



111 Contact Code: Emerging Views Paper
Public Version

Commerce Commission
10 October 2019

Summary

1. Spark welcomes the opportunity to respond to the Commerce Commission's 111 Contact Code: Emerging Views Paper. We support the Commission's work to establish a clear set of minimum requirements for service providers in the 111 Contact Code (**Code**) to enhance protection of access to 111 services for vulnerable consumers. Care is needed, though, to ensure the Code reflects the purpose of the legislation and provides appropriate protections for those with a *particular* and *known* risk of requiring access to emergency services.
2. The definition of a vulnerable consumer in the Telecommunications Act (the Act) has two parts. The first is a conditions-based test - is **the** consumer at **particular** risk of requiring the 111 emergency services (eg due to a **known** medical condition). The second is a "technology susceptibility to power failure" test – does the consumer that satisfies the condition-based test have no suitable means for contacting 111 emergency services in the event of a power failure. Both parts of the test need to be met before the 111 Contact Code should apply.
3. We support the Commission's approach on the technology susceptibility test but disagree with the Commission's intention to ignore the condition-based test. The Act does not permit the Commission's preferred approach. Rather, it requires that the Code:
 - a. Implement an individual by individual condition-based test; and
 - b. Provide for a process for individuals to demonstrate that they meet this conditions-based test.
4. Finally, we expect that both network providers and RSPs should be responsible for providing battery back-up functionality for their respective in-home devices. For example, fibre network companies should be responsible for providing battery back-up for their fibre ONTs, and RSPs should be responsible for providing battery back-up for their fibre modems or home gateways.

The Definition of a Vulnerable Consumer

5. The 111 Contact Code **only** applies to vulnerable consumers. The definition of a vulnerable consumer in the Act consists of two tests: a conditions-based test and a technology-susceptibility test. Each limb of this definition should be considered separately:

vulnerable consumer means a consumer of a specified telecommunications service who—

- (a) is at particular risk of requiring the 111 emergency service (for example, due to a known medical condition); and
- (b) does not have a means for contacting the 111 emergency service that can be operated for the minimum period in the event of a power failure.

6. It is clear that the Act anticipates (and in fact requires) these customers will have specific personal characteristics that will cause them to be at particular risk of requiring the 111 emergency service, and that this particular characteristic must be identifiable. The words “(for example, due to a known medical condition)” make this clear, and preclude the Commission from treating all customers as vulnerable consumers.

Vulnerable Consumer - First Half of The Definition

7. In our view, the Commission has not taken full consideration of the first test in the definition.
8. The Commission’s view is that any customer served by an access technology that is susceptible to power failure is potentially a vulnerable consumer, and that accordingly it should take a technology-based, rather than a conditions-based approach to assessing vulnerability.
9. Unfortunately, while we understand the policy rationale posited by the Commission to explain why it prefers this approach, it is clear that the Act directs the Commission to use a conditions-based approach. The Commission’s technology-based approach is inconsistent with the clear words of the Act:

*A vulnerable consumer means a consumer of a specified telecommunications service who is at **particular** risk of **requiring** the 111 emergency services (for example, due a **known** medical condition) [emphasis added].*

10. The Act makes clear that the Commission must implement an approach which applies on an individual by individual basis (ie a customer), where the thing that sets individuals intended to be covered by the first limb of the definition apart from others is that they have a specific (**particular**) heightened risk of requiring access because of something they are aware of in advance (**known**).
11. Section 238(3)(c) reinforces this interpretation by requiring that the Code must prescribe a process (or processes) for an individual to demonstrate that they are a vulnerable consumer, or will become a vulnerable consumer. Again, this suggests an individual by individual approach based on their known current or future circumstances or conditions, rather than simply a blanket status based on the technology supplied.
12. We therefore conclude that section 238(5)¹ imposes a separate conditions-based test for whether a telecommunications consumer is vulnerable.

Vulnerable Consumer - Second Half Of The Definition

13. We agree with the Commission’s view on the second limb of the definition, which considers the technology aspects of the service the customer is buying. However, as

¹ The definitions section relevant to section 238

discussed above we read the Act as clearly requiring that an individual must first satisfy the first half of the definition of vulnerable person before this second half can be applied. In other words, the Code must only apply to an individual telecommunications customer if the customer satisfies the conditions-based test in the first half of the definition AND only has access to a telecommunications service that will not work for a minimum period in a local power outage.

