Submission on Draft Copper Withdrawal Code and 111 Access Code

Submitter: [redacted]

My central concern relates to the functional changes that accompany changes in telecommunications technology. This concern largely mirrors that of many submitters on the Draft 111- Access Code around the vulnerability of fibroptic services to failure of electricity supply. There should be no additional costs or responsibilities placed upon consumers in order to secure continuous and resilient access to emergency services. For this to hold, it would be necessary for the connection to fibroptic cable to include (without additional charges) battery backup (including specific maintenance and testing). Without such additions, there is no way that the fibroptic service can replace the full functionality of copper-based service and the regulatory requirements cannot be met. The suggestion that mobile telephone services can be used is not a valid solution as this in turn is likely to involve additional expense in terms of handsets and service agreements and is prone to many of the vulnerabilities of the fibroptic service in the event of electricity supply failure. I recall the situation following the Christchurch earthquakes when telecommunication services were lost immediately or in short order over mobile networks while my copper landline performed continuously and faultlessly.

While it is stated that the Commission cannot prevent the change from copper to fibre, I believe that there is a responsibility to make the downsides of this switch widely known in order that both the public and government may consider the vulnerabilities that will ensue. It is my belief that the technology switch will result in a telecommunications system that is more vulnerable than the present system and that there is a case for retention of a copper network as a backup for fibroptic. The resilience of the copper system follows from it 'low tech' nature that is less dependent upon specialised machinery for maintenance and repair and that is capable of being jury-rigged in emergency. It is also capable of operations independent of the internet platform. The convergence of so much critical infrastructure upon this single platform has made our entire society extremely vulnerable to interruption of service as a result of accident or malicious interference. For copper to provide a full redundancy, it is important that even "legacy" functions (such as pulse dialling) are retained as well as the mechanical switching at exchanges. This is not going to happen without direction from government. I submit that this breadth of considerations is required by the Commission if full and dependable functionality is to be ensured.

The consumer shift away from the copper network has not been driven by need. There has been the hardest of hard sells by telecommunications retailers offering either cable or wireless services. Chorus now has the threat of enhanced mobile services (including 5G) to contend with and thus (together with the government as a result of the latter's investment in the UFB rollout) has a

powerful commercial motivation to drive consumers toward fibre. For most purposes including internet sevices, the copper network is adequate and reliable. I have not noticed any deficiencies in my telephone or internet services apart from those that are a result of poor maintenance . There is an incentive for Chorus to neglect copper service maintenance as a 'push' factor in promoting the shift to cable. I do not think that it is the place of the Commission to abet the manipulation of consumers by telecommunication service providers but rather to be alert to such manipulation and to mitigate its effects, especially where the consequences in terms of overall system resilience are significant.