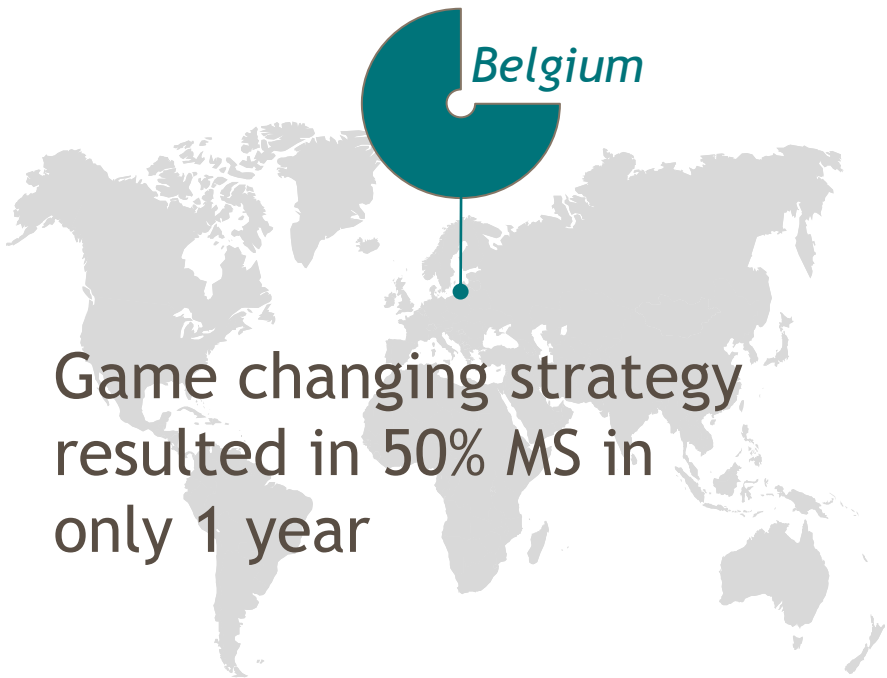
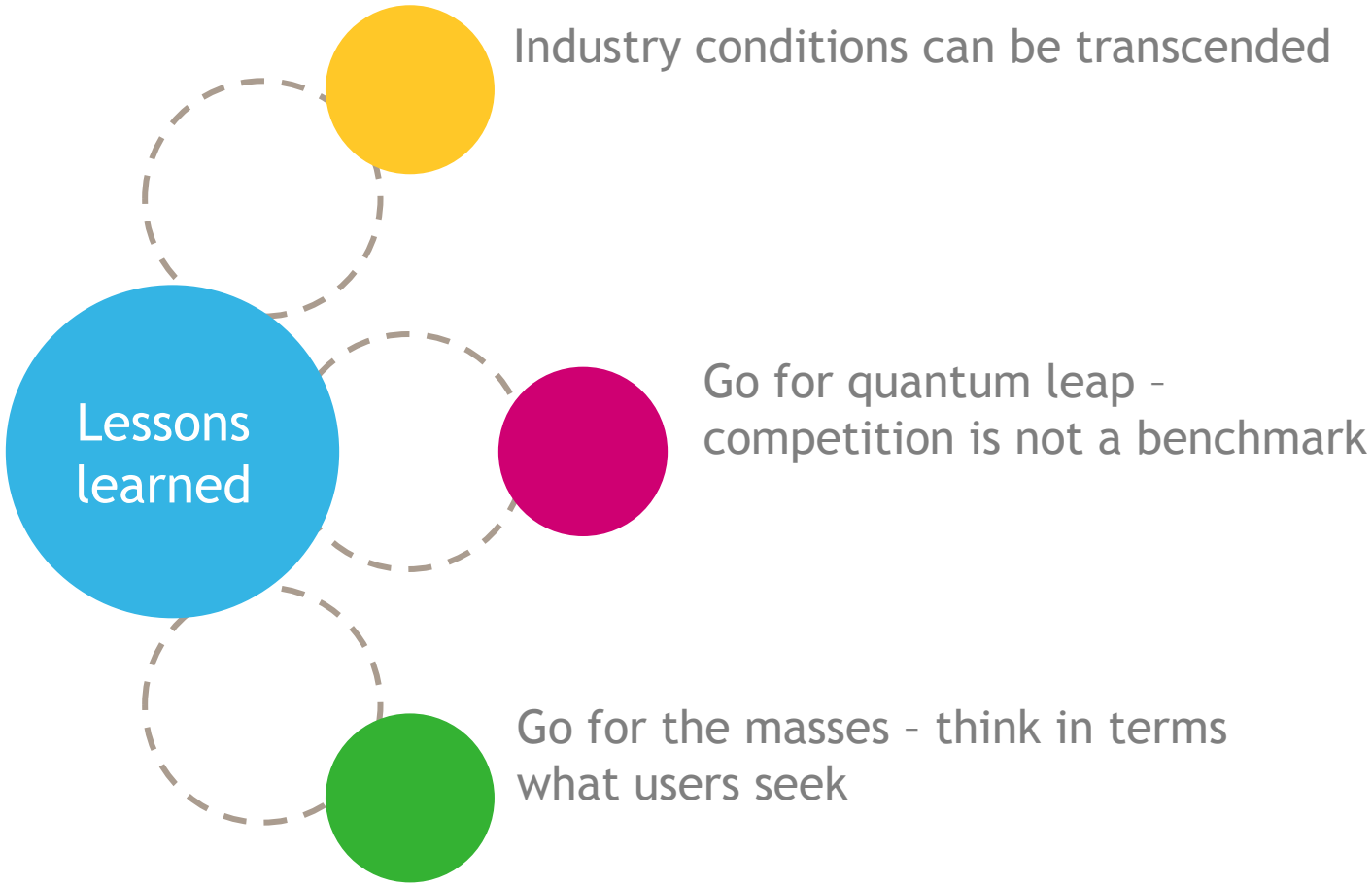
ALCATEL-LUCENT'S
ULTRA BROADBAND SYMPOSIUM
Alcatel·Lucent
GET TO FAST
FASTER 2
19 - 20 NOVEMBER
CONRAD HONG KONG

Alcatel·Lucent