Classes Of People That Must Be Considered Vulnerable Consumers

14. Under the Act, the Code may specify “a class of people that must be considered vulnerable consumers” we consider that any such class of people can be no wider than permitted by the definition of “vulnerable consumer” in the Act.
15. In other words, consumers are only vulnerable consumers if they are both at particular risk of requiring 111 services (S238 (5)(a)) AND do not have alternative means to contact emergency services for the minimum period during a power failure (S238(5)(b)). It would not be open to the Commission to, for example, specify a class of consumers who are at particular risk of requiring emergency services without making further enquiry to conclude that all (or at least the vast majority of) members of that class also do not have the requisite alternative means for contacting Emergency Services.
16. Specifying a class under S238(4)(a) seems to create a presumption that every consumer within that class is a vulnerable consumer. We therefore consider that the Commission should exercise caution if it is to exercise this power by first satisfying itself that all (or at least the vast majority) of the members of the class meet all of the requirements of the definition. We do not consider that the Commission has power to specify a class of consumer that satisfies only some of the requirements of the vulnerable consumer definition. Nor does the Commission have the power to specify a class of consumers where only a small number of the class are likely to satisfy the requirements of the definition.

Self-Certification Of Vulnerable End Users

17. Paragraph 54 of the Commission’s document argues that identifying customers in advance is a complex task. However, under the Act, the onus is on the customer to demonstrate they are a vulnerable end user. As noted above, Section 238(3)(c) says *the code must prescribe a process (or processes) for a consumer of those services, or a person on their behalf, to **demonstrate** that they are a vulnerable consumer, or will become a vulnerable consumer* [emphasis added].
18. Spark already has an existing process where our customers can register themselves as vulnerable². This allows us to meet our obligations under the TCF Disconnection Code as well as making sure we are providing the right support to customers when

² <https://www.spark.co.nz/help/accessibility/accessibility-options/>

they contact us. There is an administrative cost to Spark of collecting and maintaining this information, but this is manageable.

19. The vast majority of customers only have one landline provider with whom they need to register, and they can re-register if they change provider. We currently see no particular benefit in a central industry database.
20. Therefore, we expect the Commission's Code will need to incorporate a self-certification and validation process. This process can and should be used to confirm relevant customer information and remind customers of their obligations.
21. For example, the self-certification form could require the customer to confirm:
 - a. that the customer, or someone at their specific premise, has a medical or safety reason for why they are more likely to need 111 emergency service;
 - b. details of the vulnerable consumer's contact details and emergency contact person;
 - c. details of the general nature of the medical dependency including anything the provider may need to know (such as the customer is deaf, blind or has mobility issues which is useful information for our customer support team to know for when the customer contacts us or we send out a technician);
 - d. they agree to the RSP sharing a limited set of information with the RSP's third party suppliers, solely for the purpose of managing their vulnerable end user status
 - e. whether they have mobile coverage at the premise (if known);
 - f. whether they have a mobile phone which they can use in an emergency situation;
 - g. if they don't already have a mobile phone, whether they would have any issues using a mobile phone in an emergency (eg medical issue which impacts their dexterity);
 - h. whether they have any other means of keeping their service running in a power fail (eg some rural properties may already have a generator to manage local power outages);
 - i. if battery backup is needed, that they understand this must be installed correctly and that they will need to plug a fixed line phone directly into the phone line for it to operate during a power outage; AND
 - j. the form is signed off by a registered doctor (or police for safety issues)
22. RSPs may choose to confirm the information provided is still valid each year and should have the option to recover equipment or devices provided to a previously vulnerable consumer if it is no longer needed.

23. Under this model RSPs would have an obligation to have a process in place allowing people to self-certify. They would also need to bring the scheme to the attention of new customers and customers moving to new technologies.

