. ComReg proposed to mandate MVNO access even though this would clearly harm the prospects of two new entrant infrastructure operators (Meteor and 3 Ireland).

Market developments, for example in Austria, show that mandating service provider access is no way to secure sustainable competition. In Austria, incumbent operators have launched sub-brands (service providers on their own mobile network), such as BOB or YESSS that offer their services significantly below the cost of any new entrant MVNO.

Furthermore, promoting infrastructure is not simply about new entrants, it is about enabling those entrants to reach a position where they can survive in the market.

The 3 Group urges the Commission to use the opportunity of this review to examine why the regulatory framework is disadvantaging infrastructure competition, and to propose changes that would allow smaller operators to compete on an equal footing. The 3 Group has identified 2 features of the regulatory framework that work against new entrants: (i) regulation has become too focused on narrow market failures and the market review process; and (ii) regulators are

unwilling and sometimes unable to intervene to deal with anti-competitive practices targeted at new entrants.

*(i) Regulation is too focused on narrow market failures*

Part of the problem is that the regulatory framework, because of the market review process, encourages national regulators to focus on narrow markets. For example, service provider entry is a solution to resolve a lack of competition in one market (be that fixed broadband or retail mobile services). More generally, remedies are designed to resolve a single market failure without looking at the consequences for competition overall. This is typically to the detriment of the weaker operators in the market – the smaller and new entrant operators. Mobile call termination is another example of this. According to the Commission's market definition and analysis, each operator, regardless of its position in the wider market for mobile services, is likely to have SMP. The 'default remedy' for that SMP is cost oriented price controls, often with all operators having the same price controls.

Imposing the same price controls on all operators regardless of their size discriminates against operators that lack scale economies and so have higher costs. Annex I describes further the 3 Group's analysis and concerns about the way call termination remedies are being applied. In particular, some regulators are requiring all operators to have equal call termination soon after entry (4 years after entry in the case of 3 Sweden), whereas the Commission has elsewhere accepted higher termination rates for the newer entrant 9 years (BASE in Belgium) or 11 years (Bouygues in France) after entry. The 3 Group is submitting alongside this response a study by Dr. Hannes Leo that shows the consequences of applying symmetric termination rates for small mobile operators in Austria.<sup>3</sup> **There is an urgent need for Commission guidance on the circumstances in which a higher termination rate is justified for the newer entrant.**

The example of call termination also highlights how regulators are more concerned to address exploitative conduct than exclusionary practices. However, in dynamically competitive markets, such as the mobile sector, it is far more important to address exclusionary practices, which are likely to distort competition over the long term, than it is exploitative conduct, which tends to be transitory.

*(ii) Regulators are unwilling and unable to intervene*

An increasing problem is that regulators are unwilling to intervene to resolve anti-competitive actions by incumbent operators that are targeted at new entrants. As explained above, the nature of telecoms markets and the number of points of interaction between competitors give incumbents ample opportunities to harm the competitive position of new entrants. This is rarely in the form of the direct anti-competitive action that competition law is used to dealing with (such as predatory pricing). However by delaying interconnection, or by raising switching costs, incumbents are able to make entry more difficult and expensive. This is predatory, taking the definition of predation as '*business behaviour that has no value to the firm undertaking the action except as a result of the competitive harm it causes to an actual or potential rival*'.<sup>4</sup>

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<sup>3</sup> Leo, Hannes: 'Uniform Termination Fees as an Impediment to Competition? The Fixing of mobile termination fees revisited', October 2006.

<sup>4</sup> Paragraph 3.55, Page 34, UK Office of Fair Trading Economic Discussion Paper 'Innovation and competition policy', March 2002.

