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Communications Regulation

Reporting & Guidance on Incident Reporting & Minimum Security Standards

Regulations 23 and 24 of The European Communities (Electronic Communications Networks and Services) (Framework) Regulations

Submissions to the Response to Consultation

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An Coimisiún um Rialáil Cumarsáide

Commission for Communications Regulation

Abbey Court Irish Life Centre Lower Abbey Street Dublin 1 Ireland

Telephone +353 1 804 9600 Fax +353 1 804 9680 Email info@comreg.ie Web www.comreg.ie

Additional Information

Response to Consultation - Reporting & Guidance on Incident Reporting & Minimum Security Standards	14/02

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1 Introduction

- 1 This document contains all the non-confidential submissions received by ComReg in response to the Consultation on Incident Reporting and Minimum Security Measures – ComReg Document 13/10
- 2 These submissions were taken into consideration for the Response to Consultation for Reporting & Guidance on Incident Reporting & Minimum Security Standards – ComReg Document 14/02

2 Eircom Group

2.1 Executive Summary

- 3 Eircom Group welcomes the opportunity to respond to this important consultation on the reporting of network incidents. eircom Group comprises eircom Ltd and Meteor Mobile Communications Limited , hereinafter “eircom”.
- 4 Currently eircom provides reports and updates to ComReg on matters relating to service interruptions and impacts on eircom’s networks. As the largest operator of fixed and mobile networks eircom has extensive experience in managing network incidents, resolving the incidents to restore service, categorising their impacts and alerting key stakeholders including ComReg and media.
- 5 When incidents occur eircom employs reporting thresholds that are based on international best practice, extensive experience and the characteristics unique to our networks. Furthermore eircom has previously contributed, via ComReg workshops, to ENISA reviews of reporting thresholds.
- 6 In responding to the Consultation questions, eircom brings this know-how and reporting familiarity to bear.
- 7 In this response eircom puts forward a number of suggestions and changes with respect to the thresholds for affected customers when incidents occur. Recommendations are also made with respect to the timelines when reporting to ComReg.
- 8 eircom concurs with ComReg’s position that audits should not be conducted as a matter of routine and supports ComReg’s preference to monitor compliance through the use of incident reports. Audits are extremely burdensome and expensive and should be conducted only when necessary.
- 9 Finally the consultation’s title focuses on “Incident Reporting & Guidance on Minimum Security Standards” and the thrust of the consultation itself is on reporting incidents causing service loss or disruption. The „ENISA Incident Reporting Template“ places an emphasis on security breaches and there is an absence of any mention of loss of network integrity in its title and a number of the data fields. ComReg might address this matter in its Response to the Consultation.

2.2 Responses to Consultation Questions

2.3 Definition of an incident and thresholds

2.4 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern. Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

10 eircom will respond to questions 1 and 2 together. In paragraph 33 of the Consultation document ComReg proposes to use the following definition for its reporting to ENISA: “Network and information security incidents having a significant impact on the continuity of supply of electronic communications networks or services.”

11 The level of thresholds proposed to be used by ComReg when determining which incidents are to be reported by operators to ComReg comes within the ambit of Regulations 23 and 24¹. “... a breach of security or loss of integrity that has a significant impact on the operation of networks or services” (Regulation 23(4)(a)). The Regulation contemplates more than just an impact on the ‘continuity of supply’ as considered by ENISA and looks to a significant impact on the ‘operation of networks or services, which may not necessarily include an impact on the continuity of supply. Potentially there are incidents that may impact on the operation of a service without affecting continuity of supply. The question arises therefore as to the interpretation of ‘significance in the context of reporting incidents. The metrics proposed by ComReg for the reporting of incidents by operators are therefore crucial to the effective implementation of the regulations without the creating a burdensome and ineffective reporting regime. With respect to the table for Fixed Line services on page 19 of the document eircom makes the following observations and recommendations. eircom requests ComReg to confirm our understanding of the metrics which we believe to be:

- The qualifying reporting criteria are a mixture of the minimum number of customers affected by an incident (specified in column 2 of the table) and the minimum duration of the incident (specified in column 3)

¹ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011

- The percentage of customers affected means the percentage of the total number of eircom customers that use the affected service (e.g. the number of broadband customers rather than the total of all eircom customers)
- The initial notification time period commences upon the expiry of the minimum duration of the service impact specified in column 3
- The reporting timeline begins with the notification to ComReg during the maximum time allotted in column 4
- Subsequent updates on an incident are to be made during the timeframes that are specified in column 5
- eircom assumes that the criteria will apply to all fixed line networks; copper, fibre and cable alike.

12 In order to make the table more practical while achieving the objectives of the regulations, eircom proposes the following:

13 Row 1 of the table

- While appreciating the inclusion of thresholds below 10,000 Fixed Lines Services customers, the suggested 1,000 will prove to be burdensome. A higher threshold will achieve a more equitable balance between meeting the objectives of the reporting regime and the operational and administrative overhead
- Furthermore 10% of eircom's customer base for its various services is far in excess of 1,000. There is therefore a striking disparity between 1,000 and 10% of customers
- eircom recommends that at a minimum the threshold should be 5,000

14 Row 2 of the table

- Again there is a huge disparity between 10,000 customers and 20% of the customer base
- If the minimum number of customers is to be maintained at 10,000 the minimum duration should be increased from one (1) hour to two (2) hours

15 Row 3 of the table

- The matter of the disparity between the number and the percentage of affected customers arises with the proposed thresholds of 20,000 customers or 50% of customers.

- If the minimum number of customers is to be maintained at 20,000 the minimum duration should be increased from 10 minutes to one (1) hour

16 Row 4 of the table

- Here also the disparity between the number and the percentage of affected customers arises with the proposed thresholds of 10,000 customers or 10% of customers.
- The minimum number of customers should be increased to 20,000 for a one (1) hour minimum duration threshold

17 Rows 5, 6 and 7 of the table

- ComReg has acknowledged the repetition of rows 5 and 6 in the table relating to Leased line services which has been highlighted by eircom. We therefore ignore row 6.

18 eircom would generally agree with the Reporting Timelines outlined in Columns 4 & 5.

19 With respect to incidents of „significant public interest“ (paragraph 43) however eircom has major concerns with the proposals as set out by ComReg. Using the example cited there are two key issues for eircom:

1. There will be an issue of customer confidentiality if eircom disclosed operational risks or impacts to the banking service. eircom suggests that the customers (banks) should manage their own customer relations as is the case up to now
2. In any event the extent of any service impact to a bank or any other large customer will not always be apparent to eircom. Many of these customers have service diversity and resilience of services from more than one operator. Consequently what may appear to be a major customer impacting incident when viewed from one operator's network, may in fact have little operational impact for the customer.

20 The table from page 19 is copied below with the suggested changes highlighted for clarity.

Network/Service Type	Min number of customer lines affected (lower of number or percentage of users)	Min duration of service loss/disruption (clock hours or mins)	Report to ComReg Within (working hours or working days)	Interim Report to ComReg (working hours)
Fixed voice* services	1,000 <u>5,000</u> 10% of customer lines	24 hours	2 days	Every 4 hours
Fixed voice* services	10,000 20% of customer lines	1 hour <u>2 Hours</u>	4 hours	Every 4 hours
Fixed voice* services	20,000 50% of customer lines	10 minutes <u>1 Hour</u>	2 hours	Every 4 hours
Internet access service	10,000 <u>20,000</u> 10% of customer lines	1 hour	4 hours	Every 4 hours
Leased Line services	500 10% of customer base	30 minutes	1 day	Every 4 hours
Leased Line services	500 10% of customer base	12 hour	4 hours	Every 4 hours
Leased Line services	1,000 50% of customer base	10 minutes	2 hours	Every 4 hours

2.5 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

2.6 Q. 4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

21 eircom will take questions 3 and 4 together.

22 With respect to the table for Mobile services on page 21 of the document eircom makes the following observations and recommendations.

23 Our understanding of the metrics is as follows and requests that ComReg would confirm this:

- The qualifying criteria are a mixture of the scale of network infrastructure affected (column 2) and the minimum duration of the impact (column 3)
- The reference to “cells” for mobile voice and broadband services, should be replaced by “base stations” (per paragraph 48)
- For mobile voice and broadband services, failure of any of RNC, BSC, MSC or HLR means a total failure of single instance device
- The initial notification time period commences upon the expiry of the minimum duration of the service impact specified in column 3
- The reporting timeline begins with the notification to ComReg in column 4
- Subsequent updates on an incident are to be made during the timeframes that are specified in column 5

24 In order to make the table more practical and still meet the objectives of the Regulations, eircom proposes the following:

- While noting the value of including thresholds below the RNC and BSC levels for mobile voice and broadband services, eircom would propose thresholds in order to obtain a more equitable balance between meeting the objectives of the reporting regime and the associated operational and administrative overhead. The revised threshold should be:
 - More than 50 bases stations for more than (2) two hours (rather than the suggested more than 20 or more base stations)
 - More than 75 base stations for more than (1) one hour (as opposed more than 60 bases stations)
- eircom appreciates the importance of including thresholds at MSC, HLR, RNC and BSC levels for mobile voice and broadband services, but would propose thresholds which would be more equitable between meeting the reporting objectives and operational and administrative overhead
 - MSC, HLR, RNC and BSC failure with minimum duration of 10 minutes as opposed to „any impact.

