

1.0 Background to our comments

1.1 This response is submitted in the hopes that it will provide detailed information on a village with very poor ADSL broadband services which could be used as a typical example of a medium sized village of just over 1000 properties on the “wrong side” of the “Digital Divide”. It is written from the perspective of individual and small business users rather than as a technical appraisal of future opportunities. Further comments are also included regarding ADSL2+ and the Guildford exchange.

1.2 Ewhurst had its own exchange but it was abandoned some years ago and all telephone services are now routed from the Cranleigh (THCN) exchange. Line distance via road estimates range from 3.61 km to 8.3 km and as a consequence broadband achieved speeds vary between 1618 kbps and 192 kbps (with thanks to <http://www.thinkbroadband.com/speedtest.html>) together with a sizeable number of properties not able to get any ADSL service at all. I.e. it is not possible to achieve even a quarter of the maximum theoretical throughput of 7,150 kbps; many residents consider that the existing ADSL service is not fit for purpose but currently have no means to improve this situation. Separate List A and List B documents are included with this submission which provide individual line performance and ADSL unavailability data.

1.3 However a request has been submitted to BT to provide FTTC solutions in the three distribution cabinets 18, 19 and 20 although no constructive response has yet been received.

1.4 It should also be noted that Be have withdrawn a ready for service date for THCN although it is doubtful if any improvement in speed would be possible in Ewhurst due to line attenuations even if an ADSL2+ service were available.

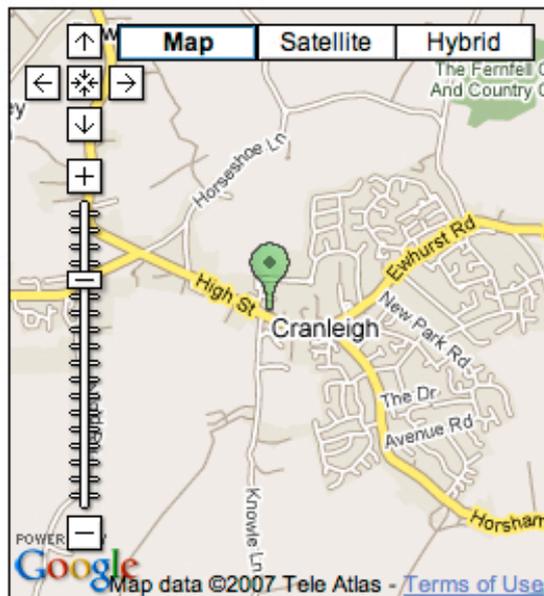
1.5 BT have announced a service date of Q1 2009 for their 21CN services at THCN but again it is doubtful if much realistic improvement would be possible for these new services in Ewhurst.

1.6 Further details of the exchange are provided below (with thanks to www.samknows.com and Prodigy Networks Ltd.) The Prodigynet data shows THCN data as of 7th May 2007.

Cranleigh (THCN)

General information	
Exchange name:	Cranleigh
Exchange code:	THCN
Location:	Surrey, South East
Postcode:	GU68AB
Maps:	Our map Multimap Streetmap
Serves (approx):	5,974 residential premises 504 non-residential premises

Broadband availability overview	
ADSL:	● Yes
SDSL:	● No
LLU services:	● No
Cable:	● No
Wireless:	● No



[View larger and more detailed map](#)

BT Wholesale information	
ADSL status:	● Enabled as of 31/05/2002
ADSL Max status:	● Enabled as of 31/03/2006
SDSL status:	● Not available
21CN PSTN switchover target:	Q1 2009

Wireless broadband availability	
LTT Broadband:	● Not available
Now Wireless:	● Not available
OnLincolnshire:	● Not available

Cable broadband availability	
Virgin Media:	● Not available
Smallworld Media:	● Not available

Who are all these providers? Why is mine not listed? [Click here](#) to find out.

Spotted an error? [Let us know!](#)

LLU operator presence		What is this?
AOL:	● Not available	
O2 / Be:	● Not available	
C&W / Bulldog:	● Not available	
CPW / TalkTalk:	● Not available	
Edge Telecom:	● Not available	
Entanet:	● Not available	
Lumison:	● Not available	
NewNet:	● Not available	
Node4:	● Not available	
Orange:	● Not available	
Pipex:	● Not available	
Sky / Easynet:	● Not available	
Smallworld:	● Not available	
Tiscall:	● Not available	
Tiscall TV:	● Not available	
WB Internet:	● Not available	
Zen Internet:	● Not available	

Exchange history		
02/02/2007	Be Unlimited is no longer reporting an enablement date for the Cranleigh exchange	
19/10/2006	BT have set a target date of Q1 2009 for the switch to 21CN for the Cranleigh exchange	
13/10/2006	Be Unlimited has set an enablement date of 31/03/2007 for the Cranleigh exchange	

BT exchange : CRANLEIGH
Real time check : Yes

Line speed capabilities

Rate adaptive (250k and 500k) : Amber
Fixed Rate (1000k and 2000k) : Red
MAX speed (upto 8000k) : Green (250 kbps)

250k and 500k ADSL is available on this line, but the line is very long which may require an engineering visit to get ADSL working. 1000k and above is not available.

