

Super-fast Fibre Access

# The NGA Portfolio



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# The NGA portfolio

## Fibre Integrated Reception System

Fibre IRS

- Distribution of TV and radio feeds over fibre
- Complimentary to GEA-FTTP
- Launched at Ebbsfleet

## Generic Ethernet Access

GEA

GEA Cable Link

- The NGA handover product

GEA-FTTC

- VDSL delivered Ethernet service
- Fibre to the cabinet/copper to the home

GEA-FTTP

- GPON delivered Ethernet service
- All fibre delivery

## Voice Over NGA

VoNGA

- Primary line voice product
- Similar to WLR in the way it is sold and delivered

# GEA FTTC



## ■ Core Products:

**Up to 40Mbps downstream and up to 2Mbps upstream**

15Mbps assured downstream rate

128Kbps assured upstream rate

**Up to 40Mbps downstream and up to 10Mbps upstream**

15Mbps assured downstream rate

2Mbps assured upstream rate

## ■ Sub 15mbps product in trial

## ■ CPs can priorities traffic on each line “drop” and “do not drop” to manage any congestion on the down stream or up stream path

## ■ CPs can “cap” or set their own downstream line rates

## ■ CPs can choose a profile for each line-

- **Standard** - the default setting - aims to keep the line working with only a few errored seconds and retrains each day.
- **Stable** - allows a CP offer an even higher level of stability, by allowing increased error protection (may give higher latency), and by allowing the line to work at a lower speed than the Standard DLM Policy would set.
- **Speed** - allows a CP to offer a higher line rate, by allowing the line to have a lower stability target than the Standard DLM Policy would set.