eircom notes that „Any Impact□ is a significant threshold and would appear to envisage a catastrophic failure. The term is far reaching without any defined parameters. However it is important to note that „Any Impact does not necessarily translate to interruption of service to

customers. Even if there were a service interruption it may affect a limited number of customers if it is of a short duration

25 eircom generally agrees with the Reporting Timelines outlined in Columns 4 & 5 but suggests the following initial notification timelines for reporting to ComReg as a more reasonable reflecting operational and customer impacts:

- More than 50 base stations, report within (4) four hours (as opposed to 1 hour)
- More than 75 base Stations, report within (4) four hours (as opposed to 1 hour)
- For MSC, HLR, RNC or BSC failure, report within (2) two hours (rather than 1 hour)

26 The table from page 21 is copied below with the suggested changes highlighted for clarity.

Network/Service Type	Min impact of services affected	Min duration of service loss/disruption (Clock hours)	Report to ComReg Within (Working hours)	Interim Report to ComReg (Working hours)
Mobile Voice, Broadband, SMS	20-59 cells >50<74 Base Stations off air	2 hours	1 hour 4 Hours of operator becoming aware of the issue	4 hours
Mobile Voice, Broadband, SMS	>60 cells B>75 Base Stations off air	1 hour	1 hour 4 Hours	4 hours
Mobile Voice, Broadband, SMS	MSC Failure	Any impact 10 Minutes	1 hour 2 Hours	4 hours
Mobile Voice, Broadband, SMS	HLR Failure	Any impact 10 Minutes	1 hour 2 Hours	4 hours
Mobile Voice, Broadband, SMS	BSC or RNC failure	Any impact 10 Minutes	1 hour 2 Hours	4 hours
SMS	Failure >20%<40% >40%, 60% of base	2 hours	8 hours	4 hours
SMS	failure >40% >60% of base	1 hour	4 hours	4 hours

2.7 The incident reporting process

2.8 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the

reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

- 27 Please see the responses to the preceding questions in relation to the initial reporting periods for fixed line services and mobile services.
- 28 In all cases where there is a service interruption it is necessary for operators to make an assessment of an outage and how customers are affected. The severity of an outage may not be apparent to operators for some time, while network alarms and customer reports are assessed. Indeed the severity may increase as time passes due to the apparent benign absence of one network element placing pressure on other network. An outage that appeared to be low level can grow in its impact on customers. Conversely a service outage may remain very limited in duration and customer impact.
- 29 To take a more consistent approach and to provide a balance in the treatment between fixed and mobile services, eircom's proposals as set out in response to questions 1 to 4 should be implemented by ComReg.
- 30 eircom appreciates that ComReg needs up to date information in order to anticipate customer queries and call volumes to its care centre arising from any incident . eircom observes that there are two reporting mechanisms put forward by ComReg:
- An e:mail address incident@comreg.ie and
 - The Wholesale operations/ Compliance team available by telephone on 01-8049600 (the main ComReg number). Telephone contact is to be used for any incident requiring notification of four hours or less, this number is available during normal business hours only. eircom proposes that a direct number be made available for contact with the „Wholesale Operations/ Compliance team

2.9 Minimum security standards

2.10 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

2.11 Implementation & Enforcement

2.12 Q. 7 Do you agree with ComReg's position on monitoring Operators compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree.

- 31 eircom will respond to Questions 6 and 7 together.
- 32 Regulation 24(2)(b) provides that ComReg may require operators to “submit to a security audit... ” etc.. The cost of such audit must be borne by the operator.
- 33 eircom agrees with ComReg position as set out in paragraph 83 of the consultation document, “To ensure compliance with the Regulations ComReg intends to use incident reports as an indication of performance of network security.” To require operators to submit to audits is burdensome and ties up operational resources for possibly prolonged periods. Furthermore the audits are costly exercises. In the absence of any clear and outright necessity, conducting an audit would be disproportionate and onerous for operators. Equally the provision of information, including risk registers is arduous for operators and intrusive unless there is a clear necessity.
- 34 Operators are at all times aiming to provide the best possible services to their customers without interruptions. The incentives are to maintain maximum customer satisfaction, protect revenue and maintain an enhanced reputation of providing reliable and secure services.

- 35 ComReg should therefore rely on the monitoring of incident reporting by operators and the level of customer reports. Any monitoring beyond this by means of audits, review of risk registers or spot checks should be on an exceptional basis only.

3 Vodafone Ireland Limited

3.1 Introduction

- 36 Vodafone notes that on 11 February last ComReg felt that it was appropriate to extend the response period for this consultation to 11 March. This extension was granted prior to ComReg issuing its consultation regarding the launch date for eircom's wholesale NGA service (13/17). This second consultation was on an issue with direct and significant market impact and direct and significant financial impacts for Vodafone. The NGA issue was also time bound by external market conditions and could not be extended.
- 37 This new consultation had a response period only one quarter the normal response period for such consultations and required the diversion of resources from other activities, including preparation of the response to 13/10.
- 38 The NGA consultation was not part of ComReg's workplan. As such it could not have been factored into Operators' reasoning when they requested an extension to 13/10 or ComReg's consideration in deciding to grant the extension. Given the resource impacts associated with dealing with the unforeseen NGA consultation, and in order to respond properly to consultation 13/10, Vodafone requested a further extension of time to respond to Consultation 13/10 until close of business Friday March 15.
- 39 This request was declined.
- 40 In light of the issues outlined in our request for a further extension this response by Vodafone is not as fulsome as we would wish. We reserve our position in respect of the subject matter of this consultation. However we remain available for further discussions with ComReg on the issues raised.
- 41 Please note that this response incorporates the views of Cable & Wireless Ireland.

3.2 General

42 In relation to ongoing statusing ComReg has proposed that in all cases there be “in-incident” statusing with updates to be provided every four working hours. The primary practical purpose for this “real-time” updating is set out by ComReg as being for ComReg’s use for managing customer queries. Network incidents are not new and ComReg has not suggested that there are any deficiencies in those ad hoc statusing arrangements already in place between ComReg and operators. In the absence of an evidence based requirement for such statusing ComReg now proposes that operators engage in a series of interactions with ComReg at incident threshold levels which would not in the normal course warrant such an interaction. In addition to the operational overhead this will impose on operators, Vodafone notes that in its submission to the European Commission in November 2012 ComReg² outlined that

42.1 “The current economic crisis has had a very significant impact on ComReg’s resources. It has had to contend with cuts to staff numbers as well as year on year cuts to its budget which have dramatically reduced the resources available to ComReg to complete all ongoing projects.”

43 It therefore appears somewhat self-defeating that ComReg would now propose a process which would have the effect of increasing the resource demand on ComReg in return for an unquantified and loosely defined benefit.

44 In terms of compliance monitoring it would appear that neither incident-by-incident reporting nor “in-incident” statusing offer any material advantage over information provided by way of a periodic summary report. On the contrary this latter approach has the benefit of not diverting operator resources during the currency of network incidents.

3.3 Fixed Services

45 In terms of fixed thresholds Vodafone notes that ComReg’s approach is likely to generate multiple reports for the same incident. In Vodafone’s case it provides retail fixed services using wholesale inputs purchased from . A single incident in could quite easily trigger reports from with little or no additional benefit to be obtained by the multiple real time reporting.

² European Commission Case IE_2012_1371-1372-1373

- 46 The reporting obligations apply to network level and/or services level. This raises the question of whether all or only one party in the communications markets supply chain would have to report an incident that is likely to have the same root cause, i.e. DSLAM outage. Vodafone is of the view that for incidents with root causes being external to own operations it is only the “first level” network operator who should report the incident.
- 47 In terms of the proposed fixed voice thresholds Vodafone notes the disjoint and inconsistency between the increments expressed as a percentage and those expressed as an absolute number.
- 48 The increment sizes in terms of absolute numbers of lines are 1:10:20 while the same increments expressed as percentages are 1:2:5.
- 49 Multinational operators increasingly use service platforms shared by multiple national operations. In this regard ComReg’s localised targets mean that there is a substantial overhead on this centralised function as it must recognise different targets for each Operating Company and provide different status on a country by country basis. It would be far preferable that a set of thresholds harmonised with the ENISA thresholds were used so that a single consistent set of operational reporting processes can be maintained. To ensure that the additional cost to operators of differentiated national targets is a proportionate regulatory intervention ComReg would need to show that the deviation from thresholds harmonised with the ENISA thresholds would deliver quantifiable benefits exceeding these costs.
- 50 In regard to Internet Access, the proposed threshold of 10 000 customer lines again is misleading in the context of a wholesale service provider. IP Transit, a wholesale Internet Access product, might be formally covered under the definitions used. But again it should either be clarified, which party in the supply chain should be responsible for the reporting and/or thresholds should be adjusted.
- 51 In terms of leased lines the granularity of the reporting differs from the internal reporting requirements and from the reporting that Vodafone customers subscribe to. This goes back to the specific nature of business customer communications and the detailed level of services, including incident/outage/fault reporting, and these customers request from their service providers. Again consideration needs to be given to how the reporting obligation applies to the supply chain model that is underlying the service provision to prevent multiple reporting.

