

Emergency call handling agent performance

Proposed guidelines with respect to the handling of emergency calls and compliance by communication providers with General Condition 4

Consultation

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Executive summary

- 1.1 In this document ("the Consultation") we propose to introduce guidelines for Communications Providers¹ ("CPs") that address how calls to the emergency services are handled and managed. The proposed guidelines set out what we consider to be appropriate roles and responsibilities as well as our expectations as to how CPs (and those performing emergency call handling on their behalf) should undertake their activities, including relevant performance targets.
- Under European law², Ofcom must ensure that those providing end-users with 1.2 electronic communications services for the purposes of making calls to numbers in the national numbering plan provide access to the emergency organisations using the emergency call numbers 112 and 999.
- 1.3 Ofcom meets its above obligations through the General Conditions of Entitlement ("GCs")³ and, in particular, General Condition 4 ("GC 4"). Under GC 4.1, CPs must ensure that any end-user⁴ can access the emergency organisations using the emergency call numbers 112 and 999. CPs must also, to the extent technically feasible, make accurate and reliable caller location information available to the emergency organisations handling those calls (GCs 4.2 and 4.3).
- 1.4 In practice, CPs meet their obligations under GC 4 by contracting with an "Emergency Call Handling Agent" ("CHA") to route their calls to the emergency services and to provide the correct location information on their behalf. A CHA effectively acts as a "call centre", providing a point of interconnection for calls that are being made over a CP's network to the emergency organisations.
- 1.5 The end-to-end process of emergency call handling, forwarding and monitoring that leads to a successful dispatch of emergency assistance is not straightforward, relying on specialised systems and processes as well as effective interaction between CPs, CHAs and Emergency Authorities ("EAs"). To meet the high expectations that the public place in the overall emergency calling process, the CHA operation needs to be designed, implemented and managed to suitably high standards.
- 1.6 The purpose of this Consultation is, therefore, to set out Ofcom's proposals for introducing specific guidelines to assist CPs satisfy themselves that appropriate performance standards are being met by their respective CHAs⁵. These guidelines

¹ A "Communications Provider" for the purposes of this document means a person who provides endusers with an electronic communications service, or provides access to such a service by means of a pay telephone, for originating calls to a number or numbers in the national telephone numbering plan. This excludes any "click to call" service.

² In particular, Article 26 of Directive 2002/22/EC of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), as amended by Directive 2009/136/EC (http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2002L0022:20091219:EN:PDF)

http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/general-conditions/

⁴ An "end-user" is defined in section 151 of the Communications Act 2003 and essentially means a person, (other than a CP) who is either a customer of a CP for the purposes of being provided with an electronic communications service, or who makes use of such a service, or who is authorised by a customer of a CP to make use of that service.

⁵We note that Ofcom's regulatory responsibilities are restricted to the role of CPs in routing emergency calls and do not extend to other bodies, such as the EAs.

will be non-statutory; Ofcom does, however, expect that CPs will have regard to them when ensuring that they comply with their obligations under GC 4, for example, by reflecting the guidelines in their contractual arrangements with their respective CHA. The guidelines set out recommendations for:

- Putting in place procedures and business practices that are commensurate with the critical nature of emergency call handling;
- Maintaining services such that in any given calendar month service availability meets 99.999%;
- Providing sufficient network, system and human resources such that in any 24hour period 95% of incoming calls wait less than five seconds before being answered;
- Conducting appropriate risk and business continuity assessments that consider how best to maintain continuity of service during significant unexpected events that place substantial pressure on call handling activities;
- Gathering and making available call volume and waiting time data, measured on a 15 minute basis, as well as reporting to Ofcom any outage of the service in accordance with our existing network incident reporting guidelines.
- 1.7 If adopted, Ofcom would keep these guidelines under review, in light of any further performance information we may receive, either from CPs or CHAs. If it appears to Ofcom that the guidelines are not sufficient to ensure an acceptable standard of emergency call performance by CPs, we may then consider whether or not more formal regulatory interventions would be appropriate. This might include an amendment to GC 4, which would then be the subject of a separate consultation.

Next steps

1.8 This 10 week Consultation will close on 20th February 2013. Subject to, and based on, the feedback we receive, we currently expect to publish our statement of conclusions to this Consultation in the Spring 2013.