## ■ Speed faults can be reported within the assured levels if:

max to min line rate over 14 days has fallen by more than 25%

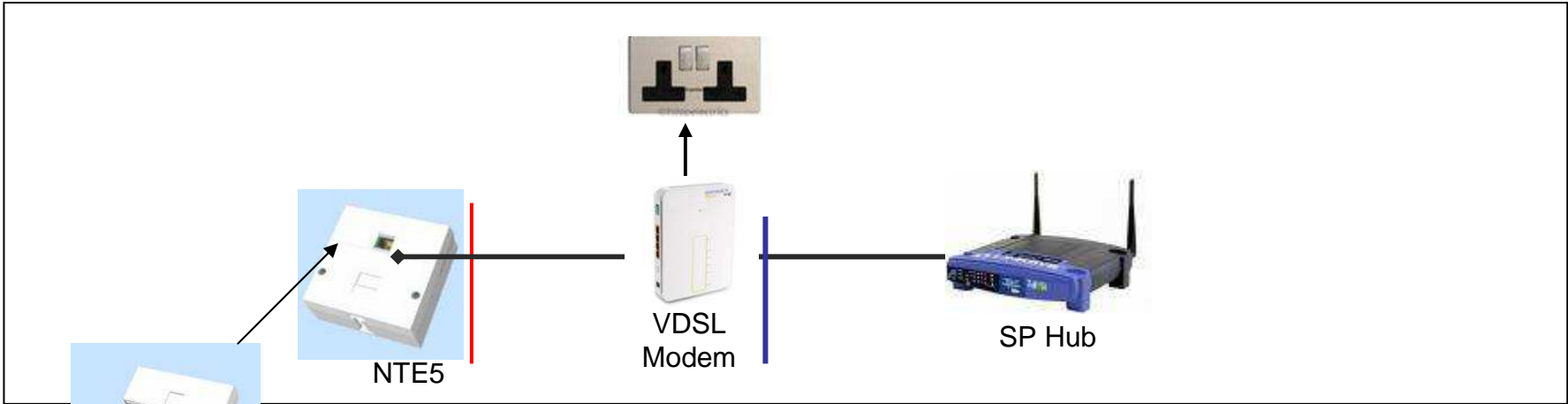
There have been 3 failed re-trains

There have been 6 retrains in any 24hr period over the past 14 days

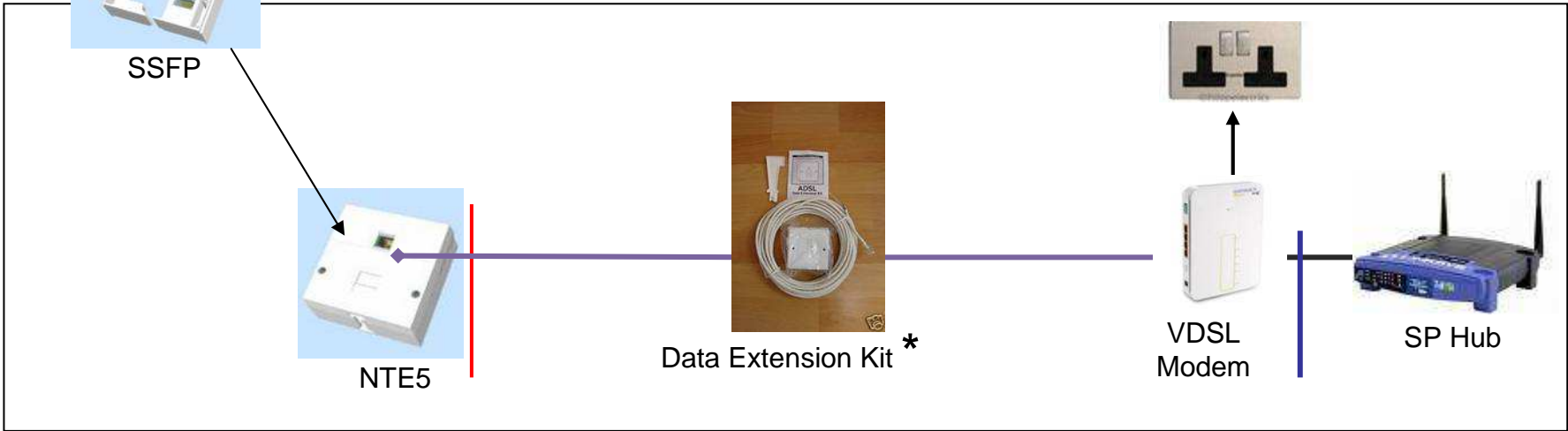
# FTTC – Home installation

Traditional Demarcation Point Back of NTP —

GEA Demarcation Point Ethernet Port —



Or



\* Where fitted by Openreach, the Data extension kit includes a 12 month warranty against faults

