

Presentation to Mid Ulster District Council, Development Committee

ICBAN

Shane Campbell,
ICBAN, 15/3/2018

ICBAN PRIORITIES

Policy – Funding - Technology

1. Ensure best technological provisions for each area of the Central Border Region – ‘Future proofing’!
2. Monitor and encourage delivery on National Broadband Plan
3. Change narrative in NI to Fibre to the Premise (FTTP) (from Fibre to the Cabinet, FTTC) and drive an investment solution

5 reports completed with The Bit Commons, 2016-2018

TOWARDS THE 4TH INDUSTRIAL REVOLUTION

in communications, creative industries, renewable energy, research and innovation

2IC NETWORK SERVICES

Symmetric

IM	Collaborative Computing
IoT	Collaborative Manufacture
TXT	3D Design & Manufacture
B2B	Sustainable Supply Chains
C2B	Sustainable Production
C2C	Sustainable Recycling
eMail	Distributed Intelligence
TeleCare	Distributed Computing
eTrading	Video Conferencing
Telephony	Social Networking
TeleSurgery	Virtual Computing
TeleTraining	Cloud Computing
TeleMedicine	Sensor Networks
Tele Education	Logistics Control
TeleMaintenance	Home Working
Audio Conferencing	Mobile Futures
Collaborative Supply	Virtual Storage
Collaborative Design	Photo Albums
Collaborative Games	Video Albums
Collaborative Working	Virtual Office
Collaborative Farming	Smart Cities
Collaborative Research	????
Collaborative Production	????

Asymmetric

Broadcast TV
Broadcast Radio
Video on Demand
Audio on Demand
Music on demand
TeleInspection
TeleControl
????

The UK lost a >>£3Bn computer gaming industry to SEA due to the lack of bandwidth and connectivity

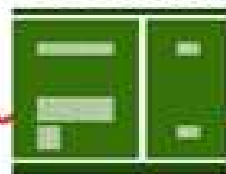
***An initial 'Straw Man' listing
Peter Cochrane 1/9/15***

FIBRE TO THE CABINET FTTC

Local Telephone Exchange



Streetside Cabinet



Premises / Home



Fibre Optic Cable

Copper Cable

FIBRE TO THE PREMISES / HOME FTTP / FTTH

Local Telephone Exchange



Splitter



Premises / Home



Fibre Optic Cable

THE EU COMMISSIONER GETS IT – Decent Fibre can Revolutionise Rural Living



Provision of world-class connectivity in rural areas creates an equality of access to information, services and opportunities previously thought impossible

“A farmer could: instantly download his Single Farm Payment form in one corner of the screen while having a simultaneous skype call with his agricultural advisor! Meanwhile his son's band are performing live via video link-up, while his mother is being remotely treated by her specialist telemedicine carers from the clinic in the nearest big town. ”

(Phil Hogan, EU Commissioner for Agriculture and Rural Development, Dublin, Sept 2015)

Ambitions

Source: Ireland's High
Speed Broadband Map
2016

www.broadband.gov.ie

**Amber area reflects
non commercial areas
for high speed
broadband**

NI Draft Prog for Government:

**Proportion of premises with
access to broadband services
at speeds at or above 30mbps**

**100% of premises
with access to high
speed broadband
of at least 30mbps
but future proofed**

**State-led
intervention** aims
to serve all
remaining
premises not
served by the
commercial sector

'THE EUROPEAN GIGABIT SOCIETY'

**100% households to have
100mbps access by 2025**



Virtual Intensive Care Unit



WITH BETTER CONNECTIVITY, WHAT WILL WE BE ABLE TO DO IN 2025?



