



Commission for
Communications Regulation

Submissions to Consultation

Reservation of Spectrum for the NBS

Comments received from respondents

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1 Alcatel Lucent

Subject: Submission re ComReg 07/24

We are pleased to respond to the ComReg public consultation on the Reservation of Spectrum for the National Broadband Scheme.

The Government National Broadband Scheme is a welcome stimulus to making broadband universally available, as is ComReg's response in facilitating this initiative.

Alcatel-Lucent's WiMAX 9100 broadband product is available in the 3.5 Ghz band and in the band segments proposed in the Consultation Document 07/24. This is the most commonly used band throughout Europe. Alcatel-Lucent's WiMAX range is also available in other commonly used frequency bands such as 2.5 Ghz and 2.3 Ghz.

Alcatel-Lucent supports the proposed TDD B channel, as this is compatible with our WiMAX TDD product offering, which is in compliance with IEEE Standard 802.16e, and is now commercially available as standard production equipment.

In addition to state of the art broadband Internet access, up to 5 Mbit/s downlink and 2 Mbit/s downlink per user, IEEE Standard 802.16e also has a number of key features, including, VOIP and mobility. A wide range of customer premises equipment is also available.

The enclosed brochures provide additional information.

We trust that you will find this contribution helpful in reaching your decisions.

Yours Faithfully,

Oliver Foley
Wireless Business Group
Alcatel-Lucent

2 High Speed Data Solutions

Subject: Reference: Submission re ComReg 07/24

1. We would like to point out that HS data has made significant investment in building a network to deploy broadband services in the 3.5 GHz band over the past 3 years. As you know HS data has acquired and is operating a number of 3.5 GHz licenses in Kerry, West Cork, Waterford, Wexford and Carlow. We have this week provided additional information on new base stations that we plan to activate in Kilkenny and Carlow in the near future and we are evaluating new sites in Kerry and Wexford. Unlike some other licensed operators in the market, HS data has deployed a true wide-area broadband solution in rural areas and has specifically not concentrated on towns or cities. HS data has a significant commercial interest in obtaining licenses for rural areas and has repeatedly applied for licenses to increase coverage in rural areas, these applications have been declined stating that no spectrum is available. We would point out that several of these applications are in areas that are now shown on the NBS map as having no service available.
2. The document 07/24 states that "All the terms and conditions of the Fixed Wireless FWALA legislation and guidelines will apply". HS Data would like to get assurances from ComReg that irrespective of its decision the guidelines under which current license holders are required to operate today (24th May '07) in relation to interference will continue to operate. We specifically refer to "Revised Guidelines to Applicants for FWALA Licenses" ComReg 06/17. In this document Comreg states that "An application will be rejected if its interference contour overlaps with the interference contour of another applicant/licensee."
3. On the assumption that these same guidelines apply, HS data would like to point out that a statement in 07/24 is misleading.

The statement is "By definition, in all the unserved areas identified by the NBS, the 3.5 GHz band is not currently utilised." While this is a true statement, it is in fact the case that in unserved areas identified by the NBS the 3.5 GHz band is not currently utilised and in many of these areas it is not available due to proximity to other existing license holders in the same band. HS data would like to point out that it has made several license applications in areas that are currently identified as unserved areas by the NBS map, and we have been refused these licenses on the basis that "no spectrum is available". The reason these were rejected by ComReg was specifically because the interference contour did overlap with the interference contour of another applicant/licensee. It would clearly be highly questionable if ComReg were now to grant a license to any other company to operate in the same area either with or without a government subsidy.

HS Data request confirmation from ComReg that should the successful tenderer for the National Broadband Scheme contract seek an allocation of FWALA spectrum that the interference rules will be applied by ComReg in a non-discriminatory manner to any applications relating to the National Broadband Scheme.

4. HS Data would like to point out that if it is ComReg's intention to change these guidelines in relation to the NBS then it must state this now so that HS Data and other potential applicants for the NBS can assess their ability to form consortia and provide coverage in the NBS areas. Failure on ComReg's part to clarify this point will mitigate unfairly against HS data's ability to compete in the NBS.
5. HS Data would like to enquire why it is that ComReg has limited this notice to the 3.5GHz A, B, C, and D bands and has excluded the band in use by eircom. This seems to confer on eircom a unfair preferential status in relation to its ability to compete in the NBS. Surely it should be incumbent on eircom to state clearly where it is currently using or planning to use it's license, just as other license holders are required to do.
6. HS Data would like to enquire whether it is ComReg intention to provide any new 3.5GHz spectrum to the winners of the NBS scheme, in particular the "E" band and that part of the spectrum between 3.6 and 3.8 GHz marked as "Not Currently Available for Licensing". We would again point out that failure on ComReg's part to clarify this point will mitigate unfairly against HS data's ability to compete in the NBS.
7. HS Data would like to understand whether as part of this reservation process ComReg propose to suspend the current allocation process. If so we would like to understand when this suspension will take effect and for what duration. It seems to us that any such suspension will in fact have the effect of delaying progress in rollout of broadband to rural areas.

