


Lorraine O'Donoghue

From: Michael R. Nelson [REDACTED]
Sent: 12 February 2008 12:08
To: Lorraine O'Donoghue
Subject: Mike Nelson's itinerary

Lorraine,
 It was good to talk to you this morning. Thanks again for taking care of my hotel and transportation from the airport. (I'll arrange my own taxi from the hotel to the airport.)

As we discussed, my usual consulting fee for engagements in Europe is 2000 euros/day.


I've booked the following economy-class flights (price, \$1112.70):

 Mon 25-Feb-08


Washington DC to **London (LHR)**
 (IAD) Arrive 10:15 am
 Depart 10:02 pm +1 day
 Terminal 3



 Flight: 924

Economy/Coach Class

 Tue 26-Feb-08


London (LHR) to **Dublin (DUB)**
 Depart 1:25 pm Arrive 2:45 pm
 Terminal 1


 Flight: 4885
 Operated by: BMI


Economy/Coach Class (Seat assignments upon check-in  [More Information](#)),
 Food For Purchase, Airbus A321


Total distance: 3,960 mi (6,373 km) Total duration: 8hr 33mn (11hr 43mn with connections)

Traveling to Washington DC

 Thu 28-Feb-08

Dublin (DUB) to **London (LHR)** 288 mi
 Depart 9:10 am Arrive 10:30 am (463 km)
 Terminal 1 Duration: 1hr 20mn


 Flight: 4882
 Operated by: BMI

Economy/Coach Class (Seat assignments upon check-in  [More Information](#)),
 Food For Purchase, Airbus A320

Please check in with **bmi**. If checking in at a kiosk, use your name rather than confirmation number.

London (LHR) to **Washington DC**

3,672 mi



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Depart 12:00 pm
Terminal 3

(IAD)
Arrive 3:24 pm

(5,910 km)
Duration: 8hr
24mn

Flight: 919

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Brendan O'Reilly

From: McElligott, John [redacted]
Sent: 08 February 2008 13:15
To: Minister Ryan
Subject: Broadband Connectivity ...
Attachments: Connectivity Perspective.08Feb08.doc; MinisterRyan.08Feb08.pdf

Minister:

Thank you. Here are my thoughts attached. Feel free to get in contact, and we can discuss in more detail. Clearly, there is no simple answer, though I am convinced it is possible to turn things around.

I have also popped a copy in the post.

Best regards

John

From: Minister Ryan [mailto:[redacted]]
Sent: 06 February 2008 12:42
To: McElligott, John
Subject: RE: National Advisory Forum ...

John

Many thanks for getting back to me. I fully understand your decision to refrain from participation in the advisory forum. I read with interest the further developments you refer to and look forward to receiving your further thoughts and indeed to the prospect of meeting with the broadband customer group you are setting up.

kind regards

Eamon Ryan TD

-----Original Message-----

From: McElligott, John [mailto:[redacted]]
Sent: 05 February 2008 19:16
To: Minister
Cc: Colm Ó Conaill
Subject: RE: National Advisory Forum ...

Minister:

Thank you for your letter of last week. Per our communication, I will refrain from participation in the NAF.

Two developments from my side are:

1. We eBay have engaged on this issue with a very wide range of stakeholders. Based on these discussions, I am happy to send you my thoughts on what can be done to address our issues. I intend to do this by the end of this week.
2. Today we convened a meeting of several business comprising a 'Broadband Customer Group'. This group included 12 companies including (i) local eCommerce players and (ii) US Multis with an interest in this. We had a very fruitful and forthright discussion. In due course, we may reach out to you as a group.

Best regards

L O R 19

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John McElligott

From: McElligott, John
Sent: 06 January 2008 21:25
To: 'minister@dcmnr.gov.ie'
Cc: minister_martin@entemp.ie; Colm Ó Conaill
Subject: National Advisory Forum ...

Happy New Year to all:

Please find attached a brief letter to Minister Eamonn Ryan regarding the proposed National Advisory Forum. I look forward to hearing your thoughts regarding the Forum.