The 3 Group has considerable experience of the difficulties of getting interconnection on terms that allow it to compete fairly with established operators in all 6 of its EU markets. Examples of problems faced by the 3 Group businesses include:

- Refusals and delays by competitors to allow cross border interconnection for SMS. This is not a trivial problem. For example, the Irish Times ran an article on 17 July 2006 about 3 Ireland customers unable to send SMSs to friends abroad (including friends roaming abroad).
- The foreign branches of direct competitors setting high wholesale roaming charges that effectively apply a margin squeeze when compared to the retail roaming tariffs of the competitor.
- Actions to reduce the effectiveness of number portability. It is notable that 3 UK has had to resort to an appeal against a decision by Ofcom in order to force the regulator to address clear failings in the mobile number portability system. In Italy, only the new Board of AGCOM required TIM to increase its porting capacity, to resolve the delays that for some customers wishing to port their mobile number were up to 6 months or more. Elsewhere, porting charges remain a deterrent to customers porting (or often, an additional cost of acquiring new customers that the operator must bear).
- Difficulties in securing national roaming on reasonable terms. Incumbent operators have both 2G and 3G spectrum allocations whereas new entrant 3G only operators have to purchase access to 2G from these incumbents (who are also direct competitors). In the UK Ofcom signalled its reluctance to get involved in these issues by proposing to remove the national roaming condition in 2004 some 5 years in advance of the date promised at auction. It is becoming increasingly clear that the terms and prices imposed by incumbent operators on new entrants for access to an essential input should be subject to greater not more limited regulatory scrutiny.

A failure to tackle these problems is especially harmful to smaller operators. Regulators may be reluctant to intervene in the belief that the market will resolve any problems, but the reality is that inaction is often discriminatory against the smaller operators.

A particular aspect of this is that smaller operators and new entrants may be forced into accepting unfavourable commercial terms by their larger rivals, just so that they can enter the market or get access to facilities that allow them to compete. An example would be an agreement to charge reciprocal termination rates. If the regulator subsequently intervenes it will be necessary to specify that the commercially agreed terms are no longer valid if the desired regulatory outcome is to be achieved. In the example of termination rates, the regulator would need to specify that the reciprocal terms are no longer valid if it considers asymmetric termination rates to be appropriate.

A further problem is that, even if willing, a regulator may be unable to intervene. Mobile markets typically do not have a single dominant operator. Rather they have 2, 3 or 4 operators, some of which may have market power. Yet the concept of collective dominance is particularly difficult to apply, meaning that markets where competition is not effective remain unregulated.

The concept of collective dominance is not appropriate to an ex ante regulatory framework. The study by Hogan and Hartson and Analysys explains that the combination of the legal test for collective dominance, together with the tests for ex ante regulation '*..all of which must apply cumulatively, renders the application of ex ante remedies on collectively dominant operators a*

*particularly challenging regulatory exercise.*<sup>5</sup> The difficulty in establishing collective dominance means that regulators are often unable to intervene even where there is clear evidence of a market failure. The failure of regulators to deal with wholesale international roaming is partly due to the need to prove collective dominance on the national market. By adopting a specific regulation, the Commission is, in effect, acknowledging that the regulatory framework has failed in this regard.

*There will be no new entry infrastructure competitors in the future*

The consequence of continuing to disadvantage infrastructure competition is that it will kill off any prospects for future entry by new infrastructure competitors. It risks freezing national markets with the current number of mobile operators, and worst, could lead to consolidation as the weaker operators find it increasingly difficult to compete on a playing field that is tilted in favour of larger incumbents. We have already seen evidence of market consolidation (in Denmark, Austria, Sweden and the Netherlands). There is a risk that many Member States could see the number of mobile competitors reduced to 3.

*Regulators must look at wider competition and be prepared to intervene*

The solution is three-fold:

- First, the Commission and regulators must stop focusing solely on resolving problems in narrow markets, and instead look at how to facilitate competition at the wider level between competing infrastructure providers.
- Second, regulators must be more willing to intervene to deal with actions that harm the prospects for new entrants and smaller operators. This requires regulators to take a much wider view of what harms competition – applying well-defined competition law tests such as predatory pricing is not enough. Regulators need to take account of the specifics of telecoms and the many opportunities that incumbents have to make entry more difficult and expensive.
- Third, the Commission must give regulators the powers to intervene where they see a problem. The concept of dominance is not well suited to regulating mobile markets, which are oligopolistic in structure. Since the market reviews under the regulatory framework are forward looking, it would seem appropriate to adopt forward looking competition law concepts, which are embodied in the merger control regime and, following the 2004 Council Regulation on mergers, include within their scope non-coordinated effects from oligopolies. The report by Hogan and Hartson and Analysys recommends this change.

The underlying reason for having ex ante regulation in network industries like telecoms is because ex post competition law is not sufficient to guarantee effective competition. The purpose of the review is to look at where the framework has not worked well and to make the necessary changes. This is one such area.