Background and introduction

- 2.1 In the UK, CPs who provide end-users⁶ with electronic communications services, or who provide access to such services by means of a pay telephone, enabling the origination of calls to numbers in the national telephone numbering plan, must ensure that those end-users can access the EAs by using the emergency call numbers 112 and 999. CPs must further ensure that, to the extent technically feasible, accurate and reliable caller location information in respect of those calls is made available to the relevant EA. These requirements are set down in GC 4⁷.
- 2.2 CPs could choose to perform the handling of emergency calls and the routing of these calls to the appropriate EA themselves. However, given the complexities of this function, coupled with the critical importance that it holds, an industry practice has evolved whereby CPs tend to contract with a CHA to deliver this function on their behalf. There are currently three CHAs operating in the UK: BT and Cable and Wireless Worldwide ("C&WW") (who handle the majority of emergency call traffic), together with Level 3, who handles emergency calls for the railways.
- 2.3 The way that emergency calling works in the UK is that a person may make a call using the national telephone numbers 999 or 112, irrespective of his or her location or the specific emergency service that is required. In order to connect the caller with the correct local emergency service, the call is first answered by a CHA operator who, from information provided from the network and from speaking directly to the caller, is able to forward the call to the correct emergency service at the nearest geographic location to the caller.
- 2.4 The CHA function provides a number of additional capabilities that help the emergency services focus on their core responsibility of dispatch and management of emergency assistance, thus helping to secure the fastest response. These include:
 - Identification and handling of mis-dialled and erroneous calls;
 - Calling alternative EAs in the event that the primary EA cannot be reached for whatever reason;
 - Listening to the connected call to ensure that two-way communication between the caller and the EA has been established and providing further assistance to the caller or EA when required (e.g. playback of calls to the EA if requested);
 - Endeavouring to ascertain the precise location of the end-user as a result of speaking with that individual and/or from information provided by the network, and providing this information to the emergency services.
- 2.5 The forwarding of calls to the emergency services is not straightforward for a number of reasons. Firstly, EAs in the UK (i.e. fire, police, ambulance and coast guard) generally have their own dispatch and control centres distributed around the country in order to provide targeted response in a given area.

⁶ See footnote 4.

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⁷ The current version of the General Conditions can be found at: http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/general-conditions/.

- 2.6 Additionally, due to the critical nature of the activity, the successful provision and operation of an emergency call handling facility requires capabilities not normally found in typical call centres and/or at substantially higher specification. For example:
 - Staff have specialised training to handle emergency calls from citizens;
 - Systems and networks are designed to offer enhanced functionality and reliability;
 - Processes and procedures are more strictly applied to avoid call loss or mishandling. This is particularly important when call volumes place significant demands on the end-to-end process.
- 2.7 The CHA function forms one part of the chain in linking the CP, on whose network the call originates, to the relevant EA. In order for the end-to-end provision of assistance to be as efficient and prompt as possible, all aspects of the chain need to function at extremely high levels of performance, as poor performance in one aspect can have detrimental consequences for the end-to-end service.
- 2.8 During normal operations, emergency calls from citizens take only a few seconds to be answered by the CHA operator⁸. Similarly, calls forwarded to the EAs are normally answered within a few seconds. However, delays can be experienced by callers as a result of a malfunction in one of the parties involved, or when call volumes exceed the capacity of either or both of the CHAs and EAs to handle them promptly.
- 2.9 For example, during the August 2011 riots, an unprecedented number of calls to the emergency services resulted in a number of abandoned calls⁹ as the volume of calls exceeded the capacity of the CHAs and EAs to address them. While such events are rare, understanding how the relevant parties respond to such events can help in identifying where service improvements can be made.
- 2.10 In the event of significant service degradation, whereby calls by citizens to emergency services are significantly delayed, Ofcom would normally seek to establish the causes and consequences of such events. It is most likely that we would consider a CP's compliance with GC 4, where we might inquire as to the steps taken by a CP, including in ensuring that its agent the CHA was operating to the required standard.
- 2.11 GC 4 does not explicitly refer to the function of the CHA, nor specify associated performance criteria for that entity. We believe that setting out guidelines as to how a CP may satisfy itself that its CHA is performing to an appropriate standard may offer all CPs greater transparency generally.
- 2.12 Guidance regarding CHA processes and procedures can already be found in the relevant industry "Code of Practice for the Public Emergency Call Service between

⁸ Typical monthly average performance ranges between 97% and 99% of calls being answered within five seconds. The equates to around 2,000 calls per day waiting longer than 5 seconds, with well over 1,500 of these usually being answered by 20 seconds. BT reports an internal target of 97% answered within five seconds.

http://www.btplc.com/Responsiblebusiness/Ourstory/Sustainabilityreport/report/stories/999.aspx

9 An abandoned call is one in which the caller hangs-up before it is answered by an operator. See http://www.standard.co.uk/news/999-callers-gave-up-waiting-for-police-to-answer-during-the-riots-6444127.html

Communications Providers and the Emergency Services" ("the PECS Code") ¹⁰, which addresses how CHAs and EAs interact with each other to achieve the best mutual performance. For example it describes how CHAs are expected to adapt to anticipated major influxes of calls (for example in the event of flooding ¹¹) and the arrangements that should be put in place accordingly ¹².