3.4 Mobile Services

- 52 Vodafone has within its network some sites which support approximately cells. i.e. a given site will support multiple cells. The thresholds proposed by ComReg would mean that an incident affecting as few as 4 sites could be above the proposed threshold for reporting. In addition the proposed thresholds take no account of network architecture. For example the loss of cells in the 1800 MHz band (which are used primarily for capacity) would not affect coverage and depending on the time of day may not affect customer service quality. Indeed outages of this type may not be treated as priority repair and therefore ComReg's thresholds will generate initial reports and ongoing statusing which do not indicate any issue with network integrity but which will impose an operational overhead on both Vodafone and ComReg for no obvious reason or benefit.
- 53 As with Fixed Services shared service platforms are becoming the norm and ComReg's approach of proposing localised thresholds which are not aligned with the ENISA thresholds gives rise to an overhead for the operational management of these shared service platforms. It is far preferable that a set of harmonised thresholds are used. It seems counterintuitive that on the one hand ComReg encourages operators to become more efficient by way of its price control interventions imposed as part of the European regulatory framework but then imposes inefficiencies on them by itself deviating from the standards set out at a European level.

4 Magnet Networks Limited

- 54 Magnet Networks Limited (hereinafter 'Magnet') welcomes the opportunity to comment on this set of issues and proposals.
- 55 Magnet believes that the proposals outlined by ComReg to be pragmatic and valuable, however Magnet it is necessary to reconsider the thresholds suggested within the Consultation paper for the reporting of incidents and Magnet offers a set of alternatives below.
- 56 Magnet's concern is that continuous, or what might be termed over reporting of incidents by ComReg to the Minister, will have the impact of undermining the importance of the scheme for three reasons:
- Relevance – as seen recently in the Oireachtas Committee on social media, our politicians appear not to be well-versed modern technology and the impact of network events;
 - Over reporting would desensitise the Minister and his team, potentially delaying any urgent engagement relating to serious incidents;
 - If a specific incident is not impacting the working of the organs of the State, such as risk to critical infrastructure, essential services, or significant volumes of consumers, what real value could a Minister add, other than supervision?

Magnet believes that two-stage process would be more effective.

Stage 1:

- 57 Incident reported to ComReg, who can evaluate an event and then decide upon whether or not an escalation to the Minister is actually required. Clearly a small incident that is being dealt with should not be escalated to cabinet level on an event-by-event basis.

Stage 2:

- 58 Incident deemed critical enough that an automatic escalation occurs. An example of this might be the severing of a non-resilient submarine fibre cable that impacts countless business or consumer services.
- 59 Magnet notes that escalation is effectively a threshold and level system or approach, and as this consultation seeks to set those thresholds, Magnet considers that this approach appears to comply with required regulations and appears to be pragmatic and effective for all.

4.1 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

- 60 Overall Magnet agrees with the proposed thresholds, however, it is our view that over notification, or knee jerk reporting to the Minister and his Department, risks desensitising reducing any initial response to a serious event. ComReg state that annual reports will be provided to the minister and his department and these could address lower level events and ComReg is always free to raise issues with the minister as it sees fit.
- 61 Magnet therefore submits that a two-stage system should be adopted where the regulator is notified to a certain level of incident and a higher threshold set for ministerial notification. As a precaution in critical or exceptional circumstances, ComReg would always have the right to escalate if deemed necessary.
- 62 Magnet suggests that in certain circumstances, the currently proposed thresholds for fixed services may create an unnecessary and disproportionate additional overhead in the operation of our business.
- 63 Magnet considers that our proposed approach aligns with the legislation as notification is based on the thresholds set.

4.2 Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

A. 2. Magnet proposes a modification to the thresholds as follows:

Stage 1 to ComReg would be notifications for 1000 and 10,000 users out of service.

Stage 2 to ComReg and then Minister would be notifications for 20,000 customer lines out of service.

Internet Service Stage 1 – 10,000 for 3 hour
 Stage 2 – 10,000 for 6 hours

Leased Lines Stage 1 – 500 for 30minuts and 12 hours
 Stage 2 – 1000 for 1 hr.

64 Magnet remarks that the failure of critical national infrastructure should automatically be Stage 2 although such services may/will have existing notification requirements and ComReg should be aware of such to avoid double reporting.

4.3 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

65 Not applicable.

Q. 4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

66 Not applicable.

4.4 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

67 Magnet does not agree with the timelines for reports associated with an incident. The Magnet engineers who are dealing with that issue, and endeavouring to reduce down time are those who will be tasked with reporting the issue to ComReg. Magnet feels the timelines for reporting is punitive and is an inefficient use of Magnet resources. The time lines penalise smaller operators who work with smaller engineer teams and more limited resources.

68 If Magnet were to look at incorporating ComReg into our outage reporting structure and alerts, this would cost a significant amount. Also, the ComReg reporting needs to be tailored to the Table 1 thresholds. This again would need further IT time and resources. As Magnet is a small operator this will be difficult to do, especially in light of the fundamental shift in the Industry with the imminent launch of the NGA.

69 Magnet also believes that it is up to the operator with the outage to manage the expectations and the queries of the customers and this would normally be handled by our proactive customer service teams contacting major customers as well as having an IVR indicating there is an outage, the location of same and the expected time of resolution. Thus, Magnet feels, ComReg will not be fielding any calls in relation to operator's outages.

4.5 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators' compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

70 Magnet does not agree with ComReg invoking additional monitoring. It is a business decision on how operators run their network. If an operator does not constantly improve their network and have increased outages will lose customers and thus affect business. Thus, an operator does not need ComReg's audit to ensure that it has up dated its network. If an operator does not monitor, maintain and update its network, it will lose customers and revenue and will stop being a viable business.

4.6 Q. 7 Do you agree with ComReg's position on monitoring Operators' compliance primarily through the use of incident reports submitted to ComReg by Operators?

Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree.

71 Magnet feels that monitoring via incident reports is the most efficient and least intrusive method of monitoring. Magnet believes that regular analysis by ComReg, would incur large costs by small operators, such as Magnet in areas of resources, i.e. engineering, IT, regulation.

5 UPC Ireland Limited

5.1 Introduction

72 UPC Communications Ireland Limited (“UPC”) welcomes the opportunity to provide its response to ComReg on its Consultation (“the consultation”) on Incident Reporting & Guidance on Minimum Security Standards. UPC is fully aware of and appreciates the importance of applying world class standards of network security and integrity in its network. Our customers demand it and our success in a very competitive market place depends on it.

73 UPC has a wide array of network management, fault detection and network degradation monitoring systems in place with a large number of staff dedicated to not just detection and repair but also focused on pro-active prevention of customer impacting issues. UPC has invested heavily in these systems and continues to invest further in areas such as the following:

- Development of new network monitoring systems.
- Continuous training and development of our engineers.
- Enhancing guidelines on network monitoring process.
- Detection of issues prior to customer impact.
- Improved preventative maintenance programs.

74 Nevertheless, UPC believes that ComReg’s approach to incident reporting at an operator level is entirely disproportionate and overly onerous on operators. UPC’s resources and systems have been developed with a focus on minimisation of customer impacting incidents, not on the reporting of these incidents to outside agencies. ComReg’s proposed reporting requirements would place additional burden and new costs on operators such as UPC, which will not readily result in consumer benefit.

75 In addition, UPC believes that ComReg’s proposed reporting timelines will potentially divert limited operator resources at critical times during network incidents to reporting to the regulator rather than to actually fixing problems for consumers. The ENISA document is provided as guidance and is not legally binding. UPC believes that ComReg should adopt a far more pragmatic and proportionate approach to incident reporting.

5.2 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

76 UPC does not agree with the proposed thresholds for fixed services as they create an unnecessary and disproportionate additional overhead in the operation of our business. UPC believes that the threshold levels are far too low and that ComReg has provided insufficient detail on how the levels were calculated and has failed to adequately justify the proposed levels.

77 With respect to its justification of the proposed thresholds, ComReg states the following:

“The elements of the thresholds related to Regulation 23(4)(a) reports are set at a level that is lower than that proposed for ComReg reporting to ENISA. The reason for this are

1. that the threshold to trigger an ENISA report by ComReg will be an accumulation of reports from various Operators,
2. having a lower threshold has the additional advantage that this will enable ComReg to use this reporting mechanism to maintain a more detailed picture of an Operators network performance,
3. and the associated effectiveness of an Operators approach to management of risks as required in Regulation 23(1)”.

78 While we understand the logic of having lower operator thresholds to meet the national reporting requirements, UPC believes that the proposed levels are far too low. In particular the absolute customer number (1000 customers) proposed by ComReg is unduly burdensome and is more than 15 times lower than the suggested national reporting threshold in the ENISA report which is 1%-2% of users at a national level (for incidents that have a duration greater than 8 hours). For reference, 1% of Irish PSTN lines corresponds to 16700 lines.