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<sup>5</sup> Page 162, Preparing the next steps in regulation of electronic communications, A contribution to the review of the electronic communications regulatory framework, Hogan & Hartson and Analysys, July 2006.

## **II. CONVERGED AND BUNDLED SERVICES**

In its response to the review of the Recommendation on relevant markets, the 3 Group provides detailed comments on the problems that may arise from the ability of incumbent operators to offer bundled services (for example bundled fixed and mobile services).

The Commission should be cautious before removing fixed retail markets from the Recommendation, to ensure regulators have the tools to investigate and remedy leveraging of dominance. However, the issue of bundled services is wider than simply market definition and this is an area where the Commission and national regulators need to think carefully about the right regulatory response to the emergence of bundled services. There is a need for transparency of retail offers to ensure they can be profitably replicated.

As a minimum, therefore, regulators will need to put in place remedies to provide sufficient transparency to expose instances of cross-subsidy or margin squeeze. This addresses the information asymmetry. Transparency will need to be accompanied by remedies to ensure that wholesale inputs are available on a non-discriminatory basis. The need for swift action and detailed information means that ex ante remedies will be required.

## **III. SPECTRUM MANAGEMENT**

The main feature of the Commission's spectrum proposals is to use market mechanisms as the default spectrum management regime. Whilst there is scope for introducing market mechanisms into the management of spectrum, as with any market, there must be rules to regulate how the market operates, so as to ensure that it runs effectively and efficiently. In particular, the current regime has provided benefits in terms of avoiding interference and promoting harmonisation. For a move to a new regime to improve the use of spectrum it will be necessary to preserve the benefits of the current regime and to take into account legacy issues, whilst also capturing the benefits that come from market disciplines. Since market mechanisms are largely untried for spectrum management, there is a danger that a 'big bang' approach could have serious negative consequences that would be irreversible. The 3 Group recommends a more cautious approach to avoid getting it wrong.

### ***Greater EU level coordination***

The 3 Group supports the Commission's proposals for greater EU level co-ordination of spectrum management. This should help achieve the benefits of harmonisation, economies of scale and the internal market. However, if more decisions are to be taken at the EU level, there needs to be more open and participative processes in reaching those decisions. This means a greater involvement of stakeholders in the decision-making process, and much more transparency in the way the committees and the Commission reach decisions.

### ***A market-based approach to spectrum management***

The greater use of market mechanisms to manage the use of spectrum will require appropriate rules to ensure it works well. Since there is little experience of spectrum liberalisation in Europe, the Commission needs to be cautious in moving to a market-based spectrum management regime to give time to consider all the issues and to ensure it gets the rules right.

The rules that determine how the spectrum market operates will need to take account of the externalities and market imperfections that an unregulated market would ignore. Rules will be required to take account of:

- Interference: The Commission will need to put in place mechanisms to ensure liberalisation of spectrum does not lead to interference between different technologies.
- Harmonisation: There are positive externalities from harmonisation that, left to its own, the market will not value correctly. The Commission will need to ensure EU citizens are not made worse off through a loss of harmonisation.
- Fair competition: The market should be designed to ensure that operators and technologies compete on a level playing field. This raises particular problems when moving from one spectrum management regime to another (so-called 'legacy' issues).

In practice, the 3 Group believes that these factors will limit the areas where full technology neutrality can apply. Whilst there may be more scope for having unlicensed spectrum, interference and 'legacy' issues mean that exclusive rights should continue to prevail in many areas, not least the mobile bands. Whilst exclusive rights can be made tradable once the property rights and parameters for trading are resolved, that trading will need to be subject to restrictions on the technology to be used to avoid interference.

A further difficulty with the principle of technology neutrality is that, in practice, it is very difficult to apply. For example, the Danish government is releasing 4 MHz of spectrum at 870 MHz on a technology neutral basis. However, the amount of spectrum being released means that it is unusable for UMTS. Practical issues such as these will make it very difficult to ensure technology neutrality.

