



Commission for  
**Communications Regulation**

## Information Notice

### **GSM Liberalisation Project: Publication of correspondence provided by respondents (and ComReg written responses to same) and redacted paragraphs from Document 12/25**

<b>Document No:</b>	<b>12/49</b>
<b>Date:</b>	<b>25 May 2012</b>

**Non-confidential correspondence provided by respondents in relation to ComReg's multi-band spectrum release proposals from 28 November 2011 until 25 May 2012 (and ComReg written responses to same).**

1. eircom Group: letter to ComReg "Multi-Band Spectrum Release - Response to Draft Information Memorandum (ComReg 11/75)" (letter dated 28 November 2011);
2. ComReg: email reply to eircom Group letter of 28 November 2011 (email dated 6 December 2011);
3. eircom Group: email to ComReg "Confidential material in ComReg 12/21" (letter dated 16 March 2012);
4. ComReg: email reply to eircom Group email of 16 March 2012 (email dated 20 March 2012);
5. eircom Group: letter to ComReg "Multi-Band Spectrum Award" (letter dated 3 April 2012);
6. ComReg: letter reply to eircom Group letter of 3 April 2012 (letter dated 5 April 2012);
7. eircom Group: reply to ComReg letter of 5 April 2012 (letter dated 5 April 2012);
8. eircom Group: letter to ComReg "Multi-band Spectrum Award" (letter dated 24 May 2012)
9. Vodafone: email to ComReg "Update on pending publication." (email dated 16 March 2012);
10. Vodafone: email to ComReg "Comreg Mailinglist Update - ComReg." (email dated 17 March 2012);
11. Vodafone: email to ComReg "Comreg Mailinglist Update - ComReg." (email dated 20 March 2012);
12. ComReg: email reply to Vodafone email's of 16, 17 and 20 March 2012 (email dated 20 March 2012);
13. Vodafone: email to ComReg "Comreg Mailinglist Update - ComReg." (email dated 10 April 2012);
14. ComReg: email reply to Vodafone email of 10 April 2012 (email dated 12 April 2012);
15. Vodafone: letter to ComReg "Commission for Communications Regulation ("ComReg") Response to Consultation and Decision on Multi-band Spectrum Release (ComReg document D04/12)." (letter dated 11 April 2012);
16. ComReg: letter reply to Vodafone letter of 11 April 2012 (letter dated 19 April 2012);
17. Vodafone: email to ComReg "Spectrum letter" (email dated 20 April 2012)
18. ComReg: email reply to Vodafone email of 20 April 2012 (email dated 20 April 2012);
19. Vodafone: email reply to ComReg email of 20 April 2012 (email dated 23 April 2012);
20. ComReg: email reply to Vodafone email of 23 April 2012 (email dated 23 April 2012);
21. ComReg: email to Vodafone "Spectrum letter" (email dated 23 April 2012);
22. Vodafone: letter to ComReg "Standards of Custodianship of Data by ComReg particularly in relation to the proposed auction of a number of individual rights of use in the 800 MHz. 900 MHz and 1800 MHz radio spectrum bands (the

- "Proposed Auction"): The Need for a New Protocol" (letter dated 23 April 2012);
23. ComReg: letter reply to Vodafone letter of 23 April 2012 (letter dated 26 April 2012);
  24. Vodafone: letter reply to ComReg letter of 26 April 2012 (letter dated 30 April 2012);
  25. ComReg: letter reply to Vodafone letter of 30 April 2012 (letter dated 4 May 2012);
  26. ComReg: email to Vodafone (OCC Scorecards" (email dated 8 May 2012)
  27. Vodafone: email to ComReg "Custodianship of Data and Spectrum auction process - Confidential" (email dated 8 May 2012)<sup>1</sup>
  28. ComReg: reply to Vodafone email of 8 May 2012 (email dated 10 May 2012)
  29. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone "Vodafone: Custodianship of Data/Spectrum Auction/Interim Licences" (letter dated 8 May 2012)
  30. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone "Vodafone: Security and Custodianship of Information/Spectrum Auction" (letter dated 16 May 2012)
  31. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone "Vodafone/Spectrum Auction/Interim Licences" (letter dated 17 May 2012)
  32. ComReg: reply to McCann Fitzgerald letters of 8, 16 and 17 May 2012 (letter dated 18 May 2012)
  33. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone "Vodafone/Spectrum Auction/Interim Licences" (letter dated 23 May 2012)<sup>2</sup>
  34. H3GI: letter to ComReg "DOC. NO. 12/25" (letter dated 5 April 2012);
  35. ComReg: reply to H3GI letter of 5 April 2012 (letter dated 11 April 2012);
  36. H3GI: letter to ComReg "DOC NO. 12/21" (letter dated 13 April 2012);
  37. H3GI: letter to ComReg "COMREG – 800, 900 AND 1800 MHZ AUCTION" (letter dated 20 April 2012);
  38. Telefónica: letter to ComReg "Multi-band Spectrum Release" (letter dated 13 March 2012 incorrectly, should instead read 13 April 2012)
  39. ComReg: reply to Telefónica letter of 13 April 2012 (letter dated 19 April 2012)
  40. Telefónica: email to ComReg "Data Breach" (email dated 23 April 2012)
  41. ComReg: reply to Telefónica email of 23 April 2012 (email dated 24 April 2012)
  42. Telefónica: letter to ComReg "Multi-band Spectrum Release – Opportunity Cost and Rebates" (letter dated 2 May 2012)
  43. Telefónica: letter to ComReg " Proposed ComReg spectrum auction" (letter dated 22 May 2012)

## **A.2 Redacted paragraphs of Document 12/25 which can now be published**

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<sup>1</sup> Note, ComReg are awaiting clarification of confidentiality of this email, and will publish this email at a later date.

<sup>2</sup> Note, ComReg are awaiting clarification of confidentiality of this letter, and will publish this letter at a later date.

**ANNEX A.1**

1. eircom Group: letter to ComReg “Multi-Band Spectrum Release - Response to Draft Information Memorandum (ComReg 11/75)” (letter dated 28 November 2011);

Alex Chisholm  
Chairperson  
Commission for Communications Regulation  
Abbey Court, Irish Life Centre  
Lower Abbey Street  
Dublin 1

28 November, 2011

**Re: Multi-Band Spectrum Release – Response to Draft Information Memorandum (ComReg 11/75)**

Dear Alex,

I am writing to you in connection with the Draft Information Memorandum (ComReg 11/75) and in particular, our concern in relation to the declarations which bidders are required to provide as set out in paragraphs A6.14 and A6.15.

The Draft Information Memorandum would require Bidders to confirm by declaration that:-

*A6.14: The Bidder or, in case the Bidder is a partnership, a joint venture or equivalent, the relevant partners or participants is not in suspension of payments, liquidation, or bankruptcy or winding-up proceedings.*

*A6.15: The Bidder is not, or, in case the Bidder is a partnership, a joint venture or equivalent, the relevant partners or participants are not, nor is expected to be involved in any disputes which may in any material and adverse way affect the Bidder's possibility of complying with the terms of the Licence, if the Bidder is awarded such Licence.*

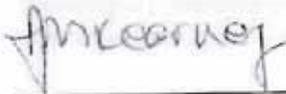
As you will be aware, eircom Group is currently engaged in a process of balance sheet remediation with its lenders. At this point in time we cannot predict with any certainty the timescales to complete this initiative or the technical form that such remediation may take although we are confident that a sustainable financial structure for eircom Group will result from this process to the benefit of the Irish economy. If the remediation process is not completed in advance of the proposed award process, it is possible that eircom Group could, on the basis of paragraphs A6.14 and A6.15, be precluded from submitting an application.

We do not believe it would be in the best interests of the award process or the long term competitive development of the Irish communications market for eircom Group to be automatically precluded from applying to participate in the proposed award process due to a short term technicality without an opportunity to engage with the Commission.

In that context, we request the Commission to consider the impact which paragraphs A6.14 and A6.15 could have such that, depending on the circumstances at the time, an eircom Group company could technically be disqualified automatically from the auction for non-compliance with either or both of paragraphs A6.14 and A6.15. We suggest that the paragraphs be redrafted in such a way that they become obligations of notification rather than automatic disqualification. On that basis, applicants would be required to notify the Commission if any of the matters contemplated by A6.14 and A6.15 are relevant at the time of application. The Commission may then exercise its reasonable discretion to determine whether the applicant is entitled to participate as a Qualified Bidder.

Given the confidential and commercially sensitive nature of the balance sheet remediation process, the concerns of the eircom Group, which arise in the context of A6.14 and A6.15 have not been specifically raised in our overall general response to the Draft Information Memorandum (which response has been submitted today in advance of the deadline). Nevertheless, we kindly request that this matter is considered as part of the review of the draft Information Memorandum.

Yours sincerely,



Ann Marie Kearney  
Chief Legal & Regulatory Affairs Officer

- 
2. ComReg: email reply to eircom Group letter of 28 November 2011 (email dated 6 December 2011);

**From:** Samuel Ritchie  
**Sent:** 06 December 2011 13:48  
**To:** 'akearney@eircom.ie'  
**Cc:** Alex Chisholm; 'makeane@eircom.ie'  
**Subject:** RE: STRICTLY CONFIDENTIAL AND COMMERCIALY SENSITIVE

Dear Ms. Kearney

On behalf of Alex Chisholm (Chairperson) I acknowledge receipt of your letter dated 28 November 2011 in relation to ComReg Document 11/75.

ComReg will give all due consideration to your letter before finalising the information memorandum.

Please be advised that ComReg has assessed your letter in the context of its Guidelines on the Treatment of Confidential Information (ComReg Document 05/24) and does not intend to publish your letter.

Please also be advised that the final information memorandum will indicate that a confidential submission was received from eircom and that submission has informed ComReg's final information memorandum.

Yours sincerely

**Dr. Samuel Ritchie**  
**Manager Spectrum Operations**

Commission for Communications Regulation

3. eircom Group: email to ComReg "Confidential material in ComReg 12/21"  
(letter dated 16 March 2012);

**From:** McCoubrey, William  
**Sent:** 16 March 2012 16:36  
**To:** Samuel Ritchie  
**Cc:** Patrick Mulvey  
**Subject:** Confidential material in ComReg 12/21

Dear Samuel,

I have been reviewing the various responses published in ComReg 12/21. I note that section 2.21 and sections 4.27-4.33 have been obscured. In other sections, for example 4.14, where O2 has considered material to be confidential it has done so by annotating that material has been '[Redacted]'. The sections that have been obscured appear to refer to potential flaws in the auction design in relation to winner and price determination in respect of party specific lots. I would be grateful if you could clarify why these sections have been obscured and the rationale for so doing. It seems to us that if there is a potential flaw in the auction design all interested parties should have the opportunity to review same.

Regards,  
William

William McCoubrey  
Head of Regulatory Policy - Mobile and Consumer Affairs



4. ComReg: email reply to eircom Group email of 16 March 2012 (email dated 20 March 2012);

**From:** Samuel Ritchie  
**Sent:** 20 March 2012 16:24  
**To:** 'McCoubrey, William'  
**Subject:** RE: Confidential material in ComReg 12/21

Dear William

Thank you for your e-mail of 16 March.

Parts of section 2.21 and all of sections 4.27-4.33 (inclusive) of Telefónica's submission to ComReg Document 11/75 have been redacted in accordance with ComReg's *Guidelines for the Treatment of Confidential Information* (Document 05/24). As you will note from page 67 of Document 12/25, ComReg is currently engaging with Telefónica with regard to its claim of confidentiality.

In relation to your view that "*...if there is a potential flaw in the auction design all interested parties should have the opportunity to review same*", I would draw your particular attention to chapter 4.3 of Document 12/25, and Annex A - "*Pricing methodology with party-specific lots*" of Document 12/24.

As is ComReg's usual practice, your e-mail of 16 March is considered to be a submission in response to consultation and will be published in due course, subject to ComReg's *Guidelines for the Treatment of Confidential Information* (Document 05/24) and any comments you may wish to make in that regard.

Regards

Samuel

**Dr. Samuel Ritchie**  
**Manager Spectrum Operations**

Commission for Communications Regulation

5. eircom Group: letter to ComReg "Multi-Band Spectrum Award" (letter dated 3 April 2012);

3 April 2012

George Merrigan  
Director of Market Framework  
Commission for Communications Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

### Multi-band Spectrum Award

Dear George

We refer to ComReg's Decision No. D04/12 and our letter of 9 March 2012.

We continue to have significant and grave concerns regarding the possibility that an auction outcome similar to that in the Swiss auction occurs in Ireland, namely significant asymmetries in the price paid by bidders for similar quantum of spectrum. In particular, the Decision does not include any mechanisms that would prevent such an outcome as the result of strategic bidding. It remains accordingly possible that a participant bid in such a way as to inflate the final price paid by other participants without affecting its own price. This is clearly inconsistent with ComReg's objectives, including as articulated in ComReg Doc. 09/99, namely that:

- the auction should encourage participation in the process, and mitigate concerns about bidder asymmetries both between the incumbent operators and between incumbents and potential entrants;
- the auction should promote incentives for bidders to bid in a straightforward manner, and not to engage in strategic behaviour or tacit collusion; and
- the auction should provide a high level of clarity and certainty for bidders as to the level of expenditure that they are liable for as a result of the bids that they place.

We have been advised that the risks posed by strategic bidding can be easily addressed by the introduction of further spectrum caps as follows:

- Introduce a cap specific to the 1800MHz band of 2x30MHz;
- While retaining the sub 1GHz cap at 2x20MHz in the second time slice, introduce caps of 2x15MHz on each of the 800 and 900MHz bands.

This would create the conditions for a fair, efficient and equitable auction in Ireland without adversely affecting any auction participant or the award process itself.

We would ask that you consider the above and revert to us by close of business tomorrow Wednesday 4<sup>th</sup> April 2012. We recognise that our proposal above is of relevance to Industry and therefore ask that you publish this letter immediately.

Yours sincerely,



Pat Galvin  
Director of Regulatory and Public Affairs

CC: Alex Chisholm, Paul Donovan

6. ComReg: letter reply to eircom Group letter of 3 April 2012 (letter dated 5 April 2012);



Commission for  
**Communications Regulation**

05 April 2012

Mr Pat Galvin  
Director of Regulatory and Public Affairs  
Eircom Ltd.  
1 Heuston South Quarter  
St. John's Road  
Dublin 8

Dear Mr. Galvin

Thank you for your letter of 3 April.

We note, again, eircom Group's ("eircom") particular analysis and interpretation of the outcome of the Swiss auction. We further note that eircom continues to have the concerns previously expressed by it regarding the possibility of the asymmetries referred to in your letter as being considered by eircom to have arisen in Switzerland, arising in the process decided upon by ComReg in Ireland. To address the risk perceived by eircom as being capable of resulting from strategic bidding, eircom proposes the introduction of additional spectrum caps into the auction process decided upon by ComReg.

In response, and as intimated above, we would note that the concerns raised by eircom regarding the Swiss auction outcome and strategic bidding were already raised in your letter of 9 March, 2012, and were fully considered and addressed in ComReg Documents 12/23 (section 6.4) and 12/25 (section 4.3). In Document 12/25 (Decision No. D04/12), having taken into account all of the material generated on foot of this lengthy consultation process as a whole, as well as having, in particular, considered eircom's concerns in this regard, and the views of its expert advisors, ComReg made it clear that, in all of the circumstances, it did not consider these concerns to be well-founded, or such as to justify or require the introduction of any changes to the proposed auction process.

Furthermore, while Switzerland is one of a number of countries to have used a CCA to assign spectrum-use rights, we do not consider undue emphasis should be placed on this particular similarity between the respective assignment processes. ComReg would also caution generally against too direct a read-across to our planned auction, given the many differences between the overall facts and circumstances obtaining, respectively, in Switzerland and Ireland, and, indeed, in terms of the particular scope and design of the respective auction processes.

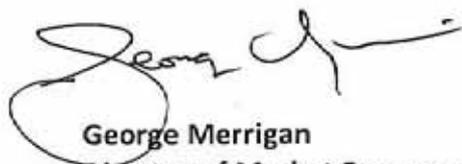
Further, we would incidentally note that it appears that all three winners in the Swiss auction, including Sunrise Communications AG (who paid more than the other two winners in the auction), have expressed satisfaction with the results of the auction.

You might also note that the soon-to-be-published Information Memorandum will give interested parties further clarification and detail in relation to the auction rules and processes, and will, further, include information about proposed auction workshop sessions, and so on.

In light of the foregoing, we feel it is neither necessary nor appropriate for ComReg to enter into further correspondence or consultation on this matter, or to consider further the introduction of the additional spectrum caps proposed in your letter of 3 April.

As you have yourself suggested in your letter, ComReg will publish this exchange of correspondence, in line with its procedures in that regard.

Yours sincerely,



**George Merrigan**  
Director of Market Framework

Cc: Alex Chisholm  
Paul Donovan

7. eircom Group: reply to ComReg letter of 5 April 2012 (letter dated 5 April 2012);

5 April 2012

George Merrigan  
Director of Market Framework  
Commission for Communications Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

### Multi-band Spectrum Award

Dear George

We refer to your letter of today's date in response to our letter dated 3 April.

We continue to be concerned that the design of the auction leaves scope for strategic bidding which would result in asymmetries in the auction outcome in terms of the price paid by bidders relative to the quantum of spectrum obtained and we are disappointed that ComReg did not give further consideration to our sensible proposal and seek the views of Industry in relation to same.

However, we note your statement that the Information Memorandum will give further clarification and detail in relation to the auction rules and processes, and information about proposed auction workshop sessions. We take relief accordingly that the Information Memorandum is capable of adequately addressing our concerns in relation to the issue of strategic bidding. In these circumstances, we will reconsider our position once we have had the opportunity of reviewing the Information Memorandum and the further clarification and detail contained therein that are relevant to this issue.

All of eircom's and Meteor's rights in relation to this matter are strictly reserved.

Yours sincerely,



Pat Galvin  
Director of Regulatory and Public Affairs

cc: Alex Chisholm, Paul Donovan

8. eircom Group: letter to ComReg "Multi-band Spectrum Award" (letter dated 24 May 2012)

Meteor Mobile Communications Limited  
In examination (under the Companies (Amendment) Act, 1990)  
1 Heuston South Quarter  
St. John's Road, Dublin 8

T: +353 (0)1 671 4444  
E: info@meteor.ie  
W: www.meteor.ie



24 May 2012

George Merrigan  
Director of Market Framework  
Commission for Communications Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

### Multi-band Spectrum Award

Dear George,

I am writing in relation to rumours of which we have become aware that the security of data, including interested party data, pertaining to spectrum auction related matters may have been compromised in recent months. If correct, this would be a serious concern for us. Given the high stakes nature of the proposed spectrum award process it is critical that confidential data relating to the process and interested party data is kept strictly confidential and fully protected.

I would be grateful if you could urgently clarify the extent to which any data relating to the process, or any interested party data, may indeed have been compromised and if you could also offer assurances to eircom that the confidentiality of eircom data submitted so far or to be submitted in the future will be fully protected.

Yours sincerely,

A handwritten signature in black ink, appearing to read "W. McCoubrey".

William McCoubrey  
Head of Regulatory Policy - Mobile and Consumer Affairs

9. Vodafone: email to ComReg "Update on pending publication." (email dated 16 March 2012);

**From:** Meskell, Kieran, VF-IE

**Sent:** 16 March 2012 16:18

**To:** Samuel Ritchie

**Cc:** michael Maher; Crowley, Patrick, VF-IE; Ryan, Paul, VF-IE; Maher, Eileen, VF-IE

**Subject:** RE: Update on pending publication.

Dear Samuel,

Thank you for this update.

Vodafone is disappointed and surprised that ComReg would intend to publish such an important document after normal working hours on the Friday of a Bank Holiday weekend. We reserve our position on this matter.

Regards

Kieran

**Kieran Meskell**

**Regulatory & Business Strategy Manager**

**Vodafone Ireland**

**Mobile: +353 (0) 87 257 0220**

**Email: [kieran.meskell@vodafone.com](mailto:kieran.meskell@vodafone.com)**

**Vodafone. The home of the Smartphone**

Vodafone Ireland Limited

10. Vodafone: email to ComReg "Comreg Mailinglist Update - ComReg." (email dated 17 March 2012);

**From:** Meskell, Kieran, VF-IE  
**Sent:** 17 March 2012 12:22  
**To:** 'press@comreg.ie'; 'Samuel Ritchie'  
**Cc:** Maher, Eileen, VF-IE; Maher, Michael, VF-IE; Crowley, Patrick, VF-IE  
**Subject:** RE: Comreg Mailinglist Update - ComReg

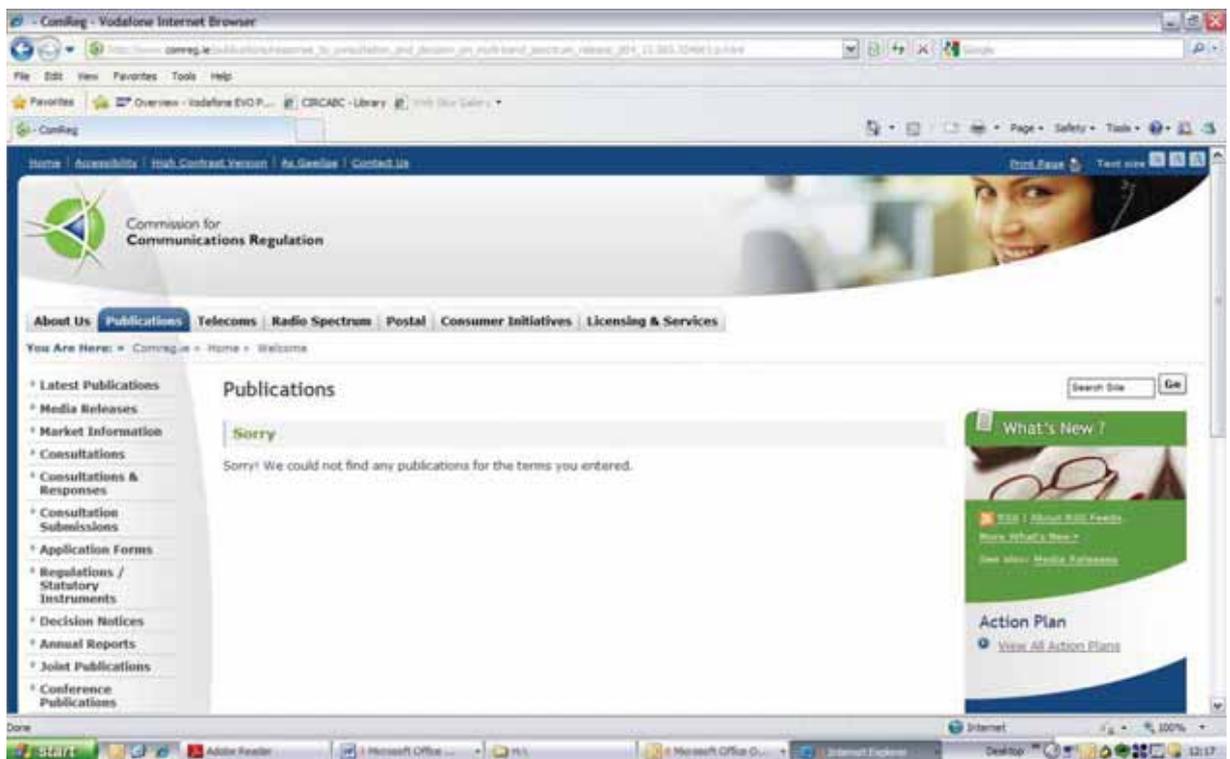
Dear Samuel,

Please see the attached screen shot.

As can be seen from the URL in the browser address line this should be the link the Decision Notice. However this document is not available on the ComReg website as of 17 March, is not accessible to affected parties and cannot be considered to be published.