CT scan

Virtual reality game

Top smartphone storage

4K movie

Medium sized corporate
server restore

Human genome



(typical European legacy
networks – 20 Mbps)

14 minutes

34 minutes

3.6 hours

11 hours

28 days

33 days



(Fiber to the Home
networks – 0.4 Gbps)

40 seconds

102 seconds

11 minutes

33 minutes

33 hours

39 hours

Timeline of Initiatives

- Senior Adviser to EU Commissioner visits Region (November 2015)
- Report - 'Fibre at a Crossroads, Part I' (June 2016)
- Engagements with stakeholders and political representatives (2016-2017)
- 40+ Assembly Questions raised (2016-2017)
- Ministerial Proposals for rolling out direct fibre connections across whole of NI (end 2016)
- Westminster Parliamentary and Select Committee Questions raised via MPs (early 2017)
- Report - 'Fibre at a Crossroads, Part II - The Need to Confirm BT's Capital Contribution in NI's Subsidised Broadband Infrastructure' (June 2017)
- Methodology of Part II Report copied by Vodafone UK (June 2017)
- Report - 'Ireland's National Broadband Plan: Delivering on the Promise' (July 2017)
- Engagement with OFCOM Board (Sept 2017)
- Comptroller & Auditor General, NI Audit Office agrees to preliminary investigation of BT capital Contributions (October 2018)
- Report - 'Towards an All-Fibre Access Network - Proposals for the £150 million' (Nov 2017)
- Engagement with COMREG Chair (November 2017)
- Engagements with stakeholders and political parties on £150 million funding (early 2018)
- 5th Report on Ireland's NBP (drafted February 2018) for spectrum consultations later 2018
- Correspondence with NI Secretary of State (March 2018)
- Dozen+ submissions to OFCOM, DCMS, DfE, ComReg etc.(2016-2018)

Key Messages from

FIBRE AT A CROSSROADS PART I

An ICBAN Report on 'Infrastructure Solutions for High Speed Internet in the Central Border Region of Northern Ireland/Ireland'



- Much has indeed already been achieved and is to be commended
- Ambition: World-class connectivity
- Focus on Mid Ulster, Armagh City Banbridge & Craigavon, and Fermanagh & Omagh
- But, 30% won't access >10Mbps (the 'Universal Service Obligation')
- **Drive Fibre deeper into Rural Areas**
- And it can be done, technically and feasibly through 3 areas:
 1. Policy
 2. Funding
 3. Technology

❖ Findings can apply across NI

'SMEs are the Lifeblood of our Economy'

- ❖ Walshs Hotel
- ❖ Metro CCTV
- ❖ Leadon Timberframes
- ❖ Don Carraig Hotel
- ❖ Lisnaskea Business Park
- ❖ Gilfresh
- ❖ Hewitt Meats
- ❖ Emerson Electrical
- ❖ Davidson Contractors

❖ (Case studies in Part 1 Report)