- 2.13 However, it is not the purpose of the PECS Code to stipulate the individual performance targets of the organisations involved in emergency calling or to provide guidance regarding compliance with statutory obligations¹³.
- 2.14 As a result of considering the current regulatory framework, existing industry practices and previous reviews of CHA performance, we believe that CPs and CHAs would benefit from the publication of general guidelines as to performance targets CPs might seek to achieve when engaging a CHA to act on their behalf. The aim of such guidelines is to more easily enable CPs to ascertain whether or not their CHA is delivering an appropriate level of performance and would complement, rather than replace, the PECS Code¹⁴.
- 2.15 This Consultation sets out our proposals for introducing specific guidelines as to the role of the CHA and the performance standards that may be generally expected in order to ensure the proper functioning of the emergency call system. These will be non-statutory guidelines. Ofcom does, however, expect that CPs will have regard to them when ensuring that they comply with their obligations under GC 4. They might, for example, decide to reflect the guidelines in their contractual arrangements with their respective CHA. Even though the CHA may be acting as the CP's agent, the CP itself remains ultimately responsible for ensuring that it meets its regulatory obligations.
- 2.16 Similarly, Ofcom does not intend to suggest onerous new procedural requirements for CPs, but rather to codify "best practice" which already exists within the CHA industry. We have met with each of the three CHAs to canvass their views on the performance targets that should be reflected in the guidelines. Accordingly, we believe that the proposals set out in this Consultation largely reflect the standards and behaviours to which CHAs already aspire and adhere.

¹² The PECS Code is administered by the 999/112 Liaison Committee, a cross-industry body consisting of members of EAs, CHAs, relevant government departments and Ofcom. The committee has the responsibility to make amendments to the PECS Code as a result of changes in best practice, technology or procedures.

A non-confidential version of the PECS code may be found here: http://stakeholders.ofcom.org.uk/binaries/foi/2011/november/1-190154366-attachment.pdf. This was published in 2011 in response to a request under the Freedom of Information Act 2000.
 PECS Code of Practice, Section 12.4.2.

¹³ While the PECS Code (Section 2.2.2) does include a specific performance target for CHAs with respect to emergency calls answering times (95% of calls should be answered within five seconds), we do not believe that the general quality of service measures set out within this document sufficiently address the range of responsibilities and performance targets that are associated with emergency call handling.

¹⁴ In particular, our proposed guidelines do not seek to supersede the operational arrangements set out in the PECS Code as between CHAs and EAs.

Impact Assessment

- 2.17 The analysis presented in the entirety of this Consultation represents an impact assessment, as defined in section 7 of the Communications Act 2003. However, this Section summarises specific aspects of the impact assessment we have carried out. In considering how to address emergency call handling performance, we considered three general options, along with the potential benefits and consequences that may result:
 - Maintaining the current situation, introducing no new guidance and making no changes to the existing GCs;
 - Introducing new statutory obligations on CPs by amending the GCs;
 - Introducing non-statutory guidelines that complement and support existing obligations and the PECS Code, but without changing the GCs.

Option 1 - Maintaining the current situation

- 2.18 From information received directly from CHAs and through the cross-industry 999/112 Liaison Committee¹⁵ we believe that the process of emergency call handling generally works well, with the majority calls being answered and forwarded promptly to the appropriate EA. Hence for much of the time, specific intervention may not normally be necessary.
- 2.19 There is, however, currently a lack of documentation explicitly setting out the role of a CHA, along with associated responsibilities and expected levels of performance. This lack of clarity is unhelpful to CHAs seeking to comply with GC 4 and hence could result in risks arising in the future that could have otherwise been avoidable. From our discussions with CHAs, and in light of recent experience, we believe that clarity on roles, responsibilities and expected performance would be welcomed. Given the importance of the emergency call system in the overall process of emergency service dispatch and assistance, we believe it is timely to consider producing suitable documentation.
- 2.20 As we consider that CHAs and the wider industry would benefit from clarification concerning our expectations for CHA performance, we believe that maintaining the current situation would not be appropriate.