Regards

Kieran



11. Vodafone: email to ComReg "Comreg Mailinglist Update - ComReg." (email dated 20 March 2012);

**From:** Meskill, Kieran, VF-IE

**Sent:** 20 March 2012 10:39

**To:** Meskill, Kieran, VF-IE; Press Office ComReg; Samuel Ritchie

**Cc:** Maher, Eileen, VF-IE; michael Maher; Crowley, Patrick, VF-IE

**Subject:** RE: Comreg Mailinglist Update - ComReg

Dear Samuel,

Can I ask you to please confirm when the Decision was published.

Regards

Kieran

12.ComReg: email reply to Vodafone email's of 16, 17 and 20 March 2012 (email dated 20 March 2012);

**From:** Samuel Ritchie  
**Sent:** 20 March 2012 16:36  
**To:** Meskell, Kieran, VF-IE  
**Cc:** Maher, Eileen, VF-IE; Maher, Michael, VF-IE; Crowley, Patrick, VF-IE  
**Subject:** RE: Comreg Mailinglist Update - ComReg

Dear Kieran

Thank you for your e-mails of Friday, Saturday and today.

We consider that Vodafone, and all other affected persons for that matter, were properly notified of the Commission's decisions, as contained in Document 11/25 (D04/12) and associated documents, which were published by ComReg on Friday, 16 March 2012.

We note that Vodafone does not consider this to be so and cites, as a reason informing this view, that "*Response to Consultation and Decision on Multi-band Spectrum Release [D04/12]*" was not available at the uniform resource locator (URL) on or before 17 March, "*is not accessible to affected parties*" and, therefore, "*cannot be considered to be published*".

We have carefully considered Vodafone's claim and would observe that the URL in the browser address line used and cited by you is incorrect. Specifically, the final section of the URL should read "d04\_12.583.104062.p.html" (as indicated in the notification email) instead of "d04\_12.583.104061.p.html" (emphasis added).

Moreover, ComReg is satisfied that the hyperlink contained in ComReg's notification of 16 March 2012 has and continues to function since the time of issue on Friday, 16 March. We therefore respectfully disagree with Vodafone's assessment of this issue.

We further note that Vodafone reserves its position on this matter. Please be advised that ComReg does also.

As is ComReg's usual practice in this matter, your e-mails of 16, 17 and 20 March will be published by ComReg in due course, subject to its *Guidelines for the Treatment of Confidential Information* (Document 05/24) and any comments you may wish to make in that regard.

Regards

Samuel

**Dr. Samuel Ritchie**  
**Manager Spectrum Operations**

Commission for Communications Regulation

13. Vodafone: email to ComReg "Comreg Mailinglist Update - ComReg." (email dated 10 April 2012);

**From:** Meskill, Kieran, VF-IE  
**Sent:** 10 April 2012 10:10  
**To:** Samuel Ritchie  
**Cc:** Maher, Eileen, VF-IE; michael Maher; Crowley, Patrick, VF-IE  
**Subject:** RE: Comreg Mailinglist Update - ComReg

Dear Samuel,

In relation to ComReg's email of 20 March 2012. Vodafone notes ComReg's position that the URL contained in its notification of 16 March 2012 was correct. However the "screen shot" sent to ComReg on 17 March resulted from an attempt to access the document not by following the link contained in the notification but by accessing ComReg's public website and attempting to follow the "links" to the document, the first of which was on the website homepage. Based on this inability to access the document via the ComReg public website the Decision was not generally available on 16 March 2012.

It appears that it is ComReg's view that sending a notification email to a closed group containing a link to its website ensures that all affected parties have been properly notified. With respect, ComReg can have no certainty that the email circulation list it used comprehends all affected parties.

Regulation 38 of the Framework Regulations (European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011, S.I. 333 of 2011) specifies the requirements for service of notifications made under the Framework Regulations. It is not clear to Vodafone that ComReg has met these requirements either in terms of the required content for the notification nor in its means of delivery.

Regards

Kieran

14. ComReg: email reply to Vodafone email of 10 April 2012 (email dated 12 April 2012);

**From:** Samuel Ritchie  
**Sent:** 12 April 2012 15:55  
**To:** 'Meskell, Kieran, VF-IE'  
**Cc:** Maher, Eileen, VF-IE; michael Maher; Crowley, Patrick, VF-IE  
**Subject:** RE: Comreg Mailinglist Update - ComReg

Dear Kieran

Thank you for your email of 10 April.

In response, we would first note that Decision 04/12 did not involve the issuing of a determination, direction or notification under the Framework Regulations and that the service requirements contained in Regulation 38 of the Framework Regulations do not therefore apply to that document. Any email notification sent to a closed group under such circumstances is not required of ComReg but is merely a courtesy afforded by ComReg to parties who had previously expressed an interest in the process.

Second, we would note that Regulation 12 of the Framework Regulations does apply and, contrary to your assertion below, the relevant documents were available for downloading by members of the general public from ComReg's website on 16 March 2012. ComReg is, therefore, satisfied that it made the results of its Multi-band Spectrum Release consultation and Decision 04/12 contained therein publicly available on that date in accordance with Regulation 12.

I trust this answers your query on this matter.

As is ComReg's usual practice in this matter, this exchange of correspondence will be published by ComReg in due course, subject to its Guidelines for the Treatment of Confidential Information (Document 05/24) and any comments you may wish to make in that regard.

Kind regards

Samuel

**Dr. Samuel Ritchie**  
**Manager Spectrum Operations**

Commission for Communications Regulation

15. Vodafone: letter to ComReg “Commission for Communications Regulation (“ComReg”) Response to Consultation and Decision on Multi-band Spectrum Release (ComReg document D04/12).” (letter dated 11 April 2012);



11 April 2012

Alex Chisholm  
Commissioner  
Commission for Communications Regulation  
Abbey Court  
Irish Life centre  
Lower Abbey Street  
Dublin 1

**Re: Commission for Communications Regulation (“ComReg”) Response to Consultation and Decision on Multi-band Spectrum Release (ComReg document D04/12)**

Dear Alex,

Following the publication of ComReg’s Response to Consultation and Final Decision on Multi-band Spectrum Release (ComReg document D04/12) Vodafone Ireland Limited (“Vodafone”) considers it necessary to express our serious concerns in relation to a number of key aspects of the Final Decision, and ComReg’s intended approach to the Final Licence Information Memorandum to be published shortly.

Most of the outstanding concerns have been expressed in our earlier submissions to previous stages of the consultation process on Multi-band Spectrum Release. However, these concerns have not, in our view, been adequately addressed by ComReg in its response and Final Decision. ComReg’s assessment in D04/12 and its attempts to refute Vodafone’s arguments has in fact only reinforced our concerns.

On this basis, Vodafone urges ComReg to revisit its assessment and effectively address the principal issues outlined in this letter prior to the finalisation of the arrangements for the award of spectrum in the 1800 MHz and sub-1 GHz bands.

**1. Transitional Issues Between Award and Commencement of Liberalised Licences in Time Slice 1**

Vodafone welcomes ComReg’s decision to retain a flexible approach in relation to the transitional issues that may arise post-auction, in particular where one or more of the existing GSM licensees would be required to re-tune to a smaller allocation than its current holding in the 900 MHz band as a result of the spectrum award process (Scenario 2). Vodafone has strong incentives to expedite the completion of any transitional activities that may be required by the earliest feasible date and ComReg can be assured of Vodafone’s co-operation in formulating a viable Transitional Project Plan.

**Vodafone Ireland Limited**

MountainView, Leopardstown, Dublin 18, Ireland  
T - +353 (0)1 203 7777 F - +353 (0)1 203 7778 W - [www.vodafone.ie](http://www.vodafone.ie)

Registered Office: MountainView, Leopardstown, Dublin 18. Registered in Ireland No. 326967  
Directors: Jeroen Hoencamp (CEO) (NL) (Chairman), Thomas Reisten (DE), Darren Jones (UK).

On the basis of ComReg's statement in paragraph 6.64 that it anticipates that the outcome of the auction is likely to be known before the end of July 2012 there would only be 6 months between the end of the spectrum auction and the current expiration date of the 900 MHz Interim Licences held by Vodafone and Telefonica. In the event that re-tuning is required as a result of the auction outcome it is therefore inevitable that there would be considerable delay in the commencement of new liberalised licences in Time Slice 1 in the 900 MHz band in particular (a fact recognised by ComReg in its acceptance of the conclusion of its advisers Red-M/Vilicom that re-tuning could take up to 2 years under a "worst case scenario") even were an optimal Transition Project Plan to be developed.

However, even with the strong incentives on all sides to expedite the completion of transitional activities, and an inevitable significant extension of current Interim Licences if Scenario 2 is realised, the proposed 2 week timeframe for the completion of a Transitional Project Plan following the conclusion of the Main Stage of the Auction not only militates against the development of an effective Transitional Project Plan, but is, in our view, grossly unrealistic to the point of being unviable. Indeed the insurmountable difficulties of achieving multilateral agreement on a properly designed Transition Project Plan within the 2 week timeframe currently set out are only compounded by ComReg's decision that this process would be required to run in parallel with negotiations on frequency assignment to facilitate possible spectrum sharing, which would also be expected to conclude within the same 2 week period.

The failure to propose a more realistic timeframe for completion of a transition plan appears to us to be based on the unsubstantiated and subjective view that the probability of re-tuning being required is minimal. Vodafone considers that ComReg is substantially underestimating the potential risks involved. Even if ComReg's assessment were valid, it is entirely inappropriate for ComReg to discount the potential outcome of Scenario 2 being realised to the extent that an unworkable timeframe for planning and agreement is imposed.

In light of the above, Vodafone urges ComReg to:

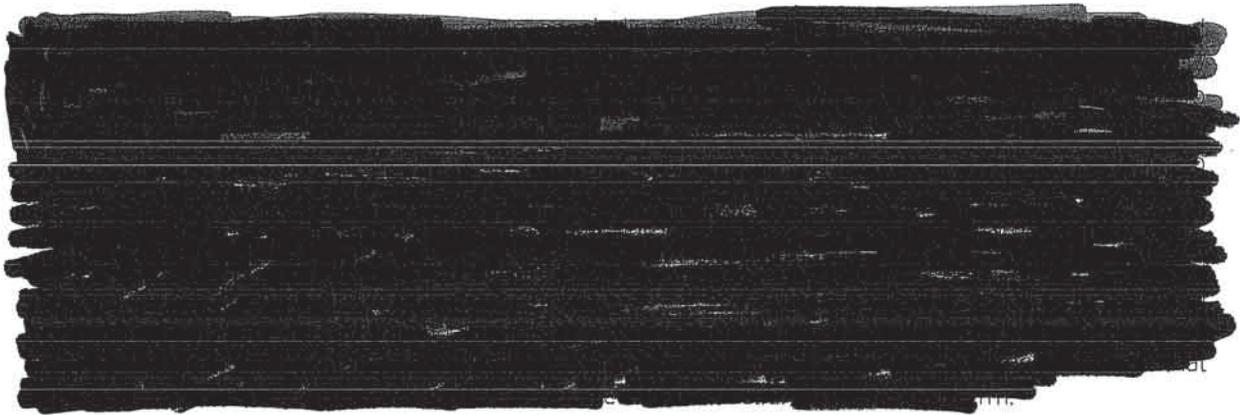
- (a) significantly extend the proposed timeframe for completion of the Transition Project from the current 2 weeks to a minimum of 6 weeks, and
- (b) provide a firm commitment at this stage to further extend existing Interim 900 MHz licences, in the event that Scenario 2 is realised as a result of the award process, to the earliest date strictly necessary to feasibly complete all required transition tasks.

## **2. Potential Requirement for Interim 1800 MHz Licences**

Vodafone notes that ComReg has declined to provide any firm commitment in advance of an award process to extend the existing 1800 MHz licences of Vodafone and Telefonica, as existing GSM licensees in this band, in circumstances where this would be required to maintain existing standards of GSM mobile communications services to retail customers. In Vodafone's view the reasoning given for this decision is flawed on a number of grounds and inconsistent with ComReg's statutory objectives.

ComReg states in paragraph 4.187 of its response to consultation and Decision that it would not be appropriate or objectively justified for it to remedy a problem that has not yet arisen or may never arise. Vodafone considers that this mis-characterises what a firm advance commitment to grant Interim Licence

would achieve. Its purpose is not to remedy a problem that may never arise, but to make prudent provision should a 1800 MHz spectrum availability gap of 6 ½ months transpire that would pose risks both for service provision to customers, the efficient use of spectrum and efficient investment. It is necessary to provide this commitment in advance of an award process so that all interested parties, particularly the existing 1800 MHz licensees, can make informed decisions with more complete information and maximum regulatory certainty.



In Vodafone's view, as we have previously proposed, ComReg can and must address this issue by now providing a firm commitment, no later than the commencement of the application stage of the multi-band spectrum award process, to granting Interim 1800 MHz Licences.

### 3. Excessive Level of Minimum Licence Prices Based on Benchmarking Approach

Vodafone remains strongly of the view that the benchmarking approach to the setting of the minimum prices for spectrum lots in the 1800 MHz and sub-1 GHz bands is inappropriate and has resulted in licence prices being set at a level that pose the significant risk of choking off demand such that spectrum goes inefficiently unallocated in the spectrum award process. Indeed a number of features of the most recent assessment of this issue by ComReg and its adviser DotEcon further reinforce the validity of the arguments we have previously provided in support of our position.

In particular DotEcon's Fifth Benchmarking Report and its latest assessment of auction issues, which takes account of information from more recent spectrum award processes internationally, has a number of very troubling aspects that further fundamentally call into question the appropriateness of the benchmarking approach in the setting of minimum licence prices in the spectrum award process. Some of these issues are recognised by DotEcon itself but inexplicably are not seen as sufficient grounds for leading it to revisit its entire approach, and advising ComReg accordingly.

DotEcon itself in paragraph 75 of its report refers to the fact that the regression equations have '... not provided a particularly stable forecast of spectrum value' and their high sensitivity to the inclusion of the most recent spectrum auction results in the dataset. This justifies the previously stated concerns of Vodafone and other consultation respondents about the insufficient robustness of the outputs of the model given the relatively limited number of observations available, particularly for some of the geography

and band-specific sub-categories analysed which have strongly influenced the setting of the current minimum licence prices.

ComReg and DotEcon should be particularly concerned that in the latest iteration of the Benchmarking Report the sign of the co-efficient on the key explanatory variable of GDP per capita has changed from positive to negative. This is a highly perverse outcome that is contrary to all logic and theory as, if taken at face value, it indicates that the higher the average GDP per person in a country the *lower* the value bidders assign to spectrum lots, other things equal. Although this result would reasonably be expected to lead to a fundamental review of the appropriateness and credibility of use of the model, or at least a thorough investigation of the reasons for this result, this apparently illogical outcome – a complete reversal of the position in previous iterations of the DotEcon Benchmarking Report - is simply accepted without any apparent concern or attempt to provide a compelling theoretical explanation. Indeed DotEcon in paragraph 118 of their report go on to claim that on the basis of this perverse property of the updated benchmarking model, the use of GNP/GNI per capita rather than GDP per capita as an explanatory variable would actually lead to a higher minimum licence price if adopted.

In addition to the fundamental shortcomings revealed by the latest benchmarking report, Vodafone considers that DotEcon's assessment of the issue of using GNP per capita rather than GDP per capita as an input to the benchmarking model is not credible. DotEcon's response to Vodafone's reasoning on this issue does not address the substance of our arguments, in particular DotEcon has not recognised the role that transfer pricing by many multinational exporting firms in Ireland has in producing the considerable gap between GDP and GNP. The large differential in favour of the former measure is to a great extent irrelevant to the level of demand by these businesses for domestic goods and services, including mobile communications services.

In light of the deficiencies of the benchmarking method to setting licence prices revealed by DotEcon's Fifth Report, Vodafone believes it is imperative that ComReg revise its entire approach to the setting of the minimum licence price and move instead to set a low but non-trivial minimum price for spectrum lots in the auction.

#### **4. Treatment of Any Unallocated Lots Arising From Award Process**

Vodafone notes the significant change in position by ComReg in paragraph 3.4 of its Decision to shorten the period within which it will not seek to re-auction any spectrum lots that are not unallocated as a result of the upcoming multi-band spectrum award process from at least 2 years to at least 1 year. ComReg has also raised the issue of possibly auctioning any unallocated 1800 MHz spectrum lots from the imminent spectrum award process in a subsequent award process for 2.6 GHz spectrum (paragraph 3.40 of the response to consultation and final decision). Vodafone is concerned that this change in position may reflect an implicit recognition by ComReg that the current levels of the proposed minimum prices for spectrum lots, and 1800 MHz lots in particular, are such that they pose a major risk of choking off demand for spectrum and leading to spectrum going inefficiently unallocated as an outcome of the auction process.

Vodafone is also alarmed by an apparent related attempt by ComReg and DotEcon to re-define what could be regarded as a successful auction outcome from the perspective of overall societal welfare. We note DotEcon's assessment in paragraphs 117 and 118 of ComReg document 12/24, with which ComReg

agrees, that if spectrum goes unsold in the auction then the award process has determined that there is no efficient way of allocating it. This is profoundly misguided reasoning as demand for spectrum cannot be treated in isolation from the price at which it is made available, and the minimum licence price has been set by ComReg at a high level in absolute terms on the highly questionable grounds that this is necessary to minimise the incentives for tacit collusion.

As set out previously above, ComReg now appears to implicitly accept that this high level of the minimum price poses a major risk of leaving spectrum unsold, but in Vodafone's view is wrongly seeking to characterise such an auction outcome where spectrum goes unallocated as not constituting what all reasonable observers would conclude as being a failure of the auction. Vodafone must state categorically that there is no objective basis for any interpretation other than that a failure to allocate spectrum lots in the upcoming spectrum award process would be an unsuccessful outcome, with adverse impacts on the efficient use of spectrum and the quality of services delivered to businesses and consumers. Accordingly ComReg should take all reasonable steps to minimise this risk, the most practical step being a significant reduction in the minimum licence price from current proposed levels.

#### 5. Excessive Complexity of Auction Process

Vodafone does not consider that ComReg has provided adequate reasoning to warrant the proposed detailed design of its current award process. We disagree that the current very high complexity of the auction process is strictly necessary to address the stated objectives of the award process and we believe that, at a minimum, ComReg could reduce complexity by removing the proposed feature to allow relaxed primary bids, while actually enhancing the probability of fulfilling the objectives of the award process. Vodafone notes that the inclusion of the feature to allow relaxed primary bids has further increased complexity but has not been adequately justified by ComReg.

#### 6. Full Liability of Licensees for Breaches of Licence Conditions by Hosted MVNOs

Vodafone notes that ComReg, in paragraph 5.242 of its response to consultation, has maintained its position that holders of spectrum usage rights under the new liberalised licences to be allocated in the spectrum award process will be liable for any licence breaches by their hosted MVNOs, such as those from missed voice QoS targets in the licence terms, even where the reason for the breach is due to factors that are not under the licensee's direct control. ComReg has rejected Vodafone's arguments on the inappropriateness of this approach primarily on the grounds that licensees can, in some unspecified manner, address this through the contractual terms of their agreements with MVNOs. We strongly disagree with this superficial and inadequately grounded assessment and resulting conclusion as it fails to consider the implications.



[REDACTED]

Vodafone believes that ComReg must revise its current position and include clear provisions in licence terms that do not expose licensees to liability for licence breaches by hosted MVNOs where these are caused by factors in the control of the latter.

7.

[REDACTED]

Yours Sincerely

Paul Ryan  
Senior Director  
Vodafone Ireland Limited

[REDACTED]

16. ComReg: letter reply to Vodafone letter of 11 April 2012 (letter dated 19 April 2012);



**19 April 2012**

Mr Paul Ryan  
Strategy Director  
Vodafone Ireland Limited  
Mountainview  
Leopardstown  
Dublin 18

Dear Mr Ryan,

Thank you for your letter of 11 April 2012 concerning ComReg's Response to Consultation and Decision D04/12 on Multi-band Spectrum Release - Document 12/25 and related documents published on 16 March 2012.

ComReg has considered the contents of your letter and responds as follows.

As acknowledged in your letter, we note that it, for the most part, contains concerns already expressed by Vodafone in its earlier submissions to previous stages of the consultation process and which have previously been appropriately considered, assessed and decided upon by ComReg. Despite this, your letter urges ComReg to revisit its assessments in advance of the finalisation of the arrangements for the award of spectrum-use rights in the relevant frequency bands, which will follow on from the award process decided upon in D04/12.

In response, ComReg would note that its assessment of, and final position on, the aspects of its Decision in respect of which Vodafone seeks a revisiting, were fully set out, reasoned and decided upon in Document 12/25 and related documents, and in Decision 04/12, and ComReg does not consider it necessary or appropriate to enter into further correspondence or consultation on these matters.

Notwithstanding this, ComReg considers it appropriate to address the assertion that the results of the latest iteration of the benchmarking report are "*contrary to all logic and theory*". In this respect, both ComReg and DotEcon consider that it is inappropriate to isolate specific components of a complex regression model without considering how these components operate and interact with the various other components of the model. For example, noting that the sign of the coefficient is negative should not be considered in isolation from its magnitude and the statistical significance. In this respect, we note that the coefficient on GDP per capita was small and insignificant in both the European regression and the global mobile auction regression.

To the extent that concerns raised in your letter relate to matters addressed in or relating to the draft Information Memorandum (e.g. sections 1, 5 and 7 of your letter),



you might note that ComReg is currently considering all issues raised in this connection, in coming to its final position, and will respond to those issues when publishing the final Information Memorandum. You might also note that the soon-to-be-published final Information Memorandum will give interested parties further clarification and detail in relation to the auction rules and processes, and will, further, include information about proposed auction workshop sessions.

Finally, please note that ComReg will publish this exchange of correspondence in accordance with its usual procedures, and Vodafone is invited to inform ComReg of any confidential material in your letter of 11 April that it considers ought not to be published in accordance with those procedures.

Yours sincerely

A handwritten signature in black ink, appearing to read 'S. Ritchie', is positioned above the typed name.

**Dr. Samuel Ritchie**  
**Manager Spectrum Operations**  
**Market Framework**

17.Vodafone: email to ComReg "Spectrum letter" (email dated 20 April 2012)

From: Hoencamp, Jeroen, Vodafone Ireland  
Sent: Friday, April 20, 2012 08:44 PM  
To: Alex Chisholm  
Subject: Spectrum letter

Alex,

Thanks for your call back this afternoon. I appreciate you have acted speedily and that you confirmed that you have both received our letter back and that it was unopened.

We will revert as a matter of priority next week.

Regards

Jeroen

18.ComReg: email reply to Vodafone email of 20 April 2012 (email dated 20 April 2012);

From: Alex Chisholm  
Sent: 20 April 2012 22:25  
To: Hoencamp, Jeroen, Vodafone Ireland  
Subject: Re: Spectrum letter

Thanks, Jeroen.

Yes, our letter to you, which is non-confidential, is being returned to us; and we are assured it has not been copied, studied or disseminated. It will in any case be published shortly on our website according to our standard practice. I am relieved that no harm has been done on this occasion, but do sincerely regret the administrative error we made, and the inconvenience and concern caused. Have a good weekend.

Regards, Alex

19. Vodafone: email reply to ComReg email of 20 April 2012 (email dated 23 April 2012);

From: Ryan, Paul, Vodafone Ireland  
Sent: 23 April 2012 09:06  
To: Hoencamp, Jeroen, Vodafone Ireland  
Cc: Alex Chisholm  
Subject: RE: Spectrum letter

Alex, I could pop in about 15.30, does that suit?

P

"Hoencamp, Jeroen, Vodafone Ireland" wrote:

Alex,

I have asked Paul Ryan to contact you to discuss things. Would you have the time to meet him later today?