79 By way of example:

- Considering ComReg’s proposed lowest operator threshold level of 1000 customer lines or 10% of an operator’s customers for that service (the lower threshold being the one that applies in a particular incident) and comparing this to the lowest suggested national reporting threshold in the ENISA report which is 1% - 2% of users at a national level (for incidents that have a duration greater than 8 hours), this yields the following for the PSTN:

- The number of PSTN lines in Ireland is 1.67m³: 1% therefore equates to 16,700 lines.
 - Therefore at the absolute operator customer number threshold level of 1000 currently proposed by ComReg it would potentially require up to 17 Irish operators to simultaneously have 1000 customers impacted in a network incident to require reporting at a national level under the ENISA guidelines.
- 80 UPC believes that it is extremely unlikely that a large number of operators would experience a simultaneous network outage and that for ComReg to propose such a low threshold level (1000 customers) to trigger a reporting requirement is an entirely unjustified additional burden on operators. While UPC accepts that some network incidents can simultaneously affect several operators, UPC believes that this is far more likely to happen to operators that are highly dependent on the eircom network, where a major incident could potentially impact the customers of a number of other operators relying on wholesale inputs from eircom. It is far less likely that networks such as UPC's network which are to a large extent standalone and not as dependent on the facilities of other networks would face simultaneous outages. In our experience network incidents impacting more than two operators in Ireland are highly unusual.

5.3 Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

- 81 Given the levels of redundancy and resilience built in to most modern networks in Ireland it is UPC's experience that having more than one network operator experiencing a network outage at the same time is uncommon. Further, it is UPC's view that it would be most unusual to have two network operators simultaneously experience a network outage and it would be highly unlikely to have more than two operators face difficulty at the same time. UPC therefore suggests that ComReg should prudently assume that at most there is potential for three operators to simultaneously experience a network outage. We suggest that the proposed absolute lower threshold for fixed service incidents (where the duration is greater than 8 hours) should at least rise to >5000 customer lines i.e. (16700/3). The same method of adjustment should also be applied by ComReg to the other threshold levels outlined in section 5.2 of the ENISA report.

5.4 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your

³ ComReg Market report Q3 2012

concern.

82 As UPC does not currently offer mobile services we are not in a position to comment in detail. However, if appropriate, threshold adjustments along the lines suggested in our answer to question 2 would logically also apply to mobile services. We note that shared use of mobile networks is not widespread in Ireland at this time.

5.5 Q. 4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

83 As UPC does not currently offer mobile services we are not in a position to comment in detail. However, if appropriate, threshold adjustments along the lines suggested in our answer to question 2 would logically also apply to mobile services. We note that shared use of mobile networks is not widespread in Ireland at this time.

5.6 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

84 UPC does not agree with the timelines for reports associated with an incident. UPC believes that the proposed timelines for reporting are far too short. The current timelines would place a disproportionate burden on operators and divert resources that would be more productively employed in actually resolving any network outages that occur and in maintaining the effective operation of services.

85 It is unclear to UPC what useful purpose could possibly justify such onerous reporting schedules. It is also unclear what, if any, European reporting obligation requires ComReg to propose the current timelines. Articles 13 and 13a of the EU Framework Directive do not specify timelines. The ENISA document on reporting incidents states⁴:

“Article 13a introduces three types of incident reporting:

1.The notification from providers to NRAs;

⁴ ENISA Technical Guideline on Reporting Incidents

- 2.The annual summary report from an NRA to the EC and ENISA;
 - 3.The ad hoc notification of incidents between NRAs and to ENISA.
- 86 The first notification scheme between operators / providers and NRAs is outside the scope of this document.; The current document deals with, and analyses the second and refers to the third type of reporting scheme. A reference to the notification of incidents both between NRAs and to ENISA (ad hoc notification) is proposed, but the implementation details will be decided at a later stage” (emphasis added).”
- 87 It therefore follows that ComReg is not imposing these onerous timelines in order to meet a specific EU Directive on timelines, nor indeed any annual reporting requirement (per point 2) above; and it would also appear that these onerous timelines cannot be related to ComReg’s obligations under (point 3 above) ad hoc notification of incidents between NRAs and to ENISA, as the implementation details have yet to be decided.
- 88 Therefore the main justification for ComReg’s proposed extremely onerous reporting timelines appears to be contained in paragraph 14 and 55 of the consultation where ComReg states:
- 89 “The reporting process will serve a number of purposes including enabling ComReg to monitor the compliance by an Operator in respect of its obligations around the management of the integrity and security of its networks. In addition, ComReg requires information to be provided in a timely manner in relation to incidents to ensure consumers can be made aware of incidents which impact a significant number of consumers. The time by which information should be provided is dictated mainly by the seriousness of the incident”.
- 90 “The principal reason for the timings outlined in the Tables is that ComReg needs to have up to date information on network and service incidents, as reported under Regulations 23 and 24, to be able to deal with consumer enquiries and to maintain a general awareness of the availability of services to consumers and these reports will be used in this regard” (emphasis added).
- 91 Firstly, UPC believes that ComReg does not need to have reports within two hours or two days or even half yearly to monitor the compliance by an operator in respect of its obligations around the management of the integrity and security of its networks. It is perfectly feasible to build a picture of an operators’ compliance over a short period of time through the annual reporting process based on revised and more realistic threshold levels as outlined above. Clearly if an operator is showing up in such a report for numerous incidents, there may be an issue to investigate further.

- 92 UPC also believes that any consumers that would actually choose to contact ComReg when such incidents occur would be better served if they were directed by ComReg to an operator's customer care lines, which in UPC's case are open 7 days a week. Operators are better equipped to answer customer queries since their helpdesks are open for longer periods than ComReg's care line, which we understand to be the generic ComReg switch number, which would be unavailable between the hours of 5.30pm and 9.00am during the week and not available at all during the weekend.
- 93 The rationale put forward by ComReg for the extremely tight reporting timelines would appear completely unjustified when one considers that for the month of January 2013 ComReg received a total of three UPC network related queries / complaints. UPC's view is that this level of UPC consumer interaction with ComReg on network related issues does not justify the extremely tight reporting timelines or thresholds levels proposed by ComReg.
- 94 Finally, with respect to the reporting timelines, UPC believes that ComReg has provided no real justification for the reporting timelines that would apply from Monday to Friday 9.00am – 5.30pm. The nonsensical and disproportionate nature of ComReg's proposals is well highlighted by the fact that no effective reporting would take place for approximately 75% of the time that network incidents could take place in UPC's case, i.e. outside ComReg's normal working hours.

5.7 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators' compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

- 95 UPC believes that ComReg's primary focus should be on putting in place a more reasonable incident reporting process which is structured around meeting any formal annual EU reporting obligations which may be imposed on ComReg or which may be agreed to by ComReg. If and when the EU institutions come forward with specific proposed incident reporting timelines, ComReg should further consult the industry. ComReg should not unduly anticipate possible timelines in that process.

- 96 If audits are deemed to be a necessary part of the regime ComReg chooses to put in place, there should be very clear guidance on likely “triggers” of an audit. Given the extremely onerous and potentially disruptive nature of such an audit, it is not acceptable that ComReg proposes such an open ended measure along the lines suggested in the consultation i.e. “ComReg ... may initiate audits from time to time”.
- 97 UPC believes that the picture built up of an operator’s compliance over a short period of time through the annual reporting process and the number of incidents reported by an operator over a period of time could be the only reasonable basis for audit “triggers”.

5.8 Q. 7 Do you agree with ComReg’s position on monitoring Operators’ compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree.

- 98 UPC agrees with ComReg’s position on monitoring operators’ compliance primarily through the use of incident reports submitted to ComReg by operators, with an emphasis on annual reporting. As has been stated above, UPC believes that ComReg’s proposed incident reporting regime is too onerous, completely disproportionate, of little practical value, and will not readily result in consumer benefit (indeed potentially the contrary – disproportionate costs will have to be passed-on to the consumer).

6 BT Communications Ireland Ltd

6.1 Introduction

99 We welcome the opportunity to comment on this important regulatory proposal to protect the interests of the customer and find most of the proposals pragmatic. However we believe there is value in ComReg re-considering the thresholds for reporting incidents and we offer a modification as below.

100 Our main concern is that over-reporting of incidents by ComReg to the Minister undermines the importance of the scheme for two reasons:

1. Over reporting is highly likely to de-sensitise the minister and his team potentially delaying urgent engagement for serious incidents.
2. In our view, the Minister for Communications, Energy, and Natural Resources (“the Minister”) should only be notified in the case of very serious incidents.

101 We therefore consider a two tier system would be more effective, where tier 1 is for reporting to ComReg who can make its own judgement whether to escalate to the Minister (such as for critical infrastructure concerns) and tier 2 where notification is to ComReg with the expectation that the seriousness will lead to the Minister being notified.

102 We note escalation is linked to reaching certain thresholds, and as this consultation is seeking to set such thresholds we consider our proposal complies with the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (“the Regulations”) and is reasonable and proportionate.

6.2 Other points we would like to raise:

103 Notification to customers / general public – Given that most network incidents will be addressed on a case-by-case basis, we would agree with ComReg in not being overly prescriptive in this area. Our view is that in the majority of cases the provider is best placed to manage/contact its own customers without unnecessarily alerting or worrying others. BT would therefore opt for Regulation 23 (4) (c) of the Regulations, which provides the option: “or require the operator to inform the public accordingly.” We would also add that incorrect or misleading public announcements could unreasonably damage the reputation of a business or businesses with the potential for redress.

104 Comments to Annex 1 - Incident reporting addresses a wider brief than security and we thus propose changing the template in Annex 1 to 'ELECTRONIC COMMUNICATIONS INCIDENT REPORT.' It is important that incidents which are not security breaches are not described as such, given the reputational harm that could be caused to service providers by such an incorrect description. Given that the template appears to have been prepared by ENISA, it may be necessary to alert it to this anomaly.