Knowledge of Technologies Available to End Users

24. The Commission notes in paragraph 55 of its document that it has an expectation that network operators and service providers know what technologies are at every premise in New Zealand. This is only partially true.
25. Network Operators know what networks are *available* at different locations and this is embedded in the prequalification information RSPs make available to customers. We can be quite accurate with this for fixed networks, but wireless networks can prove more challenging due to propagation characteristics.
26. The key measure in the Commission's approach (and the second half to the vulnerable end user definition) is whether the customer actually has an alternate means for contacting 111 in the event of power failure. This is the information we do not know.
27. Unlike the fixed network where we know the location of a customer and the location of fixed network assets, mobile network coverage can only be predicted, and can in practice differ from what is predicted due to external effects such as foliage, buildings or the existence of other, interfering, transmitters. We also cannot confirm that the address we have for an on-contract mobile customer is the location where the service will primarily be used. Our visibility is even less for prepay mobile users who do not need to register their address details with us.
28. This has two important implications:
- a. No one is able to calculate the likely cost of the Commission's proposed approach, nor the impact on their customers. The data is simply not available. This will make a cost benefit analysis of policy options challenging.
 - b. If we were required to provide a back up solution based on technology, as proposed by the Commission, we would still need to ask non-copper customers to verify whether they have a mobile phone and if they have adequate mobile coverage at home. Only the customer will know what devices and options they have available at their premises.

The Challenge Of Battery Backup

29. The challenges of providing battery backup solutions to customers should not be underestimated, especially where these need to be retrofitted to existing installations. We expect this will be an issue for customers on intact fibre who will not have considered the need for batteries when choosing the location of their ONT and their RSP's modem during the original installation. Some customers may need

to relocate their ONT to create enough space for their battery backup which will need to fit between the ONT and the power outlet.

30. Battery backup will need to back up all parts of the RSP's service up to the voice handover point. For some RSPs this may include backing up both an ONT and modem.
31. In our experience batteries are not a cheap option. Beyond the capital cost of purchasing the battery there are considerable operational and life cycle costs to consider, including the e-waste implications, as well as the risk that a faulty battery may cause damage to premises and/or people.
32. Spark would be happy to talk the Commission through our recent experience offering battery backup solutions for our fixed wireless broadband product.
33. We expect many customers who are eligible for batteries would need help installing them to ensure they are plugged in correctly and protecting the right equipment. This may require a technician to visit their home. We suggest customers may be prepared to pay a small cost to take advantage of an optional installation service.

Responsibility for battery back-up of fibre ONTs

34. Where a consumer meets each of the two limbs of the vulnerable consumer definition, and is served using a fibre access service, the in-home devices that will require battery back-up (if battery back-up is the appropriate means chosen to ensure access to the 111 service for the minimum period) are:
 - a. In cases where the ATA port on the fibre ONT is used to provide the landline voice service, only the fibre ONT; and
 - b. In cases where the landline voice service is provided from the RSP's equipment (eg from an ATA port on the RGW), the fibre ONT and the RSP's modem or home gateway.
35. In each case, we expect the local fibre company, or Chorus, to be responsible for providing battery back-up for the fibre ONT. It is their equipment, it is their responsibility for delivering their service to the premises, and therefore it should be their responsibility to maintain. On the same basis, in the latter case, we expect the provider of the modem or home gateway would be responsible for providing battery back-up for it.
36. The one exception to this is where a customer (and RSP) is forced to shift to fibre due to Chorus withdrawing its copper. This is the purpose of the Copper Withdrawal Code and a reason why the 111 Contact Code needs to be in place before copper can be withdrawn. In these cases the customer is being forced off copper (which continues to operate under a local power outage) on to another technology, and Chorus should be responsible for the cost of the battery backup for the ONT and the RSP service (where required) if the customer continues with a voice line.

Obligation to Supply on Request

37. Whichever approach is taken by the Commission it needs to be recognised that some vulnerable consumers will not want the protection they are offered. This could be for any number of reasons. This is an important part of consumer choice and avoids industry having to provide solutions to consumers who don't want them or have no intention of setting them up correctly. Ultimately this will reduce cost and e-waste.
38. Therefore, the obligation should be on RSPs to let customers know the options available for vulnerable consumers, but these need not be supplied until a customer asks for them.

