

# Case T-060

# Guidance on the provision of a public emergency call service

# Proposals for consultation

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# 1 Overview

Being able to contact the Emergency Services (**ES**) by dialling either 999 or 112 is critical for the safety and security of Islanders and visitors. The availability and reliability of this Public Emergency Call Service (**PECS**) is of paramount importance to the Jersey Competition Regulatory Authority (the **Authority**), which has responsibility for licensing telecoms operators required to provide the service.

Following several incidents leading to PECS loss, the Authority investigated causes and determined actions needed to minimise future reoccurrences. A resulting formal direction<sup>1</sup> issued on the matter included a commitment to provide licensed operators with guidance on the provision of a PECS (the **Guidance**).

The purpose of the Guidance is providing important supplemental information for licensed operators clarifying how they should go about meeting their licence obligations. The expectations included within the Guidance may also be taken into account by the Authority when investigating and evaluating the cause and impact of any future PECS incidents.

This document contains the proposed Guidance for public consultation prior to issuing. It is structured as follows:

- Consultation introduction and context
- Annex A: Proposed Guidance

It further contains two broad questions for consideration, with responses welcome from interested parties. In summary, these questions are:

Question 1: Do you have any comments on proposals to issue Guidance on the provision of a Public Emergency Call Service?

Question 2: Do you have any comments on the proposed Guidance on the provision of a Public Emergency Call Service as set out in this document?

Responses to these questions will be considered and may be taken into account by the Authority when issuing a final Guidance version after this consultation, which is open until 7 February 2022. Section 7 contains details on how to respond.

<sup>&</sup>lt;sup>1</sup> Emergency call service outages in Jersey during early 2020: a decision to give a Direction to each of JT (Jersey) Limited and Sure (Jersey) Limited, Issue date: 19 November 2020, JCRA Document No: JCRA 20/27

# 2 Consultation introduction and context

- 2.1 This section provides detail and background on Jersey's PECS and reasons for introducing the proposed Guidance and its scope. Its contents are:
  - The importance of ES calls
  - Telecoms operator licence requirements
  - Recent service failures
  - Jersey's emergency call service
  - Scope of Guidance

## The importance of ES calls

- 2.2 Being able to communicate with the ES through an dedicated telephone number is a firmlyestablished principle. By calling a single short code number, typically 999 or 112, people seeking help in an emergency situation can swiftly contact police, ambulance, fire or marine rescue.
- 2.3 Given the potentially life-threatening consequences associated with ES calls, the availability and reliability of the Island's PECS is of paramount importance to the Authority, which believes Islanders should expect access to a service comparable to those available in other relevant jurisdictions.
- 2.4 A key concern in other relevant jurisdictions is ensuring continuous availability of the PECS. The EU, for example, requires that 'Member States shall ensure that providers of voice communications services take all necessary measures to ensure uninterrupted access to emergency services...'<sup>2</sup>. In the UK, communications regulator Ofcom has established clear obligations on licensed telecoms operators through its General Conditions of Entitlement and, specifically General Condition A3.2, which includes a requirement to '... ensure that any end-user can access the emergency organisations using the emergency call numbers 112 and 999.'<sup>3</sup>
- 2.5 Licences issued to certain telecoms operators in Jersey contain an obligation to provide a PECS. To ensure the requirements associated with this obligation are fully understood, the Authority is proposing to issue Guidance providing licensed operators with important supplemental information covering areas including network and system resilience, interconnection and outsourcing, and periodic and incident reporting.

<sup>&</sup>lt;sup>2</sup> In particular, Article 109 of the European Electronic Communications Code ("EECC") available at <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L1972&from=EN</u> - specifically EECC, Art 109
<sup>3</sup> https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/general-conditions-of-entitlement

2.6 The proposed Guidance may also be taken into account should the Authority need to investigate and evaluate the cause and impact of any PECS incidents and during any subsequent licence condition enforcement actions.