Option 2 - Introducing new statutory obligations

- 2.21 The second option is for Ofcom to rely on its powers under Communications Act 2003 to make and amend the GCs. These powers are explained further in Section 3 of this Consultation. Ofcom could, on the basis of its powers, seek to amend GC 4 so as to impose specific obligations on CHAs with respect to the answering and handling of emergency calls. Any such amendments must, however, be objectively justifiable and proportionate. Further, Ofcom must have regard to targeting its regulatory activities at cases where this is needed.
- 2.22 As stated above, the arrangements currently in place for answering and handling emergency calls do appear to operate effectively and efficiently in the majority of

¹⁵ See footnote 12.

cases. Given this, it is not clear to Ofcom that amending GC 4 would be a necessary or proportionate use of its powers, at least at this stage. Ofcom will, however, keep the position under review and may reconsider this in due course.

Option 3 - Introducing non-statutory guidelines

- 2.23 The third option is for Ofcom to publish non-statutory guidelines that would complement the PECS Code and assist CPs in meeting their existing obligations under GC 4. The guidelines would be non-binding and would not impose new obligations on CPs, but would provide clarity of our expectations concerning CHA performance including respective roles and responsibilities.
- 2.24 Such guidelines may be particularly helpful when performance levels fall below their normal standards, providing a clear benchmark against which CPs can assess the performance of the CHA, and Ofcom can assess the performance of CPs.
- 2.25 It is possible that the publication of guidelines could, in principle result in CHAs having to alter internal processes and procedures in order to meet some, or all, of the expectations set down in those guidelines. This could, in turn, result in higher operating costs for CHAs, and higher costs to their CP customers.
- 2.26 However, as highlighted above, our intention is not to introduce additional or onerous performance expectations on CPs; rather we intend to codify existing operational best practice. Therefore, if CHAs and CPs are already following "best practice" we think it unlikely that they will incur further costs should they choose to have regard to the proposed guidelines. Furthermore, from feedback received from CHAs prior to this Consultation, we do not believe that adherence to our guidelines would substantially alter their current operating model, hence any additional costs are likely to be minimal.

Conclusion on Ofcom's preferred Option

2.27 At this stage, subject to responses from stakeholders, we are of the view that non-statutory guidelines would provide CPs with clarity and transparency in relation to their "emergency call handling" obligations. At the same time, this approach acknowledges that the emergency call system generally does function well and that formal intervention (for example, amending the GCs) may not be appropriate or proportionate at this stage. Having balanced the likely impacts on CPs and CHAs in introducing such guidelines, we are currently of the view that the benefits outweigh the potential burdens. Option 3 is, accordingly, our preferred option.

Consultation structure

- 2.28 The remainder of this Consultation document is structured as follows:
 - Section 3: We discuss the current legal framework and Ofcom's duties, providing
 the basis on which we propose to publish guidelines with respect to assisting CPs
 in satisfying themselves that their CHAs are performing to an appropriate
 standard.
 - Section 4: We set out the key areas that we consider the proposed guidelines should cover, along with the overall scope of the Consultation.

- Section 5: We set out our proposed guidelines, particularly key principles (if adopted) that we are likely to take account of where investigating CPs' compliance with GC 4.
- 2.29 Stakeholders are invited to respond to specific questions, particularly regarding the principles proposed as well as general comments regarding this Consultation. Following the conclusion of this Consultation, we expect to publish a statement in the Spring of 2013.

Question 1: Do you agree that expectations regarding CHA performance could and should be published?

The current framework

Introduction

3.1 We believe that setting out guidelines with respect to emergency call handling will contribute to effective regulation by improving transparency and understanding of this important function, in accordance with our duties to citizens and consumers. In this Section, we set out the legal framework and our duties.