# NGA Voice and Data

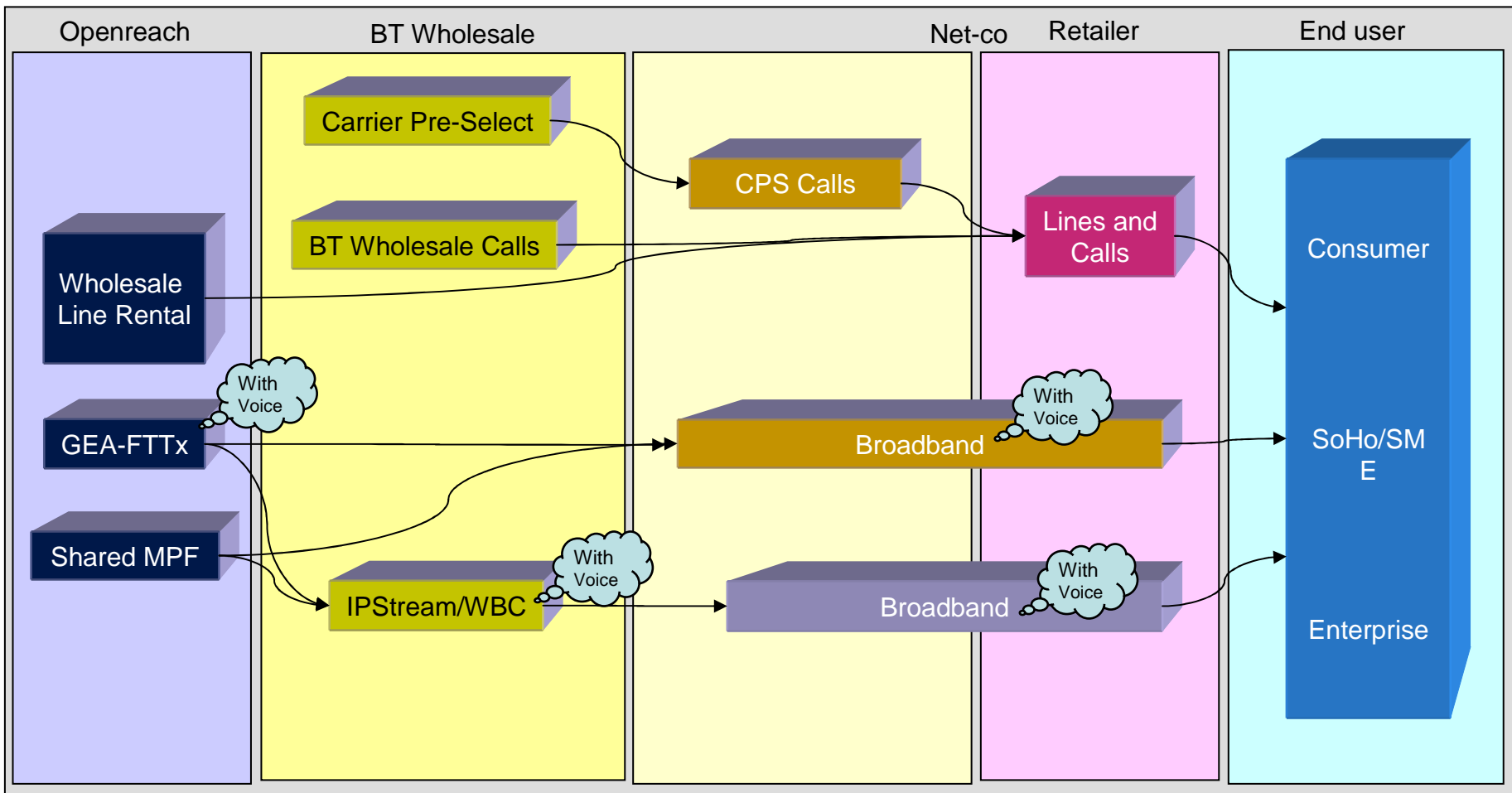
		FTTC Day 1	FTTC Day 2	FTTP Day 1	FTTP Day 2
Green Field	Data	None	None	GEA 100Mbps	GEA 100Mbps
	Voice			Derived	VoNGA
Brown Field	Data	GEA ~40Mbps	GEA ~40Mbps	GEA 100Mbps	GEA 100Mbps
	Voice	WLR or MPF	WLR or MPF or VoNGA	WLR or MPF	VoNGA

- For Day 1 Greenfield FTTP, voice is supported as a CP-provided broadband-derived service
- A WLR or MPF line may be used as a companion product for FTTP Day 1 brownfield
- Once VoNGA is launched it will become the primary voice product over FTTP Greenfield
- Day 1 and Day 2 FTTP Brownfield scenarios will overlap for a limited period while the installed lines are converted. Conversion from WLR/MPF to VoNGA will be a CP choice.
- A Day 3 scenario for FTTC which removes the WLR/MPF line is TBA. This will be subject to discussion between Openreach and CPs.

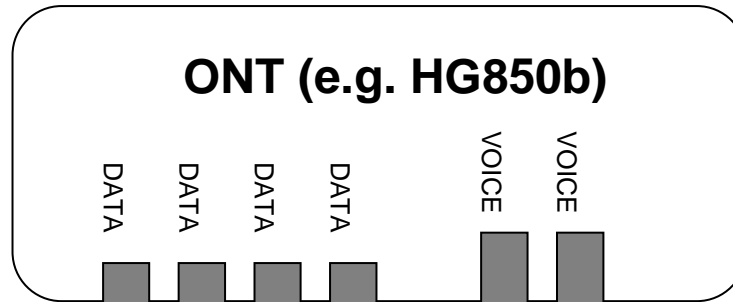
# Approach to VoNGA

- Position FTTP as suitable to support a primary voice line
  - Some end user customers may only want voice
  - Existing PATS functionality assumed (are all functions required?)
- Minimise barriers
  - Existing equipment must work
  - Reuse EMP interfaces
  - Support existing/new market structures
  - Volume ramp up over time
- Promote future voice options
  - Recognise derived voice growth
  - Offer protected voice VLAN