## Licence requirements

- 2.7 The obligation for Class II and Class III licensed operators to provide a PECS is contained in Licence Conditions 14.1 and 14.2, which require that:
  - 14.1 The Licensee shall provide a public emergency call service, being a Telecommunications Service that enables a User at any time and without incurring any charge or using any coin or token, to communicate with the police, the ambulance or fire services or the marine search and rescue services and to notify them of an emergency by using Customer Premise Equipment lawfully connected to the Licensed Network at any place in the Bailiwick of Jersey.
  - 14.2 The Licensee shall ensure that codes 112 and 999 and other codes which may be designated as emergency access codes are exclusively reserved for calls to emergency services.
- 2.8 The licence conditions require operators to provide an 'end-to-end' PECS, with responsibility for ensuring its users are able to communicate with the relevant ES and to notify them of an emergency.<sup>4</sup> This responsibility remains even if the licensed operators chooses to outsource elements of its PECS to third parties.
- 2.9 The requirement for Class III licensed operators to provide emergency call services available to other licensed operators is contained in Licence Condition 14.3. This supports expectations setout within this Guidance for the provision of an emergency Call Handling Agent (CHA) function. This requirement is set out in License Condition 14, which states:
  - 14.3 The Licensee shall make such emergency call services available, at reasonable cost, to other Licensed Operators within the Bailiwick of Jersey.
- 2.10 While all licensed operators are obliged to provide an CHA function, and each can choose to operate its own, JT (Jersey) Limited (JT) has historically provided and presently provides the only CHA in Jersey, which other licensed operators use through commercial agreement. For clarity,

<sup>&</sup>lt;sup>4</sup> This end-to-end responsibility was confirmed in a direction issued by the Authority on 19 November 2020 -Emergency call service outages in Jersey during early 2020: a decision to give a Direction to each of JT (Jersey) Limited and Sure (Jersey) Limited, JCRA Document No: JCRA 20/27

this consultation does not presume this arrangement is the only option, with the guidance relating to the CHA function generically applicable to any provision by any licensed operator.

#### **Recent service failures**

- 2.11 During 2020, and then again, the Jersey PECS failed on several occasions, at times leaving users unable to access the ES for a prolonged period. While it is fortunate that no loss of life or other serious incident occurred during the outages, both the Authority and Justice and Home Affairs (JHA), the Government of Jersey department responsible for providing ES in the Island, launched investigations into their cause and to identify potential changes required to prevent reoccurrence.
- **2.12** The Authority's investigation led to a direction<sup>5</sup> being issued that proposed establishing key performance indicators (KPIs) in relation to all licensed operators that they:
  - (a) Maintain network availability such that in any given calendar month the service will be available at least 99.999% of the time.
  - (b) Provide, or secure, CHA services such that in any 24-hour period, 99% of incoming calls wait less than five seconds before being answered.
- 2.13 The direction further established common PECS requirements for all licensed operators, with expectations being that they:
  - (a) Put in place procedures and business practices that are commensurate with the critical nature of emergency call handling.
  - (b) Conduct appropriate risk and business continuity assessments that consider how best to maintain continuity of service during significant unexpected events which place substantial pressure on call handling activities.
  - (c) Collect and make available reports on call volume and waiting time data to the Authority on a monthly basis.
  - (d) Consistent with existing licence conditions, report immediately any outage or interruption of the emergency call service to the Authority and the appropriate emergency service.
- 2.14 In connection with the direction, the Authority committed to issuing guidance to all licenced operators setting out the Authority's view as to the minimum standards that the Authority will take into account in considering future contraventions of Licence Condition 14.

<sup>&</sup>lt;sup>5</sup> Emergency call service outages in Jersey during early 2020: a decision to give a Direction to each of JT (Jersey) Limited and Sure (Jersey) Limited, Issue date: 19 November 2020, JCRA Document No: JCRA 20/27

## Jersey's Emergency Call Service

- 2.15 The Authority recognises that successfully providing a PECS in Jersey relies on several separate but interrelated elements and activities being undertaken by different organisations, including call initiation and transmission, call answering and establishing caller location, call handover to the ES and potential dispatch of police, ambulance, fire or marine rescue resources.
- 2.16 The proposed Guidance does not intend encompassing all elements and activities associated with the PECS, but focus on those most closely associated with ensuring successful emergency service call initiation, transmission, receipt and answering by the CHA.
- 2.17 Requirements or recommendations on other aspects of the service may be issued as a code of practice or similar by JHA. The Authority has worked closely with JHA in developing the proposed Guidance, incorporating elements to support the mutual aim of both organisations which is ensuring Islanders have access to a PECS comparable with those available in other relevant jurisdictions.