With very best regards

John McElligott
Managing Director, eBay Ireland
(tel) [REDACTED]
(skype) [REDACTED]

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Connectivity Perspective - Feb 2008

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1.0 Ireland's broadband performance has been woeful:

Ireland's performance in current generation broadband connectivity has been little short of disastrous. There is considerable evidence to support this view:

- The EU has called out Irish Telecomms as a **market failure**. "Lack of effective competition in Ireland has hampered growth in broadband penetration", according to European competition Commissioner Neelie Kroes in May 2007.
- The OECD has stated that **progress is very slow**. Dimitri Ypsilanti of the OECD's technology directorate stated on Dec 5th that their latest data showed Ireland at 22nd of 30 countries when it comes to broadband provision, compared with 23rd place the previous year.
- The previous Communications Committee Chairman declared in his final report that it gave him "**no pleasure whatsoever**" to write the final report given how little had been achieved.
- Given our economic achievements in other spheres, Ireland's **coverage, quality and costs are all unacceptable**.
- Whatever numbers are quoted, the truth is that **we are way behind where we should be**. In any case, in this instance, using statistics to claim "dramatic" progress is disingenuous without setting targets in advance, and measuring against those targets.
- The Government continually reports progress against the coverage measure. This measure compares the penetration of 'minimal-level' broadband (i.e. 1MB or higher). Against this measure, Ireland is simply below average. We find it curious that they rarely refer to the other measures, such as **speed, cost and quality, where Ireland is way, way below average**. For example using the measure "average download speed per country, as of October 2007, Ireland was **33rd out of 35 OECD countries**. Separately, Forfas reported in their policy document of December 2007 that "prices are significantly less competitive when compared with the services available in other countries¹. For example, Forfas noted that at the time of writing, an Irish customer was paying €2,000/ month for a 6MB service, whereas a German customer was typically paying ~€534 for 16MB of connectivity.
- None of our neighbours (e.g. UK, Scandinavia, Benelux, France) concern themselves with EU averages. They continue to roll out ever more sophisticated offerings, and plot their **Next Generation Networks** of up to 100MB connectivity to the home. For example, BT in the UK has launched a scheme to trial open-access 100MB to 10,000 homes in Kent. We claim the 4th highest per capita GDP on Earth. And we want to be average?
- Our **demography is not a barrier to achieving broadband leadership**. Some years ago, demography was sometimes cited as a factor in explaining differences between broadband capabilities across countries. According to this theory, Ireland would be a natural laggard due to its dispersed population. However, recent years have seen this theory completely discredited. By 2007, several large sparsely-inhabited countries had achieved

¹ Ireland's Broadband Performance and Policy Requirements, December 2007

broadband leadership in terms of coverage, speed cost and quality. Such countries include Canada, Sweden and Norway, all of which have far more dispersed populations than Ireland.

- We believe recent cheery news (e.g. around Mobile Broadband) is happening **despite our underlying fixed-line issues**, not because we have addressed them. Mobile broadband plays a role in connectivity in several nations. However, it is typically aimed at people on the move, and as a supplement for fixed-line broadband. This is because, by international standards, the speed and quality currently available via mobile significantly lags that of fixed-line. Ireland has seen a major take-up of Mobile Broadband amongst people using this as their **primary** source of connectivity. While we welcome this, it provides further evidence that Ireland has been experiencing a serious supply-side deficit in the fixed-line arena.
- **Ireland's issues have been supply-driven.** In early 2007, many parties claimed that our poor record in connectivity was a "demand-side issue". This is nonsense. As a high-GDP country with amongst the highest GSM penetration on earth, there can be no reasonable reason why Ireland would suffer a "demand deficit" for broadband in contrast to all other EU countries. The recent success of the Mobile Broadband offerings has proven the hollowness of the "demand-side" argument, and this argument has curiously disappeared from the debate.

2.0 So why is Broadband Connectivity important?

Broadband connectivity is important for Ireland. Connectivity is a key building block in achieving our goals of being a Knowledge Economy and moving up the economic "value-chain". Without high quality connectivity, it is unlikely we can achieve either.

The development of the Irish online sector is being hampered by our poor infrastructure. The retail market has to date had very poor connectivity. This makes it difficult for online businesses to reach them. This situation dampens local innovation, and acts as a brake on investment that targets the retail market. eBay's customers continually ask us in large numbers to help them in gaining access to better connectivity.

Currently, Ireland is nowhere in terms of online application usage and innovation. This is a major missed opportunity, which we may end up regretting. With our prosperity, US links and English language, we should rightly be an online hotbed. Instead, our connectivity is holding the country back. We actually believe there is a crisis here, and if we do not fix it, Irish competitiveness will suffer gravely.