6.3 Response to Detail Questions

6.4 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern. (Page 18)

105 As discussed in the introduction, our view is that over-notification to the Minister risks de-sensitising their initial response to a serious event. ComReg states that annual reports will be provided to the Minister.

106 These could address lower level events, while ComReg is of course always free to raise issues with the Minister as it sees fit.

107 We therefore consider a two tier system should be adopted where ComReg is notified of incidents that have "a significant impact on the operation of networks or services" under the Regulations (tier 2) and those that have a less significant impact or not a very significant impact at all. In the case of tier 1 incidents, ComReg would not generally notify the Minister. In the case of tier 2 incidents, ComReg would notify the Minister.

108 We consider this approach aligns with the legislation as notification is based on the thresholds set.

6.5 Q. 2 if you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach? (Page 18)

109 ComReg Thresholds

110 It is important that ComReg distinguishes between incidents that have a significant impact for the purposes of Regulation 23 (4) of the Regulations and ones that have a less significant impact. We consider some of the thresholds to be very low and that over reporting would place an undue burden on operators. In this regard, ComReg should have due regard for the measures it adopts to be both reasonable and proportionate.

111 In reviewing the thresholds, we consider it reasonable to review the size of the market. In its latest Quarterly Market report⁵, ComReg highlighted that there are circa. 1.67 Million direct and indirect fixed lines in Ireland. This suggests that notification of 20,000 lines would be 1.2% of the national base, which appears to be a relatively small population impact and even smaller for the lower thresholds being proposed.

112 Provision of incident reports to the Minister is a significant action and our view is reporting on an impacted base of 1.2% is too low and a more reasonable and proportionate level for notification to the Minister should be at least 5% to 10% of the market, or where there is a direct impact on critical national infrastructure.

113 We are also aware that some critical national infrastructure services will have existing notification requirements and ComReg should be aware of these to avoid double reporting.

6.6 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern (Page 22).

114 As a fixed provider BT is limiting its comments to fixed network issues.

6.7 Q. 4 if you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach? (Page 22)

115 As a fixed provider BT is limiting its comments to fixed network issues.

6.8 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals

⁵ ComReg Quarterly Key Data Report Doc 12/134 – 12th December 2012.

for reporting periods with the basis for the recommendation. (Page 23)

116 We would like to offer the following comments concerning reporting timelines.

- Timelines for reporting - we consider that interim reporting should only apply for incidents that have a significant impact on the operation of networks or services (equivalent to our tier 2 threshold) or where there is an impact on critical national infrastructure such as hospitals etc. For such incidents, we agree with the principle of 4 hour updates and would suggest there should be flexibility to mutually adjust this timing (shorter or longer) during an incident if appropriate. For incidents not falling within this category (tier 1) we propose that aggregate reporting, on an ex-post and annual basis, would be a reasonable and proportionate approach.
- Supplier Issues – Currently, a number of service providers are dependent on a wholesale/network supplier for their network services and we consider that once a supplier issue has been identified ComReg should focus its reporting periods accordingly towards the wholesale/network provider to prevent multiple reporting routes. To maintain parallel reporting of the same issue will be a distraction to those trying to resolve the issue and adds little value.

6.9 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators' compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree (Page 29)

117 We welcome and support ComReg's approach to monitor compliance through incident reporting. We accept there may be a need to audit some players from time to time, but as audits can take some time and the availability of specific expertise, we would expect such to be by pre-arrangement. In addition, for confidentiality and security reasons, we would require ComReg to destroy all confidential network design details once the audit is complete – on the basis that keeping such sensitive details of many network operators at a single location is a greater security risk.

6.10 Q. 7 Do you agree with ComReg's position on monitoring Operators' compliance primarily through the use of incident reports submitted to ComReg by

Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree (Page 31)

118 We agree with ComReg's position on monitoring Operators' compliance primarily through the use of incident reports submitted to ComReg. We would consider that if an operator had experienced a number of severe incidents within a rolling 12 months, then ComReg could expect that provider to submit itself for an independent audit on an annual basis for two years. However, we disagree with the spot check approach as network operations and key people can be dispersed throughout the country, making an unannounced visit problematic and ineffective for the operator and ComReg.

7 ALTO – Alternative Operators in the Communications Market

119ALTO is pleased to respond to the above Consultation entitled - Consultation on Incident Reporting & Guidance on Minimum Security Standards, Ref: 13/10.

7.1 Preliminary Comments

120ALTO welcomes the opportunity to comment on this set of issues and proposals arising out of newly enacted regulations⁶ within the New Communications Regulatory Framework.

121ALTO finds most of ComReg's proposals to be pragmatic and valuable, however

122ALTO believes there is significant merit in reconsidering the thresholds suggesting within the Consultation paper for the reporting of incidents and ALTO offers a set of suggested modifications below.

123ALTO's overarching concern is that continuous, or what might be termed over reporting of incidents by ComReg to the Minister, will have the impact of undermining the importance of the scheme for three reasons:

123.1 Relevance – as seen this week in the Oireachtas Committee on social media, our politicians appear not to be well-versed modern technology and the impact of network events;

123.2 Over reporting would desensitise the Minister and his team, potentially delaying any urgent engagement relating to serious incidents;

123.3 If a specific incident is not impacting the working of the organs of the State, such as risk to critical infrastructure, essential services, or significant volumes of consumers, what real value could a Minister add, other than supervision?

⁶ 23 and 24 of The European Communities (Electronic Communications Networks and Services) (Framework) Regulations, 2011.

7.2 Consultation Questions:

7.3 Q. 1. Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

124ALTO is not in agreement with ComReg's proposed thresholds for fixed services as they may create unnecessary and disproportionate overheads.

125ALTO submits that the thresholds appear to be too low and that ComReg has provided insufficient detail on how threshold levels are calculated and the requisite justification for the proposed levels.

126In attempting to justify the proposed thresholds ComReg states the following:

"The elements of the thresholds related to Regulation 23(4)(a) reports are set at a level that is lower than that proposed for ComReg reporting to ENISA. The reason for this are

- 1. that the threshold to trigger an ENISA report by ComReg will be an accumulation of reports from various Operators,*
- 2. having a lower threshold has the additional advantage that this will enable ComReg to use this reporting mechanism to maintain a more detailed picture of an Operators network performance,*
- 3. and the associated effectiveness of an Operators approach to management of risks as required in Regulation 23(1)."*

127ALTO understands conceptually why having lower operator thresholds meets the national reporting requirements, ALTO believes that the proposed levels are far too low, in particular the absolute customer numbers that are quoted in conjunction with the various percentage levels. Taking ComReg's lowest operator threshold level of 1000 customer lines or 10% of customers and compare this to the lowest national percentage threshold in the ENISA report which is 1% - 2%. By way of illustration, if we take the number of PSTN lines in Ireland as 1.67m , 1% equals 16,700 lines. Therefore at the levels currently proposed by ComReg it could potentially require up to 17 Irish operators to simultaneously have 1000 customers impacted in a network incident to require reporting under the ENISA guidelines.

128ALTO submits that such a threshold is far too granular and an unwarranted burden on operators.

129 In addition, while ALTO accepts that some network incidents can happen simultaneously, ALTO submits that this is far more likely to happen to operators that are highly dependent on the eircom network, where a major incident could potentially impact the customers of a number of other operators. It is far less likely that networks such as ALTO members' which are to a large extent standalone and not as dependent on the facilities of other networks would have simultaneous outages.

7.4 Q. 2. If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

130 ALTO remarks that the failure of critical national infrastructure should automatically fit notification requirements and that ComReg should be aware of such events, in order to avoid double reporting.

131 Given the levels of redundancy and resilience built in to most modern networks in Ireland it is ALTO's experience is that having more than one operator experiencing a network outage at the same time is uncommon, having more than two operators experiencing a network outage at the same time is most unusual, more than that is highly unlikely.

132 ALTO suggests that ComReg's should prudently assume that at most there is potential for three operators to simultaneously experience a network outage. Using the example quoted above this would mean that the current absolute lower threshold for fixed services should at least rise to >5000 customer lines i.e. (16700/3). ComReg should apply the same method of adjustment, to the other threshold levels.

7.5 Q. 3. Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

133 ALTO is limiting its comments to fixed network issues. It may be the case that the answers and indicative limits in Answer 2, may suffice for mobile operators.

7.6 Q. 4. If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

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134ALTO is limiting its comments to fixed network issues.

7.7 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

135ALTO does not agree with the timelines for reports associated with an incident.

136ALTO submits that the proposed timelines for reporting are far too short. The current time lines would place a disproportionate burden on operators and divert resources that would be more productively employed in actually resolving any network outages that occur.

137ALTO submits that it is unclear what useful purpose could possibly justify such onerous reporting schedules. It is also unclear what if any European reporting requirement requires ComReg to propose the current timelines. The ENISA document on reporting incidents states:

“Article 13a introduces three types of incident reporting:

- 1. The notification from providers to NRAs;*
- 2. The annual summary report from an NRA to the EC and ENISA;*
- 3. The ad hoc notification of incidents between NRAs and to ENISA.*

138 The first notification scheme between operators/providers and NRAs is outside the scope of this document; The current document deals with, and analyses the second and refers to the third type of reporting scheme. A reference to the notification of incidents both between NRAs and to ENISA (ad hoc notification) is proposed, but the implementation details will be decided at a later stage.”