#### Scope of proposed guidance

- 2.18 As explained in 2.7 above, Class II and Class III licensed operators have an obligation to provide a PECS. The purpose of the proposed Guidance (set out in Annex A of this document) is providing them with important supplemental information to ensure the requirements associated with this obligation are fully understood. The Guidance may also be taken into account should the Authority need to investigate and evaluate the cause and impact of any PECS incidents and during any subsequent licence condition enforcement actions.
- 2.19 To fully meet this purpose, the scope of the proposed Guidance includes:
  - (a) Access network resilience: sets general expectations on providing users with assured PECS access through focus on ensuring all network and systems carrying emergency calls are designed, built and maintained to the highest reasonable standard.
  - (b) **VoIP considerations**: draws attention to potential PECS limitations when provided using a voice over IP (VoIP) service.
  - (c) CHA function: sets specific KPIs relating to function availability and performance in view of vital nature of this service element, while also establishing acceptance that understandable specific circumstances may limit the providing operator's ability to achieve.
  - (d) Service management and development: provided to emphasise the expectation that licensed operators have strong internal focus on providing the PECS and clear responsibilities exist for service management and development.

- (e) Service reporting: underlines the expectation that licensed operators should monitor and record PECS performance, and be able to produce reports for use by the Authority if requested.
- (f) **Service incidents**: establishes clear expectations on the need to report PECS service affecting incidents and the information required by the Authority.
- 2.20 As explained in 2.17 above, the proposed Guidance will align with any code of conduct or similar issued by JHA. As a result, within the scope is emphasis on licensed operators cooperating with JHA on the delivery and development of an effective PECS in Jersey.

Question 1: Do you have any comments on proposals to issue Guidance on the provision of a Public Emergency Call Service?

Question 2: Do you have any comments on the proposed Guidance on the provision of a Public Emergency Call Service as set out in this document?

# 3 Next steps

3.1 The Authority invites written views and comments on the issues and questions raised in this document. All responses to this Call for Information should be submitted in writing, clearly marked 'T-060 999 Guidance Development', and received by the Authority before 5.00 pm on 7 February 2022. Submissions can be sent by email to info@jcra.je or alternatively in writing to:

Jersey Competition and Regulatory Authority 2nd Floor Salisbury House 1-9 Union Street St Helier Jersey JE2 3RF

- **3.2** It would be helpful if any response includes direct answers to the questions asked in this document. It would also help if you can explain why you hold your views and how the Authority's proposals would impact on you, supported by any quantitative or qualitative evidence that you hold.
- **3.3** In accordance with Authority policy, non-confidential responses to the consultation may be made available on its website (www.jcra.je). Any material that is confidential should be put in a separate annex and clearly marked as such.
- 3.4 Once this Consultation has closed, the Authority will review responses which may be taken into account within a final version of the Guidance. The intention is publishing this shortly after the consultation period conclusion.

# Annex A: Proposed Guidance

This section contains the proposed Guidance.

# 4 Introduction

- 4.1 The ability to dial a short single number to call the police, ambulance, fire service or marine rescue (jointly the Emergency Services or ES) is key for the safety and security of Jersey's citizens and visitors. Given this, the performance and security of a Public Emergency Call Service (PECS) is critically important to the Authority.
- 4.2 The Class II and Class III licences issued by the Authority to certain local telecoms operators require them to provide a PECS that enables users to communicate with the ES by calling 112 or 999. This obligation is met by licensed operators providing an end-to-end PECS that allows members of the public to call 112 or 999 and be promptly connected to the ES.<sup>6</sup>
- 4.3 Class III licence holders are further required to make emergency call services available to other licensed operators, with an ability to charge reasonable fees. This obligation is met through the provision of an Emergency Call Handling Agent (CHA) function, which promptly answers 112 or 999 calls and routes them to the appropriate ES<sup>7</sup>.
- 4.4 This Guidance sets out the Authority's expectations on how Class II and Class III licensed operators should approach compliance with these PECS-related licence conditions. It may be taken into account in enforcement actions against licensed operators on other binding requirements including the obligation to provide a PECS and CHA.
- 4.5 We recognise that providing an effective PECS requires the active involvement of several parties, including Justice and Home Affairs (JHA), the Government of Jersey department responsible for providing ES in the Island<sup>8</sup>, which may produce codes of practice or similar addressing emergency call answering and handling standards or the provision of certain emergency call service features.

# 5 Legal context, scope and enforcement

# Legal context

5.1 The requirement for Class II and Class III licensed operators to provide a PECS is contained in Licence Conditions 14.1 and 14.2, which require the provision of a free of charge service to users allowing them to communicate with the ES by using codes 112 and 999.

<sup>&</sup>lt;sup>6</sup> Obligation confirmed by a Direction to JT (Jersey) Limited and Sure (Jersey) Limited in November 2020 within JCRA Document No: JCRA 20/27.

<sup>7</sup> Ibid

<sup>&</sup>lt;sup>8</sup> Or its successors.