Alcatel-Lucent Innovations in Fixed Networks
Ana Pesovic
Fixed Networks Marketing
ALCATEL-LUCENT'S
ULTRA BROADBAND SYMPOSIUM
GET TO FAST
FASTER 2

INNOVATION IS THE KEY TO ACHIEVE PROFITABLE GROWTH
"KINEPOLIS" EXAMPLE IN 1990'S



Game changing strategy resulted in 50% MS in only 1 year



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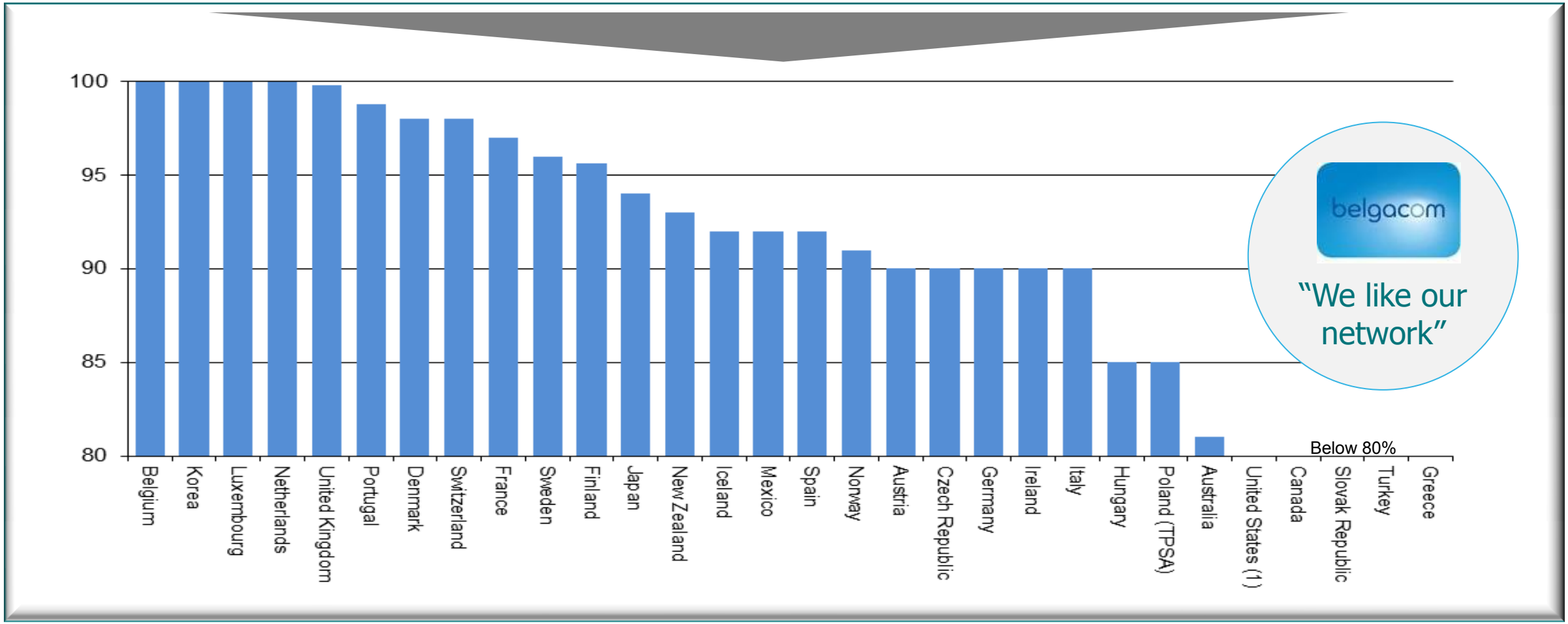
20 YEARS LATER ANOTHER BELGIAN COMPANY BETS ON A GAME CHANGING INNOVATION - VECTORING