The European regulatory framework

- 3.2 Requirements as to emergency calling in Member States are governed principally by Article 26 of the Universal Service Directive¹⁶ (the "USD").
- 3.3 Articles 26(1) and (2) of the USD, relate to "access" requirements, requiring that Member States ensure that end-users who are provided with an electronic communications service for the purposes of making national telephone calls (including users of public pay telephones) are able to call the emergency services free of charge by using the single European emergency call number "112" and any national emergency call number specified by Member States.
- 3.4 Article 26(3) refers specifically to the "answering and handling" of emergency calls, requiring that Member States ensure that calls to the number "112" are appropriately answered and handled in the manner best suited to the national organisation of emergency systems, and that this is at least as expeditious and effective as the answering and handling of calls made using the emergency call number "999".
- 3.5 Further, Article 26(5) sets out requirements for making accurate caller location information available, requiring that Member States ensure that caller location information is made available free of charge to the EAs as soon as the call reaches the authority. This applies to calls made on both emergency call numbers: "112" and "999".
- 3.6 Article 26 of the USD has been implemented in the UK through GC 4. In particular, GCs 4.1 and 4.2 require that:
 - "4.1 The Communications Provider shall ensure that any End-User can access Emergency Organisations by using the emergency call numbers "112" and "999" at no charge and, in the case of a Pay Telephone, without having to use coins or cards.
 - 4.2 The Communications Provider shall, to the extent technically feasible, make accurate and reliable Caller Location Information available for all calls to the emergency call numbers "112" and "999", at no charge to the Emergency Organisations handling those calls, at the time the call is answered by those organisations."
- 3.7 A "Communications Provider" is defined in GC 4.4(d), as a "person who provides End-Users with an Electronic Communications Service, or provides access to such a

¹⁶ Directive 2002/22/EC of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) as amended by Directive 2009/136/EC.

service by means of a Pay Telephone, for originating calls to a number or numbers in the National Telephone Numbering Plan but shall exclude any Click to Call Service."

Ofcom's duties and the General Conditions

- 3.8 Under section 3(1) of the Communications Act 2003, Ofcom has general duties to (a) further the interests of citizens in relation to communications matters; and (b) further the interests of consumers in relevant markets, where appropriate by promoting competition. We also have duties under section 4 of the Communications Act 2003 to act in accordance with the requirements of European law. These include, amongst other things, promoting the interests of citizens of the European Union 17. We have had regard to the full range of our statutory duties in preparing the Consultation.
- 3.9 In performing our general duties under section 3(1) of the Communications Act 2003, Ofcom must have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed. Ofcom must also have regard to any other principles which appear to us to represent the best regulatory practice. The following of Ofcom's own general regulatory principles¹⁸ are particularly relevant to the proposed guidelines:
 - ensuring that our interventions are evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome;
 - seeking the least intrusive regulatory mechanisms to achieve our policy objectives;
 - consulting widely with all relevant stakeholders and assessing the impact of regulatory action before imposing regulation upon a market.
- 3.10 In order to deliver these general duties, Ofcom has powers under sections 45 49C of the Communications Act 2003 to set and amend the GCs. Ofcom may, in particular, set conditions for the purposes of protecting the interests of the end-users of public electronic communications services ¹⁹. This includes, for present purposes, the protection of citizens' interests in being able to access the EAs and receive the assistance they need in a timely manner.
- 3.11 Our proposed guidelines are contained in Section 5. These set out our general expectations with respect to CHA performance, which we are likely to take account of where we investigate CPs' compliance with GC 4. In line with our procedures for investigating and enforcing General Conditions, ²⁰ each case will, however, still need to be considered on its own merits. If we decided to depart from the guidelines, we would set out our reasons for doing so. We anticipate that the guidelines may be subject to further review and revision from time to time.

¹⁷ Section 4(5) of the Communications Act 2003.

¹⁸ http://www.ofcom.org.uk/about/sdrp/

¹⁹ Section 51(1)(a) of the Communications Act 2003.

²⁰ See Ofcom's guidelines for the handling of competition complaints and complaints concerning regulatory rules: http://stakeholders.ofcom.org.uk/binaries/consultations/draft-enforcement-guidelines/annexes/Enforcement_guidelines.pdf.

Scope

- 4.1 This Section sets out the areas where specific guidelines regarding emergency call handling performance may be helpful to CPs with obligations under GC 4. It focuses on the areas where CPs typically engage a CHA to undertake functions for them.
- 4.2 Although a number of eventualities might arise at any given time, we believe that the majority of circumstances will fall into one of three general areas. It is in these areas that we have focused the guidelines:
 - Localised events affecting the CHA directly. These include situations where
 operations at one of a CHA's sites need to stop, thus increasing the load on that
 CHA's remaining centres. The reasons for such an incident could be internal (for
 example a systems failure within the building) or external (such as a power or
 network failure to the site).
 - Wide-scale events affecting (to any degree) the CHA at multiple sites. Such
 events could arise from extreme weather conditions for example, and can be
 difficult to predict and plan for, hence effective risk assessment and recovery
 procedures become important.
 - Major incidents affecting the demand for emergency service as a whole. In such
 cases, not only would the volume of calls to the emergency services significantly
 increase, but the capacity of the emergency services to deal with incoming calls
 could be limited. The CHA should be able to adapt its call handling procedures
 accordingly in order to minimise the impact on callers.
- 4.3 We consider that two key metrics define the overall performance of the work undertaken by CHAs on behalf of their CP customers:
 - The call waiting time i.e. the length of time that callers wait for their call to be answered by a CHA operator.
 - The service availability the fraction of time that a CHA answers emergency calls presented to its network over a given period of time²¹.
- 4.4 Our guidelines also include our expectations of CPs in relation to the actions and processes adopted by CHAs when it is considered necessary to deviate from existing and documented practices. Such occasions occur infrequently, but may arise when CHAs are required to react flexibly to unforeseen circumstances.
- 4.5 The guidelines do not address the provision by CPs of accurate and reliable caller location information to the EAs. We currently expect to consult separately on this issue in 2013.