- **5.2** The requirement for Class III licensed operators to provide emergency call services available to other licensed operators is contained in Licence Condition 14.3. This supports expectations setout within this Guidance for the provision of a CHA function.
- **5.3** The requirement for Class II and Class III licensed operators to provide the Authority with information, including reports, is contained in Licence Condition 4, which supports expectations set-out within this Guidance for PECS performance and incident reporting.
- 5.4 The requirement for Class II and Class III licensed operators to take all reasonable steps to ensure network integrity is contained in Licence Condition 9, which supports expectations set out within this Guidance to ensure PECS resilience and reliability<sup>9</sup>.

# Scope

- 5.5 This Guidance applies to all Class II and Class III licence holders obliged to provide a PECS service.
- 5.6 Its focus is on underlying resilience and reliability of networks and systems used to convey calls to the ES, and the effectiveness of any associated processes and people. When providing a PECS, licensed operators should also take into account any codes of practice or similar issued by JHA which may relate to emergency call answering and handling standards or the provision of certain emergency call service features.
- **5.7** We may need to make changes to this Guidance from time-to-time and will consult on these changes in the usual way as and when appropriate.

# Enforcement

5.8 Although this Guidance is not legally binding, we may take it into account in enforcement action against other binding requirements, including licence conditions.

# 6 Guidance for licensed operators providing a public emergency call service

- 6.1 This section sets out the principles for licensed operators providing a PECS on how it should be provided to meet the requirements of their licence conditions. Its contents are:
  - Overarching principles
  - Access network resilience
  - VoIP considerations
  - CHA function

<sup>&</sup>lt;sup>9</sup> Licence Condition 9.1 states that 'The Licensee shall take all reasonable steps to ensure the integrity of the Network...'

- Service management and development
- Service reporting
- Incident reporting

# **Overarching principles**

- **6.2** Given the potentially life-threatening or personal security-related consequences involved, Islanders and visitors should have access to a reliable and high-standard PECS comparable to that available in other relevant jurisdictions<sup>10</sup>.
- 6.3 While the end-to-end process of providing a complete local emergency service relies on several separate and distinct activities that may be undertaken by different organisations, licensed operators should recognise they have a pivotal role in achieving the reliability and high-standard expected and should focus every reasonable effort towards designing, developing, maintaining and managing the networks, systems, people and processes needed to connect users with the ES.
- 6.4 Licensed operators should further monitor network and service elements used to convey emergency calls and be able to report on reliability and detect loss of service incidents, which should be reported to the Authority and may be investigated.
- 6.5 Additional to this Guidance, licensed operators should be aware of and aim to comply with any requests, instructions, code of practice or similar issued by JHA in connection with providing a local PECS to the expected standard.

## Access network resilience

- 6.6 Licensed operators should ensure their networks and services are generally reliable and resilient with extra attention given to network and service elements use to convey calls to the ES.
- 6.7 Given the critical nature of ES calls, licensed operators should take enhanced measures to ensure uninterrupted access through effective design, building and maintaining of any element associated with ES calls. These include but are not limited to network infrastructure, systems, buildings, power, processes and people. We recognise that various industry standards exist to establish best practice in some of these areas and commitment to and compliance with such standards is always to be encouraged <sup>11</sup>.
- 6.8 Particular attention should be taken to avoid single points of failure associated with any elements carrying ES calls where it is reasonably possible to do so. Concessions to this may be

<sup>&</sup>lt;sup>10</sup> While not required to apply national or international best practice standards, we refer to guidance provided by UK communications regulator Ofcom or contained within the European Electronic Communications Code or its successors.

<sup>&</sup>lt;sup>11</sup> Commitment to relevant ISO standards or equivalent for example.

where geographical or physical constraints exist or where doing so may be disproportionately expensive.

6.9 Licensed operators may decide to outsource to third parties some or all of their elements associated with ES calls. In this case, sufficient levels of contractual control over third parties should be in place to ensure continued compliance with licence condition obligations and the expectations set-out in this Guidance.

#### **VoIP considerations**

- 6.10 Licensed operators providing services over broadband connections using Voice over IP (VoIP) technology should take into account the impact of power cuts on a user's ability to make ES calls.
- 6.11 Attention is also drawn to ensuring ES calls made using any VoIP service in Jersey are correctly routed to Jersey's ES.