HS Data believes that ComReg must provide a clear and unequivocal response to each of the questions raised by HS Data in respect of the Notice of Intention document. A failure to do so will adversely affect HS Data's ability to carry out a commercial assessment of the NBS contract thereby placing it, and other wireless operators at a significant disadvantage in the tender competition process

Ray O'Leary
Technical Director
High Speed Data Solutions Ltd.

3 Irish Broadband

RESERVATION OF SPECTRUM FOR THE NATIONAL BROADBAND SCHEME

IRISH BROADBAND SUBMISSION CONCERNING THIS NOTICE OF INTENTION

1. Introduction

With more than 40,000 wireless broadband customers, Irish Broadband is the largest broadband wireless service provider in Ireland. Our business is almost entirely dedicated to the provision of wireless broadband services. As such, spectrum allocation for wireless broadband services is critical to the future success of our business and our ability to provide a suite of differentiated broadband services to our customers.

Irish Broadband has deployed an extensive wireless broadband network providing coverage to Dublin, Cork, Galway, Limerick, Waterford, Drogheda, and Dundalk and more than twenty other regional towns and cities throughout Ireland. Irish Broadband holds 3.5 GHz licences in each of its service areas, and also a number of 10.5GHz regional licences.

2. Submission in relation to this proposal

General Concerns

Irish Broadband is concerned about the impact that this proposal may have on the future development of the Fixed Wireless Access Local Area (FWALA) scheme. By undermining the primary process by which wireless broadband spectrum is allocated to the market, this proposal has the potential to weaken what has been a very successful scheme that has provided broadband services to tens of thousands of customers. Many of these customers would not have been able to avail of a broadband service were it not for services deployed under the FWALA scheme. It would be ironic that in trying to resolve the issue relating to the commercial reluctance of the incumbent operator to roll-out broadband services to rural areas that one scheme that is successfully providing services to many of these very customers is negatively impacted. Irish Broadband, therefore, does not support the ring fencing of a block of FWALA licences for the National Broadband Scheme (NBS) and is of the view that the winning operator of the NBS should apply for licences in exactly the same manner as all other operators on an as needed basis.

Integrity of FWALA Licences

Fundamentally, Irish Broadband believes that the integrity of the existing FWALA scheme should be maintained and existing licence holders fully protected. This should include implementation of the recent consultation response Comreg0729. Specifically,

1. All FWALA rules and regulations should be adhered to including those proposed in the recent consultation response (Comreg 0729) and existing use it or lose it requirements.
2. The FWALA scheme should not be put on hold as a result of this proposal. All applications in the pipeline for FWALA spectrum should be processed as normal.

3. The rights to any NBS licences should not encroach on any licences in existence under the FWALA scheme. This needs to specifically include defined exclusion zones.
4. Existing FWALA licences should be extended by a further minimum 7 year period. This would help to provide regulatory certainty in the face of this proposed change and help to improve the environment for continued network investment in FWALA areas.

Efficient use of spectrum

5. Any allocation to the winner of the NBS tender should be on the basis of efficient use of available spectrum. Therefore operators with a National Spectrum allocation in the 3.5GHz band, which by definition covers the un-served NBS areas, should be excluded from this automatic allocation.
6. The spectrum allocation in the un-served areas should be proportionate to demand in that area and should not be over allocated such that it prevents future entry of alternative providers. For example, allocating all 35MHz of the TDD block seems excessive given the low population densities in these locations.
7. This proposal is not compatible with the regulatory principle of technology neutrality. Alternative spectrum blocks (such as 3G expansion band) could also be considered for this application.
8. The NBS allocation process may take in excess of six months to tender and finalise contracts. It is important that the normal FWALA spectrum allocation process is not put on hold during this period and that any FWALA spectrum does not lie fallow and unavailable for use during this period.

Potential to restrict future growth of FWALA and provision of new services

9. The fact that spectrum has not already been applied for in some locations under the FWALA scheme reflects the stage of development of business planning of many of the wireless operators in the market. As the business case is proven for existing areas, wireless broadband operators will naturally expand their service into new locations and into NBS designated areas. This allocation to the NBS may now inhibit the natural growth of wireless services and ultimately reduce competitive offerings in these locations.
10. WiMAX rev. e is currently going through the certification phase of its development cycle. This standard offers the potential of ubiquitous mobile IP data services. Consumer devices for this standard are expected to appear on the market in 2008 and increase in numbers thereafter. Any partial distribution of WiMAX spectrum could yet again hinder Ireland's adoption of new broadband technology and in trying to fix one problem could create another down the line. Inhabitants in NBS areas could find that they are denied advanced services in a few years as WiMAX spectrum has already been allocated for non-mobile fixed broadband services.