Several observers even regard leadership in broadband connectivity as essential for future prosperity and growth. The Economist has published an article promoting the virtues of broadband connectivity as a driver of economic success, entitled "Open up those highways" (Jan 19 2008). This article included the following passage:

"In eras past, economic success depended on creating networks that could shift people, merchandise and electric power as efficiently and widely as possible. Today's equivalent is broadband: the high-speed internet service that has become a vital tool for producers and distributors of goods as it is for people plugging into all the social and cultural opportunities offered by the web. Easy access to cheap, fast internet services has become a facilitator of economic growth and a measure of economic performance."

The Economist goes on to say that "The best explanation [of how to achieve leadership in connectivity] is that broadband thrives on a mix of competition and active regulation to ensure an open contest."

3.0 So why has Ireland's broadband performance been so poor?

All sorts of reasons have been put forward for Ireland's poor performance in broadband connectivity in Ireland. In essence though, we experienced a classic "market failure". As Minister Ryan stated in the Oireachtas on Dec 12th :
"One of the reasons Ireland lags behind other countries is the absence of competition in the market. Following the sale of the State telephone company, the privatised company, for a variety of reasons, did not invest in its network and the development of broadband. At the same time, the cable network was experiencing difficult times and little investment was made in the network. Our poor performance was due to this lack of competition."

Or put simply, the right balance of investment incentives and competition has not been achieved.

The Minister is correct that lack of private sector investment and competition is the chief reason for our poor connectivity performance. However, telecommunications policy and provision of infrastructure are the responsibility of the Department of Communications. In this regard, three additional factors as contributing to the current mess, namely:

- **Lack of political leadership:** The UK has a Minister for Competitiveness who "sees the highest performance telecoms sector as one of his top priorities". We don't.
- **Lack of Government investment:** Ireland has an NDP with €30Bn due to be spent on roads and <€0.5Bn for Connectivity. Is this the right investment balance? The amount earmarked for Connectivity is less than eircom's €655M annual profits in 2007.
- **Poor Execution:** In many ways the MANs have been a major improvement. At latest count, 26 operators are using the MANs, and eircom have a declared interest in acquiring them. So any argument that the MANs were 'duplication' or not required, is clearly false. However, the programme has had several issues, notably in "joining-up" the MANs, as well as the education and marketing of ENETs services.

4.0 Where do we stand on NGN Planning?

2008 will be a crucial year in addressing Ireland's connectivity issues. Countries around the world are now planning and rolling out Next Generation Networks (NGNs). Ireland should start planning our approach to NGN. Sadly, the current situation is not favourable. The existing industry programme for NGN (called the NISG) is currently stalled, and progress is not being made.

4.1 The Voice of the Customer:

Our record in delivering "current generation broadband" does not inspire confidence. The entire debate was dominated by squabbling infrastructure companies. This is akin to having property developers as the only voices in the housing debate. The result was the "LLU wars" of the last few years. These appear to have ended recently, which means that only in early 2008 do we have a reasonable chance of catching up with our peers in "current generation broadband".

To date, the voice of the customer has been missing. Representatives of Irish online businesses view ourselves as customers of our connectivity infrastructure. As customers, we are comprehensively disappointed by what has been achieved to date, and highly concerned about the future. It is of crucial importance to us, to our businesses, and to our sector that Ireland does not fail as spectacularly in NGN as it has done in current generation broadband.

4.2 The latest Departmental Review:

The Department of Communications (DCENR) is an important player in Irish connectivity, given its policy objectives which include "ensuring that Ireland is best placed to avail of the emerging opportunities provided by the information and knowledge society, by promoting investment in state of the art infrastructures, by providing a supportive legislative and regulatory environment and by developing a leading edge research and development reputation in the information, communications and digital technologies".

The Department is currently considering policy options in relation to the planning and rollout of Next Generation Broadband in Ireland. They are drafting a policy paper, which will soon be published for consultation. The DCENR are a crucial player in NGN planning given their responsibility for policy and infrastructure provision in this area. We absolutely need the Department to exhibit leadership in this process, to take the difficult decisions and be willing to take on any vested interests. We also need to ensure that the customer's voice is heard as part of this process, and ensure our views and recommendations are taken on board as NGN planning gets underway.

To date, the Department has sought to portray Ireland's current situation as satisfactory. It has even referred to recent developments as "exceptional progress". We find this curious, and believe that if the Department wants to assess our performance in good faith, it should first establish targets in terms of coverage, speed, cost and quality, and measure performance against those targets to determine the success or otherwise of progress in connectivity.