Regards,

Jeroen

20.ComReg: email reply to Vodafone email of 23 April 2012 (email dated 23 April 2012);

From: Alex Chisholm  
Sent: 23 April 2012 12:27  
To: 'Ryan, Paul, Vodafone Ireland'; Hoencamp, Jeroen, Vodafone Ireland  
Cc: George Merrigan; Samuel Ritchie  
Subject: RE: Spectrum letter

Paul,

Thank you for your email of this morning requesting a meeting later today. I am not free at the time suggested, but in any case ComReg does not see any need to meet on this matter, given the facts as already communicated. Tomorrow we would expect to have the two letters back from the 2 parties who received them - and thank you for your cooperation in this matter - and will confirm same to the parties addressed in the letters. We will in due course (as already advised) be publishing our two letters. Otherwise we would consider the matter closed.

Regards,

Alex

21.ComReg: email to Vodafone "Spectrum letter" (email dated 23 April 2012);

From: Alex Chisholm  
Sent: 23 April 2012 14:17  
To: Hoencamp, Jeroen, Vodafone Ireland  
Subject: FW: Spectrum letter

Jeroen,

I got your voicemail earlier this afternoon. Please note as below that we do not see any need for further dialogue on this matter.

Regards

Alex

22. Vodafone: letter to ComReg "Standards of Custodianship of Data by ComReg particularly in relation to the proposed auction of a number of individual rights of use in the 800 MHz, 900 MHz and 1800 MHz radio spectrum bands (the "Proposed Auction"): The Need for a New Protocol" (letter dated 23 April 2012);

23 April 2012



Mr. Alex Chisholm  
Chairperson  
Commission for Communications Regulations  
Abbey Court,  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

Re: Standards of Custodianship of Data by ComReg particularly in relation to the proposed auction of a number of individual rights of use in the 800 MHz, 900 MHz and 1800 MHz radio spectrum bands (the "Proposed Auction"): The Need for a New Protocol

Dear Mr. Chisholm

I write in relation to the Proposed Auction and specifically in connection with recent exchanges of e-mail concerning the misdirection of letters by ComReg.

The purpose of this letter is to express our concerns about the standards of custodianship of third party data, including confidential data, within ComReg and to request that, in order to protect the integrity of the process, ComReg should, prior to undertaking the Proposed Auction, put in place a protocol for the custodianship of data that reflects best industry and regulatory practice.

In this regard, I must remind you that late last week ComReg disclosed correspondence intended for Vodafone Ireland Limited ("Vodafone") to Telefonica O2 Ireland Limited ("O2") and disclosed correspondence to Vodafone intended for O2. [REDACTED] This lapse is by no means the first such episode of which Vodafone is aware involving a failure in ComReg's custodianship of data relevant to the Proposed Auction.

1. [REDACTED]
2. In December 2011, an external legal adviser to ComReg disclosed documents to Vodafone containing O2 Ireland confidential market data; and
3. At a date in the last twelve months (precise date to be verified as the correspondence was destroyed to preserve confidentiality) ComReg disclosed correspondence to Vodafone in error

Vodafone Ireland Limited

Proposed Auction of Individual Rights of Use in the 800 MHz, 900 MHz and 1800 MHz Radio Spectrum Bands

related to a possible enforcement action to be taken by ComReg against another market participant.

These are the four lapses in ComReg's custodianship of data which are known to Vodafone as a result of its own direct experience. On the basis of this experience, we have been forced to conclude that poor standards of custodianship of third party data, including confidential data and business secrets, are endemic within ComReg. As a result, our confidence in ComReg's ability to maintain the confidentiality of data, including business secrets, is compromised.

You will be aware that the Proposed Auction is part of a process that could involve [REDACTED] significant investment in this State for the forthcoming decades. You are also aware that the process will involve the submission of confidential data and business secrets by auction participants [REDACTED] to ComReg. We believe that, as far as the protection of data is concerned, it is essential that the Proposed Auction is undertaken in accordance with the highest possible standards and best industry and regulatory practice.

In our view, the Proposed Auction cannot be undertaken under the data protection arrangements currently in place in ComReg; they have been shown to be grossly inadequate and unfit for purpose. We believe that potential participants in the process, if they were aware of the lapses of which we are aware, would require substantive reassurance on the security of their data. The soundness of ComReg's arrangements for data custody and the integrity of the overall process. In our submission, to ensure that the Proposed Auction process is not compromised by further lapses, ComReg must put in place a new protocol for the custodianship of third party data, including confidential data and business secrets, which corresponds with best international practice known in our industry.

We accept that the formulation of this protocol is ultimately a matter for ComReg; however, we believe that those charged with preparing the new protocol might wish to look at the arrangements Vodafone has put in place in connection with the internal handling of its own confidential data and business secrets [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

In any event, in light of the lapses which we have observed, we submit that ComReg's new arrangements in relation to the custodianship of data, for the benefit of all participants in the Proposed Auction, must include:

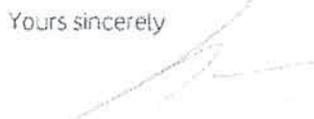
- (a) a commitment by ComReg to commission and produce an independent audit of ComReg's processes and procedures in relation to data and document security, including specifically in relation to the Proposed Auction;
- (b) a commitment that ComReg will implement any necessary changes to its current processes and procedures recommended by the independent audit within a reasonable timeframe and prior to the Proposed Auction;
- (c) a commitment that the Information Memorandum in connection with the Proposed Auction will incorporate a commitment from ComReg that it will retain and rely upon the advice of an independent third party whose mandate shall be the protection of data and document security and that such advice be published. Given the centrality of this issue to the integrity of the process, the third party in question should to have professional indemnity insurance in an amount of no less than 500m euro;
- (d) a commitment that ComReg will disclose to the public, information on all prior, current and any future data and document security breaches including those related to the spectrum auction process, thereby ensuring all potential auction participants are aware of prior breaches and have equal information in advance of and during the auction;
- (e) a commitment from ComReg that it will request and publish an opinion from the Irish Competition Authority in advance of publication of the Information Memorandum on whether any breaches disclosed at (d) above, prejudice the integrity of the spectrum auction process;
- (f) a commitment that ComReg will publish a timeframe for the conduct of the above and that ComReg will publish a timetable showing any impact on the spectrum award process, and
- (g) a commitment that ComReg will reimburse on an indemnity basis, all costs incurred by participants in the Proposed Auction in relation to (i) each and every data and documentation security breach the subject of this letter, and (ii) the commitments in (a) to (f) above and in addition a written confirmation from ComReg that such costs shall not be recovered from those participants in any way and in particular by way of the levy on licensed firms.

We await to hear from you as a matter of urgency in relation to this matter. In the meantime, [REDACTED]

[REDACTED] We urge you not to take any further steps in relation to the Proposed Auction until such time that the issues set out in this letter in respect of the Proposed Auction are addressed. Should ComReg wish to publish this letter as part of the Proposed Auction process we will require ComReg to redact certain text and we can advise you in this regard as necessary.

Finally, we have made arrangements for the safe delivery of your letter to O2 to your office marked for your attention.

Yours sincerely

  
Paul Ryan  
Director

01 854 41 111

23.ComReg: letter reply to Vodafone letter of 23 April 2012 (letter dated 26 April 2012);



Mr Paul Ryan  
Director  
Vodafone Ireland Limited  
MountainView  
Leopardstown  
Dublin 18

26 April 2012

Dear Mr. Ryan,

Thank you for your letter of 23 April, relating to the misdirection of correspondence by ComReg.

It is regrettable that, through a clerical error, ComReg sent a letter intended for Vodafone to Telefónica, and one intended for Telefónica to Vodafone.

I am, of course, sorry that this incident occurred.

At the same time, I am glad that no harm was done, on the basis that ComReg's letters related to non-confidential aspects of each party's correspondence under reply, and were intended for publication.

Having said that, you can be assured that ComReg is taking this matter seriously, and that it takes confidentiality-maintenance and information-disclosure issues seriously.

In your letter, you make a number of points, and raise some issues, regarding what you call ComReg's custodianship of data, and lapses or failures in that connection. You seek to draw certain inferences from the three events you list in that connection, both in relation to ComReg's custodianship of data generally, and particularly in relation to the custodianship of data protocols or procedures it will observe in its forthcoming auction.

Without wishing to engage in debate about *minutiae*, I would comment generally as follows:

- First, contrary to what you say, only one of the three events you mention relates to custodianship of data relevant to the forthcoming auction;

- 

- Thirdly, whilst I appreciate that parties, including Vodafone, will be keen to ensure the security of confidential and commercially-sensitive information in relation to the forthcoming auction process, it is not reasonable to infer from the matters mentioned in your letter that ComReg's processes and protocols regarding data custodianship are not robust, or are necessarily wanting.

ComReg agrees, of course, that potential participants in the forthcoming auction process need to be satisfied with ComReg's procedures and protocols regarding security and confidentiality of information. With respect, however, ComReg does not agree that its current arrangements in that regard are, or have been shown to be, inherently or necessarily deficient or unfit for purpose.

Furthermore, Vodafone will not have been aware at the time your letter was written that ComReg intends in any event to put in place appropriate, enhanced information handling procedures, which ComReg will confirm in the response to consultation to ComReg Document 11/75 and final information memorandum.

In that connection, I appreciate your sharing with ComReg the principal features of Vodafone's arrangements for its internal handling of confidential data and business secrets in the context of the forthcoming auction. ComReg will have regard to these when considering its own arrangements, which, as you properly point out, will ultimately be a matter for ComReg.

In a similar vein, while we will have regard to the processes and features that you submit in paragraphs (a) to (g) of your letter ComReg ought to adopt

- in settling on its particular arrangements, and
- as part of those arrangements,

respectively, these, again, are matters for ComReg to decide upon, having regard to the relevant organisational, technical and legal factors applicable. As I have mentioned above, once ComReg has considered the matter appropriately, and finalised its forthcoming Information Memorandum, it will publish appropriate details in that regard.

In relation to the commitments referred to in paragraphs (a) to (g) of your letter, therefore, it would be premature and inappropriate for me to comment further in this letter on the further details of ComReg's processes and procedures concerning information-handling and security surrounding the forthcoming auction, or to pre-determine what action ComReg might consider it appropriate to take in hypothetical circumstances.



However, I will indicate at this stage that

- ComReg does not intend to set a separate timeframe for its consideration of information-handling and security matters, which is a matter integral to the finalisation of its Information Memorandum in any event;
- ComReg does not envisage the auction process being held up by a consideration of these matters, and does not intend to refrain from taking further steps in its process leading to the forthcoming auction; and
- ComReg does not envisage giving a commitment of the type mentioned in paragraph (g) of your letter, and does not understand the basis on which Vodafone considers it might be entitled to recover the costs it says it has incurred in addressing the information-disclosure matters referred to in your letter.

Penultimately, save where I have definitively laid down any position, this letter is not to be taken as indicating to Vodafone that any particular procedure or protocol with regard to information-handling and security will, or will not, be adopted by ComReg, notwithstanding my referring to the fact that ComReg will generally have regard to Vodafone's submissions in this regard.

Finally, I note that you have asked for an opportunity to make submissions to ComReg regarding the redaction of text in your letter of 23 April, should ComReg wish to publish the letter. In that regard, I confirm that ComReg wishes to publish the letter, along with this response, in accordance with its usual and documented practice and procedure in that regard. Therefore, I would be grateful if you could indicate by return what information Vodafone considers ought appropriately to be redacted.

I look forward to hearing from you.

Yours sincerely,

**Alex Chisholm**  
Chairperson  
ComReg

24. Vodafone: letter reply to ComReg letter of 26 April 2012 (letter dated 30 April 2012);



30 April 2012

Mr. Alex Chisholm  
Chairperson  
Commission for Communications Regulations  
Abbey Court,  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

**CONFIDENTIAL**

**Re: Standards of Custodianship of Data by ComReg particularly in relation to the proposed auction of a number of individual rights of use in the 800 MHz, 900 MHz and 1800 MHz radio spectrum bands (the "Proposed Auction"): The Need for a New Protocol**

Dear Mr. Chisholm,

I refer to your letter of 26 April which I received in electronic format late on Thursday afternoon.

You say that "*ComReg does not agree that its current arrangements [regarding security and confidentiality of information] are...inherently or necessarily deficient or unfit for purpose*" and "*that ComReg takes confidentiality-maintenance and information-disclosure seriously*". However, with respect and having carefully reviewed your letter, Vodafone remains concerned that the lapses that it drew to your attention (which number four, not three as you suggest in your sixth and seventh paragraphs) tend to support our view that poor standards of custodianship of data, including confidential data and business secrets, are endemic within ComReg.

In the context of the pattern of recurrent lapses, the tendency in your letter to mitigate the seriousness of the most recent episode is not reassuring.

Without prejudice to the general nature of our concern inferred from that pattern of lapses, I must comment on a number of the points you make relating to the specific episodes:

- In relation to the most recent episode, the apparently non-confidential nature of the information disclosed is not relevant (other than to reassure us that the damage done by the lapse was not as serious as it might have been) and should not be relied on to extenuate the lapse or to defend ComReg's current arrangements. The fundamental point about this episode, in terms of assessing the robustness of ComReg's custodianship of data, is that it reveals, at the very least, a lack of attention to proper processes in circumstances where lapses have already occurred and in the context of a process that will involve operators being invited to commit to significant investment;

**Vodafone Ireland Limited**

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Registered Office: MountainView, Leopardstown, Dublin 18. Registered in Ireland No. 325967  
Directors: Jeroen Hoencamp (NL), Thomas Reisten (DE), Paul Ryan

Your ref:  
Our ref:  
M

- Irrespective of whether two of the lapses referred to in my 23 April letter relate [REDACTED] Vodafone's concern is that, when taken together with the other lapses, they are indicative of an endemic problem within ComReg in respect of the protection of confidential information. The fact that these incidents continue to occur suggests that ComReg is not learning from and addressing weaknesses in its data custodianship arrangements even after serious lapses have been drawn to its attention; and
- [REDACTED]
- ComReg has not addressed the issue of the integrity of the process given (i) [REDACTED] (ii) the disclosure to Vodafone of business secrets of [REDACTED] in the context of the data roaming litigation, and (iii) any other similar instances of which ComReg is aware of. We require reassurance that these breaches have not already damaged the integrity of the process.

[REDACTED]

*"I confirm that ComReg and its staff are cognisant of the confidentiality obligations imposed by law, and that ComReg treats confidentiality issues very seriously. In that regard, for example, staff are imbued with a particular sense of the confidentiality of information held by ComReg, as well as being subject to appropriate undertakings and agreements in that connection. We believe that the relevant legal obligations, practices and procedures serve to facilitate the effective maintenance of confidentiality".*

Since then, less than [REDACTED] ago, Vodafone, as a result of its own direct experience, has become aware of three further lapses in ComReg's custodianship of data. You may be able to understand why, in the circumstances, I find it hard to accept your proposition that "it is not reasonable to infer from the matters mentioned in [Vodafone's letter of 23 April 2012] that ComReg's processes and protocols regarding data custodianship are not robust, or are necessarily wanting" and why I instead maintain my position that poor standards of custodianship of data, including confidential data and business secrets, are endemic within ComReg.

Turning to your confirmation that ComReg intends to put in place "appropriate, enhanced information procedures" in connection with the Proposed Auction, I again urge you to undertake a separate consultation process on those procedures before proceeding to the Information Memorandum stage.

The issue of the custodianship of data, including confidential data and business secrets is absolutely central to the integrity of the overall process. Potential participants in the Proposed Auction, if they were aware of a pattern of recurrent lapses in data custodianship, would expect to be consulted on this core issue. In this regard, I am concerned that your reference to the "*auction process being held up by a consideration of these issues*" is a further indication that ComReg does not attribute the same level of gravity to data custodianship issues as potential auction participants.

Without appropriate safeguards for confidential data, there can be no guarantee of the fairness and transparency of the process; for that reason, potential participants are entitled to the opportunity to make their views known on the adequacy of the procedures ComReg intends to introduce. I would urge you to reconsider your decision not to consult.

As you raise the issue in your letter, I must confirm that Vodafone reserves all its rights in respect of the issue of the recovery of the costs incurred in addressing the lapses in data custodianship by ComReg.

Your sincerely



Paul Ryan  
Director

25.ComReg: letter reply to Vodafone letter of 30 April 2012 (letter dated 4 May 2012);



Mr Paul Ryan  
Director  
Vodafone Ireland Limited  
MountainView  
Leopardstown  
Dublin 18

4 May 2012

Dear Mr. Ryan,

Thank you for your further letter of 30 April, responding to my letter of 26 April, relating to ComReg's custodianship of data.

As I intimated in that letter, whilst noting what Vodafone has to say, ComReg does not wish to engage in adversarial debate about the minutiae.

This is because, in summary:

- ComReg has recognised and apologised for the misdirection of our non-confidential response letters that occurred on 19 April. The letters have been returned and redirected, and will shortly be published, along with other correspondence related to this project.
- ComReg has properly noted Vodafone's concerns, and has had regard to Vodafone's particular suggestions with regard to data security and custodianship arrangements that might relate to the forthcoming auction.
- ComReg has reiterated that it takes confidentiality-maintenance and information-disclosure issues seriously.
- In the latter regard, ComReg has pointed out that, whilst it considers its procedures and protocols in relation to these matters to be generally robust, it intends in any event to put in place special procedures and protocols for information-management in the post-Information Memorandum phase of this process, including, of course, the auction process itself. The development of these arrangements is, as you recognize, a matter for ComReg.
- ComReg has been working on these arrangements, and taking appropriate advice, and will confirm its approach in its forthcoming Response to Consultation Document 11/75 and/or the final Information Memorandum. This is happening in parallel to other work-streams associated with the preparation of the Response to Consultation and the production of the final Information Memorandum as a whole, and this certainly does not involve according an inappropriate level of importance to the matter, as you suggest.



Commission for  
**Communications Regulation**

While ComReg has had, and will continue to have, regard to views and proposals submitted, it does not envisage the need for any separately-held consultation. ComReg considers that potential participants in the forthcoming auction process will be appropriately informed by the final Information Memorandum as to ComReg's procedures for conducting the auction. ComReg is fully satisfied with the integrity of the planned auction process and the adequacy of the steps we are taking.

Finally, I note that your letter of 30 April is headed "Confidential", and I confirm that ComReg wishes to publish the letter, along with this response, in accordance with its usual practice and procedure. Therefore, I would be grateful if you could indicate by return what information in your letter Vodafone considers ought appropriately to be redacted. Please address Samuel Ritchie, Project Manager, on this matter.

Yours sincerely

A handwritten signature in black ink that reads "Alex Chisholm".

**Alex Chisholm**  
Chairperson

26.ComReg: email to Vodafone (OCC Scorecards" (email dated 8 May 2012)

**From:** Samuel Ritchie  
**Sent:** 08 May 2012 09:30  
**To:** AN OTHER; Ryan, Paul, Vodafone Ireland  
**Cc:** AN OTHER2  
**Subject:** RE: OCC scorecards

To submit scorecards:

Username: [samuel.ritchie@comreg.ie](mailto:samuel.ritchie@comreg.ie)

Password: clontarf6241

**Samuel**

27. Vodafone: email to ComReg “Custodianship of Data and Spectrum auction process - Confidential” (email dated 8 May 2012)<sup>4</sup>

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<sup>4</sup> Note, ComReg are awaiting clarification of confidentiality of this email, and will publish this email at a later date.

28.ComReg: reply to Vodafone email of 8 May 2012 (email dated 10 May 2012)

**From:** George Merrigan  
**Sent:** 10 May 2012 11:25  
**To:** Paul Ryan  
**Cc:** Alex Chisholm  
**Subject:** Your email of 8 May 2012

Dear Mr. Ryan,

I refer to your email of 8 May 2012 to Commissioner Chisholm regarding the email sent in error by a ComReg employee to you on the morning of 8 May 2012 (“the Email”). The matter has been passed to me for reply.

We have considered the issues raised in your email and set out below our responses to the concerns you have identified.

The error to which you refer occurred at 9.30 a.m. on 8 May 2012 when a personal email (“the Email”) was inadvertently sent by a ComReg employee to yourself. The ComReg employee had intended to send the email to another Paul Ryan, but mistakenly sent the Email to yourself instead. The sending of the Email to you before starting work was entirely inadvertent and resulted solely from unintended human error on the part of the relevant ComReg employee.

The ComReg employee who sent the Email was informed of the error following Commissioner Chisholm opening your email. The personal Email was not prejudicial and referred to a cricket score card.

ComReg is fully committed to preventing the unauthorised disclosure of confidential information provided to it by undertakings. On taking up employment with ComReg (and on an annual basis thereafter), all employees are required to sign a Confidentiality Agreement in which they agree not to divulge any confidential information acquired in the course of their employment. The use of email within ComReg is regulated by standards of acceptable use as set out in ComReg’s email usage policy. ComReg employees are required to comply with the ComReg rules for email use which provide in part that email is available to facilitate ComReg business; it is a resource to be used primarily for authorised business purposes. Staff are permitted to use email services for non-business use during business hours to send and receive individual email both internally and externally provided that it is kept to a minimum and not detrimental to their job responsibilities.

In light of the error which occurred on 8 May 2012, ComReg staff members are being reminded of the importance of taking extreme care as to whom emails are addressed.

Yours sincerely,

**George Merrigan | Director, Market Framework Division |**  
**✉ Commission for Communications Regulation, Abbey Court, Irish Life Centre,**  
**Lower Abbey Street, Dublin 1, Ireland**

29. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone  
“Vodafone: Custodianship of Data/Spectrum Auction/Interim Licences” (letter dated 8 May 2012)

**McCann FitzGerald**

**Solicitors**

40 Square de Meeûs

1000 Brussels

Tel: +32-2-740 0370

Fax: +32-2-740 0371

Email: [inquiries@mccannfitzgerald.ie](mailto:inquiries@mccannfitzgerald.ie)

[www.mccannfitzgerald.ie](http://www.mccannfitzgerald.ie)

**MCCANN FITZGERALD**

OUR REF

YOUR REF

DATE

DPC\5047382.2

8 May 2012

Alex Chisholm Esq  
Commission for Communications Regulation,  
Block DEF,  
Abbey Court,  
Irish Life Centre,  
Lower Abbey Street,  
Dublin 1

**BY EMAIL AND  
BY POST**

**Vodafone: Custodianship of Data/Spectrum Auction/Interim Licences**

Dear Commissioner Chisholm,

1. **Introductory Remarks**

This firm acts for Vodafone Ireland Ltd. ("Vodafone").

Our client has passed us your letter dated 4 May 2012 and has asked us to reply on its behalf. We have also seen Vodafone's letters to you of 23 and 30 April, together with your letter of 26 April.

Vodafone has asked us to communicate to you, with the strongest possible emphasis, its grave concern about the confusion and uncertainty that now surrounds ComReg's proposed auction process due, in part, to information custodianship issues, about the intransigent approach being adopted to our client's suggestions for a consultation process on methods to reduce that confusion and uncertainty and about the urgent imperative for the issues that give rise to that confusion and uncertainty to be addressed and then eliminated in order to ensure that the integrity of the forthcoming auction process is not further compromised.

Vodafone has also asked us to address timing issues as they affect continuity of service to its retail and wholesale customers.

John Cronin, David Clarke, Timothy Bouchier-Hayes, Jane Marshall, Ronan Molony, Michael O'Reilly, Lonan McDowell, Julian Conlon, Damian Collins, Catherine Deane, Paul Heffernan, Terence McCrann, Muriel Walls, Roderick Bourke, Ambrose Loughlin, Niall Powderly, Kevin Kelly, Hilary Marren, Eamonn O'Hanrahan, Roy Parker, Patricia Lawless, Barry Devereux, Geraldine Hickey, Helen Kilroy, Judith Lawless, James Murphy, David Lydon, David Byers, Sean Barton, Colm Fanning, Paul Lavery, Julie Quin, Alan Fuller, Claire Lenny, Maureen Dolan, Michelle Doyle, Hugh Beattie, Fergus Gillen, Valerie Lawlor, Mark White, Rosaleen Byrne, Eamon de Valera, Joe Fay, Ben Gaffikin, Donal O Raghallaigh, Karyn Harty, Philip Andrews, Barrett Chapman, Mary Brassil, Audrey Byrne, Shane Fahy, Georgina O'Riordan, Adrian Farrell, Michael Murphy, Annette Hogan, Aidan Lawlor, Darragh Murphy, Brian Quigley.  
Consultants: Eleanor MacDonagh (FCA), Peter Osborne, Michael Ryan (FCA), Tony Spratt (ACA).