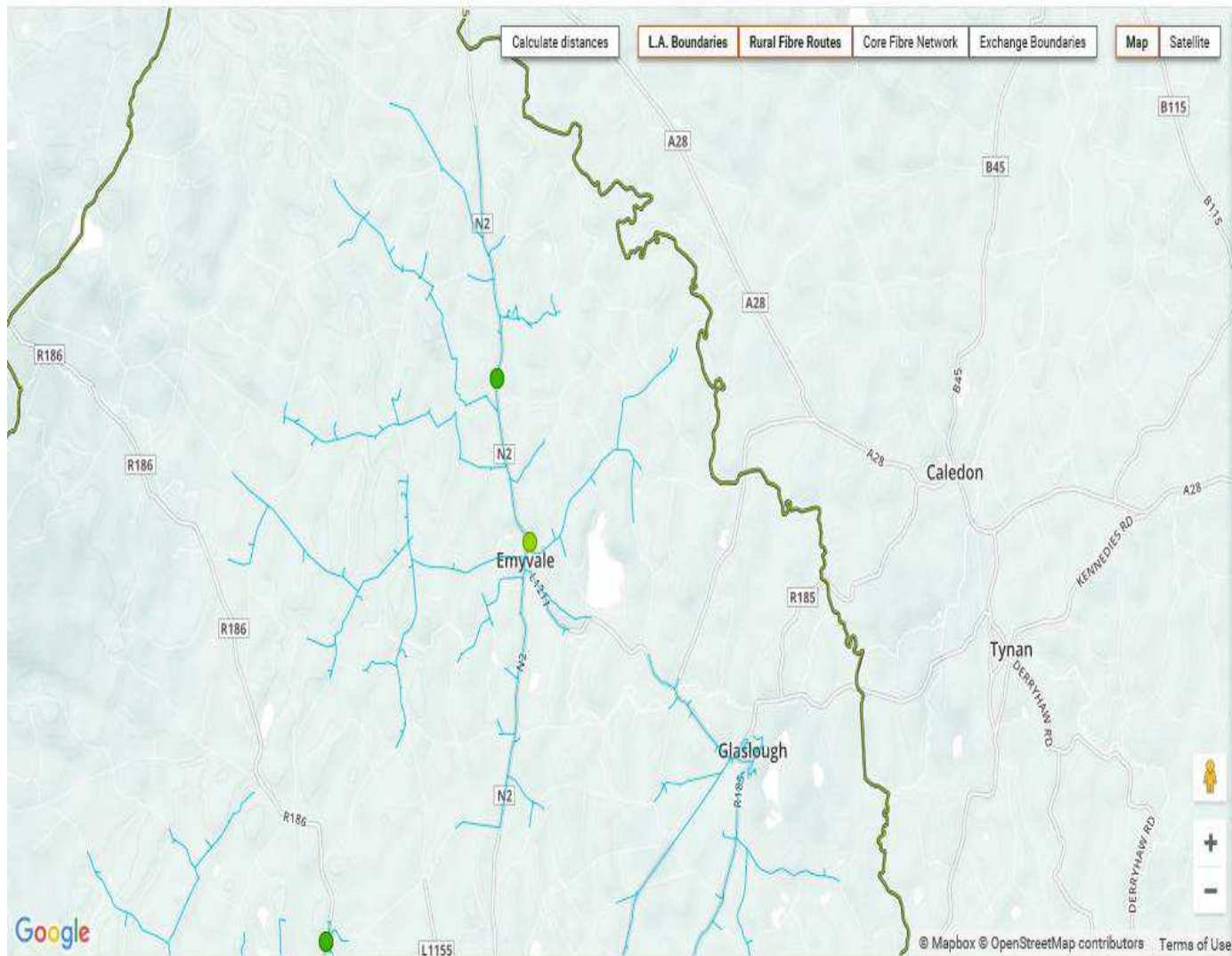
But.....

- Are > 1200 metres from cabinet 'speed' drops
- Cannot get direct fibre from state funded cabinets
- Must pay extra for private circuit contracts
- Who's supporting them ?
 - Govt ?
 - Regulator ?
 - Providers ?

A Contrast Across the Border

Viewing: FIBRE BROADBAND NETWORK COVERAGE MAP

Close map



Part 2 Report – Confirming BT's Capital Contribution to NI

- UK & NI Govt Ministers could not confirm direct knowledge of BT's capital contributions (publicised as £40m approx for NI)
- The Report questioned where NI Govt subsidies may have been used for areas defined by BT as 'commercial'
- Cited that BT commercially invested in cabinets serving 170 premises passed in Fermanagh, whilst public funds have been used in cabinets serving more premises passed
- Recommended comprehensive audit by NI Audit Office in the public interest
- Questioned that a capital contribution of £20m-£43.5m may be owed to NI, subject to official verification
- Comptroller and Auditor General, NI Audit Office, has undertaken a preliminary investigation based on evidence

