



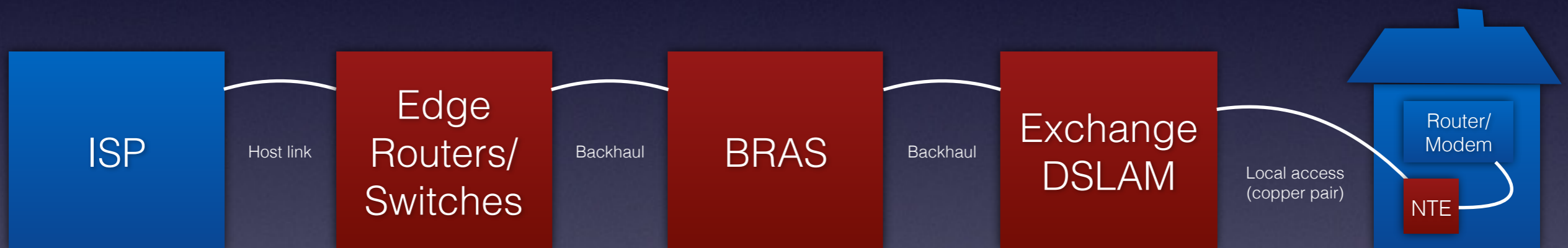
Andrews & Arnold Ltd

Comparison of two wholesale broadband providers

Rev Adrian Kennard
Andrews & Arnold Ltd

What do I mean by a wholesale broadband service?

Wholesale broadband service



Wholesale provider is responsible for linking ISP to end user premises, and making the “broadband” service work.

They use equipment and links they own and maintain and some they buy in from companies like *BT plc t/a Openreach*.

Internet

Comparing
BT plc t/a BT Wholesale
and
TalkTalk Communications Ltd t/a TalkTalk Business

- Commercial
- Technical
- Billing
- Operational

Commercial

- Cannot go in to details as both have various deals and offers. BT can be more complex (Market 3, etc)
- Basically similar pricing for BTW and TTW
- Charge for back-haul usage, similar Mb/s rates
 - TTW try to charge for 95th% of Tx+Rx, watch out!
- Charge for tails, similar rates
- TTW min term, BTW disconnect fee, but similar, for ADSL

Technical

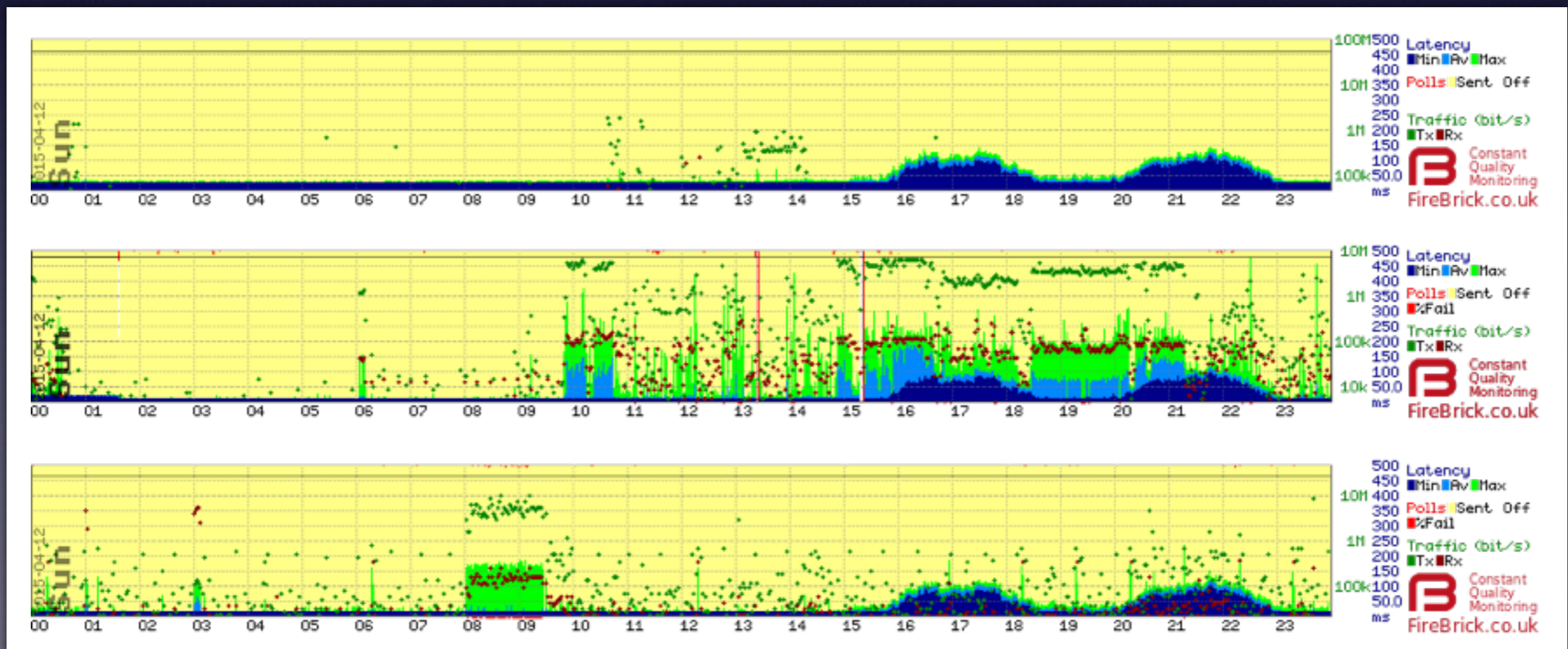
- Host link
- Back haul
- End user tails