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LONDON Tower 42, Level 38C, 25 Old Broad Street, London EC2N 1HQ, Tel: +44-20-7621 1000, Fax: +44-20-7621 9000.

## 2. Unresolved Issues with ComReg's Proposed Auction Process

Our client sees the outstanding unresolved issues with ComReg's proposed auction process as including:

- The impact of the endemic failures in ComReg's standards of custodianship of information including firms' business secrets;
- ComReg's unwillingness, by means of a consultation process, to "come clean" with stakeholders on these failures and to work with them to devise robust systems of information custodianship fit for the purpose, namely the conduct of what is likely to be Ireland's most complex and high value spectrum allocation process;
- The impact on the integrity of the proposed auction not only of the individual lapses that have already occurred and the endemic nature of the failures in ComReg's custodianship arrangements but also of the information asymmetries that are now opening up as between potential auction participants on the crucial issue of ComReg's information custodianship standards (that is to say, Vodafone has certain information about the custodianship lapses as they affect Vodafone but it does not know whether other potential auction participants are aware of those lapses; similarly, Vodafone, aware of the lapses that affect it directly because ComReg told it about them, does not know whether, and in what manner, other potential auction participants may have been victims of similar lapses);
- The increased risk of delay, confusion and challenge in respect of the auction process and its outcome arising from ComReg's (a) continuing failure to take the concerns about its information custodianship standards seriously and (b) refusal to accept the necessity for consultation on the measures required to alleviate those concerns; and
- The enormous yet unnecessary and avoidable jeopardy now faced by Vodafone and other firms whose licences expire in January 2013.

## 3. ComReg's Failure to Provide Reasons

Contrary to the suggestion in your letter of 4 May, Vodafone does not see its request for assurances on ComReg's information custodianship standards as an "adversarial debate about minutiae". This statement is emblematic of ComReg's refusal to take seriously Vodafone's concerns about ComReg's information custodianship standards.

The loss of confidential information by a statutory body is not a small or trivial matter; Vodafone's request that ComReg should hold a consultation on information custodianship is not intended to place it in conflict with its regulator but only to suggest a method by which ComReg could ensure that its processes reflect best regulatory practice and by which stakeholders could have a say. Consultation now will avoid conflict later.

In your letter, you seek to re-iterate ComReg's position that it takes the maintenance of confidentiality seriously. You indicate that you are satisfied that the integrity of the auction process is not compromised. You also refuse to accept the necessity for consultation on ComReg's information custodianship standards before the auction process. However, the reasons you advance

for these positions, in a series of bullet points on the first page of your letter, are, in our view, insufficient, inadequate and do not support your positions. Briefly:

- The return and redirection of misdirected letters are not sufficient to efface the custodianship breach or to reduce the concern about the endemic nature of the lapses;
- Noting Vodafone's concerns is not a substitute for an open and transparent consultation process in which all interested parties' views can be heard;
- The re-iteration of ComReg's view of its own position does not make that position correct or more likely to serve the interests of openness and transparency in the auction process;
- ComReg's procedures for handling information cannot be described as "generally robust" in circumstances where, on the basis of its direct experience, Vodafone is aware of four lapses of custodianship of various degrees of gravity that have occurred since March 2010. Vodafone has also become aware of a newspaper article (Sunday Business Post, 4 April 2011) concerning a report from Deloitte, which reportedly criticized ComReg 'for insufficient security implementation'. Vodafone notes that the Deloitte report itself was reported to have been leaked. By using its unreliable assumption of the robustness of its own systems as the starting point for its assessment of custodianship arrangements and the necessity for consultation, ComReg has vitiated its appraisal. Put simply, if you think there's no problem, you'll conclude everything's fine when it's not.
- ComReg says that it has been "working on these arrangements" and that it intends to "put in place special procedures and protocols for information-management". It is clear from these statements that ComReg is planning to introduce into the auction process new elements concerning information custodianship that have not previously been subject to consultation. Vodafone's position, which ComReg has not contradicted, is that custodianship of information is central to the integrity of the proposed auction process. Given this centrality, the fact that ComReg acknowledges that the protocols on which it is working are new and have not previously been disclosed to potential participants argues strongly in favour of ComReg holding an open and transparent consultation. Vodafone is concerned that the failure to be open tends to increase the risk of legal challenges with associated delay and confusion. In this context, Vodafone is forced to recall the unfortunate history of three previous spectrum licence award processes in Ireland (Esat, Meteor and Smart).

Without appropriate safeguards for confidential data, there can be no guarantee of the fairness and transparency of the process; for that reason, Vodafone believes that potential participants are entitled to the opportunity to make their views known on the adequacy of the procedures ComReg intends to introduce. Vodafone urges you again to reconsider your decision not to consult.

#### 4. The Timing of the Auction Process and Vodafone's Ability to Guarantee Service to its Retail and Wholesale Customers

Vodafone has also asked us to express its concerns about the current timing of the auction process and about the effect that may have on its ability to guarantee service to its retail and wholesale customers, given that its interim licence for the 900MHz spectrum will expire on 31 January 2013.

The spectrum allocation process began almost four years ago (with the publication of ComReg Document Number 08/57). It has already suffered very significant delays and has turned into the most complex auction process Vodafone has seen across the world. Vodafone Group has spent in the region of €1 billion for new spectrum in the past two years in Europe and is therefore probably the most experienced stakeholder on spectrum issues in Europe. Vodafone is concerned that the complexity in the ComReg process may result not only in further delays and confusion but also in unintended and distorted outcomes and that it will increase the risk of legal challenges.

Vodafone's concern about continuity of customer service is based on its conclusion that ComReg can no longer reasonably anticipate that the spectrum auction will be held prior to September 2012.

ComReg has already indicated that a fourteen week process is required to enable it and potential auction participants to prepare for an auction (c.f. paragraph 3.10, ComReg Document Number 11/75). Vodafone agrees that, in circumstances where there is widespread ratification by potential participants of the crucial process elements, a fourteen week period would be the barest minimum timeframe possible in advance of an auction of this scale, complexity and importance. However, full ratification by participants is absent here; ComReg is now proposing to introduce new elements on a crucial aspect - "special procedures and protocols for information-management" - into the auction process and refuses potential participants the possibility of ratifying them through a consultation. The result will be, at the very least, that ComReg's new protocols and procedures will require clarification, discussion and iteration between ComReg and potential bidders. In Vodafone's view, it is inevitable that the fourteen week timeframe will require extension and that the auction will not occur before September this year.

In addition, Vodafone notes that the Joint Technical Report prepared for ComReg by Red-M and Vilicom (published as ComReg Document Number 12/12) confirms that the overall timeframe required for an existing operator to complete its band reassignment activity would be approximately five months. Working back from 31 January 2013 (the date on which the current interim licences expire), this timeframe would require the auction to be completed by the end of August which, as explained above, seems to Vodafone to be an increasingly unlikely prospect.

Vodafone's current interim licence for the 900MHz spectrum expires in January 2013. Given that the increasing likelihood that the auction process will not now be undertaken before September, it is becoming reasonably foreseeable that the auction and post-auction processes (including any legal challenges) will extend beyond the date of expiry of Vodafone's current licence. ComReg must address this situation urgently to ensure continuity of service in the increasingly likely event that its spectrum auction process extends beyond 31 January 2013.

In this regard, ComReg must recall that when it became clear that the process for the allocation of the 900MHz spectrum was likely to drag on and extend beyond the expiry of the original 900MHz spectrum licences in May 2011, it undertook a consultation on the grant of interim licences. The consultation began with ComReg Document Number 10/71 published by ComReg in September 2010, that is to say eight months before the expiry of the licences.

We are now getting close to eight months of the expiry of the interim 900MHz spectrum licences and ComReg has made no attempt to explain to operators or their customers how they should deal with that impending expiry. Indeed, by proposing to introduce "special procedures and protocols" which it refuses to disclose or to consult on, ComReg may be at risk of increasing the likelihood of legal challenges which could further delay the granting of licences on foot of the auction process.

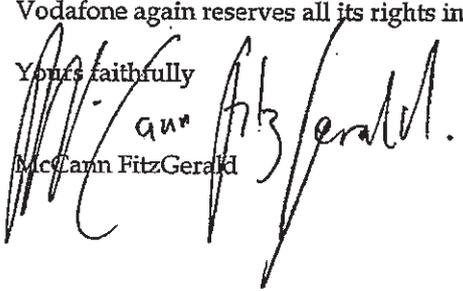
Uncertainty about the continuity of service from the main mobile operators on the expiry of their interim licences tends to have a damaging impact on consumers, the business community and the Irish economy generally. ComReg, we would submit, is under an obligation to avoid or remove such uncertainty.

In Vodafone's submission, ComReg must immediately commence a process leading to the reasonable extension of the existing interim licences in order to ensure continuity of service pending conclusion of the spectrum auction process.

#### 5. Concluding Remarks

Vodafone again reserves all its rights in this regard.

Yours faithfully

  
McCann FitzGerald

30. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone  
“Vodafone: Security and Custodianship of Information/Spectrum Auction”  
(letter dated 16 May 2012)

**McCann FitzGerald**  
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MCCANN FITZGERALD

**MCCANN FITZGERALD**

OUR REF

YOUR REF

DATE

DPC\5101510.3

16 May 2012

Alex Chisholm Esq  
Commission for Communications Regulation,  
Block DEF,  
Abbey Court,  
Irish Life Centre,  
Lower Abbey Street,  
Dublin 1

BY E-MAIL AND  
BY POST

**Vodafone: Security and Custodianship of Information/Spectrum Auction**

Dear Commissioner Chisholm,

**1. Introductory Remarks**

As you are aware, this firm acts for Vodafone Ireland Ltd. ("Vodafone") in connection with ComReg's proposed GSM band and 800MHz spectrum auction ("the Proposed Auction").

You will recall that we wrote to you on 8 May outlining Vodafone's concerns about endemic failures in ComReg's custodianship of information and urging ComReg, prior to the Proposed Auction, to put in place a new, more robust system for the protection of confidential information, having conducted a consultation process to allow interested parties the opportunity to comment.

Vodafone has now contacted us in relation to another lapse by ComReg which it believes is relevant to the conduct of the Proposed Auction. On this occasion, the lapse relates to the security of ComReg's information technology systems, specifically ComReg's e-mail system.

We have seen an e-mail copied by Dr Ritchie of ComReg to Paul Ryan of Vodafone on 8 May 2012. We have also seen Mr Ryan's e-mail to you of the same day, together with the reply of your colleague George Merrigan to Mr Ryan dated 11 May.

We have advised Vodafone that it is justified in linking the most recent episode with the previous lapses and that, on the basis of this latest lapse, it is also justified in submitting that there is now evidence that the endemic failures in ComReg extend beyond information custodianship to

John Cronin, David Clarke, Timothy Bouchier-Hayes; Jane Marshall, Ronan Molony, Michael O'Reilly, Lonan McDowell, Julian Conlon, Damian Collins, Catherine Deane, Paul Heffernan, Terence McCraun, Muriel Walls, Roderick Bourke, Ambrose Loughlin, Niall Powderly, Kevin Kelly, Hilary Marren, Eamonn O'Hanrahan, Roy Parker, Patricia Lawless, Barry Devereux, Geraldine Hickey, Helen Kilroy, Judith Lawless, James Murphy, David Lydon, David Byers, Sean Barton, Colin Fanning, Paul Lavery, Julie Quin, Alan Fuller, Claire Lenny, Maureen Dolan, Michelle Doyle, Hugh Beattie, Fergus Gillen, Valerie Lawlor, Mark White, Rosaleen Byrne, Eamon de Valera, Joe Fay, Ben Gaffikin, Donal O Raghallaigh, Karyn Harty, Philip Andrews, Barrett Chapman, Mary Brassil, Audrey Byrne, Shane Fahy, Georgina O'Riordan, Adrian Farrell, Michael Murphy, Annette Hogan, Aidan Lawlor, Darragh Murphy, Brian Quigley.  
Consultants: Eleanor MacDonagh (FCA), Peter Osborne, Michael Ryan (FCA), Tony Spratt (ACA).

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information security. We have shared with Vodafone our sense that Mr Merrigan's e-mail falls into a pattern of communications in which ComReg seeks to trivialise the lapses that have been drawn to its attention. We have advised Vodafone that this latest episode adds further support to its request for a consultation process, prior to the Proposed Auction, on how ComReg's arrangements for security and custodianship of information could be improved.

In the course of its business, Vodafone complies with extensive obligations requiring delivery of information, including confidential information, to ComReg. These obligations relate not only to the Proposed Auction but to almost every aspect of Vodafone's business including its competitive position, its views on competitors and its investment plans. Vodafone has been formally raising its concerns about ComReg's arrangements for the custodianship and security of information since last month and has not had any substantive response from ComReg.

The manifest inadequacies in ComReg's systems for custodianship and security of information, together with its apparent reluctance to engage with stakeholders on how those standards could be raised to a level of best industry practice, is a cause of grave concern to Vodafone in circumstances where ComReg is proposing to undertake what is likely to be the most complex, highest value spectrum allocation process in the history of the State.

## 2. The Latest Lapse

It may be helpful, at this stage, to summarise Vodafone's understanding of the events surrounding Dr Ritchie's e-mail of 8 May:

- On the morning of 8 May, Dr Samuel Ritchie sent Paul Ryan of Vodafone an e-mail headed "OCC Scorecards". Dr Ritchie's e-mail was sent to two other individuals, neither of whom would appear to be an employee or agent of ComReg, in addition to Paul Ryan. Attached to the e-mail was an earlier e-mail dated 7 May, on which Dr Ritchie was copied, in which he was asked to provide "log-in details" for a cricket score website.
- Dr Ritchie is currently Manager of Spectrum Operations in ComReg. As far as Vodafone is aware, one of Dr Ritchie's areas of responsibility is the Proposed Auction.
- Dr Ritchie's e-mail of 8 May indicates that he uses his ComReg e-mail address in connection with the submission of cricket scorecards to the website of the Leinster Cricket Union. In the e-mail, he provides his ComReg e-mail address, together with a password "clontarf6241", to the three individuals, including Paul Ryan of Vodafone; to whom the e-mail is addressed or copied.

In Vodafone's view, this latest episode is another serious lapse, the gravity of which ComReg either fails or refuses to understand.

## 3. The Gravity of this Episode

First, Vodafone has instructed us to explain why it regards this lapse as serious. This explanation is required because it appears from Mr Merrigan's email of 11 May that ComReg seeks to diminish the significance of this episode.

The essential gravity of the episode lies in the fact that it confirms as real the risk that information confidential to Vodafone could be released by ComReg to third parties. Dr Ritchie used his ComReg e-mail account to send cricket information intended for third parties to Paul Ryan of Vodafone; this means that he could just as easily have sent confidential Vodafone information to third parties.

The issue, of course, is unlikely to be confined to Dr Ritchie; Vodafone is concerned, due to the laxity of ComReg's standards manifest in this episode, about the possibility that other ComReg employees or agents could send confidential information to individuals listed in their electronic e-mail address books.

Have there been other episodes of ComReg employees or agents connected with the Proposed Auction sending e-mails to unintended addressees? Have there been any episodes of ComReg employees or agents connected with the Proposed Auction sending *confidential information* to unintended addressees?

Mr Merrigan in his email points to a number of elements that, Vodafone supposes, he believes mitigate the gravity of the lapse - the email was sent before starting work; the email was sent inadvertently; the sending of the email resulted solely from unintended human error; and ComReg has an email usage policy.

In Vodafone's view, not only are these elements not relevant to the core issue, namely the robustness of ComReg's internal systems for the security and custodianship of confidential information, but also, when taken together, they tend to increase (rather than diminish) Vodafone's concerns about the robustness of ComReg's systems:

- First, Mr Merrigan places emphasis on the timing of the e-mail, 9.30am, saying that this was "before starting work". How is this relevant to concerns about information security and custodianship? Mr Merrigan does not explain, and Vodafone cannot understand, why he believes this point might be relevant.
- Secondly, Mr Merrigan places emphasis on the inadvertence, mistake or error involved. Vodafone has not suggested that Dr Ritchie sought deliberately to involve Mr Ryan in the discussion about cricket scores; instead it pointed to the weakness that this lapse reveals in ComReg's systems. Pointing to the inadvertence is not a response to Vodafone's concerns.
- A large part of Mr Merrigan's e-mail consists of reference to aspects of "ComReg's email usage policy". The aspects of the policy referred to seem to have little to do with the protection of confidentiality. Even if they are relevant to Vodafone's complaint, we do not understand why they are cited since, if they are relevant, they are clearly not effective.

Vodafone is concerned that, in making these points, ComReg is either failing or refusing to accept the seriousness of this latest lapse. More generally, Vodafone is concerned that, if ComReg treats the sequence of lapses Vodafone has brought to its attention as "*minutiae*", ComReg will fail to discern the endemic nature of the problem it faces in relation to its own information security and custodianship systems and, in so doing, fatally compromise the integrity of the Proposed Auction.

#### 4. Security and Custodianship Standards in ComReg

Vodafone is also concerned by what it learns about ComReg's standards of security and custodianship of information from this lapse and from Mr Merrigan's email of 10 May. In particular, Vodafone has learned that:

- Dr Ritchie uses his ComReg email address as the identity under which he participates in at least one non-ComReg website. Vodafone believes that, by using his ComReg email address in this way, Dr Ritchie may increase the risk of the security of his internal ComReg account being compromised. Vodafone notes that, while reference is made to "email usage", Mr Merrigan's email of 10 May does not deal with the practice of ComReg staff using their ComReg email addresses to identify themselves on third party websites. As a minimum, Vodafone believes it is entitled to know whether Dr Ritchie uses his ComReg email as his identity on any other websites and, if so, which websites are involved. Vodafone also should be told whether any other individual connected with the Proposed Auction uses a ComReg email address as an identity on third party websites. Given the increased security risk involved, Vodafone has asked us to seek confirmation that you will direct ComReg employees to stop immediately any use of ComReg email addresses as identity on third party websites. In addition, thought must be given to remedying the breaches that may already have occurred as a result of the use of ComReg email addresses as identity on third party websites. At a minimum, ComReg should introduce separate e-mail servers, with special addresses and restricted electronic e-mail address books, for ComReg's staff involved in the Proposed Auction.
- Dr Ritchie tells third parties outside ComReg that he uses his ComReg email address as an identity on a third party website. This is an additional element that might result in the security of Dr Ritchie's internal ComReg account being compromised. This issue is not addressed in Mr Merrigan's email.
- Dr Ritchie disclosed a password he uses to third parties. Vodafone does not know whether Dr Ritchie uses this password - "clontarf6241" - for other purposes, including access to ComReg systems. Academic research of which Vodafone is aware seems increasingly to suggest that password re-use (that is to say, users adopting the same password for multiple accounts) is more prevalent than previously thought. In addition, even where a user has separate passwords for the various sites and applications visited, the disclosure of a password used for one site may make it easier to identify passwords used on other sites. For example, in the case of Dr Ritchie, the significance of the word "clontarf" is easily understood to a party who knows of his interest in cricket. A Google search reveals that a Samuel Ritchie is Team Secretary for Clontarf Cricket Club for 2012. Vodafone has not sought to determine the significance of the numbers "6241". Could they be related to Dr Ritchie's date of birth, his age or his residential address? Vodafone is also concerned that this password (or some reasonably predictable version of it) may be used by Dr Ritchie for access to portable devices which might contain confidential information. Has ComReg checked? This issue of Dr Ritchie's revelation of a password is not addressed in Mr Merrigan's letter.
- Dr Ritchie corresponds, using his ComReg e-mail address, with another Paul Ryan. Has this other Paul Ryan ever received e-mails intended for Vodafone's Paul Ryan?

Dr Ritchie, by disclosing both his username (in this case his ComReg e-mail address) and his password ("clontarf6241") together in the same e-mail, contravened one of the most basic rules for electronic information security. This suggests to Vodafone that ComReg staff is unfamiliar with even the most basic security procedures when using electronic systems.

In our previous letter to you of 8 May, we mentioned that Vodafone had become aware of a newspaper report (Sunday Business Post, 4 April 2011) concerning a report from Deloitte, which reportedly criticized ComReg 'for insufficient security implementation'. Vodafone understands from press reports that the Deloitte's report specifically criticised laxity in security associated with passwords. Are you willing to share this report with Vodafone? If you are not willing, could you explain why? Can you confirm what steps have been taken by ComReg to remedy the inadequacies identified in that report?

The episode involving Dr Ritchie's misdirected e-mail is just the latest in a series of lapses by ComReg of which Vodafone has become aware relating to the custodianship and security of information. On the basis of what Vodafone knows (and Vodafone only knows about the lapses that directly affect it), ComReg can no longer suggest that the lapses are isolated incidents; instead, they provide evidence of endemic failure in ComReg's system for the securing and protecting of information. Vodafone believes that ComReg must address the endemic nature of these failures before proceeding with the Proposed Auction and that, by means of a consultation specifically on these issues of information custodianship and security, it should seek to ensure that interested parties are involved.

#### 5. Concluding Remarks

Vodafone believes that this latest episode raises a significant number of questions, none of which were answered in Mr Merrigan's e-mail of 10 May. We have attempted in this letter to identify some of the most pertinent questions and would be grateful for your responses to them.

More generally, Vodafone has asked us to urge you again to reconsider your decision not to consult on what you have previously called "special procedures and protocols for information-management in the post-Information Memorandum phase of this process" (your letter of 4 May).

Without appropriate safeguards to protect confidential information, there can be no guarantee of the fairness and transparency of the overall process; for that reason, Vodafone believes that potential participants in the Proposed Auction are entitled to the opportunity to make their views known on the adequacy of the procedures ComReg intends to introduce.

Yours faithfully



McCann FitzGerald

31. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone  
“Vodafone/Spectrum Auction/Interim Licences” (letter dated 17 May 2012)

**McCann FitzGerald**  
**Solicitors**

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**MCCANN FITZGERALD**

OUR REF

YOUR REF

DATE

DPC\5117183.2

17 May 2012

Alex Chisholm Esq  
Commission for Communications Regulation,  
Block DEF,  
Abbey Court,  
Irish Life Centre,  
Lower Abbey Street,  
Dublin 1

BY E-MAIL AND  
BY POST

  
Vodafone/Spectrum Auction/Interim Licences

Dear Commissioner Chisholm

As you are aware, this firm acts for Vodafone Ireland Ltd. ("Vodafone") in connection with ComReg's proposed GSM band and 800MHz spectrum auction ("the Proposed Auction").

You will recall that we wrote to you on 8 May outlining Vodafone's concerns, among other things, about the delay in holding the Proposed Auction and about the effect of that delay on Vodafone's ability to guarantee service to its retail and wholesale customers, given that its interim licence for the 900MHz spectrum will expire on 31 January 2013.

More than a week has passed and, while we have received an acknowledgement of the receipt of our letter, we have not had any indication from ComReg of the steps it will take to safeguard continuity of service for Vodafone's customers in the context of the impending expiry of the interim licence.

Time is running out. We explained in our previous letter why we believe it is reasonable to foresee the Proposed Auction and post-auction processes (including any legal challenges) extending beyond the date of the expiry of Vodafone's current licence.