QUESTIONS

Question 1 – Do you agree that the three aspects we have identified should be considered out of scope of the Code

39. The 111 Contact Code is about the continued operation of voice services for those at particular risk of needing access to 111 in the event of a power outage in the home where those at-risk consumers don't have access to an alternative. This is driven by the move away from copper-based voice services which are line powered and generally continued to work in a local power outage.
40. The scope of the 111 Contact Code should reflect this, and we agree the following are outside the intended scope of the 111 Contact Code
 - a. fixed network issues and network resilience outside the home more generally
 - b. mobile network coverage and resilience
 - c. customer CPE (including the reliance on cordless phones in a home)
 - d. customers using over the top VoIP services, such as Skype, which run over their broadband and which they have sourced themselves
 - e. customers who have chosen not to take a voice landline
 - f. people who go 'off grid' or who have deliberate power outages at their home or business or are disconnected from the electricity supply due to unpaid charges
 - g. performance of the emergency call handling platform

Question 2: Are there any other areas that should be out of scope?

41. The 111 Contact Code should only apply to vulnerable end users – ie the subset of customers with a particular need to access 111, eg for a known medical reason and who don't have access to an alternative.

Question 3: Who should be considered a vulnerable consumer?

42. As the Commission notes in paragraph 49 of its document, there is a subset of consumers who, due to specific and often long-term medical conditions, are heavily dependent on the ambulance service, and are more likely to require the service compared to the rest of the population. There are other consumers who are at higher risk of needing 111 services because of other reasons, such as protection orders due to a violent partner etc.
43. In addition, it must be clear that the consumer does not have access to an alternative form of communication to contact the emergency services that will continue to operate for the minimum duration during a power failure. For example, a consumer who has a mobile phone which they use regularly, does not qualify.
44. It is only this group of customers who are more likely to need to access 111 which the Act directs the Code to protect.

Question 4: What alternative approaches to defining consumer vulnerability should we consider and how would they work?

45. The definition of Vulnerable Consumer in the Act is in two parts: a condition-based 'particular risk' test and a technology 'susceptibility to power failure' test.
46. As discussed in more detail above, the Act requires that a vulnerable person, and thus the Code, is limited to consumers who satisfy both of these tests only.
47. The Commission has provided a number of concerns about a 'condition-based' approach:

The Code would only apply to those with known vulnerabilities and not potentially vulnerable consumers:

48. This ignores the first limb of the definition which clearly states that the consumer must be at particular risk of needing access to 111. The example given in the Act is a *known* medical condition. This is quite clearly a condition-based approach which is to be used alongside the second half of the definition.
49. Under the Commission's chosen approach, the first half of the definition is redundant. It would make no sense to draft a two-part definition in the Act in a way where the second half of the definition always over rides the first half.

The condition based approach requires a greater level of self-identification:

50. The Act requires that vulnerable consumers self-identify, and that the Code provides for this, so we see it as curious that the Commission suggests this is one reason not to prefer a conditions-based approach.
51. As it happens, though, the Commission's technology-based approach also requires customers to self-identify as we will need to contact the customer to understand whether they have a mobile phone or other adequate way to access 111 in a power outage.

52. Spark already has a process for self-identification of customers under the TCF Disconnection Code process. Self-certification forms are processed by a small team and their content kept confidential. The team review the forms and, where appropriate, set a vulnerable end user flag on the customer's account so they can receive tailored support where needed.
53. The form would be signed by a registered doctor who confirms the customer is vulnerable.
54. Customers do not have to provide all their medical details, although they may choose to share details where it is relevant and useful – eg if they are deaf, blind or have mobility issues which may be relevant if a technician was to visit them or for when they contact the Spark help desk.

Ongoing maintenance of a comprehensive register of vulnerable consumers

55. We do not require an industry database, although if that exists from other industries, we could draw on this. Even if we did however, we would still need to contact the customer to ensure they have alternative means of accessing 111 in the event of a power outage (eg a mobile phone).
56. Instead of a central database, consumer can register with their existing landline provider. They will need to re-register when they change provider, but they should be able to use the same form (a template example could be provided as an appendix to the 111 Contact Code).
57. Even with the purely technical approach, it would be good practice to check data every year to ensure the customer's status has not changed.

Aligning databases with Government departments

58. This is not necessary under a self-certification scheme where the RSP manages its own customers rather than needing a central or coordinated database.

Question 5: Do you agree that consumers who have chosen not to take a landline with their service should not be deemed vulnerable?

59. Customers should take some responsibility for their own actions and customers who choose not to take a landline should be excluded from the 111 Contact Code.
60. There may be an obligation for RSPs to explain to customers taking naked services that they should consider other means to access 111 emergency services.