### ***Interference***

The current approach of mandating spectrum use has the advantage that it minimises the risk of harmful interference. The Commission needs to be careful to ensure that any market based approach to spectrum management contains rules to avoid interference. A problem is that we often do not know what interference problems will arise when different technologies share the same spectrum bands, and the costs of rectifying interference problems and the loss of spectrum efficiency can be very large. In practice, this means that there will need to be a regime of prior testing before allowing technologies to share or be in adjacent spectrum bands.

*Interference problems are often unknown in advance of thorough testing or operational use*

Unless technologies are thoroughly tested for operational compatibility with other technologies, the problems of interference will not be known. Possible combinations of technologies must be tested in advance of allowing them to share bands, or to be deployed in neighbouring bands. This approach has been accepted by ETSI in examining the possibility of deploying WiMAX in the 3G expansion band. The burden of proof that a new technology will not interfere with existing spectrum users should fall on the operators of the new technology.

Whilst prior testing is essential, there is still the possibility of interference problems that only come to light through operation use, and for this a compensation mechanism will need to be put in place.

It would be rash to introduce a spectrum management regime that omits proper testing and leaves the problems to be identified and resolved only once the technologies are operationally deployed. The example from the USA, where Nextel launched a cellular service only to discover that it was interfering with the radio network of the emergency services, is a clear lesson of the risks of an unregulated market. Interference was first identified in 1999, but will not be fully resolved until 2007, with Nextel required to set aside \$2.5 billion to cover costs to the other spectrum users suffering from interference. In the meantime the US emergency services have had to operate with interference.

*Interference will add costs and reduce spectrum efficiency*

Sharing with different technologies imposes additional costs as a result of measures necessary to monitor and mitigate interference. These costs can only be determined through thorough testing, which, as indicated above, must take place before allowing any sharing. Only when the costs are known can the Commission and Member States make an informed decision as to the balance of costs versus benefits in allowing technology neutrality in a band.

The Commission is correct to observe that there are ways of mitigating interference. However, they have costs and can entail less efficient use of spectrum, especially if guard bands (that is, bands of unused spectrum) are required to separate technologies.

*The Commission will need to set strict specifications to avoid interference and put in place compensation mechanisms*

As indicated above, to reduce the risk of interference, there will need to be a regime of prior testing. As part of that regime the Commission will need to formulate technically precise specifications and standards and ensure adherence to these by all users. Any technology wanting to use spectrum in close proximity to existing spectrum users will need to demonstrate compliance with the specifications.

There will also need to be a mechanism to ensure that spectrum users suffering interference from the entry of a new technology are adequately compensated. As indicated above, testing is necessary but not sufficient because interference problems may only come to light when the technologies are deployed. If interference arises because of the introduction of alternate technologies through technology neutrality, then a business compensation framework or indemnity programme must be established to provide recourse for any business that suffers a loss of service. This will need to be a common EU wide programme that would specify interference criteria. It would also act as a deterrent against poor implementation of alternative technologies, where otherwise the 'polluter' would not pay.

*The benefits of harmonisation*

A recurring feature of the Commission's Communication is the desire to achieve greater harmonisation throughout the EU, with the aim of furthering cross-border services and the internal market. To the extent that the Commission proposes a common 'market-based' approach to spectrum management throughout the EU, this entails a harmonised approach. However, as the 2004 report by Analysys, dotecon and Hogan & Hartson observes, 'Even if Member States

*had similar frameworks for spectrum trading, this does not necessarily entail similar outcomes in terms of assignment and use of spectrum, if there are local variations in demand.*<sup>6</sup>

The 3 Group is concerned that a market-based approach may not value correctly the benefits of harmonisation. These benefits, which are described below, come principally from externalities, which, by definition, are not valued by the market. Therefore, the Commission will need to place rules on the way the market operates to ensure harmonisation and so capture the externality benefits.

#### *Harmonised spectrum bands allow cheaper equipment which drives mass market take up*

Where the technology and spectrum bands are harmonised throughout the EU, this gives a large market, which leads to scale economies in handset design and manufacture. As the Commission observes, ‘*A unified single market offers EU suppliers a large home base for the development of innovative products, which is particularly important in areas like wireless communications where economies of scale count.*’<sup>7</sup> The presence of a large market also gives manufacturers the incentive to develop new equipment. Together this means cheaper handsets being available earlier, which leads to the earlier adoption of new technologies by consumers, and to cheaper services overall.