Line status

This line has ADSL fully installed on it. There are no open orders currently on this line.

Current Service Provider : <Please login for this feature>

Exchange status

This exchange is fully enabled for rate adaptive (500k) ADSL, fully enabled for fixed rate (1000k and 2000k) ADSL, and fully enabled for Max ADSL (upto 8000k).

There are 4 DSLAMS in the CRANLEIGH exchange

DSLAM name	ADSL enabled	SDSL enabled	Daily port usage	Spare ADSL ports	Spare SDSL ports	Short term available ports	Long term available ports	Available bandwidth (Mbps)	In service date
CNX-ADSL-101	Yes	No	-2	0	0	0	0	40-50	Now
CNX-DSL-001	Yes	No	0	126-150	0	0	0	110-120	Now
CNX-MSAN-301	Yes	No	2	11-15	0	76-100	0	110-120	Now
CNX_MSAN_302	Yes	No	0	76-100	0	626-650	1151-1175	130-140	Now

Notes

Daily port usage - DSL port uptake per day, trended over the last 4 weeks.

Spare ADSL/SDSL ports - ports which are equiped and ready to be used

Short term available ports - indicates the amount of ports realised when line cards are added into

existing racked capacity within the DSLAM

Long term available ports - indicates the amount of ports realised if the racked capacity was to be increased to the DSLAM maximum.

Available bandwidth - indicates how much bandwidth is currently unallocated for the connection between the DSLAM and the rest of the BT network.

2.0 Comments on Ofcom's approach

2.1 Whilst the approach certainly provides some very valuable concepts it seems to have overlooked some aspects of the existing situation.

2.2 The statement that over 99% of subscribers have ADSL available seems too simplistic and possibly rather optimistic. Figures for each quartile of the speed range would be a more meaningful set of measures. This data would demonstrate the areas where ADSL2+ and 21CN are a realistic possibility and those that aren't. It is suggested that any figure below 3,500 kbps is not really fit for purpose now, let alone when NGA services reach the marketplace.

2.3 Given the unpredictable nature of NGA services, there must surely be a strong case to install FTTC equipment and ADSL2+ services in those areas otherwise disenfranchised. It follows that any TPON solution also would probably not be viable in rural situations other than in new-build or exceptional circumstances.

2.4 It is realised that FTTC presents new challenges as ADSL configuration costs are likely to be higher as they have to be done remote from the exchange. Some form of pre-installed or automated approach would seem necessary such as:-

- a) wiring up every phone line to the FTTC DSLAM device whether or not an ADSL service is required and then enabling the services remotely as required
- b) a remotely operated switch to enable pre-wired DSLAM ports to be linked to particular phone lines

2.5 Given the condition of many BT street cabinets, the need for UPS power supplies, planning considerations and practical space limitations in many cases, it seems that the only viable solution for FTTC solutions is to have them provided solely by BT Openreach.

2.6 Be have chosen to invest in the larger exchanges such as THGI Guildford which serves some 32,000 premises but not THCN Cranleigh which serves only 6,500. BT have not yet provided any ADSL2+ so the whole of Cranleigh will remain on the wrong side of the digital divide as will many other smaller exchanges probably up to 10,000 properties. Additionally any ISPs using BT wholesale facilities are unable to offer ADSL2+ services so Be now have a monopoly for anybody wanting the much faster service.

2.7 Given that:-

- a) NTL / Virgin media do not normally undertake any new cable installation requiring duct work
- b) BT Openreach have a large number of low-performing broadband connections and seem very reluctant to install FTTC solutions; it appears that even in the current conditions there is practically no economic case for improving existing broadband access.
- c) It follows that any NGA higher bandwidth services are untenable without a significant subsidy.

2.8 There are now 7 LLU operators in THGI and serious operational problems are becoming evident. This suggests that further settling time and more staff investment is definitely needed before any NGA activities are contemplated.