4 Lastmile Wireless

Subject: Reference: Submission re ComReg 07/24

These are Last Mile Broadband's responses to the proposed reservation of FWALA Spectrum for the National Broadband Tender.

The current proposal to reserve two Channels in the 3.5Ghz Band for the NBS Scheme will compound the issue of dead zones coverage by creating more dead zones.

We do not agree that all 3.5 FWALA spectrum (Channels ABCD) should be frozen during the NBS tender process and current FWALA regulations should continue on the original basis that the licences were issued.

We do not support the allocation of dedicated 3.5 GHz FWALA channels for the National Broadband Scheme, further we propose that the winning operator of the NBS tender should apply for licences under the same terms and conditions as all other operators on an as required basis.

We propose that Channel E should be included in the spectrum to be made available in the National Broadband Tender; this channel is a reduced spectrum channel and would be sufficient to provide Wireless Broadband to marginal areas. This channel could also be used to solve dead zone issues for existing operators.

Consideration should also be given for use of the 10.5GHz FWALA Band for the NBS Scheme.

We propose that part of the spectrum in Eircom's national 3.5GHz licence should also be available for use in the tender since if an area is deemed to be unserved then surely this also means that Eircom are not using the spectrum nationally.

Any licences issued to the winning NBS tender should not encroach on existing licences and no change should be made to current FWALA rules and regulations to accommodate this.

John Gibbons
Director: Last Mile Broadband

5 Westnet

Response to ComReg Notice of Intention 07/24 “Reservation of Spectrum for the NBS”

Paul Cunnane/Brendan Minish
WestNet

May 2007

1 Introduction

WestNet is grateful for the opportunity to respond to ComReg’s Notice of Intention 07/24 of 3 May 2007, “Reservation of Spectrum for the NBS”. It is understood that the Minister for Communications, Marine and Natural Resources established a Steering Committee charged with establishing a National Broadband Scheme (NBS). The NBS will seek applications from interested parties to provide broadband services to most of the areas in Ireland where broadband is not available.

As a member of the Steering Committee the Commission for Communications Regulation (ComReg), the independent Irish telecommunications and spectrum management regulator has stated its intention to reserve spectrum in the 3.5GHz band specifically for use in locations not currently served by broadband for the winner(s) of the NBS tender, if required.

While it is a laudable and desirable objective to improve broadband penetration in Ireland, WestNet contends that previous initiatives and policy decisions cannot be disregarded. To do so could be unfair and discriminatory to the very entrepreneurs and organisations which today are establishing and developing broadband networks as a consequence of previous government initiatives. In December 2004, the then Communications Minister announced the first phase of a € 140 million Regional Broadband

Plan that would cover more than 80 smaller towns in the state, with populations of 1,500 and upward. A subsequent phase of the Plan addressed the extension of the scheme to rural communities.

WestNet is a young and dynamic company formed with the specific aim of bringing affordable, high-quality broadband solutions to rural communities in the west of Ireland and is currently delivering innovative solutions to areas not considered “cost-effective” by other suppliers. WestNet has actively participated in the Regional Broadband Plan and has had considerable success in providing broadband access to many isolated communities in the west of Ireland.

It is the position of WestNet that the timing of this initiative is extremely unfortunate. As described below administrative action already initiated by ComReg has delayed the deployment of broadband service to WestNet customers. Furthermore, the reservation of spectrum in the manner proposed by ComReg for the Government’s NBS initiative will effectively deny the possibility of WestNet securing access to radio frequencies in a key part of the spectrum, which is critical for the WestNet business model. This is considered to be unfair and discriminatory. WestNet further contends that the result of the Government’s approach to the former Regional Broadband Plan and the continuing availability of suitable spectrum for the provision of rural services could adversely impact on companies such as WestNet and their ability to provide cost-effective and competitive broadband services. WestNet therefore considers that it is inappropriate for ComReg to consider reserving 3.5GHz spectrum for the NBS at this time. Our detailed reasoning follows in subsequent sections of this document.

2 ComReg Consultations 06/59 and 07/29

In November 2006, ComReg invited responses to their consultation paper 06/59, “Increased FWALA Licence Flexibility”. This consultation paper proposed a number of changes to the 3.5GHz and 10.5GHz FWALA licencing schemes, and invited comments.