Question 6: Should consumers with medical or personal alarms be assessed as vulnerable?

61. Medical and personal alarms are commercial services which the customer has opted in to and may use a range of technologies. While there is likely to be an overlap between customers with medical or personal alarms and vulnerable consumers the link should not be automatic. Not all people with alarms will be vulnerable and

many alarms may already provide an alternative way of accessing the 111 service without reliance on the customer's landline voice service.

62. Instead the interpretation of who is a vulnerable end user should be no broader than is plainly intended by section 238(5), focussing solely on voice access to 111 from a landline and their particular risk of needing to call 111. Other products the end user has are immaterial to this.
63. However, alarm companies may be one way to inform consumers about their rights under the 111 Contact Code when it is introduced.

Question 7: Should consumers with a cordless (walk-about) phone be considered vulnerable?

64. See answer to question 5 above. Cordless phones have not provided uninterrupted services during a power outage for some time and arguably consumers who chose a cordless phone have long accepted the trade-off between in-home mobility and lifeline power. Such consumers are not vulnerable according to the definition. Consumers should be responsible for the consequences of their own technology choices. The role RSPs play in this case should go no further than reminding customers with cordless phones that their service may not operate in a power failure, even if they have a battery back-up.

Question 8: Which telecommunications services should the Code apply to?

65. The Code should apply to all landline service which will stop working in the event of a local power outage. Mostly this will be fibre, fixed wireless and HFC cable.

Question 9: What are your views on our approach to defining consumer vulnerability based on the susceptibility to a power failure of the technology at their premises?

66. See our comments above on the two part definition of a vulnerable consumer

Question 10: What are the potential practical issues with choosing to assess vulnerability as we have in our proposed approach?

67. An RSP will usually know what service is provided to a customer and the limitations which apply during a power fail. However, this is only one test in the two part definition.

Question 11: Who should we define as the service providers that will be required to supply vulnerable consumers with an appropriate means for contacting the 111 emergency service?

68. RSPs have the ongoing relationship with customers so are best placed to communicate with them, both in terms of providing information and receiving their self-certification forms. Where customers already have a means to access 111 in a local power failure (eg they are on copper or already have a mobile phone) then this is not a problem.

69. The obligation to provide a solution for customers who do not have a means to access 111 in a local power failure should fall on the access network.
70. Spark accepts it would be responsible for its fixed wireless network under the 111 Contact Code and we accept we would be responsible for providing battery backup to vulnerable consumers on this platform if they meet the definition in the Act.
71. We would expect any obligation to provide battery backup fall directly on access networks as these have been designed without power fail protection built in. The access networks should be responsible for costs associated with batteries for fibre ONTs and installations if these are provided at no cost to the end user.
72. Where the customer's move to a new technology is as a result of Chorus shutting off the copper network (following the Copper Withdrawal Code process), Chorus should be responsible for the cost of the battery backup of all devices, including RSP equipment and installations if they are to be provided at no cost to the end user. Customers and RSPs should not be penalised by a Chorus commercial decision.

Question 12: What are the appropriate means for vulnerable consumers, or persons on their behalf, to contact emergency services in the event of a power failure?

73. Customers should be able to use any technology available to them to access 111 in the event of a power failure. If these exist in their home already they do not need any additional protection.

Question 13: Is a mobile phone an appropriate means to contact the 111 emergency service in the event of a power failure?

74. Yes. As the Commission notes, over 75% of 111 calls are from mobile phones today. Mobile phones have built in batteries allowing them to operate in a local power failure, work inside and outside the home, and are readily accessible for most people.

Question 14: How should consumers demonstrate that they do not have access to a mobile phone?

75. Customers must certify that they do not have access to a mobile phone as part of their self-certification form.

Question 15: What happens when a consumer who has been provided with a mobile phone switches provider or technology?

76. RSPs should retain the option to charge for the phone or recover it from the consumer. The same should apply to battery backup, unless this has been provided and paid for by the fibre access network directly.

Question 16: What additional stages or questions might be required for our flow diagram to meet the purpose of the 111 Code?