EVIDENCE OF NEW TECHNOLOGY

– FTTP Splitters in Cookstown



Tulnacross

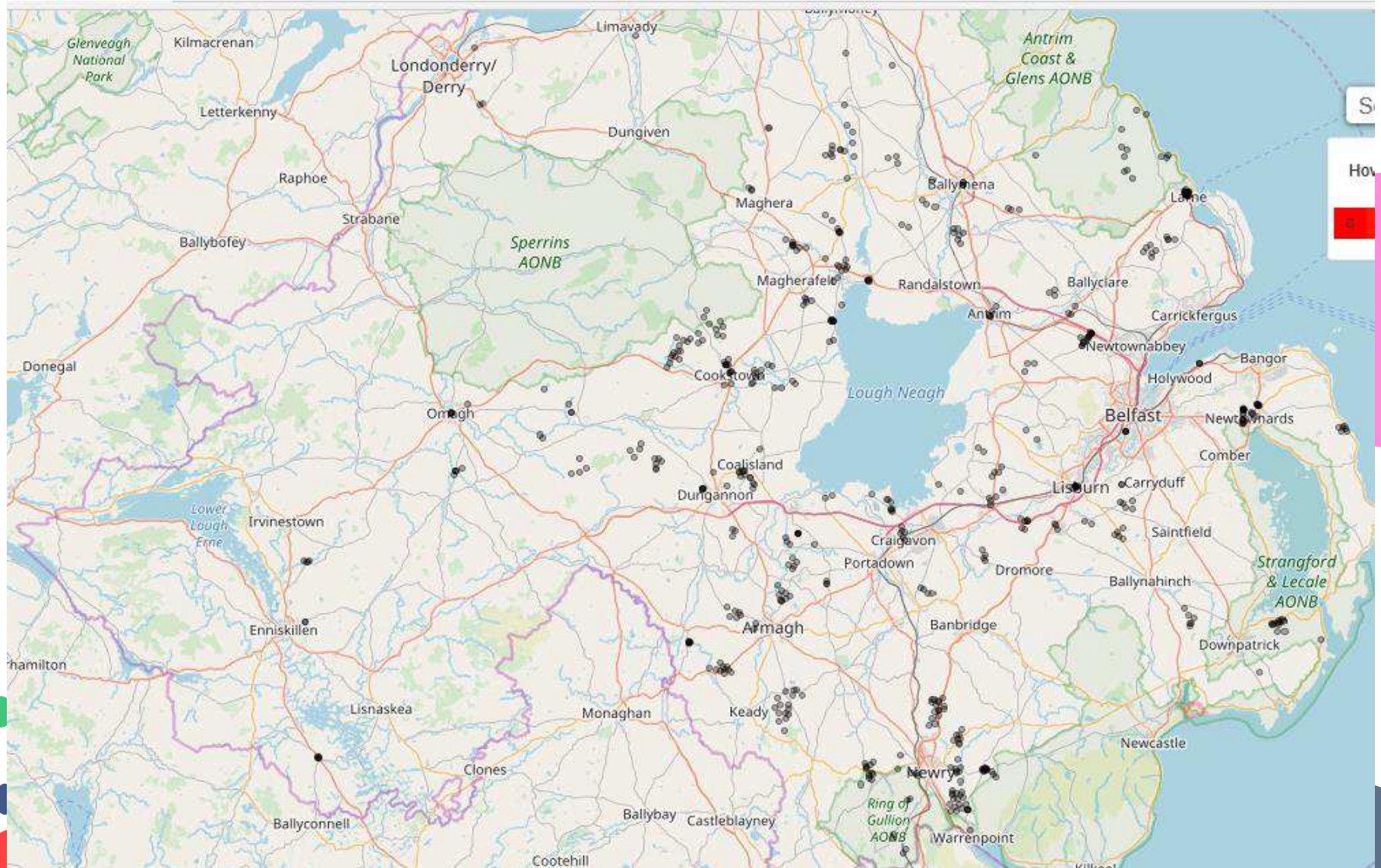


Drapersfield Road

Claggan Church

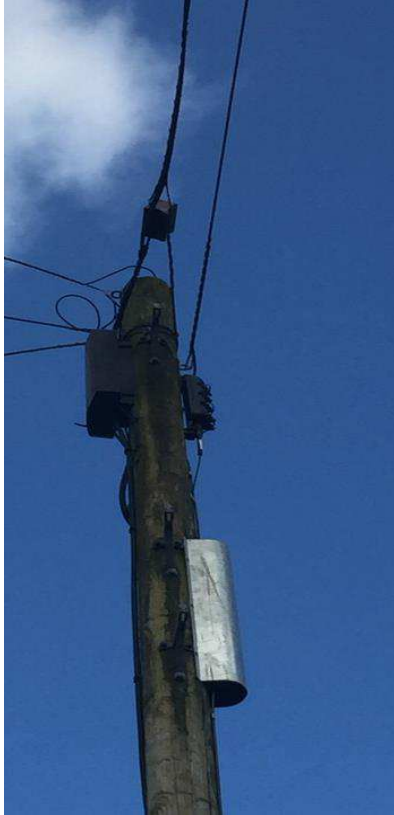


NI - FTTP Splitter Locations



Splitters used in Co. Fermanagh

1.



2.



3.



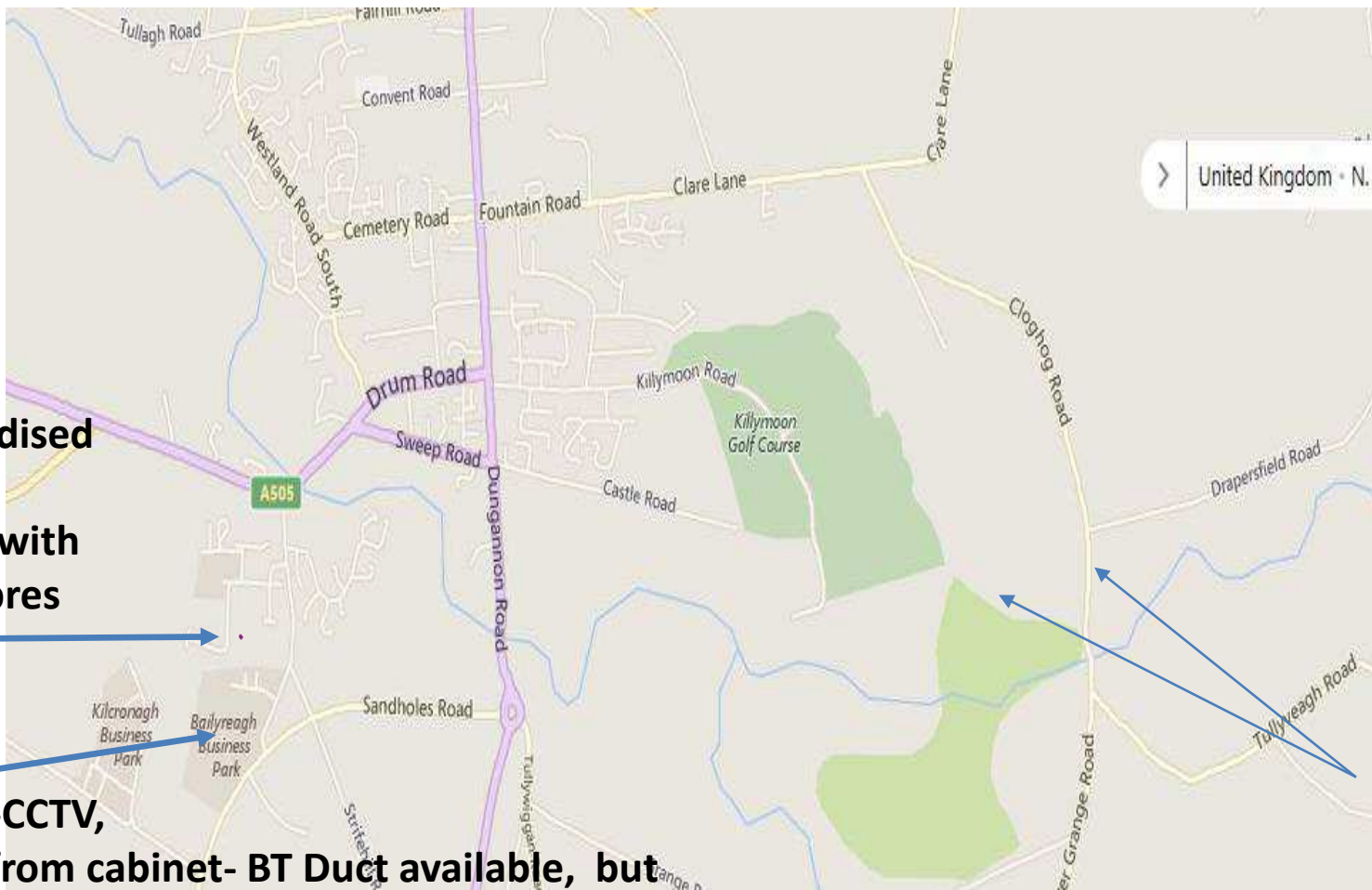
1. At top of lane between Oak Grove housing development and Startrite Auto Parts, with lines connecting nearby houses and business premises
2. At bottom of same lane, 80 m from top of lane, with lines connecting to 2 nearby houses from top of pole
3. Between Public Toilets and playgroup building and connecting to building across main road

