

**Ofcom Advisory Committee for Wales**

**Consultation Response**

**Assessment of future mobile competition and proposals for the award of 800 MHz  
and 2.6 GHz spectrum and related issues**

**Introduction**

The Ofcom Advisory Committee for Wales (ACW) welcomes this opportunity to respond to the Consultation. The ACW response deals with issues that would be expected to have particular impact on Wales: these are largely dealt with in Sections 5 and 6 of the document. The ACW discussed some of these points during our videoconference briefing by Graham Louth at the ACW meeting held on 14 April 2011.

We welcome the emphasis on competition and recognise the benefits it brings, but we believe it must be tempered by intervention where market failure has occurred.

It is the view of the ACW that the introduction of 4G telecoms has a potential significant impact on Wales' economic development, and in particular on the lives of rural consumers and citizens. For example, in mid Wales 50% of employment is in firms with up to 10 people, meaning that good communications are essential to the economy.

The ACW welcomes the 2G/3G licence variation at 900 MHz and 1800 MHz, and the creation of tradability. However, it is essential that sufficient safeguards are put in place to ensure that the introduction of indefinite licences does not encourage incumbent operators to hoard spectrum, thereby hindering competition in the market. The ACW is concerned that mobile operators could be tempted to hoard their spectrum to prevent new entrants to the market and other incumbents from entering the sector and providing effective competition. We believe that it is appropriate for Ofcom to put in place a mechanism whereby if deployments do not commence within a specified time (perhaps 18 months) then Ofcom has grounds to develop a prima facie case for market failure and refer the matter to the Competition Commission.

The ACW strongly believes that irrespective of any such changes to 2G/3G licences, the conditions for the 4G award must include improvements to coverage obligations, provision for Wales-only targets, provision for rural fixed access broadband, and a 'use it or lose it' clause.

We set out below the ACW responses to individual questions posed in the consultation document. The ACW urges Ofcom to factor these responses into the design of the awards.

## Background

Wales has a population of 5% of the UK total, with significant dense concentrations in the south-east and to lesser extent the north-east. However, it has a relatively high rural population compared to the UK average: 22% to 12%. The landscape presents a significant challenge to the provision of telecoms services, and '... in many areas of rural Wales, communications services are unavailable.'<sup>1</sup> This includes broadband not-spots, no mobile coverage, no digital radio reception and limited terrestrial television. That there has been at least partial market failure is recognised in the proposals of both the Welsh Assembly and UK Governments for public leadership of next generation broadband infrastructure build.

Welsh Gross Value Added (GVA) has declined from 84,3% of the UK mean in 1989 to 74,3% in 2009. Gross Disposable Household Income has declined from 89,6% of UK in 1995 to 87,9% in 2009.<sup>2</sup>

These declines coincide with the diminution or abandonment of UK regional development initiatives in favour of open-market approaches. The decline in investment in Wales is exemplified by the Foreign Direct Investment data.<sup>3</sup> Wales received 11,8% of the total foreign investment into the UK in 1992; in the five years 2000/4 Wales received 6,8%; in the five years 2005/9 Wales received 3,2%.

The introduction of broadband raises a country's GDP per-capita by between 2,7 and 3,9%. A subsequent increase in the broadband penetration rate by 10% raises growth in per-capita GDP by between 0,9 and 1,5% *in each following year*.<sup>4</sup>

The ACW believes it to be in the vital interest of Wales and the UK that everything possible is done to maximise investment in telecoms in Wales, and that proportionate cost increases are justified, either to operators or to governments.

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<sup>1</sup> Ofcom, Communications Market Report, 2009

<sup>2</sup> <http://www.statswales.wales.gov.uk/TableViewer/tableView.aspx?ReportId=114>

<sup>3</sup> <http://www.publications.parliament.uk/pa/cm201011/cmselect/cmwelaf/writew/inwardin/iw07.htm>

<sup>4</sup> <http://www.cesifo-group.de/portal/pls/portal/docs/1/1185856.PDF>

## Consultation questions

***Question 5.3: Do you agree there is a risk of potentially beneficial sub-national RAN uses not developing without measures to promote competition? Please state the reasons for your views.***

***Question 5.4: Do you agree with the analysis that at least four competitors are necessary to promote competition?***

***Question 5.5: Do you agree that the specific measures we propose to take to ensure there are at least four holders of such spectrum portfolios are appropriate and proportionate?***

The ACW accepts the analysis of benefit to the UK of having had four operators. We believe that further benefit could be achieved by ensuring that competition occurs at the level of the consumer. In densely populated areas this is largely achieved. However, in much of Wales there are not four operators: mandating roaming or mast sharing would enhance price competition and increase coverage.