Host link

- TTW can do deals for free host link when enough tails. BTW Standard pricing but working on in-building handover
- BGP for announcing LNSs one way and BRASs the other, same on BTW and TTW
- Session steering RADIUS on both
- TTW circuit IDs not known in advance, bit of guess work

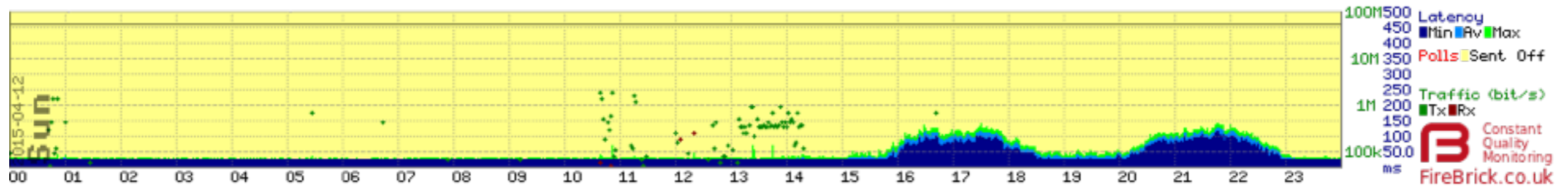
Backhaul

- Using FireBrick FB6202s, we monitor every line every second. This allows us to pick up faults on lines, and faults on backhaul and exchange links.



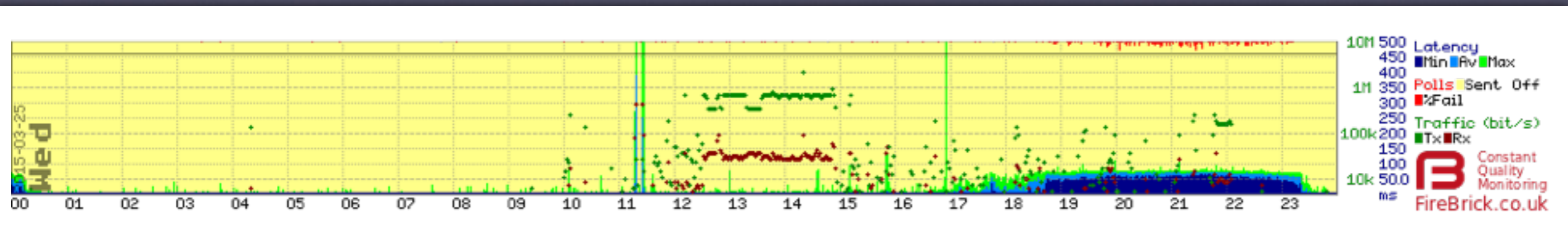
Backhaul: BTW

- BTW go through phases! Some times all is well. Right now they have several shitty (overloaded) links... Yes Neil, they do, and I have proof, facts (not just stats).
- Can be very slow to fix - ETA on this one is June!!!



Backhaul: TTW

- TTW seem to have good backhaul
- A few issues which turned out to be config errors and they were very pleased we found them, and fixed within hours.
- TTW did occasional alternative routing with extra latency - not sure if still an issue.



End user tails

- BTW 20CN ADSL1 and 21CN ADSL2+; DLM (almost impossible to disable and way more trouble than it is worth); no direct control of profile; some settings with 10 day lock out!
- TTW ADSL2+; wide coverage; direct and instant control of profiles; no DLM (may be an option soon)
- Both have options, like Annex M
- BTW - FTTC broadband. TTW still no FTTC (may be available soon)
- TTW do offer an interesting EoFTTC service though which beats BTW Ethernet FTTC
- TTW - no 3dB profile, yet, so not equivalent service to BTW.