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²¹ Availability = (Uptime/Total Time), where Uptime is time that the CHA answers incoming calls and Total Time is the sum of Uptime and Downtime. (N.B. Downtime is the time that the service is unable to answer calls for any reason other than "Force Majeure"). This is similar to the definition used by ComReg in its regulation of emergency call handling services in Eire ("ECAS quality of service parameters"). http://www.comreg.ie/_fileupload/publications/ComReg1181.pdf

4.6 However, we do remind CPs that responsibility for the ownership and validation of Name and Address (NAA) information of callers remains with the CP.

Question 2: Do you agree with the scope of this Consultation as set out in Section 4?

Proposed guidelines for consultation

Introduction

5.1 This Section sets out the performance metrics and measures which Ofcom is likely to take into account when assessing a CP's compliance with GC 4.

Criteria and expectations

Overarching principle: The handling of emergency calls is of upmost importance, and we expect CPs to satisfy themselves that CHAs with whom they contract deliver services to an appropriately high standard.

- 5.2 Given the safety of life implications of emergency call handling we would expect that, where CPs engage a CHA, they satisfy themselves that all aspects of that CHA's organisation and operation are managed and performed to considerably higher standards than would be associated with conventional call centre activities.
- 5.3 In particular, these heightened levels of management and performance would apply *inter alia* to:
 - The security and robustness of constituent network and systems infrastructure;
 - Operational processes and procedures (including reviews and audits);
 - The recruitment and training of staff (including management);
 - Risk and crisis management processes and assessments;
 - Maintenance and testing activities.

Call Answering performance target – 95% within five seconds

In conjunction with these high-level principles we propose that CPs should satisfy themselves that 95% of calls made to the emergency services will be capable of being answered by their CHA within five seconds, as measured over a 24 hour (midnight-midnight) period. Calls that are abandoned by the caller within five seconds would not count in these statistics (although should be noted and recorded).

Service availability target – 99.999%

5.5 We propose that CPs should satisfy themselves that their CHA can remain operational (in that incoming calls can be answered at any level of performance) 99.999% of the time ('five nines' availability), measured on a monthly basis²². Such availability encompasses all elements of CHA function including systems, networks and personnel. This target complements the call answer time performance criterion above and represents a strict constraint on the allowable degradation of service that can occur.

²² Calculated as per footnote 21.

Automated call answering systems

5.6 Our general position is that the use of automated answer/response systems should be avoided, in preference to human call operators who can both listen to, and speak with, end-users and can provide the correct assistance to those individuals. We believe that automated responses could increase the likelihood of the caller abandoning the call prematurely or the call not being handled correctly. However, in times of extreme stress on CHA call systems, contingency measures, including the use of automated messages, may be appropriate. This is discussed in more detail below.

Organisational and operational management

- 5.7 We propose that CPs satisfy themselves that appropriate organisational structures, operational processes, networks and systems have been put in place by the CHA and that these are continually monitored and managed to ensure that they remain effective. In particular, the training undertaken by staff and management should highlight the additional responsibilities associated with emergency call handling and the behaviours that would be expected for those employed in its execution.
- 5.8 We would also expect that a CP satisfy itself that the CHA with whom it contracts organises and manages its operations to a very high standard, meeting or exceeding relevant standards for the continual improvement of business capability and efficiency. Such standards normally require that appropriate assessment of the risks is carried out regularly, with demonstrable evidence showing how such risks are identified, assessed and mitigated²³.