4.3 Eircom's latest change in structure:

The situation regarding the incumbent is a source of concern to many parties associated with provision of connectivity infrastructure. The company has changed structure and ownership a large number of times, and for a variety of reasons, has not historically invested in its network. The company also has a high level of indebtedness (~€4Bn). Many commentators wonder how a company in such a position will be able to lead the rollout of NGN in Ireland. This situation contrasts sharply with the situation in Northern Ireland where, it is widely acknowledged, the functional separation of BT, played a major role in rolling out broadband there, and across the UK.

Eircom's latest owners are currently proposing a new type of separation, one that has not yet been carried out in any advanced economy. In fact, BCM has described the proposed approach as "unchartered waters". While the future corporate structure is primarily a matter for that company, the proposal has raised questions in many quarters regarding the incentives of the new arrangements to provide an efficient network at competitive prices. Other industry participants warn that such a structure could undermine efforts to stimulate competition. These concerns have to be addressed. At the same time, it will be imperative to ensure that the right investment incentives exist to ensure that eircom, as the former monopolist and current dominant player, plays a leading role in helping Ireland achieve NGN.

4.4 Do we need to guard against complacency?

We are concerned that complacency is setting in. Vodafone & O2 have saved many Irish blushes by launching mobile broadband. As a result, all sorts are claiming 'dramatic progress' etc. in Ireland's broadband story.

As stated earlier, we believe this "dramatic progress" is nonsense. The recent good news around Mobile Broadband is happening despite our underlying fixed-line issues, not because we have addressed them. Mobile broadband is typically aimed at people on the move, and as a supplement for fixed-line broadband. Ireland has seen a major take-up of Mobile Broadband amongst people using this as their

primary source of connectivity. While we welcome this, it simply illustrates that Ireland has been experiencing a serious supply-side deficit in the fixed-line arena.

Senior politicians concede that broadband is currently not a "vote-getter". We understand this. We also recognize that for the majority of retail customers, the fact that 1st generation broadband is currently being rolled out is a pleasure. As a result, there is likely to be less consumer pain in 2008 than in 2007. Separately, the Sunday Times has warned of what it sees as "concerted attempts to dismiss" our broadband concerns.

There is a real risk that these developments will push our fixed line issues off the agenda, and Ireland will fail as spectacularly in NGN as we did in current generation connectivity. We believe this would have significant consequences for Ireland's future competitiveness, and the coveted "high value-chain" investment that we wish to attract in the future.

5.0 How does Ireland achieve leadership in NGN?

The question of how to achieve leadership in Next Generation Networks (NGN) is not a simple one. There is no silver bullet. Answering the question involves taking on significant, established vested interests, and taking tough decisions.

Nonetheless, we believe the key to achieving leadership in NGN lies in achieving greater **investment** and **competition** in **Core** and **Access**. We need "more of both in both", so to speak. The key here will be ensuring all core investment is interconnected and open access. It is also important to make the best possible use of existing assets, and ensure a wide group of investors in Ireland's future core capacity. It is imperative that we avoid a monopoly situation in terms of core infrastructure provision.

In addition, there is certainly more than can be done to **stimulate demand**. We outline here a set of recommendations that are not intended to be exhaustive, though if implemented successfully, could help achieve these goals.

There are considerable carriers in place to implementing several of the recommendations we describe here. Several stakeholders and vested interests will claim "it can't be done". We call for an end to this mantra, and a move to a more constructive phase or a "how best can it be done?" approach.

5.1 Investment and competition in Core:

Delivering NGN will mean rolling out a largely IP-based core infrastructure (fiber core) throughout the country. This will replace the existing largely switch-based infrastructure.

The key will be for Ireland's future core to be a network of fiber owned by several parties with open access to this capacity. The vision is that all core infrastructure will be inter-connected and no party will have a monopoly position in the provision of core infrastructure. In this way, many entities will contribute to Ireland's "core capacity".

It is important to move on from the concept of an "incumbent core", and a "duplicated core". Instead, the debate needs to focus on provision of interconnected, open-access core capacity. Monopoly infrastructure provision has to be avoided as it would have significant potential to dampen innovation and restrict price improvements based on efficiency gains. It would also have the potential to remove the incentives (or ability) for a host of private players to invest. Clearly, all of these outcomes are undesirable.