We understand the term 'Sub-national' to mean 'sub-UK'. The existing regulatory regime has led to significant under-provision of services in Wales. Measures are required to ensure that wholesalers compete to provide retailers in rural Wales with cost-effective solutions.

***Question 5.7: Do you consider that we should take measures to design the auction to assist low-power shared use of 2.6 GHz? If so, what specific measures do you consider we should take?***

Delivering fixed services to isolated communities is almost certainly best achieved by a multi-technology approach. Typically fibre can only be justified to a local or even regional node. Radio delivery may then be achieved over several tens of kilometers using 800MHz, even in undulating terrain. However, blind spots will still exist, especially in Wales, and these are well served by the relatively short range of a 2600MHz repeater. WiMax or similar technologies make the costs of the multi-tiered approach affordable.

In Wales, at least one frequency slot should be reserved, paired with at least one 800MHz slot, for operators or consortia of operators, who propose this model. In the event of no bids being received, the slots should revert to WAG for use in the Digital Wales programme.

***Question 6.1: Do you have any comments on the proposal to include in one of the 800 MHz licences an obligation to serve by the end of 2017 an area in which 95% of the UK population lives, while providing a sustained downlink speed of 2Mbps with a 90% probability of indoor reception? Do you think there is another way of specifying a coverage obligation that would be preferable?***

***Question 6.2: We would welcome views and evidence on the costs and benefits of imposing an additional coverage obligation focused on particular geographical areas, and if such an obligation were to be imposed what might be the appropriate specification of geographic areas?***

The ACW considers a target sustained downlink speed of 2 Mbps by 2017 to be inadequate. By 2017, LTE technology should provide an average data rate between 5 and 15 Mbps. The coverage obligation should be at least 5 Mbps.

That a true mobile 4G network can be achieved in rural areas has been demonstrated by Arqiva, partnered with Alcatel-Lucent. The two companies have created a 4G LTE network in the Preseli Mountains by using 800 MHz spectrum that was made available after digital switchover.

The ACW cannot accept a coverage obligation specified as crudely as 95% of the UK population. This could be achieved without serving a single resident or business in Wales. Even were an operator's coverage decision be based on nation/regional population densities, it is likely that Wales would achieve below 80% population coverage. (This figure is an estimate – it is difficult to calculate and the ACW requests that further Ofcom research be undertaken).

Ofcom has included the 95% UK target in the consultation ‘... since we believe that the costs of such a requirement should be relatively low’. (Para 6.21). The thinking behind this was described by the Ofcom CEO to a Parliamentary Committee.<sup>5</sup>

In summary, the CEO said:

The coverage achieved so far by 3G data is about 90% of UK population, whereas 2G voice reaches between 97 and 98%. The frequency offered for 4G is close to the 2G frequency and therefore the same masts, or masts at similar density, could be used.

On this basis, the ACW believes that the obligation for the UK as a whole should be 97,5%. Propagation will not be identical and system noise bandwidths will differ, but this value should be achieved with modest additional investment in rural areas, which is fully justified. (See Background, above)

Nevertheless, the ACW believes that a UK-wide approach would seriously disadvantage rural areas (including much of Wales). For example, although the 3G UK coverage is about 90% (actually last reported figure is 87%), the value for Wales is below 50%. As a minimum, we recommend that geographic roll-out requirements with individual coverage obligations should be included in the design of the auction. Ideally, operators should be obliged to prioritise rural areas, at least by infilling fixed service not-spots. This has already been done in Germany where licence conditions prioritise rural areas over densely populated urban areas.