Vodafone has prepared a graphic (a copy of which is attached), illustrating the impossibility (by reference to the estimates of ComReg and its consultants) of holding an auction and completing post-auction realignment prior to the expiry of the interim 900MHz licences. With the efflux of time, concerns about continuity of service become more acute and the necessity of addressing the issue

John Cronin, David Clarke, Timothy Bouchier-Hayes, Jane Marshall, Ronan Molony, Michael O'Reilly, Lonan McDowell, Julian Conlon, Damian Collins, Catherine Deane, Paul Heffernan, Terence McCrann, Muriel Walls, Roderick Bourke, Ambrose Loughlin, Niall Powderly, Kevin Kelly, Hilary Marren, Eamonn O'Hanrahan, Roy Parker, Patricia Lawless, Barry Devereux, Geraldine Hickey, Helen Kilroy, Judith Lawless, James Murphy, David Lydon, David Byers, Sean Barton, Colm Fanning, Paul Liversy, Julie Quin, Alan Fuller, Claire Lenny, Maureen Dolan, Michelle Doyle, Hugh Beattie, Pergus Gillen, Valerie Lawlor, Mark White, Rosaleen Byrne, Eamon de Valera, Joe Fay, Ben Gaffikin, Donal O'Riaghallaigh, Karyn Harry, Philip Andrews, Barrett Chapman, Mary Brassil, Audrey Byrne, Shane Fahy, Georgina O'Riordan, Adrian Farrell, Michael Murphy, Annette Hogan, Aidan Lawlor, Darragh Murphy, Brian Quigley.  
Consultants: Eleanor MacDonagh (FCA), Peter Osborne, Michael Ryan (FCA), Tony Spratt (ACA).

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becomes more pressing. We have been instructed to write to you again to urge you immediately to commence a process that will allow Vodafone to have certainty in the provision of services to its retail and wholesale customers, including, if necessary, the extension of the existing interim licences.

In this regard, Vodafone has asked us to summarise some salient data concerning the service it provides to its customers and its broader role in the Irish economy:

- Vodafone has approximately 2.4 million customers whose service from Vodafone is dependant on the spectrum in question.
- Vodafone has obligations under [redacted] roaming [redacted] the fulfilment of which is entirely dependent on access to the spectrum in question. Likewise, Vodafone's [redacted] arrangements [redacted] are dependent on access to this spectrum.
- A large proportion of government departments and State agencies, [redacted] depend on the Vodafone network for mobile communications services.
- A significant proportion of Irish businesses also depend on our client's network.
- Vodafone has invested circa [redacted] billion to date in Ireland and has approximately 1200 employees.
- Currently Vodafone invests approximately [redacted] million annually in its network infrastructure.

All of this is placed in jeopardy if Vodafone cannot be sure of its ability to continue to use the spectrum after January 2013. In addition, if the uncertainty continues, Vodafone may be forced to postpone or cancel planned investments in Ireland. In large part, the uncertainty is the result of the delay which has been a disappointing feature of the Proposed Auction process since it began almost four years ago; ComReg has consistently missed all of its own self-imposed deadlines in relation to the Proposed Auction.

In addition, Vodafone's competitors do not face the same regulatory jeopardy in relation to licence expiry and licence duration. This is having a damaging effect [redacted] and, in our view, distorts competition as Vodafone's competitors have a significantly greater degree of certainty in relation to future strategic planning [redacted] in the absence of urgent clarity being provided by ComReg in relation to the spectrum.

A little more than eight months now separate Vodafone from the expiry of its interim 900MHz spectrum licence. Vodafone has been given no indication as to how ComReg intends to deal with this extraordinary situation.

ComReg must immediately commence a process that will ensure that Vodafone can continue to be able to provide services to its wholesale and retail customers and, if necessary, it must extend Vodafone's existing interim licence pending conclusion of the Proposed Auction process.

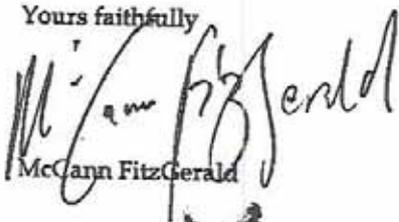
The purpose of this letter is urgently to request that ComReg make its intentions clear on this matter immediately.

CONFIDENTIAL

MCCANN FITZGERALD

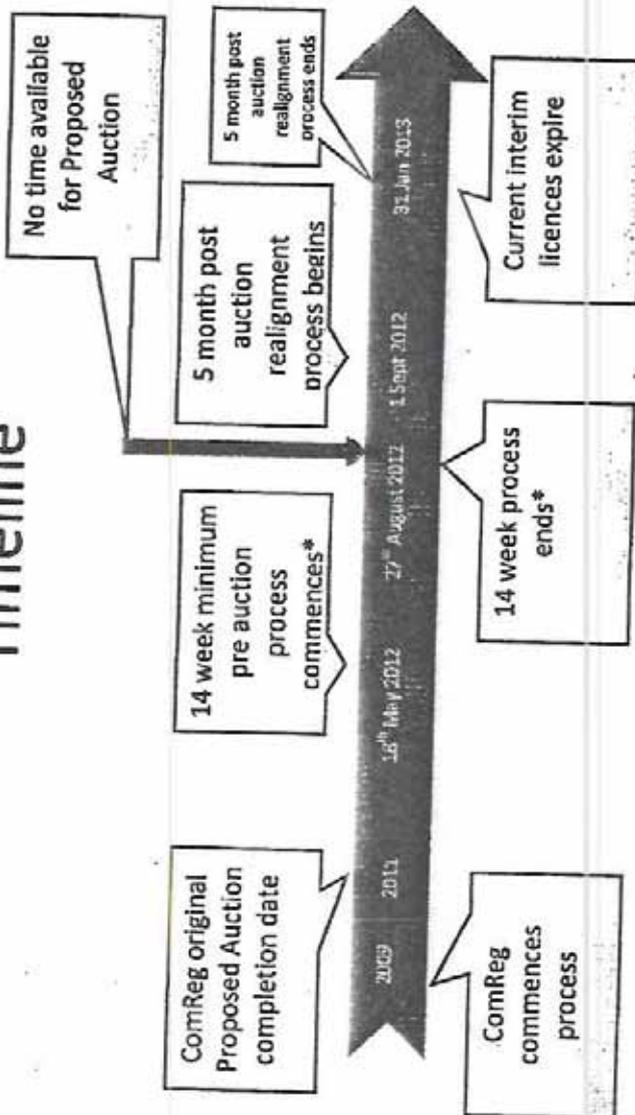
We have also been asked by Vodafone formally to reserve its rights to damages for any loss it may suffer and costs associated with the delay and uncertainty.

Yours faithfully



McCann FitzGerald

# Timeline



\* Exhibit 11 data remaining information Memorandum published 18<sup>th</sup> May 2012

32. ComReg: reply to McCann Fitzgerald letters of 8, 16 and 17 May 2012 (letter dated 18 May 2012)



18 May 2012

Mr Damian Collins  
McCann FitzGerald Solicitors  
Square de Meeûs 40  
1000 Brussels  
Belgium

Dear Mr Collins

**Ref: DPC\5101510.3 – Vodafone: Security and Custodianship of Information/Spectrum Auction**

I refer to your letter dated 8 May, 2012, sent on behalf of your client, Vodafone Ireland Limited (“Vodafone”), and referring to previous correspondence between Vodafone and ComReg relating to data security, confidentiality and related matters.

I also refer to your letter dated 16 May regarding the same matters. ComReg will address the issues raised in this letter separately, including in relation to the report from Deloitte referred to in both letters.

Lastly in this letter, ComReg will address the timing issues mentioned in your correspondence, including your most recent letter (being your letter of 17 May).

***Data security, confidentiality and related matters***

Please be assured that ComReg is in no doubt about Vodafone’s concerns and views, having regard to the correspondence that has passed between the parties, including your recent letters.

ComReg rejects the suggestions that it is not taking information-security issues seriously, that it has been intransigent in its approach to the question of holding a separate consultation in relation to this matter, or that it is not being transparent, as suggested in your letter. With respect, its reasoned responses to Vodafone in this regard, whilst not agreed to by Vodafone, nevertheless constitute valid and tenable responses, and do not indicate a lack of seriousness or transparency, or signal intransigence, merely because they run counter to Vodafone’s point of view.

Further, previous comments about not engaging in adversarial debate about the minutiae were misinterpreted by you insofar as your letter conflates them with the notion of ComReg considering information-security issues as being “small or trivial” (which it does not).



However, with regard to information-custodianship and the suggestion that a separate consultation process is required in relation to information-related aspects of the forthcoming auction process, ComReg's position remains as it has been previously articulated it: viz.,

- that such a consultation is not required or necessary;
- that ComReg has had, and will continue to have, regard to views and proposals submitted generally;
- that the intention not to hold such a consultation ought not to be confused with ComReg not according appropriate importance to the matter of information-security in the process;
- that ComReg is working on appropriate arrangements and taking advice in relation to same;
- that ComReg will confirm its approach to these matters in its forthcoming Response to Consultation Document 11/75 and final Information Memorandum;
- that, accordingly, potential participants in the forthcoming auction process will be appropriately informed as to ComReg's procedures for conducting the auction; and
- that ComReg is fully satisfied with the integrity of the planned auction process and the adequacy of the steps it is taking.

ComReg does not consider that the procedural arrangements it is working on with regard to information-management and security for the auction process amount to "*...new elements...that have not previously been subject to consultation...*", in the sense in which your letter makes this point. In other words, ComReg does not consider this matter of *procedural* detail to be a matter which requires separate formal consultation. Rather, as your client has already acknowledged in this correspondence, this is a matter for ComReg. Notwithstanding this, ComReg, as always, will have regard to relevant views and material put forward by interested parties.

Further, I might point out also that following publication of the Response to Consultation 11/75 and the final Information Memorandum, there will be a question-and-answer phase to the process, as well as a mock-auction phase, and these may serve to identify any relevant and residual issues which may surround the process regarding these matters, and which may require attention before the running of the auction. Again, ComReg, as always, will have regard to relevant views and material put forward by interested parties in this connection.



Commission for  
**Communications Regulation**

*Timing Issues*

Finally, in relation to the comments you make on behalf of Vodafone regarding timing issues in your letters of 8 and 17 May, please note that ComReg is having regard to these and to Vodafone's suggestion of possible extensions to existing interim GSM 900 MHz licences, as well to issues relating to timing generally, and ComReg will address same in its forthcoming Response to Consultation 11/75.

Finally, in the interests of transparency, ComReg intends to publish the letters submitted by McCann FitzGerald on behalf of Vodafone, dated 8 and 17 May 2012 (along with its letter of 8 May, a redacted version of which has been received by ComReg).

In this regard, and noting that you have already submitted a redacted version of the letter of 8 May, I would appreciate if you would indicate what material, if any, in the letters submitted on 16 and 17 May 2012 is considered confidential. If McCann FitzGerald/Vodafone considers these letters (or any parts of these letters) in their current form to be confidential, ComReg requests that McCann FitzGerald submit redacted versions by close of business on 23 May 2012. In doing so, ComReg requires that you disclose what exactly is deemed confidential by McCann FitzGerald/Vodafone, and on what grounds.

Further information on ComReg's treatment of confidential information is published in ComReg document 05/24.

Yours sincerely



**George Merrigan**  
**Director Market Framework**

33. McCann Fitzgerald: letter to ComReg on behalf of its client Vodafone  
“Vodafone/Spectrum Auction/Interim Licences” (letter dated 23 May 2012)<sup>6</sup>

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<sup>6</sup> Note, ComReg are awaiting clarification of confidentiality of this letter, and will publish this letter at a later date.

34.H3GI: letter to ComReg "DOC. NO. 12/25" (letter dated 5 April 2012);

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Registered Number: 316982  
Place of Registration: Republic of Ireland



Mr George Merrigan, Director Framework Division  
Commission for Communications Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

**BY REGISTERED POST AND EMAIL:** [george.merrigan@comreg.ie](mailto:george.merrigan@comreg.ie)

5 April 2012

Dear George

**COMREG DOC. NO. 12/25**

I refer to: (i) ComReg Doc. No. 12/25, *"Multi-band Spectrum Release, Release of the 800 MHz, 900 MHz and 1800 MHz Radio Spectrum Bands"* ("ComReg's Response to Consultation"); (ii) ComReg Doc. No. 12/25A, *"Multi-band Spectrum Release, Release of the 800 MHz, 900 MHz and 1800 MHz Radio Spectrum Bands"* ("ComReg's Response to Consultation Annexes"); and (iii) ComReg Doc. No. 12/24, *"Issues relating to the award of spectrum in multiple bands in Ireland, A report for ComReg"* ("DotEcon's Issues Report"). The comments contained in this document are in addition and without prejudice to Hutchison 3G Ireland Limited's ("H3GI's") previous responses to ComReg's consultations on liberalisation of the 900 MHz spectrum band.

H3GI welcomes ComReg's decision to hold an open auction in respect of the 800, 900 and 1800 MHz bands ("ComReg's Decision"). However, it is deeply disappointed with and concerned about certain aspects of ComReg's Decision, including: (i) ComReg's failure to auction indefinite licences; (ii) ComReg's proposed spectrum cap structure; and (iii) ComReg's failure to create sufficient incentives to promptly complete transitional activities (Detailed comments in respect of these matters are set out in an annex to this letter).

In relation to ComReg's failure to auction indefinite licences, ComReg fails to address the point made by H3GI that certainty, delay and the risk of litigation in respect of an indefinite licence regime are all matters under ComReg's control. It also fails to address the concern raised by H3GI regarding the complete absence of any discussion of the implementation of similar concepts to indefinite licences in New Zealand and the US in ComReg's spectrum strategy statement response to consultation. DotEcon's position in respect of this matter is also unclear, contradictory and unfounded. It is unclear whether DotEcon has been instructed to and/or considered the merits and demerits of indefinite licences. Whilst stating *"Regardless of the merit or demerit of indefinite licences"*, it then proceeds to give a view in relation to the merit of finite licences, namely, *"Given that the availability of this spectrum is determined for the next 18 years, it is unlikely that there would be any material effect on investment incentives in the near term"*. For the reasons set out in previous submissions and the NERA report provided by H3GI to ComReg in October 2011, H3GI believes that ComReg should issue indefinite licences in the upcoming 800, 900 and 1800 MHz auction. H3GI believes that ComReg's decision not to auction indefinite licences is a poor one and a huge opportunity has been missed to make Ireland a progressive telecommunications market that will attract future

Directors  
Robert Finnegan: Irish  
Canning Fok: British  
Frank Sixt: Canadian  
Robert Eckert: U.S.A  
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Richard Woodward: British



investment from shareholders. Other markets like the UK see the huge value in indefinite licences and will attract infrastructure investment as a result.

In relation to ComReg's proposed spectrum cap structure:

1. DotEcon and ComReg effectively state that they do not believe that it is a probable outcome of the auction design that one bidder will only acquire 2 x 5 MHz of sub-1 GHz spectrum. DotEcon bases its view on three reasons: (i) inherent fragility; (ii) if there is no value in such a block, a bidder should not bid for it or bid an appropriately low figure (and at a minimum, the minimum reserve price); and (iii) it is not clear that long-run downstream competitive intensity would be materially greater with four operators having at least 2 x 10 MHz sub-1 GHz relative to three operators with 2 x 20 MHz and one with 2 x 5 MHz (augmented by spectrum in other bands). ComReg bases its view on DotEcon's analysis. In relation to (i), DotEcon does not demonstrate why such an outcome will or probably will happen. In relation to (ii), H3GI does not understand how this supports DotEcon's conclusion. The logical conclusion is that spectrum will be unallocated or a bidder will be allocated one block of spectrum. The former is not an efficient outcome and both would put an operator at a significant competitive disadvantage to operators with four blocks of sub-1 GHz spectrum. Finally and in relation to (iii), ComReg and DotEcon have failed to conduct a proper and transparent competitive and technical analysis.
2. H3GI accepts that Ofcom's minimum spectrum portfolio proposals are still being consulted upon. However, that does not detract from the requirement for ComReg and DotEcon to do a proper and transparent competitive and technical analysis. Hutchison 3G UK Limited strongly challenges Ofcom's current position.
3. At no stage, has H3GI suggested that "*any conclusion in the UK*" should "*automatically apply to Ireland*". DotEcon refers to population and geographic differences between Ireland and the UK, and states "*there are not four symmetric players in Ireland and it is not clear what a sustainable long-run market structure might be for Ireland. Indeed, DotEcon notes that other small European countries have not sustained four players in the market and many countries have operators sharing networks for cost savings and efficiencies*". However, where is DotEcon's competitive assessment? What is the relevant market? Who are the relevant operators? What are their market shares? How concentrated is the market? What is the likelihood that ComReg's proposed spectrum cap structure will have anti-competitive effects? H3GI submits that ComReg has failed to promote competition and ensure that "*there is not an not an unacceptable risk of a material reduction in downstream competitive intensity*". For the reasons set out in its previous responses, H3GI believes that ComReg's proposed spectrum cap structure will result in "*a material restriction of competition relative to current market conditions*".
4. Where is ComReg's competitive assessment? What is the relevant market(s)? Who are the relevant operators? What are their market shares? How concentrated is the market? What is the likelihood that ComReg's proposed spectrum cap structure will have anti-competitive effects?

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Registered Number: 316982  
Place of Registration: Republic of Ireland



5. H3GI believes that ComReg's proposed spectrum cap structure will reduce competitive intensity in the market and that "*intervention*" is necessary.

Finally and in relation to ComReg's failure to create sufficient incentives to promptly complete transitional activities, notwithstanding the measures that ComReg has put in place, H3GI is deeply concerned that the incumbent GSM operators will delay transitional activities to their unfair competitive advantage. As a result, H3GI hereby asks ComReg to:

1. Clarify in its final Information Memorandum that it has various remedies in the event of failure by an operator to promptly complete its transitional activities, including withdrawal of any offer of a licence won under the proposed auction;
2. Include 'audit rights' similar to ComReg's authorised officer rights in the information-gathering section of the final Information Memorandum;
3. Appoint a senior and experienced ComReg manager to project manage transitional activities once the results of the auction are known; and
4. Commit to weekly project meetings with successful bidders once the project plan has been finalised.

H3GI is also deeply disappointed by ComReg's continued failure to publish a detailed project plan in relation to the upcoming auction to which all interested parties, including ComReg, could work towards. This lack of organisation and transparency is not conducive to an "*efficient outcome*". H3GI reminds ComReg that the interim 900 MHz licences of Vodafone and O2 expire on 31 January 2013. Any extension of those licences would cause great concern to H3GI. H3GI reserves all rights in respect of this matter.

H3GI looks forward to the publication of the final information memorandum and participating in the upcoming auction.

Yours sincerely

  
**MARK HUGHES**  
Head of Regulatory

**Encl.**

Directors  
Robert Finnegan: Irish  
Canning Fok: British  
Frank Sixt: Canadian  
Robert Eckert: U.S.A  
Edmond Ho: British  
David Dyson: British  
Richard Woodward: British

## ANNEX

### Indefinite Licences

At page 89 of ComReg's Response to Consultation, ComReg states as follows:

*"ComReg notes that H3GI raised numerous issues in its letter to ComReg of 22 December 2011. In this letter, H3GI re-iterated many arguments supporting indefinite licences, that were contained in its submission (NERA report) to ComReg of 7 October 2011. ComReg addressed these arguments in its Spectrum Strategy Statement (see Section 3.4.2 of Document 11/88). Many of the arguments presented in its letter directly opposed ComReg's analysis and position on indefinite licences as presented in Document 11/88, without presenting sufficient new evidence to alter ComReg's position as set out in Document 11/88.*

*New arguments presented by H3GI included that indefinite licences have been issued elsewhere, ComReg's position threatens new and smaller operators and that liberalised spectrum may not be available until 2015.*

*In addition, ComReg recognises H3GI's argument that indefinite licences have been issued elsewhere; however there are very few examples of such usage. Indeed, the appropriateness of indefinite licences is dependent on the specific scenario faced in each jurisdiction. In this regard, ComReg does not deem indefinite licences appropriate in Ireland for the reasons set out in Document 11/88. Equally, ComReg does not agree with H3GI's assertion that liberalised spectrum will not be available until 2015. ComReg envisages that liberalised spectrum will be available on time in 2013. Finally ComReg considers that new and smaller operators are not disenfranchised by finite licences, and ComReg maintains that finite licences promote competition and spectrum efficiency for the reasons presented in Document 11/88 and 11/89. ComReg therefore maintains its position as expressed in Document 11/88 (Section 3.4.2) that finite duration licences is the most appropriate.*

*For the reasons set out in Documents 11/88, 11/89 and above, ComReg considers that it has not, in its view, been presented with any further evidence to suggest that liberalised rights of use in the three spectrum bands should be awarded by way of licences of indefinite duration. ComReg has not seen any reason to depart from the specific licence duration set out in Document 11/60, which results in all Time Slice 2 licences co-terminating in 2030."*

ComReg fails to address the point made by H3GI that certainty, delay and the risk of litigation in respect of an indefinite licence regime are all matters under ComReg's control. It also fails to address the concern raised by H3GI regarding the complete absence of any discussion of the implementation of similar concepts to indefinite licences in New Zealand and the US in ComReg's spectrum strategy statement response to consultation. ComReg's Response to Consultation is factually inaccurate. The fact that indefinite licences have been issued elsewhere and that ComReg's position threatens new and smaller operators were not new arguments presented by H3GI. These points were raised in the NERA report in October 2011.

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At page 52 of DotEcon's Issues Report, DotEcon states as follows:

*"On the issue of licence duration ComReg has been consistent in its view that licences awarded in the planned process should be for a fixed term.*

*On the 22 November 2011, ComReg published its Strategy Statement, "Strategy for Managing the Radio Spectrum: 2011–2013". In Section 4.3 of this Statement ComReg outlines its position on licence duration and provides its reasons as to why it considers licences of finite duration to allow a spectrum manager to maintain co-ordination of the most important bands and presents its views on the arguments regarding uncertainty and investment incentives in the presence of finite licence duration. Therefore, ComReg has already stated its policy on this matter applying to the auction.*

*In addition, ComReg considered the report submitted by NERA on behalf of H3GI in Section 3.4 of ComReg document 11/88 and provided its specific comments. We refer the reader to ComReg document 11/88 on this matter. We also note the further submission from H3GI dated 22 December 2012 which responded to ComReg's Spectrum Strategy Statement 2011-2013 and re-stated its case for indefinite licences.*

*Regardless of the merit or demerit of indefinite licences, it is worth noting that the auction would allocate spectrum in the three bands until 2030. Given that the availability of this spectrum is determined for the next 18 years, it is unlikely that there would be any material effect on investment incentives in the near term."*

DotEcon's position is unclear, contradictory and unfounded. It is unclear whether DotEcon has been instructed to and/or considered the merits and demerits of indefinite licences. Whilst stating *"Regardless of the merit or demerit of indefinite licences"*, it then proceeds to give a view in relation to the merit of finite licences, namely, *"Given that the availability of this spectrum is determined for the next 18 years, it is unlikely that there would be any material effect on investment incentives in the near term"*. For the reasons set out in previous submissions, H3GI believes that ComReg should issue indefinite licences in the upcoming 800, 900 and 1800 MHz auction. DotEcon highlights the consistency of ComReg's approach. Consistency is not a virtue if the relevant position is wrong.