Broadband coverage in Belgium reaches almost 100%



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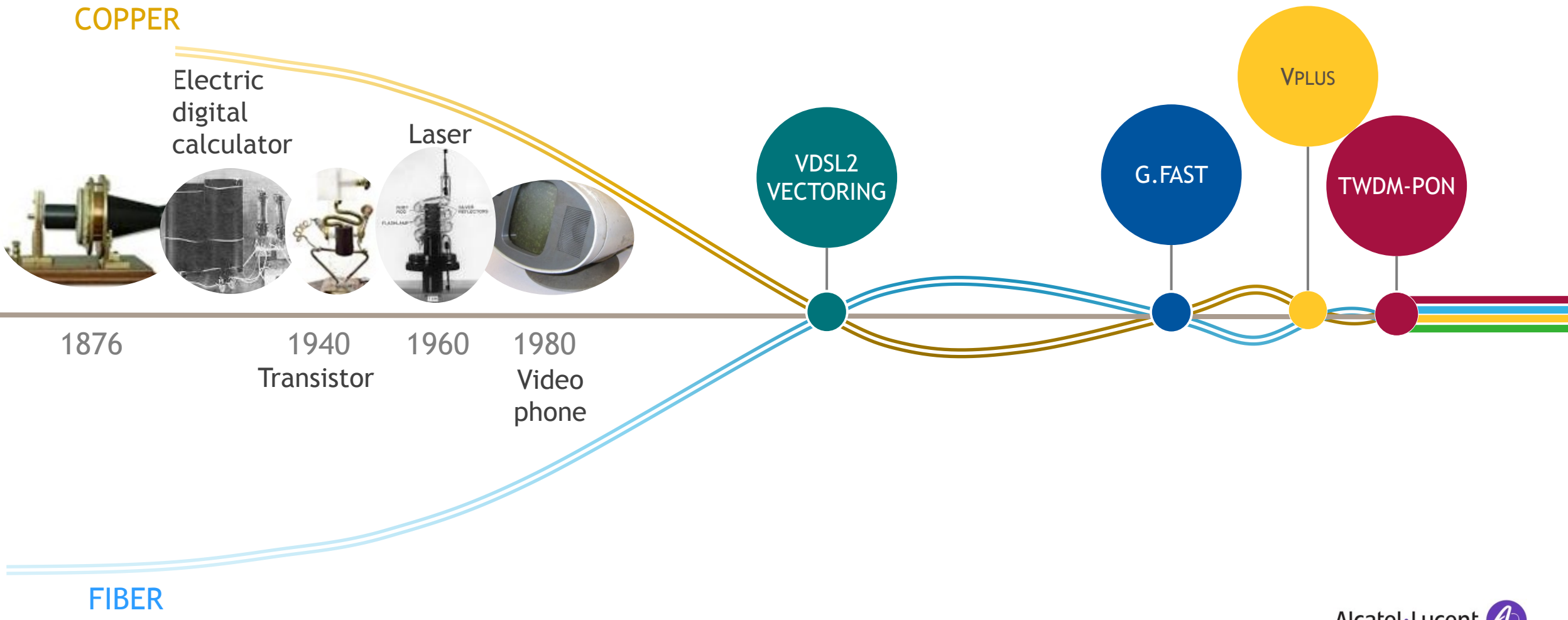
ALCATEL-LUCENT HISTORY OF INVENTION