Harmonised spectrum also reduces the problem of designing handsets with multiple radios. Already 3G handsets must operate in 3 bands: 900 MHz, 1800 MHz and 2.1 GHz. If spectrum is no longer harmonised and other bands are used for mobile services, more radios will need to be added. This in turn will add to the cost and complexity of designing handsets with the performance that consumers have come to expect.

#### **Example: technology neutrality in the United States**

In 1987 the US Federal Communications Commission (FCC) said it would not mandate the technology to be used in the 800 MHz band for mobile services. This, and the later allocation of 1900 MHz spectrum, led to little interoperability and so little possibility for international roaming by US mobile users until GSM tri-band and GSM/ CDMA handsets became available. A further consequence is that US handsets have consistently lagged European handsets in terms of features, performance, size and weight and have been more expensive. It could also be partly responsible for the relatively low levels of mobile penetration when compared to the EU.

#### *Harmonisation secures long-term competition*

If operators are allowed to use any technology, there can initially be very intensive competition. This is because the winning operator also establishes the winning technology which becomes the industry standard. The winner captures the whole market and thereafter holds a monopoly position. This process occurs often in consumer electronics, where there are competing

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<sup>6</sup> Paragraph 11, Page iii, Study on conditions and options in introducing secondary trading of radio spectrum in the European Community, May 2004. Analysys, dotecon, Hogan & Hartson.

<sup>7</sup> COM(2006) 334: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the Review of the EU Regulatory Framework for electronic communications networks and services. Page 8.

standards. The intensity of competition in the initial phase of competition is driven by the ability to reap monopoly profits in the second phase.

Where there is a harmonised standard, initial competition may not be as intense, but over the long term the market will not tend to monopoly, and so several competing operators can be sustained. Over the long term this will be of more benefit to consumers.<sup>8</sup>

**Example: technology neutrality in New Zealand**

New Zealand made available 2 spectrum bands for mobile services on a technology neutral basis. One of the operators uses the GSM technology in the globally harmonised 900 MHz band, the other EV-DO in the US 850 MHz band. This has resulted in customers being unable to change operator without also changing handset, creating a disincentive for customers to exercise choice and hence reduced drive for price competitiveness between operators.

Also, the EV-DO operator is now restricted to US-sourced handsets, and their future options regarding 3G are limited by handset and infrastructure availability to support multiple technologies and bands. New Zealand has some of the highest mobile prices to be found anywhere. The fact that the operators use different technologies has led to dampened competition. For example, there are no dual GSM/ EV-DO handsets in New Zealand, leading to higher switching costs.

*Harmonised spectrum bands promotes interoperability, cross-border use and the internal market*

If consumers are to be able to use their handsets across borders, the same spectrum needs to be used for the same services in all countries. A market-based approach may lead to EU citizens being no longer able to access the full range of services when crossing borders. The loss of interoperability across EU borders will be a major inconvenience for EU mobiles users and cannot be in the interests of citizens nor the internal market. Indeed the Commission noted that ‘...radio transmissions cannot be confined within national boundaries, and many types of radio devices are highly portable, with citizens having a natural expectation for them to work throughout the EU.’<sup>9</sup>

*Harmonised spectrum bands have helped the EU’s mobile sector to be a world leader*

Interoperability and harmonised spectrum bands were a key factor in the success of GSM and therefore in enabling EU equipment manufacturers to become world leaders. Without harmonised spectrum bands European industry will no longer take the lead in developing new technologies and standards. Without harmonisation in technologies and services, there simply will not be sufficient size to develop and promulgate European standards. Instead the standards and technologies will be developed elsewhere. Europe will become a technology ‘taker’, not a

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<sup>8</sup> Carl Shapiro and Hal R. Varian in Information Rules, Harvard Business School Press, 1999 identify the following as some of the benefits of interoperability: (i) expanded network benefits; (ii) reduced technology risk for consumers; (iii) reduced consumer lock-in to a single supplier; (iv) shift in competitive focus from competition for the market to competition in the market; (v) competition is moved towards price and away from features (which are standardised); (vi) greater component competition.