There are already considerable amounts of fiber laid throughout the country. Much of this is in state hands. In addition, several private companies have already invested in fiber, or have announced a desire to do so. Three specific issues have to be addressed to enable rollout of a fiber core. These are:

- How can we best join-up or “interconnect” all of the fibre owned by different organizations? Ireland’s “squabbling infrastructure companies” have a programme to determine the way forward on interconnection, called the NISG. As of Jan 2008, this programme was stalled and progress is not being made on this issue.
- How do we make it as easy as possible for companies that wish to lay fiber to actually do so? This includes ensuring that the investment required to lay fiber is as low as possible?
- What are the learnings from project “Dingle” – a previous effort to join up state-owned fibre assets, and the MANs programme.

In addition, the Core cannot be address in isolation. Industry players will not invest in core if they cannot be confident of getting the **customer access**. Therefore, in the following section, we will address how as wide a group of industry players as possible have sufficient Access to enable them to invest in Core.

5.2 Recommendations to achieve investment and competition in Core:

We recommend that the Department of Communications take on board four key steps to help delivering higher investment and more competition in Core:

1. **Maximise benefits from existing state-owned assets through creation of CoreNet:** Several state bodies already own considerable fiber and ducting resources. These include Bord Gais, ESB, Irish Rail, ENET, NRA etc.. The Irish Government should use these existing government-owned assets to create a sort-of open-access “mega-MAN”, which would provide significant core capacity. Maybe it should be called “CoreNet”. Ownership of these assets would remain where they are. CoreNet would lease the assets from the owners and then lease them on to the providers (similar to how ENET works today). The end result is a considerable amount of IP-based “core capacity”. In other words, the Government uses its existing assets as effectively as possible, and in the process, seeds Ireland’s NGN capacity. Such a move should at least ensure IP-core capacity of some description is in place in Ireland, and would involve the use of existing assets. Also, a better understanding of what is in place is likely to stimulate and provide greater specificity for greater core investment by incumbent and other private sector providers. This investment by operators can be focused on the highest priority core infrastructure areas not sufficiently covered by, or in competition with, CoreNET.
2. **Invest NDP funds in Ducting:** The Government should invest in Ducting as a means of stimulating investment in backhaul and fiber to the cabinet (FTTC). This ducting should be made available to all operators on an open-access

basis, Rapid roll-out of ducting would both remove a substantial investment hurdle (accounting as it does for approximately 70% of the cost of installing fiber) and stimulate competition as more than one private operator will be able to put its fiber in this state-owned ducting. Sufficient amounts of ducting will help ensure it is commercially viable for private operators to invest in laying their own fiber and compete with each other on a wholesale basis. The precise levels of investment in Ducting that are needed should be determined by DCENR based on what is needed to stimulate competition.

3. **Ensure ducting is included in future road works:** Government should establish the regulatory regime such that, from now on, any time roads are being built or dug up, ducts are laid as part of the civil works.
4. **Extend MAN programme:** The MANs and the future CoreNet should be extended and augmented with additional government investment to plug any significant gaps. This investment should come from the NDP. The precise level of investment needed should be determined by CoreNet once this is established. This can be thought of as an extension to the existing MAN programme to further locations and involving key backhaul routes.
5. **"Fit for purpose" regulation to move from LLU to NGN:** Ireland's regulation needs to be "fit for purpose" in terms of enabling the move from LLU to NGN. Interconnectivity and open access of core infrastructure is essential. Regulation should also promote migration of provision for existing services (e.g. USO) from PSTN/LLU to NGN, and minimize the time required for Ireland to make our much-needed transition. Wholesale pricing regulation is also important. The vision is *retail minus* wholesale pricing. Any other goal is difficult to countenance. However, this may not be achievable straight away. Regulation should ensure a realistic progression towards retail minus within an achievable timeframe.

5.3 Investment and competition in Access:

Competition between providers and competition between technologies is important to achieving high levels of broadband take-up. Ireland's poor broadband performance has largely stemmed from a lack of competition in this sphere. Until recently, alternative fixed-line providers have struggled to be permitted to compete in fixed-line broadband. At the same time, the recent success of 3G broadband from O2, Vodafone and 3 highlights the benefits of broadband availability through different technologies.

Fiber to the Home (FTTH) is viewed as the leading technology for high-speed broadband. However, various wireless technologies (based on a fiber backbone) can also play a role, especially in access. These include WiFi, WiMax and 3G - which collectively we will refer to as Wireless. For the foreseeable future, copper wires (LLU) will play a role in delivering faster broadband speeds, particularly as they are currently so prevalent in Ireland, though are likely to play a minor role in true high speed broadband. In summary, over the next few years, it is likely that competition between and among Fiber, LLU and Wireless that will drive investment in Access.