Directors  
Robert Finnegan: Irish  
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## Proposed Spectrum Cap Structure

### Sub-1 GHz Spectrum Cap of 2 x 20 MHz

At pages 106 and 108 of ComReg's Response to Consultation Annexes, ComReg states as follows:

*"DotEcon remains sceptical that, with a sub-1GHz cap of 2 x 20MHz, a bidder is likely to be forced down to 2 x 5MHz of spectrum due to each of its rivals boosting its valuation for a fourth block of sub-1GHz in anticipation of benefits from muted downstream competition, rather than simply because it was more efficient for additional blocks to be assigned to other winners. DotEcon puts forward three main reasons for this (assuming that there will be four bidders):*

- *the criticisms put forward rely on three bidders each winning 2 x 20 MHz and, if this does not occur, it is not possible for a fourth bidder to be limited to 2 x 5 MHz only. There is inherent fragility in three bidders trying to force a fourth down to 2 x 5 MHz, as if any one of this coalition deviates from the strategy, then the fourth player will obtain more spectrum. Once prices are sufficiently high it becomes increasingly attractive for one of these three bidders to contract demand to less than 2 x 20MHz;*
- *should any bidder (including H3GI) not see value in holding only 2 x 5 MHz of sub-1 GHz spectrum, DotEcon notes that it should not bid on this outcome in any packages or, alternatively, bid at a low level reflecting its valuation of a single block; and*
- *it is not clear that long-run downstream competitive intensity would be materially greater with four operators having at least 2 x 10 MHz sub-1GHz relative to three operators with 2 x 20 MHz and one with 2 x 5 MHz (augmented by spectrum in other bands).*

*Implicit in H3GI's arguments is the assumption that effective competition requires at least four largely symmetric players and that ComReg should actively intervene to achieve such an outcome. However, DotEcon sees no solid case for active intervention to engineer a largely symmetric four-player outcome in the Irish mobile market. There is also a risk that this would simply create a transient and ultimately unsustainable market structure through an implicit public subsidy generated by the restriction on competition for spectrum that tighter caps (or other measures such as MSPs) would create.*

...

*First, ComReg notes that it did not receive any objections to the principle of a sub-1GHz spectrum cap and, on the basis of the reasons identified in Documents 11/60, 11/60a and Document 11/58 (paragraphs 123 – 132) and noting that no other information before it would lead it to conclude otherwise, ComReg has decided to implement a sub-1GHz spectrum cap in the Award Process.*

*In relation to the proposed sub-1GHz cap of 2 × 20 MHz, ComReg notes that, of the three responses received on this proposal, Vodafone and eircom Group supported ComReg's proposal and ComReg notes the reasons provided by them in support of their position.*

*ComReg notes H3GI's disagreement with ComReg's proposal and the reasons provided by it in support of its position. ComReg addresses the concerns expressed by H3GI regarding MSP, in the context of H3GI's suggested spectrum floor.*

*ComReg also notes DotEcon's assessment of responses received, as set out in section 4 of Document 12/24.*

*Having carefully considered the views of interested parties and DotEcon's analysis and recommendations, ComReg's assessment of this issue is as follows:*

- *in relation to H3GI's suggested 2 × 15 MHz sub-1GHz cap, ComReg finds DotEcon's analysis convincing, including that:*
  - *it would have the effect of significantly pre-determining the outcome of the Award Process;*
  - *with an initial sub-1GHz spectrum cap of only 2 × 15MHz, in the case of four competing bidders, this would necessarily result in 2 × 5 MHz being 'set aside', essentially to be left for a fifth entrant, potentially resulting in an inefficient outcome. There is no apparent justification for this on competition grounds;*
  - *it may encourage speculative demand for a single block to prevent the cap being relaxed and exploit the restriction that this imposes on incumbents; and*
  - *alternatively, if there is no such demand for a single block, the situation resembles a situation which could arise if a 2 × 20MHz cap existed (with the additional complexity of a contingent cap not being needed).*
- *In relation to the concerns expressed regarding the likelihood of a 2 × 20 MHz sub-1GHz cap resulting in a bidder being forced by other bidders to win only 2 × 5 MHz of sub-1GHz spectrum, ComReg would also agree with DotEcon's analysis summarised above, and therefore considers that there is no solid case for active intervention to engineer a largely symmetric four-player outcome in the Irish mobile market.*

*Having had regard to all relevant material before it and on the basis of the discussion set out above, ComReg has not identified grounds to warrant changing its proposal for a 2 × 20 MHz sub-1GHz spectrum cap for each of Time Slice 1 and Time Slice 2 and has, therefore, decided to implement this proposal in the Award Process."*

DotEcon and ComReg effectively state that they do not believe that it is a probable outcome of the auction design that one bidder will only acquire 2 x 5 MHz of sub-1 GHz spectrum. DotEcon bases its view on three reasons: (i) inherent fragility; (ii) if there is no value in such a block, a bidder should not bid for it or bid an appropriately low figure (and at a minimum, the minimum reserve price); and (iii) it is not clear that long-run downstream competitive intensity would be materially greater with four operators having at least 2 x 10 MHz sub-1 GHz relative to three operators with 2 x 20 MHz and one with 2 x 5 MHz (augmented by spectrum in other bands). ComReg bases its view on DotEcon's analysis. In relation to (i), DotEcon does not demonstrate why such an outcome will or probably will happen. In relation to (ii), H3GI does not understand how this supports DotEcon's conclusion. The logical conclusion is that spectrum will be unallocated or a bidder will be allocated one block of spectrum. The former is not an efficient outcome and both would put an operator at a significant competitive disadvantage to operators with four blocks of sub-1 GHz spectrum. Finally and in relation to (iii), ComReg and DotEcon have failed to conduct a proper and transparent competitive and technical analysis.

### **Proposed Overall Spectrum Cap of 2 x 50 MHz**

At page 113 of ComReg's Response to Consultation Annexes, ComReg states as follows:

*"In relation to the proposed overall spectrum cap of 2 x 50 MHz, ComReg notes that, of the three responses received on this proposal, Vodafone supported ComReg's proposal and ComReg notes the reasons provided by it in this regard.*

*ComReg also notes eircom Group's and H3GI's disagreement with ComReg's proposal and the reasons provided by them in support of their position. ComReg addresses the concerns expressed by H3GI regarding MSP, in the context of H3GI's suggested spectrum floor.*

*ComReg also notes DotEcon's assessment of responses received as set out in section 4.3 of Document 12/24.*

*Having carefully considered the views of interested parties and DotEcon's analysis and recommendation on its proposal, ComReg assessment of same is as follows:*

- *in relation to eircom Group and H3GI's concerns regarding the likelihood of a Bidder obtaining only 2 x 5 MHz of sub-1GHz spectrum, ComReg refers to its analysis of the same concerns in the context of the 2 x 20 MHz sub-1GHz cap proposal above;*
- *ComReg would also disagree with eircom Group's submission that the proposal aims to maximise the number of outcome permutations in the award process and would reiterate that ComReg's objectives are to ensure both an efficient auction (such as by providing high levels of bidder flexibility) and an optimal outcome for consumer welfare (such as by providing safeguards against excessively asymmetric outcomes including those where the acquisition of rights of use of spectrum could be motivated by the expectation of muting downstream competition);*

- *In addition, ComReg concurs with DotEcon's assessment that an overall spectrum cap of 2 x 40 MHz could have a number of adverse effects, including: significantly limiting competition for spectrum in the Award Process and impeding bidder flexibility without any demonstrable benefit for downstream competition (noting ComReg's previous assessment of the situation of a bidder with only 2 x 5 MHz of sub-1GHz spectrum rights in the context of the 2 x 20 MHz sub-1GHz cap proposal above).*

*Having had regard to all relevant material before it and on the basis of the discussion set out above, ComReg has not identified grounds to warrant changing its proposal for a 2 x 50 MHz overall spectrum cap for each of Time Slice 1 and Time Slice 2 and has, therefore, decided to implement this proposal in the Award Process."*

H3GI refers to its comments above in respect of the sub-1 GHz spectrum cap of 2 x 20 MHz. H3GI submits that ComReg has failed to provide safeguards against "excessively asymmetric outcomes including those where the acquisition of rights of use of spectrum could be motivated by the expectation of muting downstream competition".

### **Sub-1 GHz Spectrum Floor**

At page 124 of ComReg's Response to Consultation Annexes, ComReg states as follows:

*"DotEcon notes that the proposals referred to by H3GI regarding 'minimum portfolio packages' ('MPPs') is still being consulted upon with no certainty that it will be adopted in the UK. DotEcon also note that there is no certainty that at the moment that Ofcom will adopt spectrum floors proposal as opposed to relying on spectrum caps, a point made by Ofcom in its January 2012 consultation. ...*

*DotEcon further noted that Ofcom published an addendum to its January 2012 consultation which stated that the portfolios packages would change in the event Everything Everywhere sold its 2 x 15 MHz (that it is required to divest) to a party other than Vodafone or Telefónica in advance of the auction for 800 MHz and 2.6 GHz spectrum.*

*DotEcon notes that all the various options within the two Group have the common feature that a sufficient amount of high frequency spectrum is a potential substitute for sub 1 GHz spectrum in providing a sufficient amount of spectrum to permit a national network operator to function effectively. Indeed, DotEcon state that "the current Ofcom consultation is clear that sub-1 GHz spectrum is not essential to be an effective national operator provided a sufficient quantity of spectrum above 1 GHz is held".*

*DotEcon also states that any conclusion in the UK should not automatically apply to Ireland. In that regard, DotEcon notes that Ireland has a much smaller population (and dispersion of same) and different geography resulting in different national roll-out in the two markets. Currently, there are not four symmetric players in Ireland and it is not clear what a sustainable long-run market structure might be for Ireland. Indeed, DotEcon notes that other small European countries have not sustained four players in the market and many countries have operators sharing networks for cost savings and efficiencies.*

*In addition, DotEcon outlines major differences between the situation in the UK and Ireland, including that:*

- *Ofcom's proposed spectrum release is for the 800 MHz and 2.6 GHz spectrum bands only (with up to 2 × 15 MHz of 1800 MHz dependant on divestment by Everything Everywhere), which DotEcon note is not certain to take place before the auction, whereas ComReg's proposed spectrum release involves there being more spectrum available as it is releasing all of the 800 MHz, 900 MHz and 1800 MHz bands (ComReg releasing all 2 × 75 MHz as opposed to Ofcom potentially releasing a portion) simultaneously; and*
- *there are specific reasons why an interventionist approach is being adopted in the UK. In particular, the UK release does not include 900 MHz spectrum, which, in its totality, is held by Vodafone and Telefónica. Accordingly, there is an existing strong asymmetric distribution of 900 MHz spectrum in the UK that will not be affected by the auction, whereas in Ireland the entire 900 MHz band is being included in the award process (subject to existing GSM 900 MHz rights of use in Time Slice 1), making all of the sub 1 GHz spectrum available simultaneously from Time Slice 2. There is a major difference between the amount of sub 1 GHz spectrum available for award in the UK and in Ireland.*

*DotEcon notes that even if three bidders acquired 2 x 20 MHz of sub 1 GHz spectrum each, there is still the potential for a fourth bidder to secure enough 1800 MHz spectrum to satisfy Ofcom's "Group 1" MPP, and indeed larger amounts corresponding broadly to Ofcom's high frequency groups, "Group 2" and "Group 3".*

*For these reasons, DotEcon sees no solid case for active intervention using the auction as an instrument to "engineer" a largely symmetric four-player outcome in the Irish market and it is not clear that the scenario presented by H3GI is necessary for effective downstream competition. Indeed, DotEcon considers that there is also a risk that the spectrum floor proposal would simply create a transient and ultimately unsustainable market structure through an implicit public subsidy generated by the restriction on competition for spectrum that tighter caps (or other measures such as MSPs) would create. DotEcon states that, other than designing an award process which can reasonably be expected to achieve ComReg's objective of promoting competition, ComReg does not need to ensure any particular market structure is created or preserved going forward, save to ensure that there is not an unacceptable risk of a material reduction in downstream competitive intensity.*

*In addition, DotEcon states that it agrees with eircom Group's view that the introduction of a spectrum floor (which no other regulator has implemented to date) would considerably increase the complexity of the award process which is already complicated by many idiosyncratic factors.*

### **Additional H3GI Comments**

*DotEcon also addresses a number of additional comments presented by H3GI, a summary of which follows:*

- *in relation to H3GI's view that ComReg is required to conduct an explicit competition analysis, DotEcon expresses the view that ComReg has properly considered competition throughout the award process and notes ComReg's aim of only precluding outcomes that would compromise downstream competition, whilst otherwise providing maximum flexibility to bidders. DotEcon state that therefore "the protection of downstream competition has an absolute priority, but equally unnecessary restrictions should not be placed on competition for spectrum if these are not required to support effective downstream competition";*
- *with regard to H3GI's view that a judgement cannot be avoided regarding the number of players that the market will sustain, ComReg noted (in Document 11/60) that it is not required to ensure a particular number of competitors in the market and considers that the underpinning legislation is principled in nature and not prescriptive. In other words, ComReg need not prescribe a specific number of market operators and to do so would be inappropriate unless a failure of competition in the market or similar circumstances requires ComReg to do so. Rather, leaving to one side the design of an award process that can reasonably be expected to achieve ComReg's objective of promoting competition, the particular issue in this context is to set constraints on the possible outcomes of the auction to prevent, as far as is reasonably possible, a material restriction of competition relative to current market conditions; (In that regard, it is noted that ComReg's spectrum cap proposals would see a minimum of four operators with access to sub-1GHz spectrum rights, compared to the current situation where only three operators have access to such rights (with the fourth operating only enjoying rights of use in the 2.1 GHz band)) furthermore, DotEcon notes that effective competition does not require ensuring a certain number of operators, imposing symmetric auction outcomes or the protection of any particular operator. Rather, in DotEcon's view, the most troublesome scenarios which could adversely affect competition need to be identified, considered and avoided where they would undoubtedly be harmful to competition;*
- *there are trade-offs when implementing spectrum caps or spectrum floors. For instance, giving operators the ability to acquire more spectrum reduces capacity costs and encourages the deployment of advanced services to the benefit of consumers (provided that other operators are not left with so little spectrum that competition becomes ineffective). Given the obvious difficulties in quantifying such trade-offs, it is reasonable to be guided by the current market structure and ensuring that the award process does not run a significant risk of worsening competitive conditions; and*
- *finally, DotEcon states that the proposed spectrum caps do not seek to interfere with the market or seek the exit of a market player. Instead, the proposed caps are to ensure competition is not weakened compared to the current market conditions but otherwise not to impose further restrictions. In relation to H3GI's assertion that the spectrum caps do not allow bidders to "compete on fair and equal terms", DotEcon notes that all bidders are subject to the same spectrum caps and the same rules, and therefore will compete on equal terms.*

### **ComReg's Consideration of Respondents' and DotEcon's Views**

*Of the two responses received in relation to H3GI's proposal, eircom Group did not support the proposal and ComReg notes the reason provided by same.*

*ComReg also notes the additional material provided by H3GI in support of its spectrum floor proposal.*

*ComReg further notes DotEcon's assessment of same as set out in section 4 of Document 12/24.*

*Having carefully considered the views of interested parties and DotEcon's analysis and recommendations in relation to same, ComReg's assessment of this issue is as follows:*

- First, ComReg notes that H3GI's proposal for a lower sub-1GHz cap and its spectrum floor proposal are premised on its view that at least four operators with largely symmetric sub 1 GHz spectrum holdings are required to ensure effective competition in the Irish market. ComReg notes DotEcon's observation that this argument was made without providing any evidence to support this point, other than to refer to Ofcom's recent proposals in the UK. Moreover, there are not currently four symmetric players in Ireland and it is not clear what a sustainable long-run market structure might be for Ireland. Indeed, DotEcon notes that other small European countries have not sustained four players in the market and many countries have operators sharing networks for cost savings and efficiencies;*
- In relation to the applicability or otherwise of Ofcom's approach to the situation in Ireland, ComReg notes and agrees with DotEcon's views on this issue as summarised above. In addition, ComReg notes that Ofcom's proposals remain subject to consultation and have altered significantly since H3GI's submission was prepared. For example, ComReg notes that Ofcom now appears to be of the view that access to sub-1GHz spectrum is not critical to the credibility of an MNO.*
- in addition, ComReg considers that the spectrum floor proposal limits the range of possible auction outcomes and presents a largely pre-determined and potentially inefficient outcome, without adding any tangible value to ComReg's spectrum caps proposal. In that regard, it is significant that H3GI acknowledges that the spectrum floor proposal constrains outcomes and reduces the potential for achieving a competitive and efficient outcome, which ComReg notes runs contrary to one of its objectives for the auction;*
- in contrast, ComReg would reiterate its goal of protecting against a reduction of competitive intensity in the market, and not intervening unless it considers it necessary to do so in order to protect competition. As ComReg has previously stated, it is not for ComReg to determine what the most efficient auction outcome should be (noting in this regard that ComReg does not have access to perfect information particularly in relation to the demand for spectrum of potential auction participants). Rather, ComReg is satisfied that the market will decide the optimum number of operators and the spectrum*

*mix amongst successful operators, whereas ComReg's spectrum cap proposals will operate to preclude extremely asymmetric outcomes which would otherwise have a negative effect on competition and consumer welfare;*

- *equally, ComReg does not accept that it is not promoting competition through the design of the Award Process, including its spectrum cap proposals. In that regard, ComReg observes that:*
  - *in the Irish mobile market there are currently four MNOs, only three of which have rights of use in respect of sub-1GHz spectrum (ComReg notes that there are currently roaming agreements in place by virtue of which operators are providing services using 900 MHz spectrum licensed to other operators. ComReg sees no reason why such agreements will not remain part of the competitive landscape after the auction). Under ComReg's proposal, at least four operators would have access to sub-1GHz rights. In these circumstances, it can reasonably be seen that ComReg is both ensuring that competitive intensity is not diminished as a result of the Award Process (by identifying, considering and avoiding harmful asymmetric outcomes) and promoting competition relative to the present competitive situation;*
  - *whereas ComReg would prefer that market forces determine the ultimate spectrum allocation between operators, subject of course to the exclusion of harmful asymmetric outcomes, the spectrum floor proposed by H3GI would, in ComReg's opinion, tend to engineer a situation where:*
    - *it is not at all clear that four symmetric operators would be the most ideal outcome for competition (noting also that symmetries between undertakings in an oligopolistic market structure can facilitate tacit collusion); and*
    - *the outcome of the auction, if the proposed spectrum floor was implemented, could be inefficient insofar as it subsidises and protects weaker bidders due to the enforced reduction in demand, with corresponding potential negative consequences on efficient allocation and use of spectrum and on consumer welfare.*
- *furthermore, ComReg does not agree that its spectrum cap proposals are interfering with the market. In that regard, ComReg would firstly note that its spectrum cap proposals are considerably less interventionist than virtually all of the spectrum assignment proposals put forward by respondents to this consultation process, including H3GI's spectrum floor proposal. In addition, in relation to the claim regarding the potential exit of a player, ComReg would observe that:*
  - *first, there are not four symmetric players in Ireland and it is not clear what a sustainable long-run market structure might be for Ireland;*
  - *further, ComReg considers that such matters are for the market to decide and not for a regulator without access to perfect information;*

- *H3GI's argument does not make clear the extent to which it takes into account a number of factors including that, in the absence of a spectrum floor:*
  - *an operator with "only" 2 × 5 MHz of sub-1GHz spectrum may still acquire significant liberalised 1800 MHz rights;*
  - *existing players would still have 2.1 GHz spectrum rights with which to continue to provide mobile services;*
  - *licensees will be in a position to enter into roaming and network sharing agreements; and*
  - *there may well be releases of other valuable mobile spectrum during the course of the lifetime of Liberalised Licences.*
- *In relation to H3GI's assertion that the spectrum caps do not allow bidders "compete on fair and equal terms", ComReg notes that all bidders are subject to the same spectrum caps and the same rules, and therefore compete on equal terms.*
- *ComReg also notes and agrees with DotEcon's observation that it is not clear that the scenario presented by H3GI is necessary for effective downstream competition and that there is also a risk that the spectrum floor proposal would simply create a transient and ultimately unsustainable market structure through an implicit public subsidy generated by the restriction on competition for spectrum that tighter caps (or other measures such as MSPs) would create;*
- *In addition, ComReg notes and agrees with eircom Group's view that the introduction of a spectrum floor (which no other regulator has implemented to-date) would considerably increase the complexity of the award process which is already complicated by many idiosyncratic factors;*
- *In relation to H3GI's concerns about an operator acquiring only 2 × 5 MHz sub 1 GHz, ComReg would refer to its and DotEcon's assessment of the likelihood of such a scenario occurring in the context of the 2 × 20 MHz sub-1GHz cap above;*
- *ComReg also rejects H3GI's assertion that it is equating revenue under the proposed auction with efficiency and prioritising this over the medium and long term well-being of the mobile communications market in Ireland. ComReg is of the view that H3GI has taken its statements in this regard out of context. At no point has ComReg attempted to prioritise revenue generation over its statutory functions, objectives and duties and, as H3GI is fully aware, it is commonly accepted that, by ensuring that spectrum goes to those bidders who value it the most, this will ensure its optimum use. Contrary to H3GI's assertion, this will in turn ensure the long term well-being of the mobile communications market in Ireland. ComReg also notes that H3GI has made this comment in the context of advocating the introduction of a spectrum floor. In this regard, ComReg would note that, unlike the proposed spectrum caps, the introduction of a spectrum floor itself runs a*

*clear risk of encouraging inefficient entry or sheltering an inefficient incumbent to the detriment of competition in the mobile communications market and society as a whole.*

*Having had regard to all relevant material before it and on the basis of the discussion set out above, ComReg has not identified grounds to warrant implementation of the spectrum floor proposal and has, therefore, decided not to implement same.*

### **Additional H3GI Comments Regarding Competition Assessment**

*In relation to H3GI's various submissions regarding its view that it is necessary for ComReg to carry out a competition assessment on the likely future competition in the mobile market as a result of the outcome of the auction (citing, by way of example, recent work undertaken by Ofcom), ComReg makes the following observations:*

- *ComReg has considered, amongst other things, the impact upon competition when designing the various facets of the award process. See, for example, the RIA and assessment of the different options against ComReg's statutory framework;*
- *a more detailed 'current competition' assessment would not be warranted or particularly helpful as the current market has only a limited relevance to the post-auction landscape given ComReg's proposal for full-band auctions of the 900 MHz and 1800 MHz bands (or "big-bang" scenario);*
- *a more detailed post-auction competition assessment cannot meaningfully be done, as that would involve looking at a 'post-big-bang' scenario, where any number of permutations could crystallise, and where the 'market' may also change as a result of the liberalisation of use of spectrum permitted thereafter. Contrast this with the situation in the UK where Vodafone and O2 have, between them, all 900 MHz spectrum rights for an indefinite period which, therefore, provides a known reference point from which to conduct an assessment;*
- *given the 'big bang' scenario, the impact of various options on competition as discussed in the RIA framework and the chances of various options serving to safeguard and promote competition can be analysed without any more detailed competition assessments than those already prepared and carried out;*
- *accordingly, ComReg is entitled, without further unnecessary analysis, to expect that the most positive impact on competition can reasonably be expected to accrue and that its competition-related obligations and objectives can reasonably be expected to be fulfilled, by implementing the particular auction with the particular auction-design features that it is proposing. These, in the most proportionate and non-discriminatory way, seek to achieve the most that can be achieved in such forward-looking circumstances, which is to try to ensure that there will not be any lesser amount of competition in the future, relative to that obtaining currently; and*

- *to this end, the auction has been designed to provide for the maximum possible potential for participation in the auction and spread of spectrum allocation, by means, inter alia, of the following:*
  - *an open, transparent, non-discriminatory and competitive process;*
  - *making available a large amount and range of complementary and substitutable spectrum;*
  - *spectrum caps/sub-caps, etc., to avoid extreme asymmetric outcomes, and to provide the potential for new entry; and*
  - *spectrum going to the highest bidders, and therefore, to those who value it most (i.e. those who will make optimum use of it, to the benefit of consumers).*

*As such, ComReg rejects H3GI's assertion that it is required to carry out a further detailed review of competition in addition to that which it has carried out to date."*

H3GI accepts that Ofcom's minimum spectrum portfolio proposals are still being consulted upon. However, that does not detract from the requirement for ComReg and DotEcon to do a proper and transparent competitive and technical analysis. *"DotEcon notes that all the various options within the two Group have the common feature that a sufficient amount of high frequency spectrum is a potential substitute for sub 1 GHz spectrum in providing a sufficient amount of spectrum to permit a national network operator to function effectively. Indeed, DotEcon state that "the current Ofcom consultation is clear that sub-1 GHz spectrum is not essential to be an effective national operator provided a sufficient quantity of spectrum above 1 GHz is held".* Hutchison 3G UK Limited strongly challenges Ofcom's current position.