<sup>9</sup> IP/06/874: Telecoms: Commission tables plans to boost competition among telecoms operators and build a single market for services that use radio spectrum. 29 June 2006.

technology 'maker'. The European economy has benefited hugely from the technology lead it has had in GSM. The Commission's 2004 Communication on mobile broadband services noted:

*'Europe's success in mobile communications was built upon a solid regulatory and policy foundation. A single, open digital standard for second generation (2G) mobile (GSM), pre-competitive R&D, a competitive market, a strategic approach to spectrum management and certification of equipment to stabilise the technology were critical factors.'*<sup>10</sup>

*The Commission will need to reserve bands to ensure even a limited harmonisation*

In practice, the Commission will need to address the need for even a limited amount of harmonisation and cross-border interoperability by reserving bands for certain services and technologies. This is the approach the Commission is adopting for mobile television services, where it would like to see 'seamless mobile TV services'<sup>11</sup>. There the Commission accepts that if mobile TV services are to have widespread consumer acceptance, it will need to allocate harmonised spectrum to them. It is also looking for industry to propose a single technology (or at least interoperable technologies) so as to realise the benefits of 'cross-border services, interoperability and roaming and a pan-European dimension'<sup>12</sup>. Similarly, the Commission will need to reserve bands for UMTS services if it wants these to be interoperable throughout the EU. As the 3 Group explained in its response to the consultation on the use of the expansion band, it will be necessary to reserve spectrum in that band for UMTS use, to ensure sufficient spectrum for UMTS services throughout the EU.

***The market won't necessarily price these factors correctly***

As explained above, there are reasons why the market will not price correctly the benefits of harmonisation and the cost of interference. One reason is the presence of externalities. A new technology entering a spectrum band may cause interference to existing users. At least some of the costs of rectifying this may fall on the existing users and not on the new service provider, such that the new service provider does not take into account the full costs when entering the spectrum band.

A positive externality comes from the network benefits of a new technology and these are often not known in advance. In the early years of GSM it was thought that it would only ever be a business tool, and cross-border roaming was thought to be an even more marginal service. At the time, consumers would have placed little value on owning a mobile and even less on roaming. 10 years later we can see the value that consumers now place on mobiles and on being able to use their mobiles throughout the EU. The high values that consumers place on mobiles now arise partly from positive network externalities that the market is unlikely to value correctly in advance.

Further, there is a significant danger (given the co-ordination issues involved) that even if market forces do deliver harmonisation, this will most likely be through the monopolisation of a market.

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<sup>10</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Mobile Broadband Services, Brussels, 30 June 2004, COM(2004) 447

<sup>11</sup> Presentation by Beatrice Covassi, DG Information Society, 11 July 2006.

<sup>12</sup> Ibid.

This can be seen in other industries where intellectual property rights and proprietary standards that create a monopoly are the only ways of overcoming the investment risk in markets facing significant network externalities.

### *Ensuring fair competition and 'legacy' issues*

The Commission refers to 'legacy' issues and the need for the new EU committee mechanism to decide how to deal with them. It refers to ensuring no distortions of competition and to providing compensation. There is a clear need to ensure that any market mechanism avoids distortions of competition. There are particular problems when moving from one regime to another and the so-called 'legacy' issues will need specific attention if competition is not to be distorted.

### *Ensuring fair competition*

To the extent that different technologies are used to provide competing services, it will be necessary to consider whether changes in spectrum use could advantage one technology over another with the consequent distortion of competition between them. For example, 2G networks are long established and often fully depreciated. This gives them a huge cost advantage over newer 3G networks. In addition, 900 and 1800 MHz spectrum have propagation characteristics that allow the frequencies to travel further and to penetrate better solid objects than the core UMTS spectrum. Again, this gives 900 and 1800 MHz significant cost advantages over 2100 MHz. 3G networks compete by offering different services, but if that competitive advantage is taken away by technology neutrality, the ability of 3G only networks to compete effectively is greatly diminished. The Commission will either need to ensure any such competitive distortions are avoided, thus limiting the scope for technology and service neutrality, or compensate operators that are put at a competitive disadvantage. One solution would be to use re-farming to actively level the playing field for new entrants - for example if there is initially a shortage of spectrum at 900 MHz for 3G use there may be good reasons to give new entrants priority of allocation of released spectrum.

