Resilience guidance consultation and Call for Input on mobile RAN power back up

Proposal for updated guidance for communications providers on resilience related security duties under the Communications Act 2003.

Non-Confidential response of Gamma

About Gamma and this Consultation Response

Gamma Telecom Holdings Limited ("Gamma") is a Public Electronic Communications Network ("PECN") that provides wholesale fixed and mobile telephony and data services, to some 1,200 channel partners. Two of these channel partners are wholly owned subsidiaries and represent themselves over 20% of our business. In all cases, our partners and subsidiaries sell almost exclusively to all sizes of businesses and not-for-profit entities throughout the UK and increasingly to various European Union member states.

This consultation response relates to Gamma and its subsidiaries. Any conflict between the implied position of Gamma in any UK Competitive Telecommunications Association (UKCTA), Comms Council UK (CCUK) or Federation of Communication Services (FCS) responses or that of any other association in which Gamma is involved, or implies Gamma is involved, is accidental and we consider that our views in this response should prevail.

Gamma trusts that this response addresses the questions posed by the Office of Communications ("Ofcom") and would welcome the opportunity to elaborate on any points in more detail if required.

General Comments

Gamma welcomes the opportunity to respond to the Consultation. In general, we find the guidance proportionate and appropriate and we have detailed our response to the individual Consultation questions below.

The one area of major concern is with footnote 38 ('the footnote') on page 34 of the draft guidance ('Draft Guidance')1.

If we interpret the footnote correctly, it infers that a Primary Line service can only be delivered on a non-public dedicated internet service. If this were to be applied as written, then it would have a significant impact on the already well established VOIP market.

In the business market the purchasing of access and voice services from different providers is a common practice. Cloud based voice solutions are provided by major providers of cloud-based services and such services are widely consumed by both the corporate sector and government. We are quite sure that these users consider their voice applications to be 'Primary Line'. Additionally, with the prevalence of faster and more reliable fibre access products some businesses choose a residential grade fibre connection and then run a business grade voice service over the top. Again, these business grade voice services would be considered 'Primary Line' by the end user.

A number of established fibre network providers utilise third party partners such as Gamma for their voice services. Gamma may provide our over-the-top ('OTT') voice services to micro businesses or home workers, or indeed provide numbering and interconnection facilities to other OTT voice providers to sell on to residential, so these situations would not be considered a 'Primary Line' based on the footnote. There are now broadband only providers such as Plusnet. Would the footnote preclude the customers of these broadband only providers from consuming a voice service from another provider that can access emergency services? We would argue that Ofcom have not fully considered the market and the impact of the footnote.

^{1 &}lt;a href="https://www.ofcom.org.uk/">https://www.ofcom.org.uk/ data/assets/pdf file/0024/272931/Network-and-Service-Resilience-Guidance-for-CPs.pdf

The footnote also appears to conflict with the General Condition requirements for emergency services access when a VOIP or OTT service utilises a number from the national numbering plan. Given the volume of over-the-top services in use today that would be considered Primary Line by the end user, we consider the phrasing of the footnote to be flawed.

To summarise, we are of the opinion that the text in the footnote has been drafted without due consideration and insight into the impact such a statement could have in today's voice market. The General Conditions already have established definitions such as NBICS, IAS and ECS and we fail to understand why Ofcom would introduce new definitions in the draft guidance. With all of the above in mind we would welcome clarification from Ofcom on the footnote and their reasoning behind it.

Response to Consultation Questions

Question 1: Do you consider the measures in the proposed guidance relating to the resilience of the physical infrastructure domains to be appropriate and proportionate?

Whilst Gamma has a relatively small physical infrastructure footprint, we do adopt the resilience guidelines published by the Electronic Communications Resilience & Response Group (EC-RRG) of which Gamma is a member. The segmentation into logical domains outlined in the Draft Guidance is sensible and, in our view, aids contractual arrangements when Gamma purchases Access/Last Mile and Aggregation/Backhaul services from other Communications Providers.

Gamma also agrees that the measures in the Draft Guidance relating to the resilience of the physical infrastructure domains are appropriate and proportionate.

Question 2: Do you consider the measures in the proposed guidance relating to the resilience at the Control Plane to be appropriate and proportionate?

Yes, Gamma already employs the principles outlined within 4.3 of the Draft Guidance where we operate relevant network platforms. Learning from occurrences of control plane fault conditions and resultant overload has greatly helped Gamma harden our Control Plan designs and thorough testing thereof. Device registration overload, authorisation and authentication and DNS services are all areas where Gamma considers the Draft Guidance to be logical and appropriate.

Question 3: Do you consider the measures in the proposed guidance relating to the resilience of the Management Plane to be appropriate and proportionate?

Gamma has invested heavily in an Out-of-Band Management Network, and we agree with the five key reasoning principles outlined within 4.4 of the Draft Guidance.

Additionally, it is our view that 'Isolation' should be further enhanced within the Management Plane by segmentation (via VLANs or similar technology) into sub-networks that are dedicated to specific platforms. This practice reduces the risk of an incident within the Management Plane moving laterally across the Plane or across network elements under management.

Question 4: Do you consider the measures in the proposed guidance relating to communications providers' own managed services to be appropriate and proportionate?

Yes, Gamma already employs the principles outlined within 4.5 of the Draft Guidance and we do consider them proportionate. 'Carrier Grade' is a term that is widely understood within Gamma and is synonymous with our design methodologies.

Question 5: Do you consider the measures in the proposed guidance relating to communications providers' arrangements for preparing for adequate process, skills and training to be appropriate and proportionate?

Yes, Gamma already employs the principles outlined within 5.1, 5.2 and 5.3 of the Draft Guidance.

Ofcom should consider including within the Guidance some examples of suitable frameworks, e.g.

Continuing Professional Development (CPD) schemes operated by appropriate professional institutions.

The realm of Network Automation outlined within 5.5 of the Draft Guidance is complex and Ofcom rightly note that it does carry risk of potentially catastrophic network failure. Gamma agrees with the headline principle that automation should be considered at the inception of design rather than retrofitted at a later stage.