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<sup>5</sup> <http://www.parliamentlive.tv/Main/Player.aspx?meetingId=8285>

(Question at 1h31m15s and answer at 1h33m30s)

A reasonable overall target for Wales would be 95%, as measured by population, AND 90% by area. This would ensure that Wales has similar coverage to (the average of) England, and ensure that the investment gap between the two countries is not further widened. This is a minimalist requirement: consumers would be better served by a more rigorous local area-based approach, though this would require rather more effort by the regulator and operator(s). This should be at the level of unitary authority wards or combinations of wards, or postcodes, but at a granularity of not more than say 1000 people. Similar requirements have been imposed in Germany and Sweden, amongst others, with no damage to the industry.

The consultation document suggests that one licensee have these obligations. This would lead to an effective monopoly in substantial parts of Wales. It would also cause market distortions as retailers might offer contracts for the 'monopoly' network at a higher price than obtains elsewhere. The best solution, and one that recognises the power of competition, is to have a minimum of two operators under the coverage obligation. A reverse auction element should be built into the main auction process to identify the public monies the operator(s) require to meet these societal needs. Two operators could control costs whilst maintaining price competition by having free roaming or mast sharing. This should be allowed and encouraged.

The ACW has long campaigned for emergency call roaming and warmly welcomes its recent introduction. Now that all the technical issues have been resolved, it is now appropriate that roaming should be mandatory in all rural areas for all operators, not only those with coverage obligations. This is essential if the overseas holidaymaker is not to reject the UK as a destination.

***Question 6.3: Do you have any comments or evidence on whether an additional obligation should be imposed to require coverage on specific roads?***

We consider there should at least be an obligation to provide coverage on all A roads. In many parts of Wales these are key strategic routes between widely scattered communities.

***Question 6.4: Do you have any comments on our proposal not to use the combined award to address existing not-spots?***

The ACW believes that some provision should be made to address not-spots using fixed or portable devices (not necessarily fully mobile). See Q 5.7 above.

***Question 6.5: Do you have any comments on our proposal not to impose 'use it or sell it' obligations but to consider including an additional power to revoke during the initial term of the licences?***

***Question 7.1: Do you have any comments on the proposals relating to the duration of the initial licence period, our rights to revoke the licence during this period, the charging of licence fees after the end of the initial period and our additional revocation powers following the initial period?***

The ACW believes the distinction between 'use it or lose it' and 'revocation' to be somewhat arcane. We believe that Ofcom should retain the right to revoke licences, fully or partially, at any time after three years from the licence award, if the proposed services are not available in the proposed geographical coverage areas and at the proposed coverage percentage. In the absence of such a power, it has been shown that services are preferentially rolled out in areas of existing good service. In fact, rural areas would probably be without a competitive service even after seven years, cf. 2G and 3G. Such powers are implicit in several EU countries without reported damage to either services or auction processes.

### **Other Recommendations**

The ACW expects that Ofcom will have conducted detailed modelling of the relative costs of covering 90, 95, and 98% of the UK population. We also expect that Ofcom will have modelled the extra costs, if any, of making specific geographic coverage obligations. A successful debate about appropriate obligations in the nations and regions requires transparency, and the ACW believes that these data should be published before the consultation period closes.

It is an unfortunate co-incidence that the consultation, which has particular impact in the devolved nations, should be conducted in a period when the three nations have been without, or are in the process of forming, governments. The ACW recommends that the devolved administrations be given an extension of four weeks to prepare their responses.

### **Summary**

The ACW has proposed solutions which promote competition where appropriate but safeguard areas in Wales where incipient market failure exists.

These include

- Increasing the coverage obligation to 95% of Wales, as measured by population, AND 90% of Wales by area, PLUS all A-roads.
- Placing this obligation on two licence holders to ensure competition in rural areas.
- Imposing 'use it or lose it' clauses.
- Ensuring that the licence-holder with the 95% coverage obligation cannot exploit their monopoly position in rural Wales, should only one licence have that obligation.
- Allowing and encouraging roaming in more remote areas to meet whatever coverage obligation is determined.
- Facilitating small scale fixed wireless broadband in remote areas.