At no stage, has H3GI suggested that *"any conclusion in the UK"* should *"automatically apply to Ireland"*. DotEcon refers to population and geographic differences between Ireland and the UK, and states *"there are not four symmetric players in Ireland and it is not clear what a sustainable long-run market structure might be for Ireland. Indeed, DotEcon notes that other small European countries have not sustained four players in the market and many countries have operators sharing networks for cost savings and efficiencies"*. However, where is DotEcon's competitive assessment? What is the relevant market? Who are the relevant operators? What are their market shares? How concentrated is the market? What is the likelihood that ComReg's proposed spectrum cap structure will have anti-competitive effects? H3GI submits that ComReg has failed to promote competition and ensure that *"there is not an unacceptable risk of a material reduction in downstream competitive intensity"*. For the reasons set out in its previous responses, H3GI believes that ComReg's proposed spectrum cap structure will result in *"a material restriction of competition relative to current market conditions"*.

In relation to ComReg's *"Consideration of Respondents' and DotEcon's Views"*, etc:

1. Where is ComReg's competitive assessment? What is the relevant market(s)? Who are the relevant operators? What are their market shares? How concentrated is the

market? What is the likelihood that ComReg's proposed spectrum cap structure will have anti-competitive effects?

2. H3GI believes that ComReg's proposed spectrum cap structure will reduce competitive intensity in the market and that "intervention" is necessary. H3GI does not believe that "ComReg's spectrum cap proposals will operate to preclude extremely asymmetric outcomes which would otherwise have a negative effect on competition and consumer welfare".
3. H3GI's argument takes into account all of the factors listed by ComReg.
4. Given ComReg's failure to conduct a proper and transparent competitive assessment and as a result, propose an appropriate spectrum cap structure, H3GI does not agree that its proposal is too complex.
5. In the absence of a proper and transparent competitive assessment, H3GI maintains its view that ComReg is equating revenue under the proposed auction with efficiency and prioritising this over the medium and long term well-being of the mobile communications market in Ireland.
6. Finally, H3GI disagrees that: (i) "a more detailed 'current competition' assessment would not be warranted or particularly helpful as the current market has only a limited relevance to the post-auction landscape given ComReg's proposal for full-band auctions of the 900 MHz and 1800 MHz bands (or "big-bang" scenario)", and (ii) "a more detailed post-auction competition assessment cannot meaningfully be done, as that would involve looking at a 'post-big-bang' scenario, where any number of permutations could crystallise, and where the 'market' may also change as a result of the liberalisation of use of spectrum permitted thereafter. Contrast this with the situation in the UK where Vodafone and O2 have, between them, all 900 MHz spectrum rights for an indefinite period which, therefore, provides a known reference point from which to conduct an assessment".

### Transitional Activities

Notwithstanding the measures that ComReg has put in place to ensure prompt completion of transitional activities, H3GI is deeply concerned that the incumbent GSM operators will delay transitional activities to their unfair competitive advantage. As a result, H3GI hereby asks ComReg to:

1. Clarify in its final Information Memorandum that it has various remedies in the event of failure by an operator to promptly complete its transitional activities, including withdrawal of any offer of a licence won under the proposed auction;
2. Include 'audit rights' similar to ComReg's authorised officer rights in the information-gathering section of the final Information Memorandum;
3. Appoint a senior and experienced ComReg manager to project manage transitional activities once the results of the auction are known; and

4. Commit to weekly project meetings once the project plan has been finalised.

In relation to the process for finalising the transitional activity project plan, ComReg's proposals are not clear. On the one hand, ComReg proposes that the incumbent GSM operators commence work on their retuning and relocation project plans once the main stage of the auction is complete and work with each other in preparing the relocation project plan.<sup>1</sup> On the other hand, it proposes that the discussions commence immediately following the outcome of the award process ie after the assignment and negotiation stage.<sup>2</sup> H3GI would be concerned in respect of any discussions between the GSM operators during the auction and hereby asks ComReg to clarify this matter.

### Network Sharing and Contiguous Spectrum

At page 113 of ComReg's Response to Consultation, ComReg states:

*"In relation to Approaches i, ii and iv put forward by eircom Group, ComReg agrees with DotEcon's assessment of same (see section 12.3 of Document 12/24 – DotEcon's report). ComReg also notes DotEcon's assessment of Approach iii and that this approach is similar to that put forward by Vodafone (i.e. allowing communication and coordination) within the context of the existing proposed rules for the Assignment Stage and Approach iii is therefore considered in the context of Vodafone's proposal.*

*In relation to Vodafone's negotiation stage proposal, ComReg has considered this proposal and would have the same reservations identified by DotEcon and summarised above. At the same time, ComReg considers that the modifications proposed by DotEcon would address the issues identified and allow the modified proposal to facilitate the attainment of the efficiency benefits of adjacent spectrum assignments for NSA partners in a manner not inconsistent with ComReg's other statutory objectives and duties.*

*In relation to Copenhagen Economics proposal, ComReg agrees with DotEcon that this proposal does not improve on the current DotEcon proposal. ComReg agrees that DotEcon's current proposal "is appropriate in order to allow competition between operators for preferred frequencies", something which is not possible with Copenhagen Economics proposal, resulting in DotEcon's current proposal being an overall superior proposal.*

*Accordingly, and noting that implementation of the negotiation stage as recommended by DotEcon would not require changes to the Assignment Stage (as already consulted upon), ComReg has decided to implement the Full Assignment Round and a negotiation stage as recommended by DotEcon and detailed below. ComReg notes that this approach should also deal with those concerns expressed by Telefónica and H3GI in this regard."*

<sup>1</sup> Page 274 of ComReg's Response to Consultation.

<sup>2</sup> Page 275 of ComReg's Response to Consultation.

At page 81 of DotEcon's Issues Report, DotEcon states as follows:

*"We have carefully considered Vodafone's suggestion and believe that this may represent a valid approach. However, this approach is not without its problems. For example, for an outcome to be negotiated prior to release of results would require all parties in the band to agree on their frequency allocation. Finding such an outcome by verbal negotiation in a short space of time may prove difficult in practice, and there may be an incentive for at least one of the parties to 'hold up' the process even if others agree.*

...

*However, Copenhagen Economics' 'modified' approach may address the issue of distorted bidding incentives in the assignment round by ensuring that the bids from the assignment round will only come into force if a negotiated agreement does not occur. In the case where a negotiated solution is met, the prices paid will be those agreed by the bidders, whereas there will be a commitment to the bids from the previously held assignment round if a negotiated settlement is not reached. However, we note that there still remains the threat of 'hold up' from the negotiated round even under the 'modified' proposal suggested by Copenhagen Economics for H3G1.*

*Having considered both Vodafone's original proposal, and the modified version suggested by Copenhagen Economics, we would consider there would be merit in a modified approach similar to Vodafone's proposal, but with a different order of events. Following the running of the assignment stage and the determination of winning bids and additional prices to be paid as currently proposed, these results would be released to all winners to form the starting point for further negotiation with each other. This negotiation could occur prior to the issuing of licences for specific frequencies. This has the significant advantage that agreement need not necessarily be reached amongst all parties, as bilateral or trilateral deals could be made. Such an approach leaves the currently proposed assignment stage implementation unchanged and would encourage bidders to submit bids based on their valuations, whilst still allowing the re-organisation of the band by private negotiation prior to the issuing of licences. In summary, following a consideration of the proposed revisions to the assignment stage options, and the specific options provided by Power Auctions, Vodafone and Copenhagen Economics, we would agree that there may be benefits from allowing operators to be in a position to express their preferences for spectrum contiguous to the spectrum holdings of a potential or actual network sharing operator. We believe there is merit to Vodafone's approach with a 'negotiation stage'. However, in order to mitigate negative consequences that may arise from distorted bidding incentives in the assignment round, or operators wishing to 'hold up' any re-organisation of allocations where there is need for all parties to agree on the final outcome, we recommend that this negotiation stage is only carried out following the completion of the assignment round and release of results, including additional prices to be paid, which would not be affected by the outcome of negotiation. A subsequent negotiation phase would occur prior to grant of licences, where some or all winners could swap frequencies. Notice that this negotiation phase would then only require the consent of those parties shifting frequencies, which might not be all parties; unaffected winners from the assignment stage would have no power to block the negotiated outcome.*

*This proposal is very similar to that suggested by Copenhagen Economics, in that negotiation is allowed to create an efficient outcome without distortion to the assignment stage auction. However, it differs from the Copenhagen Economics proposal in that winners pay the additional price determined in the assignment stage of the auction. We consider that this approach is appropriate in order to allow competition between operators for preferred frequencies (including potentially the A and B lots in the 900MHz band that may in some cases allow for advanced commencement). To the extent that particular frequencies provide an advantage in subsequent negotiation, this would create fair competition for those frequencies. [Emphasis added]*

ComReg fails to address the concern of H3GI and the other mobile network operators, namely, that ComReg's auction design creates a risk that some operators will be able to spectrum share whilst others will not, resulting in competitive advantages and disadvantages to the detriment of consumers. It fails to create an incentive to agree pro-spectrum sharing contiguous spectrum assignment. In contrast, under Copenhagen Economics modified Vodafone proposal, each operator is motivated to agree pro-spectrum sharing contiguous spectrum assignment by the risk that it may be subject to a competitive disadvantage if it fails to agree (by virtue of operators not knowing the results of the assignment stage). It is always possible that an operator may not agree. However, ComReg's Decision does nothing to create any incentive to agree. H3GI asks ComReg to provide for Copenhagen Economics modified Vodafone proposal in addition to its 'negotiation phase'. H3GI asks ComReg to expressly provide in the Information Memorandum that any negotiation phase(s) do not have any adverse impact on transitional activities.

### **Minimum Reserve Price**

ComReg has failed to properly and transparently identify a minimum reserve price in accordance with its statutory objectives. In this regard, H3GI relies on the criticisms made by other respondents to ComReg's consultation process.

35.ComReg: reply to H3GI letter of 5 April 2012 (letter dated 11 April 2012);



**11 April 2012**

Mr Mark Hughes  
Head of Regulatory  
3 Ireland  
3rd Floor  
1 Clarendon Row  
Dublin 2

**Re: ComReg Document 12/25**

Dear Mr Hughes

Thank you for your letter of 5 April 2012 concerning Document 12/25 which was published on 16 March 2012 and its related documents published that same day.

As an overarching matter, ComReg is pleased to hear that H3GI will, notwithstanding its expressed disappointments and concerns, participate in the upcoming auction, and that H3GI looks forward to the publication by ComReg of the final Information Memorandum.

Leaving that aside, ComReg notes that your letter nevertheless contained a number of criticisms of the award process decided upon in ComReg's Decision.

ComReg disagrees with all of the criticisms raised. In particular, ComReg disagrees with, and finds objectionable, suggestions made by H3GI in your letter that ComReg's decision to issue fixed-term licences amounts to a "failure" on ComReg's part. ComReg would also disagree with H3GI's suggestion that it has failed properly and transparently to set a minimum reserve price in accordance with its statutory objectives. ComReg has entertained and considered such issues and criticisms at length, together with associated materials, and has set out its proposals, their statutory basis and its reasoning for them in Document 12/25 and, indeed, in previous consultation documents.

ComReg is satisfied that the decisions reached in Document 12/25 were properly arrived at following appropriate and required procedures, and that they are not only substantively desirable and in accordance with its statutory objectives, but ComReg considers that they are also more suitable and appropriate than the alternatives put forward by H3GI, or others.

ComReg also considers that H3GI has misconstrued certain DotEcon text by incorrectly suggesting that DotEcon said the following:

*"...if there is no value in such a block, a bidder should not bid for it..."*

and by inferring that spectrum will, as a result, go unallocated.



DotEcon was merely responding to specific assertions made by H3GI itself that a 2x5 MHz block had little or no value. At no point did DotEcon itself assert that there was no value in winning a single 2x5MHz block of sub-1GHz spectrum, nor has it suggested that sub-1GHz spectrum would go unallocated by virtue of bidders not placing any value on a 2x5 MHz block of spectrum.

ComReg notes H3GI's comments and suggestions on transitional activities. In this regard, you might note that ComReg is currently finalising the Information Memorandum which shall contain some additional details and clarifications in relation to these.

Please note that ComReg will publish this exchange of correspondence, in accordance with its usual procedures, and H3GI is invited to inform ComReg of any confidential material in your letter of 5 April that it considers ought not to be published in accordance with those procedures.

Yours sincerely



**George Merrigan**  
**Director Market Framework**

36.H3GI: letter to ComReg "DOC NO. 12/21" (letter dated 13 April 2012);

Ms Sinead Devey  
Commission for Communication Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1  
**BY REGISTERED POST AND EMAIL: [sinead.devey@comreg.ie](mailto:sinead.devey@comreg.ie)**

13 April 2012

Dear Sinead

## COMREG DOC NO. 12/21

I refer to ComReg Doc. No. 12/21 Information Notice 'GSM Liberalisation Project: Publication of non-confidential submissions to Document 11/75 and correspondence provided by respondents (and ComReg written responses to same). The following comments are made in respect to selected parts of the responses to ComReg Doc 11/75. More specifically, it comments on all of Vodafone's supplementary response and on page 8 and Appendix 1 of eircom Group's response to the draft Information Memorandum.<sup>1</sup>

### 1. *Vodafone's supplementary response*

#### 1. **Apparent error in the wording of the price cap rules**

Vodafone's point is justified and correct. In cases where the final bid is a Relaxed Primary Bid and the Final Primary Package is smaller (in terms of eligibility) in a single time slice ComReg's wording is incorrect. In that case, ComReg's wording in the mentioned paragraph 4.146 is contradictory to ComReg's wording in section 4.47:

*"The Relative Cap limits the amount that can be Bid for packages that the Bidder is no longer eligible to Bid for in the Final Primary Round"*<sup>2</sup>

Since a bidder does not lose eligibility when submitting a Relaxed Primary Bid in the final primary round, she may still have been eligible to bid for some packages in the final primary round that are larger than the Final Primary Package. Supplementary bids for these packages should not be limited by a Relative Cap.

<sup>1</sup> Both responses are available at <http://www.comreg.ie/fileupload/publications/ComReg1221.pdf>.

<sup>2</sup> Source: ComReg document 11/75, paragraph 4.47.

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One Clarendon Row,  
Dublin 2, Ireland

Registered Number: 316982  
Place of Registration: Republic of Ireland



Three.ie

Vodafone does, however, claim that a Final Primary Package, that is a Relaxed Primary Bid, can be smaller in both time slices. This must be a misunderstanding. If a package is smaller in both time slices, the bidder has eligibility to bid for it without using a Relaxed Primary Bid. Such a bid represents a decrease in eligibility, not a Relaxed Primary Bid.

## **2. Additional lots for sale can lead to lower value outcome**

H3GI do not follow Vodafone's comments in this section. The feature of the price rule referred to is neither counterintuitive, nor unsatisfactory. Rather, the feature represents the intention that if existing license holders want to win their party-specific lots they must pay a price equivalent to what they would have paid for the licenses in fair competition with the other bidders.

The mistake in Vodafone's argument lies in measuring auction success by the total value outcome. If the aim was to maximize the total value outcome, ComReg should let all existing license holders liberalise (i.e. buy) their party-specific lots at whatever price they were willing to pay. This would increase the total value outcome because all party-specific lots would be sold, but it would violate fairness as existing license holders would be allowed to purchase frequencies at a lower price than other bidders.

In Vodafone's example, the total value outcome with two generic lots is 80 compared to 60 with three generic lots. The difference, namely 20, is solely due to Meteor not bidding enough to win its party-specific lot when in competition with Ben. This is perfectly in accordance with the intentions for party-specific lots: If a bidder does not bid enough for her own party-specific lots to win them in the hypothetical situation where she is in open competition for the lots with other bidders, she should not be allocated the party-specific lots.

## **3. Adding liberalised lots to the spectrum supply when calculating opportunity costs**

H3GI agrees with Vodafone's main point in this section, namely that the uncertainty regarding the treatment of party-specific lots in the re-optimisation across bidders should be resolved. Presumably, this has however already been done by DotEcon in ComReg document 12/24. In this document, DotEcon describes that the procedure conforms to the following principles:

Directors  
Robert Finnegan: Irish  
Canning Fok: British  
Frank Sixt: Canadian  
Robert Eckert: U.S.A.  
Edmond Ho: British  
David Dyson: British  
Richard Woodward: British

*“...that the notionally released lots of the bidders in the set  $S$  (whose opportunity cost is being calculated) should be available for allocation within the relevant release scenario to all bidders not in the set  $S$  of excluded bidders; that the release of existing spectrum corresponding to party-specific lots won by bidders not in the set  $S$  should be re-determined in this counterfactual situation, but subject to the requirement that only notional release scenarios that were initial feasible (i.e. feasible in the original determination of winners) will be considered;”<sup>3</sup>*

#### **4. Bidder interface for supplementary bid entry**

H3GI agrees with Vodafone’s point. Any information on the auction software will make preparation for the auction easier for bidders.

## **2. Eircom Group’s Response**

### **1. Section 4.4.4 and Annex 8 Winner Determination**

H3GI agrees with Power Auctions’ point. As discussed in DotEcon’s recent document 12/24 for ComReg, there was a deficiency in the detail of the pricing algorithm with part-specific lots in ComReg 11/75. This point needs to be fully clarified in the final Information Memorandum.

<sup>3</sup> Source: Page 114/115 in DotEcon, “Issues relating to the award of spectrum in multiple bands in Ireland, A report for ComReg”, ComReg document 12/24, 16 March 2012, available at <http://www.comreg.ie/fileupload/publications/ComReg1224.pdf>.

## **2. Annex 1: 2.1 Treatment of eligibility points following a Relaxed Primary Bid round**

H3GI agrees with Power Auctions' point. The only reason why it would make sense to enforce this eligibility point rule is if lots are perceived to be substitutable across time slices. Yet, as Power Auctions correctly points out, lots in time slice 1 and 2 are treated as non-substitutable by calculating eligibility point separately for the two time slices. One can further add that a revision of the eligibility points is necessary if the two time slices were to be considered as substitutable by implementing a joint eligibility point calculation. Given the lengths of the two time slices a lot in time slice 2 should have a higher number of associated eligibility points than a comparable lot in time slice 1 in a joint eligibility point calculation.

The proposed eligibility point rule may allow for some strange or undesired bidding behaviour. For example, a bidder may completely abandon one time slice for a couple of rounds by submitting Relaxed Primary Bids for a large package that only contains one time slice and then reappear in the other time slice at a later point. Such 'sniping behaviour' cannot be ruled out as unlikely given the value difference between time slice 1 and 2.

## **3. Annex 1: 2.2 Binding Supplementary Bids**

H3GI does not fully agree with Power Auctions' observation that Binding Supplementary Bids are applied as a 'penalty' in the auction rules. The requirement to make Binding Supplementary Bid(s) is imposed as a consistency requirement on bidders wanting to break the eligibility point rule. The fact that Relaxed Primary Bids and Supplementary Binding Bids are sensitive to price increments and individual bidder's valuation is not unique – the same can be said for the caps in the supplementary rounds.

Furthermore, it may cause incentive problems if Binding Supplementary Bids are removed from the current rules without any other changes. Simply removing the Binding Supplementary Bids rule implies that bids can be made for much larger packages without any requirement of consistency with 'revealed preferences' for all the other rounds in which the bidder dropped eligibility.

Thus, if removing the Binding Supplementary Bid H3GI would argue that one should opt for Power Auctions' proposed activity rule for the clock rounds (see section 4.1 in their report and the comments below).

#### 4. Annex 1: 3.1 Introduction of a Final Price Cap

In the interest of simplicity, H3GI would argue for the current rule rather than Power Auctions' proposed 'Simplified RP Cap'. In practice, the difference is likely to be small but Power Auctions' proposal is more complex – it requires comparison of prices for a number of rounds rather than just for one round. Therefore, H3GI prefers ComReg's proposed rule.

#### 5. Annex 1: 4 Power Auctions' alternative recommendations

This section sums up Power Auctions' earlier comments on the activity rules. As already mentioned, H3GI supports that eligibility should drop if a Relaxed Primary Bid has lower eligibility for one time slice.

Power Auctions' proposed activity rule for the clock rounds seems to be an alternative way to ensure consistency with 'revealed preferences'. H3GI's perception is that ComReg's proposed rule requires that a bidder bidding for a larger package also submits bids for other larger packages if this is prescribed by her 'revealed preferences' while on the contrary, Power Auctions' alternative recommendation only allows a bidder to bid for a larger package if it is in accordance with her 'revealed preferences'. In other words, ComReg's rule allows a bidder to regret decreasing eligibility if it agrees to submit the Supplementary Binding Bids that ensure consistency with 'revealed preferences' while Power Auctions' rule prohibits a bid for a larger package if it is not consistent with 'revealed preferences'.

Based on this understanding, H3GI has a preference for Power Auctions' activity rule over ComReg's rule. The aim should be to incentivise bidders to bid consistently rather than forcing them to make bids on packages that are not their preferred packages at the current prices.

As stated above, when it comes to the proposed activity rule for the supplementary round H3GI prefers the current rule rather than Power Auctions' proposed 'Simplified RP Cap'.

Yours sincerely



**CATRIONA COSTELLO**  
Regulatory Affairs Manager

Copy: Mr Jim Connolly, ComReg ([jim.connolly@comreg.ie](mailto:jim.connolly@comreg.ie))  
Mr Samuel Ritchie, ComReg ([samuel.ritchie@comreg.ie](mailto:samuel.ritchie@comreg.ie))  
Mr Patrick Mulvey, ComReg ([Patrick.mulvey@comreg.ie](mailto:Patrick.mulvey@comreg.ie))

37. H3GI: letter to ComReg "COMREG – 800, 900 AND 1800 MHZ AUCTION"  
(letter dated 20 April 2012);

Hutchison 3G Ireland Limited  
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Registered Number: 316982  
Place of Registration: Republic of Ireland



Mr Samuel Ritchie, Manager Spectrum Operations  
Commission for Communications Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1  
**BY REGISTERED POST AND EMAIL:** [samuel.ritchie@comreg.ie](mailto:samuel.ritchie@comreg.ie)

20 April 2012

Dear Samuel

### COMREG – 800, 900 AND 1800 MHZ AUCTION

I refer to: (i) ComReg Doc. No. 12/25, "*Multi-band Spectrum Release, Release of the 800 MHz, 900 MHz and 1800 MHz Radio Spectrum Bands*"; and (ii) ComReg Doc. No. 11/75, "*Multi-band Spectrum Release – Draft Information Memorandum*".

In relation to ComReg's proposed deposit and deposit-increase mechanism, Hutchison 3G Ireland Limited ("H3GI") hereby highlights the importance of ensuring confidentiality in respect of the amount of any deposit paid. If the amount of a deposit paid by a bidder to ComReg were revealed to other bidders, other bidders could obtain an indication of how that bidder has bid or might bid in subsequent rounds.

With kind regards.



**MARK HUGHES**  
Head of Regulatory

Directors  
Robert Finnegan: Irish  
Canning Fok: British  
Frank Sixt: Canadian  
Robert Eckert: U.S.A.  
Edmond Ho: British  
David Dyson: British  
Richard Woodward: British

38. Telefónica: letter to ComReg "Multi-band Spectrum Release" (letter dated 13 March 2012 incorrectly, should instead read 13 April 2012)

**Strictly Confidential**

13<sup>th</sup> March 2012

Mr George Merrigan  
Director – Market Framework  
ComReg  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

Dear Mr Merrigan

**Multi-band Spectrum Release**

I refer to document 12/25 which ComReg issued on 16<sup>th</sup> March following numerous consultations held over the past three years regarding the proposed assignment of spectrum in the 800MHz, 900MHz, and 1800MHz bands.

