

CONSULT21



BRIEFING

21CN rural exchange isolation working - summary of responses to C21-NS-015

Issue 1: Consultation C21-NS-022

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1 Background

In BT's existing network, System X and AXE10 concentrators and UXD5 switches are able to support own-exchange calls in the event that those concentrators or switches become isolated from their parent DLE due to backhaul transmission failure.

In the 21CN design there is no local turn-round switching in the MSAN, or local call control - even in the event of isolation from the call server.

There are a number of MSAN sites in the BT network to which it has been, and remains with 21CN, uneconomic to provide full topological transmission diversity. Many of the sites that are particularly at risk are those where backhaul transmission resilience is not provided, often due to the remoteness of the location. Evidence suggests that the isolation working function (i.e. own-exchange calls) is utilised in cases of backhaul transmission failure.

Though it is not a requirement to provide isolation working, BT conducted a feasibility study to identify the isolation working options for PSTN voice calls. The scope of the feasibility was sites that are currently served by single unit Concentrators (System X or AXE10) and UXD5 exchanges that have less than 2000 customer lines connected and are served by non-resilient transmission links. Multi-concentrator sites were outside the scope of the consultation exercise and the proposed solution.

Isolation working for non-voice services is currently not provided nor is it intended to provide this in 21CN.

On 31 May 2007, BT issued a consultation document, C21-NS-015, that sought the views of CPs on whether it was appropriate to deploy an isolation working solution at vulnerable exchanges. This consultation document was presented at the NSWG on 4 June 2007. CPs sought a number of clarifications, the BT responses to which were presented at the NSWG on 3 July 2007. It was also recommended that the consultation be drawn to the attention of the LAWG and the I&PWG and presentations were made on 4 July and 10 July respectively. Given the time taken to provide the clarifications, the deadline for CP responses was extended from 29 June to mid July.

There were 5 respondents to the consultation. This document summarises their responses.

2 Summary of CP responses

The responses are summarized below against each CP and are tabulated in Table 1

CP A

- Not enough detail for a reasoned response
- Not of great importance
- Supportive from a national good perspective
- Ensure emergency calls are dealt with effectively
- Investigate better resilient solutions

CP B

- Mainly a BT design issue
- Supportive from a national good perspective
- Equivalence of service under isolation working
- Check Ofcom's view on emergency call handling

CP C

- Not enough detail for reasoned response
- Uncertain about the robustness of the solution
- Indicate which exchanges are impacted on the NIPP
- Not required and would not be prepared to pay toward the costs
- What products will benefit?

CP D

- Appreciates desirability of parity with capability of existing network
- What products would benefit and how would the costs be apportioned?

CP E

- Appreciates desirability of parity with capability of existing network
- Supportive from a national good perspective
- Investigate better resilient solutions
- Explore whether it can support 999 calls on VLC lines
- WLR and CPS only benefit - (Assumes in case of CPS, own-MSAN calls would be routed)
- No benefit to call termination, call origination to NTS/PRS, Call origination to ISD
- Indicate which exchanges are impacted on the NIPP

Table 1

CP views	CP A	CP B	CP C	CP D	CP E
Supportive from a national good perspective and acknowledge desirability of parity with capability of existing network	X	X		X	X
Not of great importance to themselves. Mainly a BT design issue	X	X			
Not required and would not be prepared to pay toward the costs			X		
Not enough detail for a reasoned response	X		X		
Need more clarity on which products would benefit and how the costs would be apportioned?			X	X	X
Need assurances that emergency calls would be dealt with effectively. Check Ofcom's view	X	X			
Require equivalence of service under isolation working. Request that BT explore what can be provided for VLC lines - in particular the support of 999 calls		X			X
Noted that WLR and CPS only benefit (assumes, in case of CPS, own-MSAN calls would be routed). No benefit to call termination, call origination to NTS/PRS, Call origination to IDA					X
Uncertain about the robustness of the solution			X		
Need assurances that better resilient solutions are investigated	X				X
Need an indication of which exchanges are impacted on the NIPP			X		X

3 Conclusions and next steps

The responses from CPs are mixed and we cannot at this stage draw clear conclusions. BT has therefore initiated further investigations to try to bring more clarity on the technical features isolation working would support, what products would benefit, and how the costs might be apportioned. It is hoped to be in a position to issue a further consultation document with a more succinct proposal in early September for presentation at the NSWG on 13 September.