## JHA function

- 6.12 We would expect licensed operators providing a CHA function to establish appropriately enhanced organisational structures, operational processes, networks and systems and that these are continually monitored and managed to ensure that they remain effective. There should also be close liaison and understanding with JHA to ensure staff and management associated with the CHA are meeting expressed responsibilities.
- 6.13 Given the safety of life implications associated with emergency calls, we expect licensed operators providing an CHA function to achieve the following KPIs:
  - Service availability: the CHA function should be designed and managed to 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 basis<sup>12</sup>. Such availability encompasses all elements of the CHA function including systems, networks and personnel. This target complements the call answer time performance criterion below, where we would expect a strict constraint on the allowable degradation of service that can occur.
  - Service performance: in conjunction with the service availability expectations stated above we would expect that 95% of calls made to 999 or 112 that are received into CHA call queues will be answered within 5 seconds, as measured over a 24-hour period (midnight to midnight). Any calls abandoned by the caller without answer within 5 seconds need not be included though should be noted.

<sup>&</sup>lt;sup>12</sup> Availability = (Uptime/Total Time), where Uptime is time during which the CHA is able to answer incoming calls and Total Time is the sum of the Uptime and Downtime.

- 6.14 We accept there may be occasions when achieving these KPIs is not possible due to exceptional circumstances, including but not limited to:
  - Major site loss or damage;
  - Unavoidable unscheduled staff evacuations;
  - Wide-scale staffing challenges caused by unpredictable Island-wide issues;
  - Severely disrupting weather events; and
  - Unforeseen major local incident.
- 6.15 Notwithstanding this, we expect licensed operators to take all reasonable steps to avoid or minimise the risk of exceptional circumstances affecting their ability to provide the EOS function and have arrangements in place to rapidly restore services should they occur.
- 6.16 Given the complexities involved in providing an CHA function we recognise that licensed operators may choose to contract another licensed operator or competent agency to provide this service on their behalf. In this case, we remind the originating licensed operator that they remain responsible for ensuring reliable and resilient interconnect arrangements are in place to provide for assured emergency calls continuity and, as part of the arrangements, are able to satisfy themselves that the CHA function is being performed according to the expectations set out in this Guidance.
- 6.17 Given the critical nature of the service, however, in the event a licensed operator chooses to outsource their CHA function responsibilities to another licensed operator or competent agency, they should only do so to one evaluated and approved by JHA.

#### Service management and development

- 6.18 To ensure appropriate focus on the quality and provision of a PECS service, licensed operators should designate a single point of responsibility within their organisation for ensuring effective service management and development and to be ultimately accountable for them within the organisation.
- 6.19 We would expect licensed operators to ensure their emergency calls handling systems are developed to include best practice functionality comparable with that found in other relevant jurisdictions and to cooperate, where it is reasonably possible to do so, with requests from JHA for service and feature development. In particular, the technical functionality used to ascertain and provide accurate and reliable caller location information.

#### Service reporting

6.20 For assurance, licensed operators should monitor and record data on ES calls they convey and the reliability and resilience of all associated network and service elements.

- 6.21 Licensed operators providing an CHA function, whether directly or through an outsourced arrangement, should be able to demonstrate the effective operation of their service and successful interoperability with JHA. We may request periodic reports to evaluate this, to ideally include:
  - Service availability against KPI expectations;
  - Number of calls received (within a period e.g. day, week, month);
  - Call answering times against KPI expectations; and
  - Average call handling times.

## Service incidents

- 6.22 We consider any loss of ES calls to be urgent in nature and therefore service failure incidents should be reported to the Authority as soon as possible and ideally within 24 hours of a licensed operator becoming aware of them.
- 6.23 We would expect licensed operators to use the following criteria when determining which incidents to report:

Network / service type	Minimum number of users affected	Minimum duration of service loss or major disruption
Fixed or mobile network providing access to the emergency services	10	1 hour
Fixed or mobile network providing access to the emergency services	100	Any duration
CHA function	Any service disruption leading to a failure to achieve KPIs or being unable to pass calls to JHA.	

- 6.24 In addition to above, we would expect licensed operators should report any incident involving ES calls that may attract significant media attention.
- 6.25 Incident reports should contain the following information:
  - Licensed operator name;
  - A unique reference number for the incident;
  - Date and time of the incident;
  - Number of affected users and the nature and duration of service disruption they experienced; and

- Whether incident is resolved or ongoing.
- 6.26 We would expect licensed operators should provide the Authority with periodic updates on any ongoing incidents and a final update once resolved.
- 6.27 We would expect licensed operators to also comply with incident reporting requirements established in any requests, instructions, code of practice or similar issued by JHA in connection with providing a local PECS to the expected standard.