139ALTO submits therefore, that ComReg is not imposing onerous timelines to meet its annual reporting requirement (2) above, and it would also appear that these onerous timelines cannot be related to ComReg’s obligations under (3) ad hoc notification of incidents between NRAs and to ENISA, as the implementation details have yet to be decided.

140 Therefore the main justification for these extremely onerous reporting timelines appears to be contained in paragraph 14 and 55 of the consultation where ComReg states:

“The reporting process will serve a number of purposes including enabling ComReg to monitor the compliance by an Operator in respect of its obligations around the management of the integrity and security of its networks. In addition, ComReg requires information to be provided in a timely manner in relation to incidents to ensure consumers can be made aware of incidents which impact a significant number of consumers. The time by which information should be provided is dictated mainly by the seriousness of the incident”.

“The principal reason for the timings outlined in the Tables is that ComReg needs to have up to date information on network and service incidents, as reported under Regulations 23 and 24, to be able to deal with consumer enquiries and to maintain a general awareness of the availability of services to consumers and these reports will be used in this regard” (emphasis added).

141 ALTO believes that ComReg does not need to have reports within two hours or two days or even half yearly in order to monitor the compliance by an operator in respect of its obligations around the management of the integrity and security of its networks.

142 ALTO submits that it is perfectly feasible to build a picture of an operators compliance over a short period of time through the annual reporting process based on revised and more realistic threshold levels as outlined earlier. Clearly if an operator is showing up in such a report for numerous incidents, there may be an issue to investigate further.

143 ALTO also submits that any consumers that do contact ComReg when such incidents occur would be better served if they were directed by ComReg to members twenty four hours a day, seven-days-a-week, dedicated customer care lines particularly as the ComReg phone line which ALTO understands to be the main ComReg switchboard number that would be unavailable between the hours of 5.30pm and 9.00am during the week and not available at all during the weekend.

144 Further, ALTO believes ComReg has provided no real justification for the reporting timelines that would apply from Monday to Friday 9.00am – 5.30pm, as proposed in the consultation document and the disproportionate nature of the current proposals is highlighted by the fact that no effective reporting would take place for approximately 75% of the time that network incidents could take place i.e., outside normal working hours.

7.8 Q. 6. ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators’ compliance with

obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

145 ALTO welcomes and supports ComReg's approach in monitoring operator compliance through incident reporting.

146 ALTO accepts there may be a need to monitor compliance from time to time, but as such can take some time and the availability of specific expertise, ALTO would expect such monitoring to be by pre-arrangement. Additionally, in relation to confidentiality and security ALTO would require ComReg to destroy all confidential network design details once any audit is completed.

147 ALTO believes though that ComReg primary focus should be on putting in place a more reasonable incident reporting process which is structured around meeting its ENISA annual reporting obligations. When and if ENISA specifies incident reporting timelines in the manner ComReg has chosen to do, ComReg should further consult the industry.

148 If audits are deemed a necessary part of the regime ComReg chooses to put in place there should be very clear guidance on likely "triggers" for an audit. Given the extremely onerous and potentially disruptive nature of such an audit It is not acceptable that ComReg propose such an open-ended measure as "ComReg ...may initiate audits from time to time".

149 ALTO believes that the picture built up of an operator's compliance over a short period of time through the annual reporting process and the number of incidents reported by an operator over a period of time could be a reasonable basis for audit "*triggers*".

7.9 Q. 7. Do you agree with ComReg's position on monitoring Operators' compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree.

150ALTO agrees with ComReg's position on monitoring Operators' compliance primarily through the use of incident reports submitted to ComReg.

151ALTO disagrees with the proposed spot-check approach, relating to network operations, and the dispatch of key people throughout the country making an unannounced visit could be highly problematic for the operator and ComReg.

152ALTO submits that ComReg's current proposals are onerous, completely disproportionate and of little practical value.

153ALTO members have major concerns about security and confidence to this end and would require foresight and vetting of any external body retained to carry out such work.

8 Hutchison 3G Ireland Limited

8.1 Q.1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

154 No comment.

8.2 Q.2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

155 No comment.

8.3 Q.3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concerns.

156 No, Hutchison 3G Ireland Limited (“Three”) does not agree with the proposed thresholds for mobile services. The proposed thresholds are too low. The current threshold of 20-59 cells equates to 3 to 9 sites, if a six cell/sector site ratio is used, or 2 to 6 sites, if a 9 cell/sector site ratio is used. This would mean almost daily reporting on very low level outages and due to national roaming, outages that would not have a significant impact on Three subscribers.

8.4 Q.4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach.

157 Three considers the following threshold to be more appropriate: (i) 50 sites (equating to 300 - 450 cells) impacted by the same incident; or (ii) 15% of traffic impacted by a single incident. This will also cover incidents related to the core network. In relation to reporting to ComReg,

158 Three believes that mobile operators should report incidents to ComReg as soon as possible with increasing levels of available information, with the proposed reporting periods being guidelines in this regard. Completing a ComReg report within the proposed timelines could jeopardise properly identifying the underlying fault and impact of an incident, and clearly communicating the nature of the incident to our customers and ComReg. In this regard, Three would highlight the already time-consuming process of engaging internal teams, outsourced service providers, network-share operators, network-share shareholders and potentially third parties in relation to incident resolution.

8.5 Q.5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

159 No, Three does not agree with the timelines for reports associated with an incident. Please see response above.

8.6 Q.6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operator's compliance with obligations. Do you agree with this? Please provide your reasoning for your review if you disagree.

160 Three believes that ComReg should exercise its statutory audit rights only where it has reasonable grounds to do so and on an exceptional basis.

8.7 Q.7 Do you agree with ComReg's position on monitoring Operator's compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised

such as the level of incidents reported? Please provide your reasoning for your view if you disagree.

161 Three agrees with ComReg's position on monitoring operators' compliance primarily through the use of incident reports submitted to ComReg by operators. In this regard, it is important that ComReg's approach is clear and consistent.

8.8 Miscellaneous

162 In relation to paragraphs 33 and 41, does an operator have to notify ComReg in the event that there has been "Network and information security incidents having a significant impact on the continuity of supply of electronic communications networks or services" or "a breach of security or loss of integrity that has a significant impact on the operation of networks or services"?

163 In relation to paragraph 35.1, Three queries why wholesale broadcasting services (as an electronic communications service) are not included?

9 Telefonica Ireland Limited

164 Telefonica Ireland Ltd welcomes the opportunity to respond to the ComReg consultation on Incident Reporting & Guidance on Minimum Security Standards (Ref: ComReg 13/10).

9.1 General Comments

165 The consultation sets out ComReg proposals for notification to ComReg, the Minister and ENISA in the event of a breach of security or loss of integrity that has a significant impact on the operation of networks and services. In principle Telefonica agrees with the proposed approach, subject to some alteration of reporting thresholds.

166 In relation to thresholds, Telefonica designs and maintains its network to ensure security, continuity and integrity of service. However, it should be noted that no network is fault free and there are aspects outside the control of network operators, such as extreme weather conditions, which will impact on service availability. Such outages while undesired should have a minimal impact on consumers and an operator's primary aim will be to ensure prompt service restoration. It is important therefore that formal incident reporting should not distract an operator from fault resolution. Telefonica can understand the need for ComReg to set thresholds marginally lower than ENISA guidelines however our view is that thresholds should be set closer to the guidelines from the outset and then subject to ongoing review. Telefonica has established practices of reporting smaller incidents to ComReg and would propose to continue notification of such issues outside any formal reporting processes that are developed. This should address any potential concerns that ComReg has regarding raising thresholds, ensuring customer information requirements or ensuring operator compliance.

167 To ensure accurate reporting Telefonica would request further clarifications on the responsibility for notification for wholesale network providers. Where an issue relates to the network, then the responsibility for notification should reside with the network provider. It is not appropriate that the hosted operator should also be required to notify. This creates an unnecessary administrative burden, and will certainly lead to confusion as the same incident is reported in different ways across multiple operators. The hosted operator should be required to notify only when there is a customer impacting outage caused by a fault in their internal systems.

168 The range of service providers who are required to notify should be specified. This is an important consideration as an increasing number of consumers make use of VoIP and other OTT services. Incidents will arise where the underlying network is operating correctly, however consumers lose voice service because of a fault in the OTT platform. It is not clear whether this type of incident would be reported to ComReg. Telefonica therefore requests clarification on the scope of services that will require notification to ComReg.

169 Any failure to comment on specific aspects of this document 13/10 should not be taken as implicit acceptance of specific assertions in the document or endorsement of the approach of ComReg on such matter. Telefonica also fully reserves its rights to raise further concerns, including ones similar to those that may be raised by such other operators in their responses which equally impact upon the position of Telefonica and the industry more generally.

9.2 Response to Consultation Questions

9.3 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

170 The thresholds proposed for fixed services seem, low however fixed network providers are better placed to provide feedback in this regard.

9.4 Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

171 Telefonica would expect fixed network providers are best placed to put forward proposals in this regard.

9.5 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

172 Telefonica agree with ComRegs proposed approach to reporting on incidents - by number of base stations, however we would highlight the need for some alteration on reporting thresholds.