77. Stage 1 of the definition needs to be included in the flow diagram as the solution should only be available to customers who are at particular risk of requiring 111 emergency access.
78. It is also worth noting that copper services (including baseband IP) will generally continue to function in the event of a local power outage. Anyone with a copper service is unlikely to need any alternative solution unless their landline is dependent on the RGW continuing to operate in a power fail.

Question 17: How appropriate is a battery backup as a method of providing the means to contact the 111 emergency service in the event of a power failure?

79. Battery backup is an appropriate solution where the existing landline technology will not operate during a power failure AND a mobile phone is unsuitable (eg because of network coverage issues or the nature of the customer's vulnerability).

Question 18: What are the practical issues and potential solutions for using battery backups to provide the means to contact the emergency service in the event of a power failure?

80. These are discussed in more detail in the main body of our submission.

Question 19: What other appropriate means, technologies or solutions for contacting the 111 emergency service in the event of a power failure should we consider (eg medical alarms, satellite phones, pagers), and what are the advantages and disadvantages of these?

81. This is for RSPs to determine. There is no need to define these in the Code as technology will evolve. The key question is whether they can access 111 emergency services in the event of a power failure.

Question 20: How should service providers identify consumers who do not have access to a mobile phone?

82. Only the customer will know if they have a mobile phone in their household which can be used to access 111 in the event of a power outage. Therefore, RSPs will need to confirm with each customer. This is the case whichever way the Commission chooses to interpret the definition of a vulnerable end user.

Question 21: Should service providers be given the ability to choose what appropriate means they provide to vulnerable consumers providing they are guaranteed to operate for the minimum period?

83. Yes. An RSP should be able to choose any solution which allows the customer to call 111 in the case of a power failure. We expect most RSPs will choose mobile as their first option where this is practical.

Question 22: Should service providers be required to offer consumers a choice of a range of options if they do not have an appropriate means to contact the 111 emergency service?

84. RSP obligations should only be to provide an appropriate solution for the end user. Usually this will be based on available technology and the RSP's preference, but it needs to be suitable for the vulnerable end user and the nature of their vulnerability. Eg if a customer can't use a mobile phone for dexterity reasons caused by a medical condition then the RSP must provide another solution (or a mobile phone which is suitable for use by this person).

Question 23: Should a central register be created for vulnerable consumers (or potentially vulnerable consumers) which also records who has received an alternative method to contact the 111 emergency service be created?

85. As discussed above, we see no compelling reason to keep a central register for vulnerable consumers. The register would be subject to constant changes as customers change plans, change fixed provider, change mobile provider, move home, change living arrangements etc.
86. Our view is this is an overcomplicated solution for day 1 but could be explored in future if the number of vulnerable consumers warrants this approach, and the time and resource to implement makes sense. We suggest the Commission should review this requirement after two years to see if there are any efficiencies possible by moving to a central register.
87. Initially each RSP can keep a list of their own customers who are vulnerable.

Question 24 What is an appropriate minimum period that a service must operate for contacting emergency services in the event of a power failure?

88. The UK has determined battery backup should operate for a minimum of 1 hour. We think this is a good benchmark.

Question 25 Should we base the minimum period on the average network infrastructure resilience in the event of power failure?

89. Network resilience is outside the scope of the 111 Contact Code so is not relevant for this discussion (assuming the network resilience is longer than the minimum period).

Question 26 Should we base the minimum period on the length of an average power outage?

90. We support an approach based on a minimum of one hour. If a consumer can clearly demonstrate they are subject to more frequent longer duration outages then this can be included as part of their self-certification form and their RSP can decide whether a more advanced battery backup is required which will provide up to four hours of backup.

Question 27 Should we base the minimum period on the length of power outages during a significant national event such as the Christchurch earthquakes?

91. There is always a balance with contingency planning between resilience and cost. It is easy, but very costly, to over engineer networks to cover as many eventualities as can be imagined. Events such as the Christchurch earthquakes are thankfully infrequent and unique, and unlikely to happen in exactly the same way each time. In events such as these people come together to check on their neighbours and share resources, such as mobile phones, to make emergency calls.

Question 28 What other methods for determining the minimum period should we consider?

92. The UK benchmark is one hour so we suggest this is an appropriate period. If a consumer can clearly demonstrate they are subject to more frequent longer duration outages then this can be included as part of their self-certification form. Their RSP can then decide whether a more advanced battery backup is required which will provide up to four hours of backup.