Billing

- BTW bills are a challenge, but they mostly work - have to download from e-billing web site. Not required Direct Debit for us. Often mistakes.
 - Never had a correct bill, ever, so DD would not work!
- TTW billing data via FTP, and similarly challenging. Fewer actual mistakes but still SFI disputes. Direct Debit only, but...
 - They cannot meet DD rules, so we are finally on BACS
- For both we have had to make a whole dispute management process and withhold payments. Mostly SFI related! Solicitors get involved occasionally.
 - We should sell the dispute system!

Operational

- Orders
- Diagnostics
- Faults

Orders

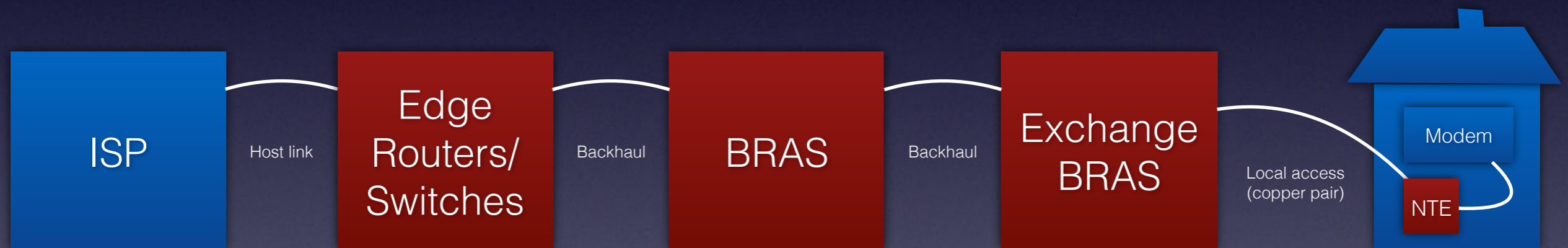
- TTW Simple web XML API. BTW nightmare XML B2B API with signed SOAP and shit.
 - Both have a web based system you can use!
- Both able to do new installs and migrates no problem.
- New NoT process will be, err, fun...
 - BTW way more pro-active on this than TTW
 - (you know that businesses >10 staff are excluded, right?)

Diagnostics

- BTW have a number of tests, including Copper Line Test (basically, checking to SIN349)
- BTW main test is KBD which is judge and jury, decides if a fault exists or not, and what sort of fault. Can be helpful sometimes, can run TAM (login from modem in exchange) sometimes.
- TTW have a number of simple tests, and nice logs of loss and margin.

Faults: Remember what we are buying - a broadband service!

Wholesale broadband service



Wholesale provider is responsible for linking ISP to end user premises, and making the “broadband” service work.

They use equipment and links they own and maintain and some they buy in from companies like *BT plc t/a Openreach*.

Internet

Faults - BTW

- Until recently - SFI2 visits charged if “end user equipment at fault”. No charge on “uplift network for broadband”, etc.
 - Big issue is that “no fault in BT network” assumes end user equipment, which is flawed logic.
- This has changed - new rule - SFI2 is an optional *BT plc t/a Openreach* service which *BT plc t/a BT Wholesale* offer us. SFI2 only tests a line to SIN349 (metallic path spec), charging if it meets the spec. New rule means all charges passed on, so repeat visits even where final engineer finds and fixes a fault!
- Seems no official way to get a “broadband” fault on a line fixed if not failing also SIN349. This is a serious issue at present.

Faults - TTW

- Charge for anything *BT plc* t/a *Openreach* charge them!
 - Even charge for exchange work like re-jumpering - obviously we don't pay for that!
 - Oddly, they understand not to charge us if they have to pay a CISCO engineer to come out and fix a faulty card in a BRAS, etc.
- Again, a serious issue. Another wholesale broadband provider not taking responsibility for what they provide: A broadband service!
- Have had calls where “demarcation point” clearly understood as “NTE in premises” and explained we will NEVER pay for work their side of that point to fix a fault. A big issue at present.
- [Obviously, us doing something wrong and sending engineer on wild goose chase is a different discussion here, and something we would expect to pay for]
- Same conversation with BTW.

Summary

- BTW and TTW very similar pricing (well, except 20CN)
- BTW and TTW very similar technically
 - Getting closer, if TTW do 3dB and FTTC and DLM, and BT do direct profile control and no DLM, etc.
- BTW and TTW very similar in stupidity over SFI charges and not taking responsibility for what they actually sell!
- Really good offering end users a line from each, with bonding and fallback.
- Well worth having both!

Wholesale Broadband Buyers Forum

- Closed, web based forum (Chatham House rule)
- Aimed at ISPs that buy wholesale broadband services from the large players (BTW, TTW, etc)
- Discussion of common issues
- Trying to find better ways to work with carriers
- www.wbbf.uk

Questions?