173 In relation to thresholds Telefonica notes that ComReg has proposed thresholds lower than ENISA guidelines. ComReg's rationale for proposing lower thresholds is that they will facilitate an understanding of 'appropriate technical and organisational measures' and will be used by ComReg to monitor operator compliance. In the establishment of any reporting framework it is important that ComReg does not design overly prescriptive reporting thresholds and timelines. The reference to events that have a significant impact is a subjective term however ComReg should not seek to deviate, to any great extent, from the established thresholds at EU level. The ENISA thresholds are the consensus view on events that represent a significant impact.

174 In establishing its formal compliance monitoring framework it is recognised that ComReg may initially require lower thresholds to form its understanding for the potential for incidents to arise on operator networks. The lowest reporting requirement that has been proposed by ComReg is any incident affecting 1% of users which is over 2 hours in duration. However, that same incident is only reportable to ENISA when it exceeds 8 hours in duration. The disparity between reporting regimes is substantial and it is our view that the duration for which incidents require formal notification, update, and closure should be increased. Telefonica has put forward alternative proposals below.

175 It is also advised that ComReg have set a lower threshold to assist ComReg in respect of its communication with consumers. It should be noted that there is an established practice in place with Telefonica to advise ComReg on network incidents which arise. Telefonica's experience to date has been that consumer information has not been an issue. The first point of contact for consumers and the primary information source to distribute details on service issues should always be the operator concerned. It is sufficient if ComReg are made aware that there is an incident without triggering any detailed formal reporting requirement. It is not appropriate that an operator should be under pressure to develop detailed reports and customer scripts for ComReg while endeavouring to resolve network issues. A further consequence of low reporting thresholds and timelines is that an operator would be developing ComReg reports for network incidents that will not generate any significant consumer concern. It is also important to set thresholds in such a way that reports submitted can be managed or else this will be a wasted exercise.

176 The consultation paper (Table 2) sets out a minimum duration of service loss/disruption and the timeframe for reporting to ComReg. Telefonica assume that the report to ComReg is not required before the minimum duration of service loss has been reached. For example, (assuming proposed thresholds) if 20-59 base stations/sites are off air then the operator will be required to report to ComReg within 1 hour after the minimum duration of 2 hours has passed. The document could be interpreted to read that notification to ComReg happens before the minimum threshold is passed and we recommend clarification is added to the table.

177 A further clarification is required for the definition on minimum services impacted. The consultation paper refers to 'cells' off air. The measurement of cells would not be an effective measure and we expect the intended reference in this table relates to mobile sites/ base stations. Telefonica request that this is clarified in the final version.

9.6 Q 4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

178 For the reasons outlined above, Telefonica considers the initial reporting thresholds proposed are too low and recommend the thresholds should be raised to 6 hours. Alternatively if ComReg want to focus on the duration of incidents then the number of sites impacted should be raised to 50 and above. On incidents that are less than 6 hours or where there are between 20 and 50 sites impacted then ComReg may recommend that the established informal notification process continues.

179 A closer alignment between the ENISA and ComReg reporting frameworks will ensure a common understanding of incidents that have the potential to be reported to the Minister and ENISA. It will also ensure the information reported by Ireland is comparable with that provided in other Member States and unnecessary administrative burden is avoided. It is also within ComReg's remit to reduce the threshold further for specific operators or generally if the approach proposed proves inadequate. There is no evidence based on established practices that this would be the case.

9.7 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the

recommendation.

180 Further clarification is required that interim reports would no longer be required once service is restored. The timeframe for submission of closure reports will need to be agreed at time of reporting as root cause analysis and measures to prevent re-occurrence are identified.

9.8 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators' compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

181 The proposal to implement monitoring compliance is being made to reduce the need for inspection and audit. Telefonica's preference is the implementation of a monitoring regime as opposed to any inspection and audit requirements. It is our view that the powers to require audits or to direct specific technical measures are designed to be used as a last resort and can only be invoked with justification.

9.9 Q. 7 Do you agree with ComReg's position on monitoring Operators' compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree

182 In principle Telefonica agree with the general approach subject to some changes on reporting thresholds. It is not clear from the consultation paper whether ComReg intend to advise the Minister of all incidents notified where ComReg implement thresholds that fall below ENISA thresholds. Telefonica considers that only reportable ENISA incidents (that have a significant impact) should only be escalated to the Minister.

10 Digiweb

10.1 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

183 We strongly disagree with the proposed thresholds given it indicates that the minimum number of customer lines affected is set to the lower of a given number or percentage of users. As a direct effect, ComReg is therefore requesting this incident report not only from the largest operators whose outage will have a large effect on the national's network uptime, but also down to the smallest alternative and local internet service providers scattered across the country. With the current set-up, a local wireless broadband operator maintaining a base of 500 Broadband subscribers may need to provide an incident report for an outage of 10 minutes occurring on its busiest wireless transmitter and affecting 50 customers.

184 While we firstly don't find the benefit to ComReg to request such a volume of information, we also seriously question the additional burden of work imposed to the smaller operators which cannot avail of a well structured internal regulatory department required in order to maintain an efficient feedback process with ComReg.

185 The EU directive 2009/140/EC is very clear about securing the fact that "Member States shall ensure that national regulatory authorities have adequate financial and human resources to carry out the task assigned to them" (article 3) ; however, there are little concerns observed toward the financial and human resources required by the Operators to fulfil their missions.

186 We would strongly recommend that the minimum number of customer lines should be set to the highest of a given number or user percentage, and that particular focus is made toward the largest operators whose outages will have a material effect and be imperatively disclosed in ENISA report.

187 Alternatively, ComReg may set up two thresholds for each of the network/service type depending of the scale of the operator (SME scale OR Large scale).

10.2 Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

188 See above – we are suggesting to set the minimum number of customer lines affected as the higher of the given number or percentage of users. This way, more emphasis will be made on the largest outages on the network having a material impacts on national metrics, and therefore save a burden of work from smaller operators. Alternatively, ComReg may set up two thresholds for each of the network/service type depending of the scale of the operator (SME scale OR Large scale).

189 We don't wish to dispute all of the proposed thresholds – but we believe the minimum duration of service loss/disruption should be aligned to ENISA's 1 Hour. ComReg's primary goal is to report to

190 ENISA and other NRAs based on the agreed ENISA thresholds – and we are sceptical that an unlikely accumulation of reports from various operators would require ComReg to lower the minimum duration to 10mn to satisfy ENISA/NRA reporting duties. Moreover, as specified above, we don't believe that drilling down to more marginal incidents will be of strong added value to ComReg.

191 Finally, we also believe requesting an Incident Report back within 2 hours, irrespective of the scale of the disruption, is unrealistic. Large scale outages will often affect our core infrastructure therefore affecting a wide range of customers, from residential to corporate. This latter category is ensured better SLA/QoS and therefore priorities will be given to addressing this customer base first. We can commit to provide a report to ComReg within 4 working hours on a best effort basis, but the

192 Regulator should understand that our ability to communicate is limited in the event of large disruption and that focus has to be given towards the segment of customers generating most of our revenues. Forcing Digiweb to primarily focus on non-revenue generating administrative duties would be strongly detrimental to our business. ComReg should have the right to be made aware of significant outages, but more flexibility should be ensured regarding reporting deadlines.

10.3 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

193 Digiweb is not a Mobile Network Operator in Ireland, so we would have minimal input to make. However, should we wish to enter the MVNO market, we believe the duty of reporting should be restricted to the wholesale provider given it is the actual network operator/controller. The same principle should apply in the fixed line market. A reseller should not be bound to report on a fault caused by the wholesale provider (i.e Wholesale NGA/NGN).

10.4 Q. 4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

194 See above.

10.5 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

195 See the last paragraph of our answer to Question 2 which partially answers Q.5. Assuming the impact threshold is upped as suggested in Q1, Digiweb consider it is feasible to organize a reporting process with ComReg. However, we consider that the Initial report should be made available within 4 hours on a best effort basis, regardless of the scale of the event. ComReg must understand our full dedication must be on communicating to our key customers generating the majority of our revenue, and not on non-revenue related administrative duties.

10.6 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators' compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

196 We welcome the well balanced assessment from ComReg, accepting that the correct degree of risk-management will be a decision of each Operator to make, and that considerations of cost and benefit are important. We believe the minimum security standards should serve as a guideline to all operators, who should use its templates as much as possible. Digiweb is open to transpose this format into its own security process. We believe those guidelines should be adopted on a voluntary basis.

197 ComReg may create some sort of certification on the back of this guideline – should an operator meet all of the criteria following voluntary audit. We believe such EU wide certification backed by an independent professional body could be a good way to incentivize voluntary adoption. It should be noted however that many similar forms of certifications already exist within the telecommunication industry. As an illustration, Digiweb currently holds PCI Data Security Standard. ComReg should satisfy itself that compliance to these industry standards is sufficient. We foresee an element of overlap between ComReg's audit requirements and what certification we currently hold. Creating such an overlap would come as an additional cost to us, without extra benefits.

198 We most absolutely refuse the imposition of an audit to the operator, by an independent professional nominated by ComReg while the operator would have to bear the full cost. Once again, we feel the ENISA's workings are particularly targeting the large national operators, but this imposition would represent a significant burden for the smaller operators in the industry.

199 We would disapprove interventionist behaviour from the Regulator on security matters. All of the operators have the utmost motives to retain an acceptable level of security in their network, or their whole business model could be at risk. This incentive is large enough for all actors in the industry.