Examples of expectations under particular conditions

- 5.9 We outline below some potential areas of risk, which CPs may seek to mitigate in the arrangements they make with their CHAs. This list is not exhaustive as events and circumstances can vary in unforeseen ways. However, this list provides a guide as to the levels of resilience and contingency planning that we believe would be appropriate for the continued support of emergency calls.
- 5.10 As the list below is non-exhaustive, CPs should satisfy themselves that they have given reasonable consideration to other possible situations and events than those explicitly discussed here, in a manner consistent with the principles set out. Moreover, CPs should satisfy themselves that they have considered the general issue of crisis/event management with respect to their, and their CHA's, own particular operations and circumstances.

Localised events affecting the CHA directly

- 5.11 There may be occasions when activity at a particular CHA call centre site needs to stop. These include (but are not limited to):
 - Major site damage (e.g. flooding);
 - Forced evacuations (e.g. gas leak, bomb threat);
 - Power failure;

²³ For example, "Risk management. Risk assessment techniques", BS EN 31010:2010, June 2010, http://shop.bsigroup.com/en/ProductDetail/?pid=00000000030183975

- Substantial network/systems failure.
- 5.12 To minimise such events in the first place, we would expect CPs to satisfy themselves that CHAs are sufficiently resilient to withstand isolated power and/or systems failure, and that they choose sites which are less exposed to risks of major site damage such as from flooding, subsidence etc. When shutdown of a centre is deemed necessary we would expect that call handling should be transferred in a controlled manner to alternative or backup facilities, with appropriate notification to EAs.

Wide scale/National events affecting the CHA directly

- 5.13 Some incidents can affect the performance or availability of multiple CHA sites simultaneously, including:
 - Wide-scale staffing incapacity (e.g. flu pandemic);
 - Multi-location civil disturbance.
- 5.14 Wide-scale events can put additional pressures on CHA call volumes as well as possibly interfering with CHA performance (such as limiting availability of personnel). How these events arise and develop can be difficult to predict, making appropriate responses hard to pre-define in advance. However, as described in the general principles above, we would expect CPs to satisfy themselves that CHAs have contingency and crisis management plans in place, including arrangements for modifying call priorities under such circumstances, and for these plans to be agreed with the relevant EAs.

Major incidents affecting the emergency service as a whole

- 5.15 Major incidents, whether localised or more widespread, can put pressure on the emergency services and cause degradation in performance, for example:
 - Widespread adverse weather conditions such as flooding or snow;
 - Terrorist attack.
- 5.16 In such circumstances, the volume of calls to the services can increase significantly. This can stretch the resources of EAs, the CHAs, or both, leading to extended answering times and/or abandoned calls, with potentially serious consequences for callers. Typically, the call answering time of the EAs is the first to suffer, as a particular service (the fire service in a flooded region for example) becomes stretched. This means that the CHA operators are increasingly tied up with callers who are waiting to be transferred to the congested EA and unable to answer new calls. Eventually, as the CHA's "buffer" becomes full, wait times for new callers will increase and as the system operates nationally, this will affect callers in areas unrelated to the original incident.
- 5.17 The existing PECS Code sets out the practices and working arrangements that should be followed in such situations²⁴. These include transferring calls for a busy EA to its neighbour, putting answered calls "on hold" to free up CHA resource, rapidly increasing CHA staffing levels and filtering duplicate calls. We understand that CHAs tend, as far as possible, to follow the PECS Code when adopting contingency

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²⁴ PECS Code of Practice, Section 9.

measures. However, CPs may wish to satisfy themselves that, where this is not possible, CHAs adopt their own measures (such as automated announcements), on the basis of a predetermined internal authorisation process that includes an assessment of risks, provided that:

- They are limited in duration;
- They serve to maximise the number of calls pertaining to unique events/situations to be forwarded to the emergency services;
- The number and line identifiers of calls abandoned during the incident are recorded;
- The EAs are notified at the earliest opportunity and have the opportunity to suggest changes to the arrangements.
- 5.18 In times of exceptional load on the emergency services, CPs may wish to suggest to their CHA that arrangements be put in place for working with other CHAs in sharing relevant information such as any agreed changes to working practices with EAs in order to maximise the effectiveness of the CHA function as a whole.