Ensuring fair competition requires consideration of a combination of different factors and spectrum bands, which will be difficult under a technology neutral approach. For example, if 2G spectrum is not re-allocated and re-assigned to 3G only operators on a non-discriminatory basis, then a technologically neutral allocation of the expansion band will exacerbate the resulting distortion of competition in the 3G market. This is because the 3 Group will be forced to acquire additional spectrum in the expansion band to ensure an equivalence of essential inputs with its direct competitors. If that band is technology neutral then the disparity between what it must pay and what its competitors will pay becomes that much greater.

Competition law would not necessarily resolve these problems. It is difficult to envisage how competition law could be used to redress an historical allocation of spectrum that leads to an unfair competitive advantage.

### *'Legacy' issues*

Industry participants have spent billions of euros acquiring 3G spectrum and subsequent billions on rolling out the infrastructure. That investment was made on the basis of the allocation of spectrum for 3G use and, indeed, on the basis of the unavailability of other spectrum. Moreover, assignments of 3G spectrum have often had technology specific obligations, such as roll-out obligations attached to them. Such obligations have undoubtedly resulted in investment decisions different from those that would have been made if coverage had been left to market factors alone.

These ‘legacy’ issues are not just about respecting past commitments and ensuring a fair treatment of past investors. They are also of great importance for future investors in Europe. If investments based on one legal framework are going to be undermined by the introduction of a new legal framework, that will raise the risk of investing in Europe. It will also undermine the credibility of future commitments that the Commission and Member States make.

Given the importance of respecting such ‘legacy’ issues the Commission and Member States must either respect all past commitments made, or fully and adequately compensate for any failure to respect such commitments.

#### **IV. THE COMMISSION’S OTHER PROPOSALS**

##### **Commission veto on remedies**

The Commission is proposing to extend its current ‘veto’ to cover remedies. This applies, in effect, both to the market reviews under Articles 6 and 7 Framework Directive and to access and interconnection measures under Article 5(1) Access Directive.

It is clear that some national regulatory authorities have not applied the existing regulatory framework properly. To the extent that this relates to inappropriate remedies, a Commission veto on remedies may help. However, often the NRAs’ failures are due to other factors, such as delays in market analysis. A veto over remedies would be of no assistance there.

If the Commission is to have a veto on remedies, there needs to be improvements to the Article 7 procedure to allow affected parties to be involved in the process. This means greater transparency on the discussions between the Commission and NRAs and consulting with affected parties.

##### **Authorisations and licences**

Service authorisations and spectrum licences are for fixed durations. This does not reflect the cycle of investment in new technologies nor the way in which mobile operators compete. An increasing feature of mobile networks is the constant process of upgrading and enhancing their capability. An operator might have a 20 year spectrum licence, but will be constantly upgrading the network. This means that in practice the operator has far fewer than the 20 years in the licence over which to recover the investment. For example, 3 Italy acquired its spectrum licence in 2001. The licence expires in 2021. 3 Italy launched 3G services in 2003, so has 18 years to recover that initial investment. Of course the network continues to be expanded and upgraded. In 2006 3 Italy launched the HSDPA upgrade, and so has 15 years to recover that investment. As time passes, these investments will have shorter and shorter life times because of the duration of the authorisations and licences. It is important that the Commission commits now to increasing the duration of authorisations and licences to ensure operators continue to have the incentive to invest in improving their networks. The 3 Group recommends an increase in duration of 20 years.

##### **National appeals**

The Commission is proposing that national courts can only suspend NRAs’ decisions pending the outcome of an appeal if there would otherwise be ‘irreparable harm’ to the appellant.

The 3 Group agrees with the Commission that it is important to have an effective and speedy appeals mechanism. However, it would be inappropriate to fetter the discretion of national courts when deciding whether to suspend remedies pending the outcome of an appeal. There will be circumstances, such as a price control remedy, which once implemented would be irreversible even if it were subsequently overturned on appeal. It is important for national courts to be able to take into account all relevant factors when deciding whether or not to suspend a remedy.

### **Universal Service**

The Commission intends to launch a debate on the whole nature of the Universal Service in 2007. The 3 Group supports this because the current interpretation of the universal service concept has become too narrow to be of practical value to society. In societies where mobile phones are ubiquitous it no longer makes sense to define a universal service as being voice calls from fixed locations.