200 Digiweb believe ComReg should focus its energy in helping the operators circumvent external malicious attacks, to the benefit of the end-customers.

201 So far, the emphasis is on protecting the end-customer, and implying the Operator is the offender. In actual cases, outages are often caused by external events, many being malicious in origine (DDOS attack, High Site Transmitter vandalism, etc). This is where ComReg could be of real added value, and not by imposing an audit on the Operator forcing them to find out what they already know.

10.7 Q. 7 Do you agree with ComReg’s position on monitoring Operators’ compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree.

202 We generally agree with ComReg’s position on monitoring Operator’s compliance primarily through the use of incidents reports. In addition, ComReg may organize an industry forum focused on discussing any new malicious attacks being observed by the various operators and their experience in dealing with those.

11 AT&T Global Network Services Ireland Limited

203 AT&T Global Network Services Ireland Limited (“AT&T”) respectfully submits these comments on the ComReg Consultation on Incident Reporting & Guidance on Minimum Security Standards (the “Consultation Paper”).

204 Operating globally under the AT&T brand, AT&T’s parent, AT&T Inc., through its affiliates, is a worldwide provider of Internet Protocol (IP)-based communications services to businesses and a leading U.S. provider of wireless, high speed Internet access, local and long distance voice, and directory publishing and advertising services, and a growing provider of IPTV entertainment offerings. In Ireland and other EU Member States, AT&T Inc., through its affiliates, is a competitive provider of business connectivity and managed network services. AT&T Inc. also is a leading provider of bilateral connectivity services linking the U.S. with Ireland and all other EU Member States.

205 Before providing answers to ComReg’s specific questions, AT&T wishes to highlight some specific concerns that we would urge ComReg to take account of when finalising its proposals. These concerns are described in more detail below.

11.1 A CONSISTENT APPROACH TO INCIDENT REPORTING ACROSS THE EU SINGLE MARKET IS ESSENTIAL

206 AT&T operates in most EU countries and notes the emergence of inconsistencies with regard to circumstances that trigger a requirement for incident reporting. As a provider of services on a pan-European and global basis, this complicates the task for our 24/7 network operations teams in determining which incidents must be reported in which jurisdictions. AT&T therefore urges ComReg to observe faithfully the ENISA incident definitions to avoid discrepancies.

11.2 RESELLERS SHOULD BE EXCLUDED FROM INCIDENT REPORTING REQUIREMENTS

207 AT&T'S understanding of the relevant Regulations⁷ is that the incident reporting obligation would apply to all operators providing public communications networks or publicly available electronic communications services, including in relation to services or elements of services that are resold. As incidents on resold services are already reported by the underlying operator, we believe that there is therefore a risk of "double reporting".. In many instances, the reseller will have no access to the underlying network or network elements and may not be aware of the incident unless or until it has exceeded the underlying provider's threshold for reporting. At this point, the underlying provider will be responsible for reporting to the incident to ComReg. AT&T therefore urges ComReg to deal explicitly with the situation of resellers in its guidance.

11.3 AT&T RESPONSES TO COMREG'S QUESTIONS

11.4 Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

208 AT&T is concerned by ComReg's proposal to express incident reporting thresholds in terms of the lower of actual number of lines or percentage of customer lines affected. We do not believe that a percentage of customer lines threshold is appropriate or practical in the case of operators who focus exclusively on large enterprise customers and therefore have a very small customer base in terms of absolute number of lines and customers. We believe that such a reporting threshold could have a distortive effect in requiring such operators to report incidents which would not be reported were they to occur in identical circumstances with operators with larger customer bases.

⁷ The European Communities (Electronic Communications Networks and Services) (Framework) Regulations, 2011

11.5 Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

209 AT&T notes that the UK regulator Ofcom in its equivalent guidance⁸ has chosen to set thresholds solely in terms of the absolute number of lines affected and we urge ComReg to adopt the same approach to address both the possible distortive effects and the importance of consistent approaches to incident reporting across the EU Single Market.

11.6 Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

210 As we identified in our comments above, AT&T believes that resellers of mobile (or fixed) services should not be subject to incident reporting requirements which should be the responsibility of the underlying network provider.

11.7 Q. 4 If you do not agree with the mobile services proposed thresholds, what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

211 No further comment.

⁸ *Ofcom guidance on security requirements in the revised Communications Act 2003 - Implementing the revised EU Framework*, 3 February 2012, available at: <http://stakeholders.ofcom.org.uk/binaries/telecoms/policy/security-resilience/guidance.pdf>

11.8 Q. 5 Do you agree with the timelines for reports associated with an incident? If you disagree with the reporting periods please provide alternative proposals for reporting periods with the basis for the recommendation.

212 We note that ComReg is proposing far more exacting timelines than, for example, Ofcom in its guidance which states “For most incidents, the initial report should be submitted within a few days of the incident, but where the incident may be life affecting (such as an outage with an impact on accessing the emergency services), we expect to be notified within 24 hours.” As we have indicated in our comments above, we believe that national regulators should adopt a consistent approach to incident reporting across the EU Single Market.

11.9 Q. 6 ComReg in addition to monitoring compliance through incident reporting may initiate audits from time to time to ensure Operators’ compliance with obligations. Do you agree with this? Please provide your reasoning for your view if you disagree.

213 AT&T welcomes ComReg’s recognition that not all Operators are the same and therefore the correct degree of risk-management will be a decision for each Operator to make. We also welcome ComReg’s approach of not being prescriptive about how operators demonstrate compliance with their obligations under Regulation 23(1). Against this background, we have no objection to ComReg’s proposal to monitor compliance through incident reporting and possibly ad hoc audits, provided that such audits are both justified (e.g., on the basis of concerns raised at the level of incidents reported) and proportionate. When considering and assessing compliance, ComReg should give appropriate acknowledgement to circumstances where an operator has already chosen to be audited and assessed for conformance to the requirements of an internationally recognised standard, such as ISO/IEC27001.

11.10 Q. 7 Do you agree with ComReg’s position on monitoring Operators’ compliance primarily through the use of incident reports submitted to ComReg by Operators? Alternatively, should ComReg monitor compliance through regular analysis of work undertaken by operators, e.g. annual review of risk

registers, or through spot checks and reviews from time to time as may be triggered by concerns raised such as the level of incidents reported? Please provide your reasoning for your view if you disagree

214 No further comments beyond those mentioned in our answer to Question 6.

215 AT&T would be pleased to answer any questions concerning these comments.

12 Verizon Enterprise Solutions

216 Verizon Enterprise Solutions (“Verizon”) welcomes the opportunity to respond to ComReg’s consultation on Incident Reporting and Guidance on Minimum Security Standards (the “Consultation”).

217 Verizon is the global IT solutions partner to business and government. As part of Verizon Communications – a company with nearly \$108 billion in annual revenue – Verizon serves 98 per cent of the Fortune 500. Verizon caters to large and medium business and government agencies and is connecting systems, machines, ideas and people around the world for altogether better outcomes.

12.1 Summary

218 [redacted] We are happy to discuss any aspect of the response with ComReg.

12.2 Timing of the Consultation

219 Before elaborating [redacted], we make an observation on the timing of the Consultation. We note that Regulations 23 and 24 of ‘The European Communities Electronic Communications Networks and Services (Framework) Regulations’, (the “Regulations”) were introduced in 2011. Yet ComReg has only now issued its provisional views on how they should be applied in practice, nearly two years later.

220 We therefore register a general concern on why it has taken ComReg so long to issue the Consultation. It is not a particularly long document, nor particularly complex. It does not appear that ComReg was compelled to engage in substantial market analysis or information gathering from stakeholders. Further, ComReg has been substantively guided in its thinking by existing recommendations from ENISA, which were published over a year ago. As a result of the delay, ComReg is significantly behind the curve and should recognise and accept that, given the importance of this matter, providers may well already have processes in place to address the Obligations.

12.3 The Measures

221 [redacted]. However we would be happy to provide further detail about this work if ComReg wishes.

222 [redacted], Verizon considers that it fully complies with the requirements set out under the Framework Regulations.

12.4 ComReg next steps

223 As ComReg receives and considers responses to the Consultation, and plans any further action, it is very important that it takes into account that some providers [X]. It is absolutely crucial for providers of pan-European services that NRAs work in a harmonised and consistent manner when considering compliance with pan-European obligations. ComReg must therefore act in a flexible and proportionate manner [X].

224 We would be happy to discuss Verizon's compliance activity with ComReg once it has had the chance to consider the contents of our response.

13 Huawei Technologies Company Ltd.

225Q. 1 Do you agree with the proposed thresholds for fixed services? If not please advise the basis of your concern.

..... agree

226Q. 2 If you do not agree with the fixed services proposed thresholds what alternative thresholds would you consider more appropriate, what reporting periods to use and what is the basis for that approach?

.....

227Q. 3 Do you agree with the proposed thresholds for mobile services? If not please advise the basis for your concern.

228Q4 you should include a geographical outage > 20% land area of a county where < 20 Base Stations Cells. Are down. Most Opcos count Base stations rather than cells for outages as a base station may have 6 or 9 cells so do you really mean base-stations or would you think 3 or 4 basestations need to report? .. if going with cells would the numbers be too small.. is voice more important?