Location - Splitter sites in Cookstown

**BT subsidised
FTTC
Cabinet with
spare fibres**

**Metro-CCTV,
400m from cabinet- BT Duct available, but
not permitted to order an 'affordable'
direct fibre connection**

**BT splitters
supporting
FTTP
connections,
serving rural
premises**



WHERE ARE WE NOW ?

UK Macro Factors

- Govt and Ofcom calling for greater accountability and more fibre investment
- 10mbps 'Universal Service Obligation'
- BT owe £527m+ in capital deferral/clawback
- Direct fibre costs reducing
- £150m+ election agreement for 'Ultrafast' in NI

WHERE ARE WE NOW?

£150m+ Funding Opportunity

- Narrative change:
 - ‘FTTC is exhausted in NI’ (OFCOM)
 - ‘FTTP is the way forward for NI’ (BT and Virgin Media)
 - ‘FTTP is the investment solution for rural areas’ (BT)
 - Current programme targeting 13k FTTP connections across NI
- £150 million funding for NI in DUP election agreement
- With match-funding this totals £270-£300 million
- To be targeted at rural areas as well as SMEs
- Don’t have financial funding challenges - but do have political challenges and institutional challenges
- Cross-Party consensus on need for investments

SO WHERE NEXT FOR THE DISTRICT & NI?

- Spent £64m in public subsidies and £??m in BT investment
- But, 30% won't access >10Mbps ('Universal Service Obligation')
- That is some 80,000 to 100,000 NI premises
- Opportunity for widespread deployment of direct fibre
- **Reset Ambition: 100% availability of 'ultrafast' future-proofed broadband, to anyone who wants it in NI**
- £270m-£300m spend needs political authority / ministerial oversight

BREXIT AT THE BORDER – Survey 2018

Another chance to have
your say

10 minute survey on the impact of Brexit on the Central
Border Region.

We welcome responses from anyone living or working in
the areas of Armagh City Banbridge and Craigavon; Cavan;
Donegal; Fermanagh and Omagh; Leitrim; Mid Ulster;
Monaghan; and Sligo.

Survey opens 08 March 2018 and can be found at
www.tinyurl.com/ICBAN-Brexit



An Roinn Gnóthaí Eachtracha agus Trádála
Department of Foreign Affairs and Trade



QUEEN'S
UNIVERSITY
BELFAST

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