### **Number portability**

An obligation to provide number portability currently exists. The Commission recognises that this needs to be adapted for current services. The obligation should also be adapted and strengthened to meet current expectations. Specifically, the Commission should amend the obligation to require:

- Porting within 2 hours of a customer requesting it. This is technically feasible and available in some Member States and should be the basic service level requirement for porting. It is simply unacceptable to force customers to wait days, and in some cases over a week, to be able to switch mobile service provider and keep their number.
- Direct routing of calls to a ported number. Article 30 USD states that subscribers must be able to retain their numbers *'independently of the undertaking providing the service'*. This is only possible if the donor network is no longer involved in the provision of service. That is, onward routing is not acceptable, and there must be direct routing of calls to a ported number using a central database. This must apply to all inbound services including voice, video, SMS and MMS. This is the only way to protect the subscriber against the risk of the donor network going out of business and the customer consequently losing all incoming services.
- Porting charges should not exceed the direct costs of porting incurred by the donor network. Donor networks should not be allowed to levy excessive porting charges at the expense of customers and recipient networks. In practice, high porting charges act as a deterrent to porting and an additional cost to the recipient network.

### **Access to emergency services for disabled users**

The 3 Group supports equality of access and is committed to providing services that deliver equality, such as 999 via the Relay Service in the UK. This is an equivalent service to voice 999. The Commission should avoid specifying services that go beyond equivalence. For example, should the Commission require 112 access via SMS, it would be discriminating in favour of deaf people when the purpose of regulation for disadvantaged groups should merely be to remove the disadvantage, not to create a further imbalance. In addition, access by SMS is problematic since operators cannot guarantee timely delivery of SMS messages. It would also be difficult to restrict access to deaf customers only.

### **Non-geographic numbers**

The 3 Group is concerned about the possibilities for fraud if non-geographic numbers are to be made available across borders. Fraud has been a significant problem in some Member States and the problems are likely to be even greater if the services are made available across borders. There may be further consumer protection problems, for example around price transparency. The Commission will be aware of the likely concerns following its study into the possibility of creating cross-border markets for premium rate services. Any measures must adequately address these concerns and ensure there is sufficient monitoring and enforcement. A further requirement is for international settlement arrangements to cope with the different direction of funds transfers. Again the Commission will need to ensure the processes are in place before allowing access to non-geographic numbers across borders.

## ANNEX I: Asymmetric call termination rates

Some national regulators seem intent on imposing symmetric mobile call termination rates on all operators. In Sweden, PTS has imposed termination rates on 3 Sweden that will mean it will have the same rates as all other operators from 1 July 2007 (0.54 SKR, about 5.8 cents) – 4 years after entry. In Austria, 3 Austria will be required to charge the same rate as the other operators (6.79 cents) from 1 January 2009 – less than 6 years after entry.

In contrast, the Commission has accepted in two cases higher termination rates for the newer entrants, 9 years (BASE in Belgium) and 11 years (Bouygues in France) after entry. In the Article 7 letter to ARCEP, the Commission says that *'in certain exceptional cases, an asymmetry might be justified by objective cost differences which are outside the control of the operators concerned, for instance owing to cost differences between the operation of a GSM900 network and a DCS1800 network or to substantial differences in the date of market entry'*. The Commission made similar comments to the Belgian regulator.

The 3 Group agrees with the Commission that objective cost differences justify asymmetric termination rates. However, the 3 Group disagrees that these cost differences are an exceptional case. The 3 Group has obtained research from Dr Hannes Leo of the Austrian Institute of Economic Research, which shows that the approach of those regulators that are imposing equal termination rates on all operators is wrong and damaging to competition between mobile operators. The key points of that research are:

- There are considerable economies of scale in operating a mobile network. This means that new entrant operators will have higher costs until they reach a similar scale to the incumbent operators.
- First mover advantages are large and so it takes a long time for market shares to converge. On average, market share gains for the new entrant are around 1 – 2% per year. This means it takes 10 to 20 years to reach a market share of 20%.
- Imposing equal call termination rates on operators with different costs discriminates against the newer entrant (since it has higher costs because of a lack of scale) and harms its ability to compete.

The 3 Group is submitting that research together with this response.

There is an urgent need for a clear statement from the Commission on the circumstances in which asymmetric termination rates are justified. This will give national regulators guidance on the appropriate treatment of cost differences when setting termination rates.