Reporting and documentation

- 5.19 To assist in our ongoing monitoring of call handling performance, and help identify whether our guidelines remain appropriate and effective²⁵, it would be useful if CHAs were prepared to provide the following information to us every three months:
 - Date & Time period (15min intervals);
 - Number of calls received;
 - Number of calls answered within 5 seconds (absolute and percentage);
 - The average call handling time.
- 5.20 At this stage, notwithstanding any formal powers that Ofcom may have to obtain information under the Communications Act 2003²⁶, we would be seeking such information on a voluntary basis in a similar way that CHAs currently make information available to the 999 Liaison Committee. We would welcome CHAs' views on this proposal.
- 5.21 Notwithstanding the voluntary provision of regular call statistics above, we remind CPs that under our existing network incident reporting framework²⁷ we expect to be notified of outages affecting the ability of citizens to contact the emergency services (including the activation of backup capabilities), subject to the terms of that framework. Service outage information provided under the network incident reporting framework could be used to establish whether the service availability expectations set out above have been achieved.

http://stakeholders.ofcom.org.uk/binaries/telecoms/policy/security-resilience/guidance.pdf

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²⁵ For example, whether the daily target is leading to unexpected/undesirable behaviours/outcomes (e.g. unacceptable performance at certain times of the day being regularly and unduly negated by very good performance during 'quiet' times later in the day).

For example, under section 135(3)(c) for the purposes of ascertaining whether or not a General Condition continues to be effective.

Auditing and review

5.22 In addition, we would expect that, as part of the contractual agreement between the CHA and the CP, the CP satisfy itself that regular audits and reviews of processes, networks and systems are carried out.

Question 3: Do you agree with the guidelines as set out in Section 5? Are there any other performance standards or metrics that you think should be added?

Next steps

6.1 Following the responses to this Consultation we intend to publish a statement in the Spring of 2013 setting out our guidelines with respect to emergency call handling agent performance.

Annex 1

Responding to this Consultation

How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 20**th **February 2013**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at http://stakeholders.ofcom.org.uk/consultations/emergency-call-handling/, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses particularly those with supporting charts, tables or other data please email CHA_Performance@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.

Tim Gilfedder Floor 3, Strategy, Chief Economics and Technology Group, Riverside House 2A Southwark Bridge Road London SE1 9HA

Fax: 020 7981 3333

- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

A1.7 If you want to discuss the issues and questions raised in this Consultation, or need advice on the appropriate form of response, please contact Tim Gilfedder on 020 7981 3550.

Confidentiality

A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your

- response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.
- A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at http://www.ofcom.org.uk/about/accoun/disclaimer/

Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a statement in the Spring 2013.
- A1.12 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

- A1.13 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.14 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk. We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Graham Howell, Secretary to the Corporation, who is Ofcom's consultation champion:
- A1.16 Graham Howell
 Ofcom
 Riverside House
 2a Southwark Bridge Road
 London SE1 9HA

Tel: 020 7981 3601

Email Graham. Howell@ofcom.org.uk

Annex 2

Ofcom's consultation principles

A2.1 Of com has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

- A2.3 We will be clear about who we are consulting, why, on what questions and for how long.
- A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.
- A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.
- A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.
- A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at www.ofcom.org.uk/consult/.
- A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

| BASIC DETAILS | | | | |
|---|--|--|--|--|
| Consultation title: | | | | |
| To (Ofcom contact): | | | | |
| Name of respondent: | | | | |
| Representing (self or organisation/s): | | | | |
| Address (if not received by email): | | | | |
| CONFIDENTIALITY | | | | |
| Please tick below what part of your response you consider is confidential, giving your reasons why | | | | |
| Nothing Name/contact details/job title | | | | |
| Whole response Organisation | | | | |
| Part of the response | | | | |
| If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)? | | | | |
| DECLARATION | | | | |
| I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments. | | | | |
| Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here. | | | | |
| Name Signed (if hard copy) | | | | |

Annex 4

Consultation questions

A4.1 This section presents the specific questions that Ofcom seeks responses to in relation to this issue.

Question 1: Do you agree that guidance regarding the performance of emergency call handling agents is necessary?

Question 2: Do you agree with the scope of this Consultation as set out in Section 4?

Question 3: Do you agree with the guidelines as set out in Section 5? Are there any other performance standards or metrics that you think should be added?

Annex 5

Glossary

| Term | Definition | | |
|--------------|---|--|--|
| Availability | Availability = (Uptime/Total Time), where Uptime is the time that the CHA answers incoming calls and Total Time is the sum of Uptime and Downtime | | |
| ВТ | British Telecommunications plc | | |
| CHA | Call Handling Agent | | |
| СР | Communications Provider | | |
| C&WW | Cable and Wireless Worldwide plc | | |
| EA | Emergency Authority | | |
| GC | General Condition | | |
| Level 3 | Level 3 Communications Limited | | |
| PECS | Code of Practice for the Public Emergency Call Service between Communications Providers and the Emergency Services | | |
| USD | Universal Service Directive | | |

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