In our response to that consultation which we submitted in December 2006, we outlined the changes that we believed would be required to make the FWALA licencing scheme a truly useful way to deliver high-quality wireless broadband products to rural areas. Pending a decision from ComReg on this consultation, it would have been impractical for WestNet to have

considered applying for new licences, as the process of locating and securing high sites is heavily dependent on knowledge of the terms under which the licence will be offered.

In short, the open nature of consultation 06/59 created a degree of market uncertainty which has led to an understandable unwillingness, and indeed in some cases an inability, on the part of operators such as ourselves to commit to the purchase of further FWALA licences. This effectively distorts the picture of areas currently shown as being currently unserved and/or with no future plans for coverage on the map as published by the DCMNR in relation to the NBS.

The response to 06/59 has subsequently been published (07/29), and with it a new consultation on yet another proposed revision to the FWALA licencing scheme. This consultation will require another re-evaluation of rollout plans and opportunities.

Under these circumstances, we strongly feel it would be appropriate to *defer* this Notice of Intention until after the decision in relation to 07/29 has been published. Furthermore, it would be appropriate to allow a reasonable period of time for operators to revise their rollout plans and apply for new licences in light of the revised regime, so as to provide a more accurate picture of planned coverage before allocating any spectrum to the NBS.

3 Reservation of “B” channel spectrum

There are four sub-bands of 3.5GHz spectrum available for licencing under the FWALA scheme, labelled “A” to “D”. Of these, “A”, “C” and “D” are intended for FDD (frequency-division duplex) access, leaving “B” as the only spectrum available for TDD (time-division duplex) access.

WestNet (in common with other operators) has chosen to apply for licences in the “B” sub-band. This means that we have committed to rolling out TDD equipment in our existing licence areas; consequently it makes sense (for reasons of economies of scale, compatibility, provision of spare parts etc.) that we should continue to deploy the same equipment in any future licence areas that we may wish to apply for.

If the “B” channel were to be exclusively reserved for the NBS, we would no longer be in a position to apply for TDD licences. This would force us to apply for FDD licences for our planned business expansion.

Given that there are three FDD sub-bands and only one TDD sub-band, we feel it would be *inappropriate* to reserve the only available TDD sub-band for the NBS.

However, there is scope in the 3.5GHz Irish band-plan for two additional TDD slots by utilising sub-band “E” for TDD applications. Using sub-band “E” for the NBS would certainly mitigate the difficulties for existing operators and reduce the amount of market distortion introduced by the NBS.

4 Lack of clarity on scope and timeframes

There are several points that are unclear in relation to the proposed Rules of the Reservation as set out in the Notice of Intention:

- *“The reservation will only apply to areas identified in the NBS process as unserved areas”*

As it currently stands, the areas as defined by the NBS are not clearly defined. They are loosely defined as the areas not shaded in the map; however these are not contiguous geographic areas. The FWALA scheme, by contrast, clearly defines geographic licence areas.

Is it therefore proposed that a licence would not be available to an operator other than the winner of the NBS tender, if at any point its coverage area overlapped with even a small “green” area on the NBS map?

- *“The winner(s) of the tender process, wishing to utilise this spectrum as part of their proposal, will have to apply to use this spectrum under the Fixed Wireless Access Local Area (FWALA) licensing scheme”*

The chronology of this process is unclear. Assuming an operator wishes to submit a proposal to be considered for the NBS tender, will they have to apply through the normal FWALA scheme before being allowed to include FWALA licences in the proposal? If multiple operators all submit proposals involving FWALA, will they all be granted provisional licences by ComReg, pending the decision of the DCMNR?

- *“All the terms and conditions of the Fixed Wireless FWALA legislation and guidelines will apply”*

As pointed out in section 2 above, those terms and conditions are currently under review for the second time.

- “If not taken up by the winner(s) of the NBS tender process the reserved status of these two channels will lapse”

When does the reservation lapse? If the winner(s) of the tender don't include a FWALA element in their proposal, does the reservation lapse immediately? If they do include such an element, how long after the tender has been awarded (bearing in mind the tender is for a five-year period) does the reservation lapse?

5 Summary

This spectrum reservation should not take place at least until a reasonable period of time has lapsed, subsequent to the publication of a decision in relation to Consultation 07/29. Spectrum to be identified for the NBS should be made available in a fair and non-discriminatory manner to operators already providing and planning rural broadband services. In addition, existing operators should have an opportunity to review their rollout plans and comment accordingly. Furthermore, should a reservation of spectrum for NBS take place, considerably more clarity is required concerning the terms for its release. In any event, it is *inappropriate* and *unfair* that access to the only currently available TDD sub-band should be denied existing operators. Sub-band “E” should therefore be considered for NBS TDD applications.