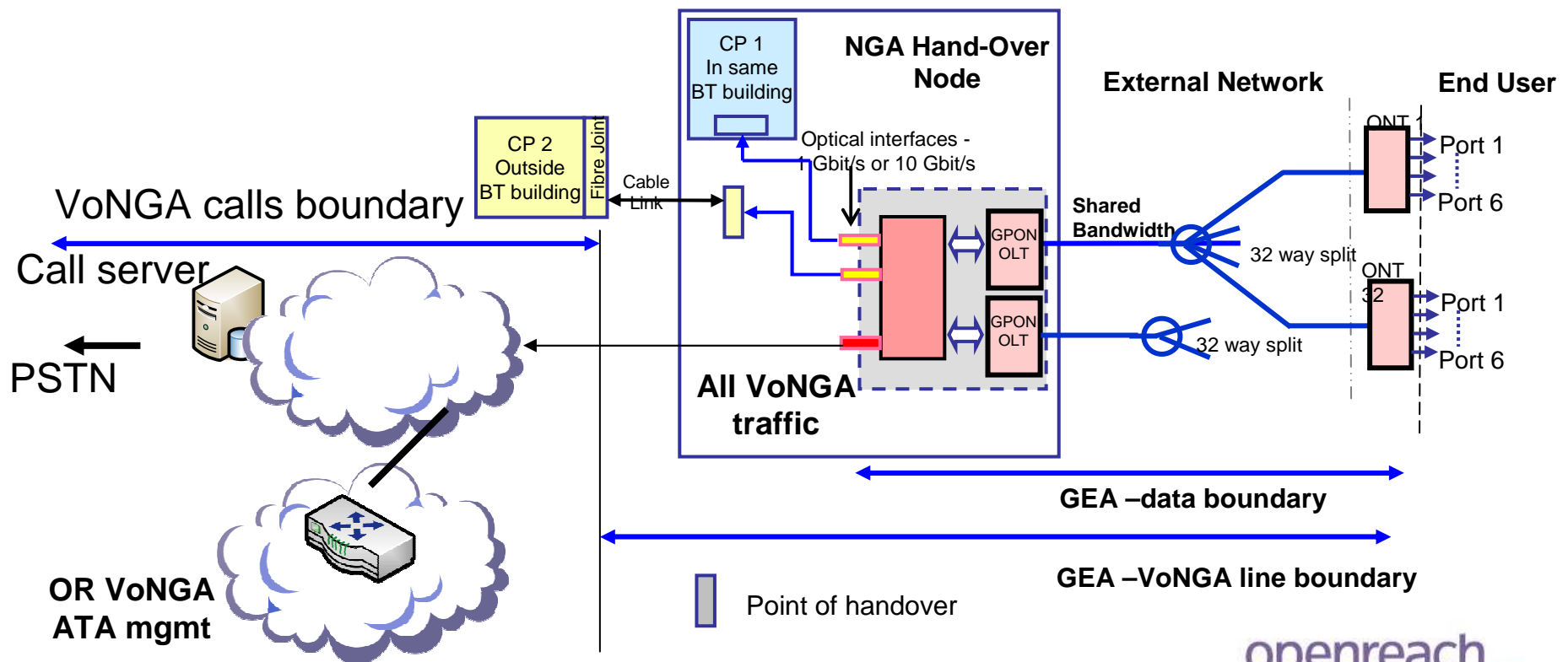
# The Voice Value Chain



# Product Components

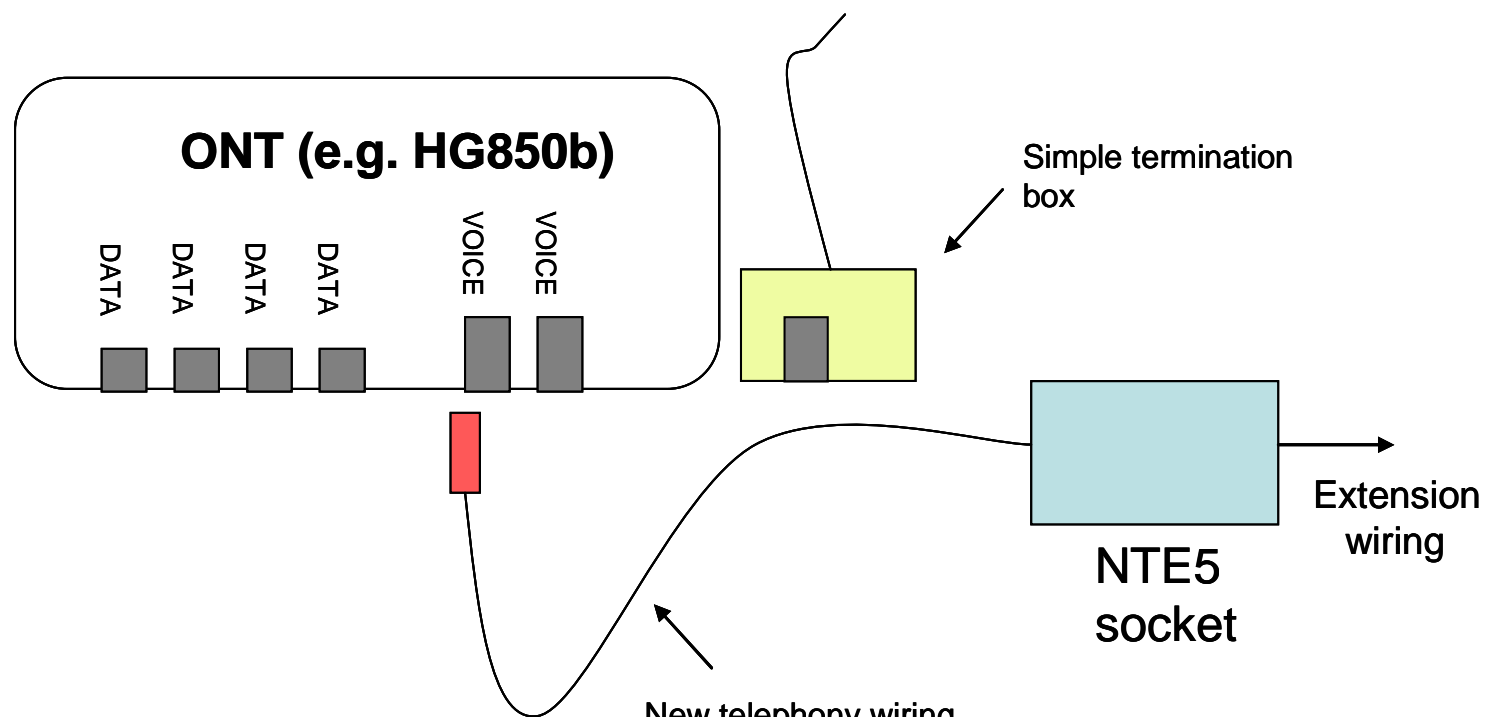


**CPE**



# Managing WLR/MPF to VoNGA migration

## ONT Telephony Wiring



Voice Ports: BT603A/BT431A

Data ports: RG45

New telephony wiring  
Can plug into ONT instead  
of into new simple  
Termination box

## VoNGA Features

- The features offered will reflect the capability provided by the call server platform and the ATA capability built within the ONT.
- The initial set of product features offered in early pilot phases of service may reflect 'out of the box' capability provided by both the ATA and call server platforms.
- Development of additional features will be considered where there is clear business justification.
- Openreach intends that the VoNGA product, specified as the result of this CP consultation, will support CPs in meeting legal and regulatory obligations for Voice services.
- In this new and emerging area, it is our expectation that CPs and Openreach will need to discuss further how such obligations are met.
- Where CPs have specific questions on the implications of regulatory responsibilities then we will be pleased to discuss further as part of this consultation process.

## Your engagement is key

- VoNGA specification delivery plans
- Ofcom Undertakings variation required for Openreach to deliver FTTP and therefore VoNGA closes 20/11/09

<http://www.ofcom.org.uk/consult/condocs/fttp/>



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