While ComReg has concluded its consideration of several aspects of the proposed assignment, we note that the full details of the award process (including the final Regulations) will only be communicated on publication of the Auction Rules and Information Memorandum document, anticipated in the next few weeks. We further note that there are several specific matters that remain to be decided and clarified, including, but not limited to the specific auction rules; rebate mechanisms; the final terms and conditions regarding preparatory licences and fees; transition rules; and the final reserve price.

I have highlighted below some areas of concern regarding the current proposal that Telefonica Ireland would expect ComReg to address in the final rules and decision. Telefonica fully reserves its rights in relation to the final decision and any matters covered throughout the numerous consultations that preceded it.

**Risk of loss of Spectrum**

Telefonica notes that under the current proposal Telefonica could lose access to spectrum (including in the 900MHz band) with inadequate time post-auction to prevent consequent disruption to consumer services and loss to Telefonica. We do not regard that ComReg has considered and responded to the representations made throughout the consultation processes in this regard.

### **Transition Post-Auction**

As previously stated, Telefonica believes the earliest possible date for conclusion of the assignment process is in Q3 2012. Even in the event that all applicants are assigned sufficient spectrum to meet their requirements, the precise arrangement of the assignments is unknown at this time and might require significant time for re-arrangement of assignments. Telefonica expects that ComReg will take account of all practical issues in accordance with its statutory objectives when setting out its decision on the transition plan.

### **1800MHz Gap**

Telefonica notes that ComReg has accepted that a six-month gap could arise in the availability of 1800MHz spectrum under certain auction outcomes, and that ComReg does not dispute that such a gap for a six and a half month period could result in disruption to services<sup>1</sup>. However ComReg has declined to make any decision on this point yet on the basis that it might not arise and if it does arise, such decision can be taken after conclusion of the auction. Telefonica hereby puts ComReg on notice that in the event that such a spectrum access gap does arise, Telefonica will rely on ComReg to issue any necessary interim licence, and will regard a failure to do so as a breach of ComReg's statutory objectives.

### **Time between Auction Stages**

Though the final rules are yet to be finalised, the auction proposed by ComReg is arguably the most complex Combinatorial Clock Auction yet to be undertaken. Telefonica has already expressed its views on this issue, and awaits ComReg's response, decision, and process documents. However a practical matter arises whereby a number of significant decisions must be made by all bidders when submitting the supplementary round bids. Having considered the complexity of the auction, Telefonica is of the view that a minimum of five working days is required between conclusion of the primary clock rounds and submission of the supplementary round bids.

### **Knock-out Bids**

ComReg has proposed that any bidder can assure to win their final primary package by placing a "knock-out bid" for that package, if the bidders can afford to do so. The worst-case knock-out bid value can be determined by simply adding the value of unsold lots remaining at the end of the primary round (plus €1,000). However in this particular auction, the presence of a large number of party-specific lots (2x900MHz, and 9x1800MHz) in the first time-slice can have the effect to inflate the knock-out bid significantly and could increase the value of a knock-out bid beyond a bidder's valuation or budget.

The true value of a knock-out bid may in fact be significantly less than the worst case, as lack of eligibility or relative caps might reduce the overall value of uplift to the final primary package that is required. However as Telefonica understands ComReg's proposal, no information regarding eligibility/activity for party specific lots will be revealed to bidders, so they must assume the worst case when calculating the knock-out bid. The absence of this information unnecessarily increases the bid that any bidder must place in order to be sure to win their final primary package, and could lead to a wrong decision being taken at the supplementary bidding stage.

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<sup>1</sup> Document 12/25, Section 4.6.3

Telefonica has previously stated its opinion that the two time-slice auction and party-specific lots should be eliminated, and it is not necessary to repeat those arguments here; however that would eliminate the problem. There is an alternative solution that could eliminate the requirement to bid above the true knockout value while having no other impact on ComReg's proposed auction. ComReg should reveal the bids placed for all party specific lots in each clock round. It is not necessary to reveal this information on a round by round basis, however all rounds should be revealed following conclusion of the primary stage, and before submitting the supplementary round bids. This information would allow bidders to calculate the true knock-out bid value as opposed to the worst case value.

### **Strategic Bidding**

As previously stated, Telefonica is concerned that CCA auctions can be subject to strategic manipulation. This is particularly the case in ComReg's proposed auction as the time-slicing creates certain categories of lot where demand is easy to predict. If ComReg persists with the auction as proposed, then Telefonica expects that appropriate activity rules will be adopted to eliminate the possibility of strategic manipulation of the outcome. The statements of ComReg and Dotecon so far (up to and including Document 11/25) do not address this concern.

### **Speculation Regarding Operator Positions**

Telefonica notes that at several points throughout the various consultation documents ComReg speculates on the likelihood of current operators participation in the auction and on their likely demand for spectrum in each category (e.g. the likely demand for 900MHz spectrum, or the likelihood that party-specific lots will be liberalised), and has taken decisions partly based on these assumptions. As far as Telefonica is concerned this speculation is baseless, and is not derived from any document or representation made to ComReg.

Yours Sincerely



---

Tom Hickey

CC: Samuel Ritchie

39.ComReg: reply to Telefónica letter of 13 April 2012 (letter dated 19 April 2012)



**19 April 2012**

Mr Tom Hickey  
Telefonica Ireland Limited  
28-29 Sir John Rogersons Quay  
Docklands  
Dublin 2

Dear Mr Hickey,

Thank you for your letter of 13 April 2012 (which we note was incorrectly dated 13 March 2012) concerning ComReg's Response to Consultation and Decision D04/12 on Multi-band Spectrum Release - Document 12/25 and related documents - published on 16 March 2012.

ComReg has considered the contents of your letter and responds as follows.

As acknowledged in your letter, in issuing Document 12/25 ComReg has concluded its consideration of, and has decided upon, several aspects of the proposed award process.

To the extent that concerns or issues raised in your letter relate to matters addressed in, or relating to, the draft Information Memorandum, you might note that, in coming to its final position concerning the Information Memorandum, ComReg is currently considering all concerns or issues raised in this connection and will respond to these when publishing the final Information Memorandum. However, to the extent that your letter concerns matters which were already assessed and decided upon in Document 12/25 and related documents, ComReg does not consider it necessary or appropriate to enter into further correspondence or consultation on same.

Notwithstanding the above, ComReg considers it appropriate to respond to a comment under the heading "1800 MHz Gap" in your letter.

In that regard, ComReg notes that Telefónica purports to put ComReg on notice that in the event of a spectrum access gap arising, it "*...will rely on ComReg to issue any necessary interim licence, and will regard a failure to do so as a breach of ComReg's statutory objectives*".

It is not clear whether Telefónica's comment in this regard goes beyond a mere statement of what Telefónica would expect ComReg to do in particular circumstances, and of what Telefónica considers would be the legal consequence of ComReg not adopting the course of action considered appropriate by Telefónica.



However, insofar as Telefónica's comment does go further, and insofar as, for example, it might consider the reliance referred to as being related to some statement or indication given by ComReg, ComReg would specifically point out to Telefónica that, in Document 12/25, it did not commit to issuing interim licences in the event of a gap in the availability of 1800 MHz spectrum arising. In section 4.6.3 of that document, ComReg merely noted that, in such an event, it would consider whether there was a requirement for interim GSM 1800 MHz licences in light of the prevailing situation after the award process, and that it would consult with interested parties on any proposal in this regard. Accordingly, the reliance referred to in your letter would seem to be misplaced.

Finally, as you are aware, it is ComReg's practice to publish all correspondence relating to this process, and ComReg intends to publish this letter in accordance with its usual procedures. In this regard, Telefónica is invited to indicate to ComReg whether it considers any information contained in your letter under reply to be confidential, and inappropriate for publication.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Samuel Ritchie', is positioned below the text 'Yours sincerely'.

**Dr. Samuel Ritchie**  
**Manager Spectrum Operations**  
**Market Framework**

40. Telefónica: email to ComReg "Data Breach" (email dated 23 April 2012)

**From:** Healy Gary (IE)  
**Sent:** 23 April 2012 14:05  
**To:** Alex Chisholm  
**Subject:** RE Data Breach

Hi Alex

I am writing to express Telefonica's concern following a letter received by us intended for Paul Ryan of Vodafone and addressed to our Tom Hickey. Given the sensitivity of the spectrum project we are concerned that processes are not sufficiently robust to ensure that commercially sensitive data could be disclosed in error by ComReg. You are also aware that Telefonica experienced a similar breach of commercial data some months ago when a non-compliance letter was sent in error to Vodafone.

We are relying on ComReg to ensure data given to ComReg and communications to us by ComReg are managed by best practise regulatory processes and I am seeking a confirmation that such processes are in place, to the highest standard, for the upcoming spectrum auction. I also believe, as I am not aware of other breaches which have not impacted Telefonica but still have occurred, that ComReg need to state clearly in the upcoming IM final document what measures are being taken to ensure the integrity of the spectrum auction process. In that respect please treat this email as a response to consultation for document 11/75.

Best Wishes

Gary

Gary Healy  
Head of Regulatory & Public Policy  
Telefonica O2 Ireland

41.ComReg: reply to Telefónica email of 23 April 2012 (email dated 24 April 2012)

**From:** George Merrigan  
**Sent:** 24 April 2012 13:51  
**To:** Healy Gary (IE)  
**Subject:** Your email of 23 April

Dear Gary

Thank you for your email of 23 April. Given the non confidential nature of Telefónica's letter and ComReg's response to same we do not consider it appropriate or accurate to refer to the current matter as a data breach.

Nevertheless, ComReg continues to keep its procedures under review and makes changes it considers appropriate and this experience will, of course, be considered within that context.

In relation to the upcoming multi-band spectrum auction, there will be appropriate, enhanced information handling procedures in place, which ComReg will confirm in the response to consultation to ComReg Document 11/75 and final information memorandum.

Please note that ComReg will publish this exchange of correspondence in accordance with its usual procedures, and Telefónica is invited to inform ComReg of any confidential material in your e-mail that it ought not to publish in accordance with those procedures.

Regards

**George Merrigan | Director, Market Framework Division |**  
**✉ Commission for Communications Regulation, Abbey Court, Irish Life Centre,**  
**Lower Abbey Street, Dublin 1, Ireland**

42. Telefónica: letter to ComReg “Multi-band Spectrum Release – Opportunity Cost and Rebates” (letter dated 2 May 2012)

2<sup>nd</sup> May 2012

Mr George Merrigan  
Director – Market Framework  
ComReg  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

Dear Mr Merrigan

### **Multi-band Spectrum Release – Opportunity Cost and Rebates**

I refer to document 12/25 and ComReg's proposal to assign spectrum this year using a multi-band Combinatorial Clock Auction. As previously stated, we note that ComReg has yet to finalise and publish the Information Memorandum and decision document that will clarify the detailed auction rules, rebate mechanisms, and other matters. This letter is without prejudice to Telefonica's stated position in response to the preceding series of consultation documents and Telefonica reserves its rights in full in respect of both the decisions in document 12/25; the Information Memorandum; or any future decision on this matter.

ComReg has proposed to use a Combinatorial Clock Auction (CCA), the general form of which has been described in its proposals and in document 12/25. Similarly to other spectrum auctions that have used the CCA, ComReg's auction is proposed to use a second-price rule, whereby the price paid for a winning bid is determined by reference to the opportunity cost of that outcome, i.e. the winning price is derived from the net value of other bids denied or displaced.

The particular auction proposed by ComReg has some unique features caused by the inclusion of spectrum for which there is unexpired licences. This has led to the two-time-slice structure; party-specific lots; liberalisation options; and rebates. Telefonica has previously expressed its disagreement with this structure, and will not repeat that here.

There is a particular aspect to the proposed auction (described below) that ComReg does not seem to have considered, or at least where ComReg has not stated its position. Telefonica would now request that this matter is specifically clarified in the Information Memorandum or in the associated decision document published with it.

If we take as an example that Bidder A wins a particular package of lots in the main stage of the auction. Bidder B in this example is entitled to bid to liberalise existing party-specific lots. It is possible that Bidder A's winning bid prevents Bidder B from winning a package that includes liberalised lots. In this case, it seems that ComReg will determine the price to be paid by Bidder A by reference to opportunity cost or the net value denied to other bidders. ComReg has not stated whether in this case the calculation will include the full value of the opportunity cost associated with the denial of liberalisation of Bidder B's party specific lots. ComReg has stated that where party specific lots are to be liberalised, the liberalising bidder will be entitled to a rebate of licence fees as illustrated in Table 4 of document 12/25. In this case, the opportunity cost of denying such liberalisation is properly calculated by reference to the value of the bid denied, minus the associated rebate.

Telefonica would expect ComReg to confirm that this is the case with the publication of the Information Memorandum and associated decision.

Yours Sincerely



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Tom Hickey

CC: Samuel Ritchie

43. Telefónica: letter to ComReg “ Proposed ComReg spectrum auction” (letter dated 22 May 2012)

22 May 2012

George Merrigan  
Commission for Communications Regulation  
Abbey Court  
Irish Life Centre  
Lower Abbey Street  
Dublin 1

**Re: Proposed ComReg spectrum auction**

Dear George

I refer to ComReg's 16<sup>th</sup> March Decision (12/25) to auction 800, 900 and 1800 spectrum, and the earlier draft Information Memorandum ("IM") (11/75) and note as follows:

- 1. Date of the IM.** In its spectrum auction decision 12/25 of 16<sup>th</sup> March, ComReg referred to the "forthcoming" publication its final IM, setting out ComReg's detailed spectrum auction rules. As it is now two months since publication of Decision 12/25 we would appreciate it if ComReg could provide an update on when it intends publishing its final IM. As set out in more detail below, publication of the IM will trigger a significant amount of activity in order to be ready to participate in the spectrum auction. In document 11/75 ComReg indicated that it would "*endeavour to provide guidance as to the intended publication date in advance*" of the IM. We would appreciate if you could now publish this advance notice of the IM's publication to ensure that we have the resources available.
- 2. Minimum 14 week Period between Information Memorandum and Auction Rules.** ComReg indicated in Document 11/75 (Table 9) that there will be a period of 14 weeks between publication of the final IM and the start of the auction, with a deposit payable 7 weeks post-IM publication. Telefonica considers that this is the minimum time required, given the very significant amount of activity that needs to take place between IM publication and auction. This includes review of the auction decision, updating of auction software and training the bid team with the final rules, participation in ComReg mock auctions, completion of shareholder governance processes with our parent company Telefonica SA requesting permission to participate in the auction and pay the necessary deposit, and ensuring the availability of shareholder management and external advisers for the proposed auction period. We have relied and continue to rely on ComReg's previous indications that a period of 14 weeks will be available for this work, although in our view this may not be sufficient time to complete all the work involved, particularly the proposal to only allow bidders two weeks pre-auction to familiarise with ComReg's bid tool and conduct mock auctions and for ComReg to deal with any technical glitches that may well emerge from this testing, as with any new software.
- 3. Date of the auction.** As ComReg will be aware, participation in the proposed CCA auction, particularly given its extreme complexity and the sums involved, is a very significant and costly undertaking for any bidder. For Telefonica it will require ensuring the availability of specialist external advisers, local management and Telefonica global management both during the 14 weeks post-IM and during the auction itself. Consequently we would appreciate it if ComReg could, as soon as possible, advise of the final fixed date for the auction, in order to give bidders sufficient

time to make the appropriate arrangements to be able to participate. This is a discrete point that could be published ahead of the publication of the final IM. Given the requirement for a period of 14 weeks between IM and auction, Telefonica understands that the earliest the auction could take place now is the start of September, and is planning on that basis.

4. **Licence start dates.** Finally, we note that ComReg's advisers Vilicom has previously indicated that a minimum of 6 months would be required post-auction to allow operators to complete the necessary moves to new spectrum allocations within the various bands prior to licence commencement (on the basis of simultaneous relocation in the 900 and 1800 bands). Assuming the auction is completed by the end of September, this would indicate a licence start date of at the earliest April 2013. (As Vilicom has also indicated, significantly more time would be required if certain outcomes arise, such as sequential relocation or loss of spectrum by existing 900 MHz and 1800 MHz operators). Telefonica Ireland's current interim 900 MHz licence will expire in 8 months on 1 February 2013. This licence (and Vodafone's equivalent interim licence) was put in place by ComReg to avoid consumer disruption to Telefonica and Vodafone customers by ensuring continuity of mobile services until the new post-auction licences came into effect. In circumstances where such post-auction licences will not now take effect until after February 2013, we are relying on ComReg appropriately extending these interim licences in ensuring there is a sufficient period post-auction at a minimum per Vilicom's recommendations and to align with the start dates of the new post-auction licences.

Please note that the above is without prejudice to Telefonica Ireland's significant concerns in relation to the proposed detailed CCA auction rules and post-auction time periods as set out in previous submissions, in respect of which ComReg's response is awaited.

Yours Sincerely



Head of Regulatory & Public Policy  
Telefonica Ireland

Correspondence with interested parties & Redacted paragraphs from Document 12/25

**A.2 Redacted paragraphs of Document 12/25 which can now be published**

specific lots or where the winner and price determination might have no solution. Telefónica believed that this is caused by the inclusion of distinct lot categories to allow liberalisation of GSM licences at so called 'fair market prices' and in its submission to Document 11/75 Telefónica submitted an confidential illustrative example<sup>74</sup>: **[Confidential Text Removed: to illustrate a) "how a bidder may be obliged to pay too much for liberalised spectrum, or even fail to have spectrum liberalised when it is willing to pay fair market value", b) "a potential fatal flaw in the process which may mean there is no solution to the price determination", and c) a claim that the proposed approach to pricing the option to liberalise spectrum may fail to determine a fair price and/or that liberalisation may be erroneously rejected. See paragraphs 4.27 – 4.33 of Telefonica's submission in response to Document 11/75.]**

4.27 Furthermore, Telefónica stated that:

- *"the auction cannot proceed until these flaws have been eliminated" and*
- *"its preliminary view is that the best way these problems can be completely eliminated is to abandon the entire time slicing and party-specific lot approach."*

#### 4.3.4 Additional Submissions

4.28 ComReg received two additional submissions<sup>75</sup> relating to the Auction Format; Telefónica submitted a letter to ComReg on 1 March 2012 and eircom Group submitted a letter on 9 March 2012.

4.29 Telefónica's most recent submission reiterated concerns presented in submissions to Document 11/60 and Document 11/75 (see summaries above). Telefónica stated in this submission;

- It is the first example where a CCA similar to ComReg's was used for a multiband spectrum auction<sup>76</sup>;

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<sup>74</sup> Telefonica claimed the example provided was confidential and ComReg is currently engaging with Telefónica with regard to this claim.

<sup>75</sup> Both Telefónica and eircom Group raised concerns in these submissions regarding ComReg's proposed Auction Format (as detailed in Document 11/60 and Document 11/75), with both referencing the recent Swiss multi-band auction. Both of these letters are contained on Document 12/21

<sup>76</sup> *"it [the Swiss multiband auction] is the first example where a Combinatorial Clock Auction (CCA) format was used for a multi-band mobile spectrum auction that is comparable to ComReg's proposed auction. There are several similarities between this auction in Switzerland and the one proposed by ComReg"*

- 4.57 The following sets out ComReg's consideration of the illustrative example provided by Telefónica<sup>81</sup>, having taken account of DotEcon's analysis on same as set out in Annex A of its Issues Report (Document 12/24).
- 4.58 **[Confidential Text Removed: Regarding example a) where Telefónica claimed that a bidder may be obliged to pay too much for liberalised spectrum, or even fail to have spectrum liberalised when it is willing to pay fair market value (paragraph 4.28-4.29 of Telefónica's response to Document 11/75), ComReg notes that in the example provided, Tim and Mary each pay the opportunity cost for the spectrum won, i.e. the value of the option they preclude with their successful winning bid. It should be noted that it is and should be irrelevant whether Mary's bid and valuations are for new spectrum or liberalising existing spectrum, because the outcome would be the same and is a consequence of opportunity-cost based pricing.**
- 4.59 **Regarding example b) where Telefónica claimed that there is "a potential fatal flaw in the process which may mean there is no solution to the price determination" (paragraphs 4.30-4.31 of Telefónica's response to Document 11/75), ComReg notes that the outcome provided by Telefónica in its example is correct but the point made by Telefónica on the basis of same is misleading. In this example, Telefónica claimed that Mary is being prevented from liberalising her lot despite having a value for doing so (€5m) greater than the value of Tim for winning one lot (€3.4m). However, the relevant comparison in this example is between the value created by giving Tim his second lot (at an additional value of €5.1m) or Mary her release (at an additional value of €5m). In particular, there are two release options: Mary releases nothing (release scenario 1) or Mary liberalises one lot (release scenario 2). As Mary does not win back (i.e. liberalise) the one lot released in release scenario 2, this release scenario is deemed infeasible and release scenario 1 is determined to be the winning release scenario. Therefore release scenario 2 should not be considered in the pricing algorithm and Mary's bid to liberalise a lot will not affect the price Tim will have to pay for winning his lot.**
- 4.60 **In respect of Telefónica's claim that the proposed approach to pricing the option to liberalise spectrum may fail to determine a fair price and/or that liberalisation may be erroneously rejected (see paragraphs 4.32 and 4.33 of Telefónica's response to Document 11/75), ComReg notes that the**

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<sup>81</sup> Telefónica claimed that the example provided was confidential and ComReg is currently engaging with Telefónica with regard to this claim.

**mechanics of the pricing methodology as defined in the Draft Information Memorandum were not specified accurately. ComReg notes that DotEcon has addressed this deficiency in Annex A of the Issues Report (Document 12/24) which presents a revised and detailed description of the winner determination and pricing method appropriate with party-specific lots.**

- 4.61 ComReg notes that the pricing methodology with party-specific lots will be finalised in the final Information Memorandum. Furthermore ComReg notes, DotEcon’s view that “we do not believe that the example provided by Telefónica illustrates a deficiency in the pricing algorithm, nor do we believe that there is any deficiency in the procedures for determining whether or not liberalisation will occur.” ]**
- 4.62 Given the above, ComReg is of the view that firstly, the examples provided by Telefónica behave as expected and secondly these examples do not identify a deficiency in the winner determination and pricing methodology rules as presented in Annex A of DotEcon’s Issues Report.
- 4.63 In relation to the winner determination and pricing methodology with party-specific lots, ComReg notes that DotEcon has, in Annex A, identified and addressed a deficiency in the detail of the pricing algorithm described in Document 11/75. In particular, DotEcon notes that at present, the Draft Information Memorandum suggests that the supply scenario in the pricing algorithm “*should be re-optimised along with the winning bids in these hypothetical situations without any further constraint.*” DotEcon states that this is incorrect as “*when recalculating the winning bidders, it is important that the supply scenario – the situation with regard to the allocation of party-specific lots, determining the total number of lots available – is not changed to an alternative scenario that was initially infeasible when the winning bids were originally determined.*” DotEcon addresses this deficiency by adjusting the description of the price determination algorithm procedures to restrict “*attention to the initially feasible scenarios only when considering the exclusion of bidders as a counterfactual to determine opportunity cost.*” On the basis of this proposed adjustment, DotEcon states that it does not “*believe that the example provided by Telefonica illustrates a deficiency in the pricing algorithm, nor do we believe that there is any deficiency in the procedures for determining whether or not liberalisation will occur.*”
- 4.64 ComReg has carefully considered both Telefónica’s submissions and the material in Annex A, and on the basis of this consideration, is of the view that the adjusted winner determination and pricing method appropriate for an