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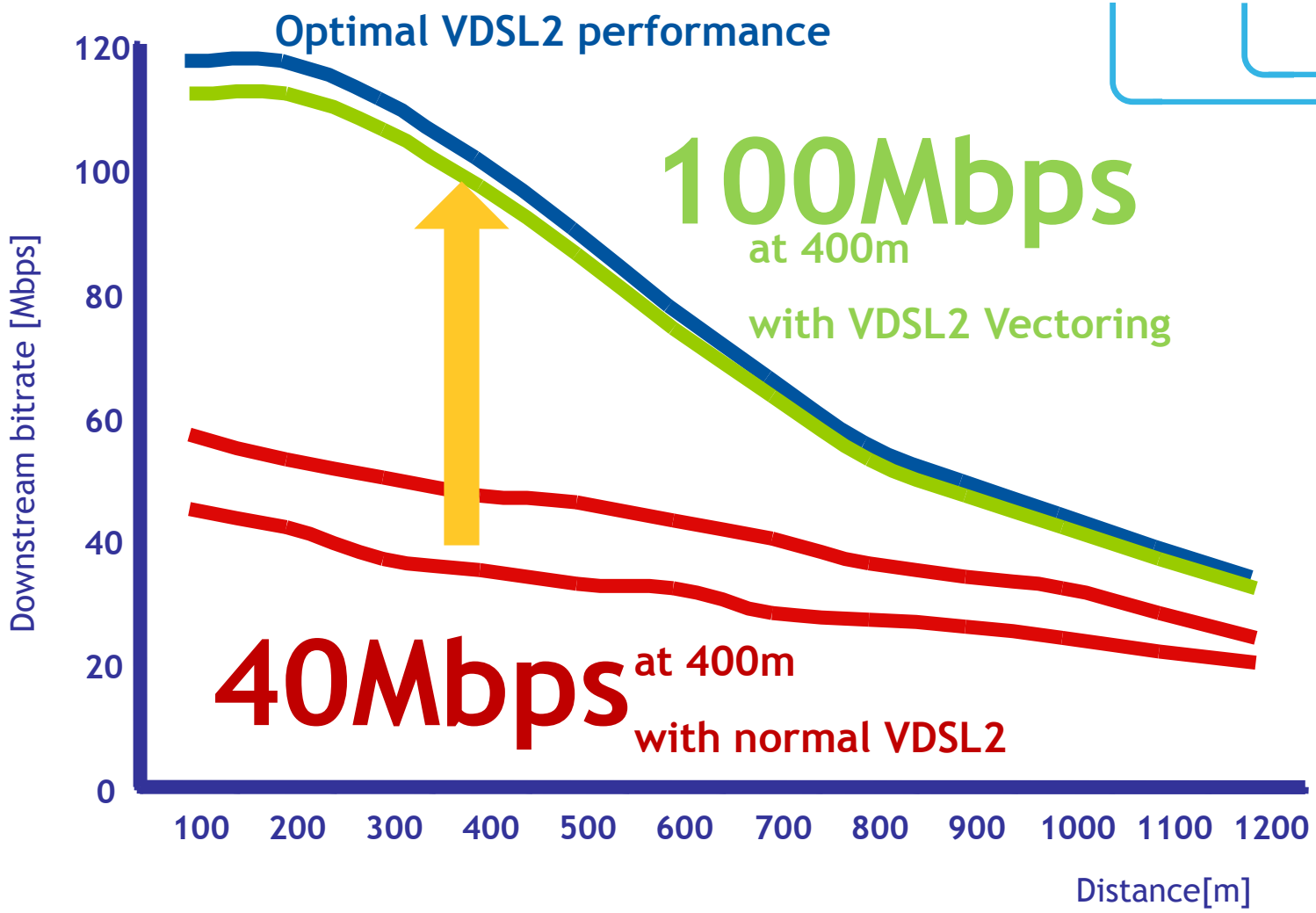
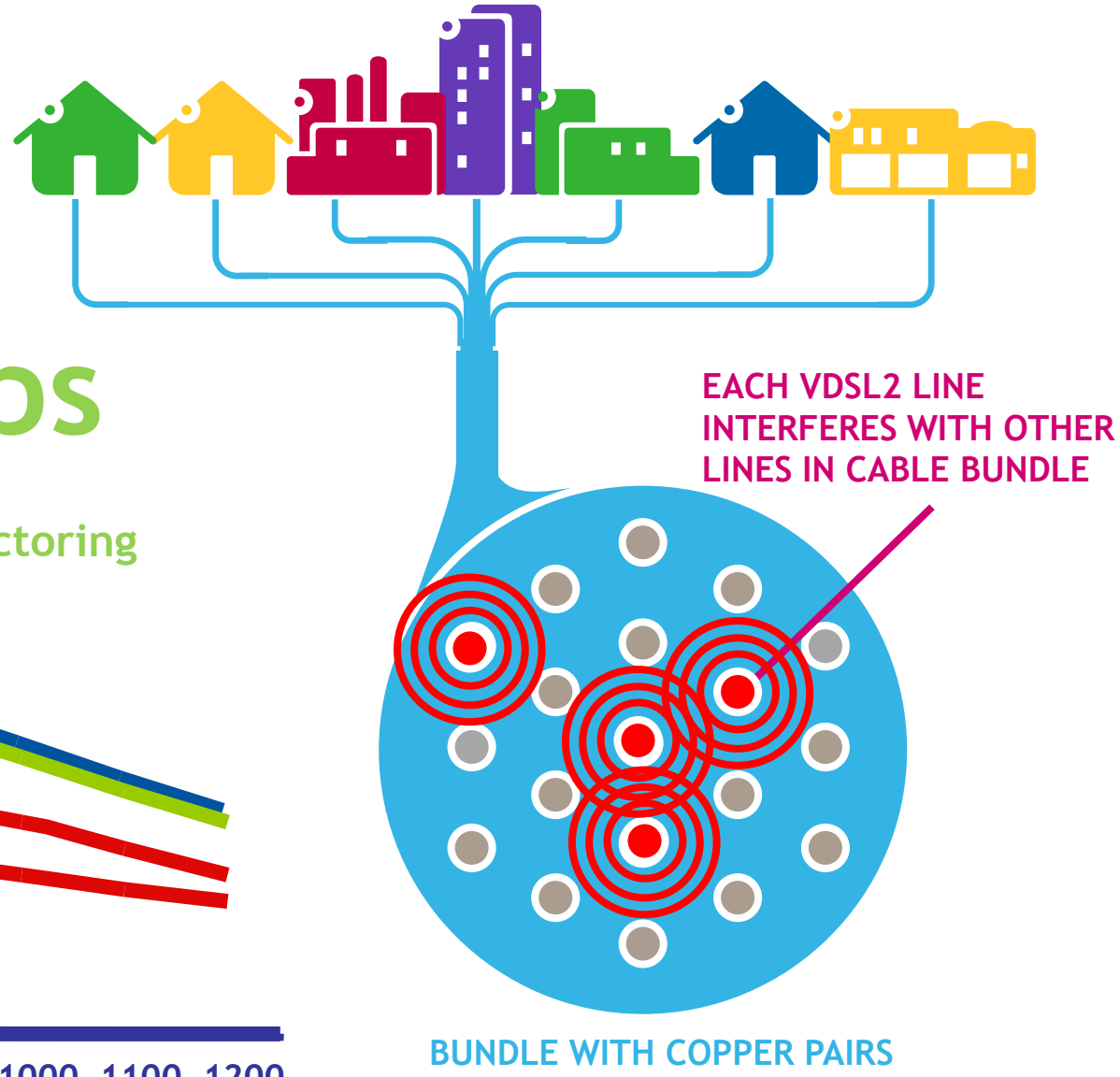
VDSL2 VECTORING IN A NUTSHELL





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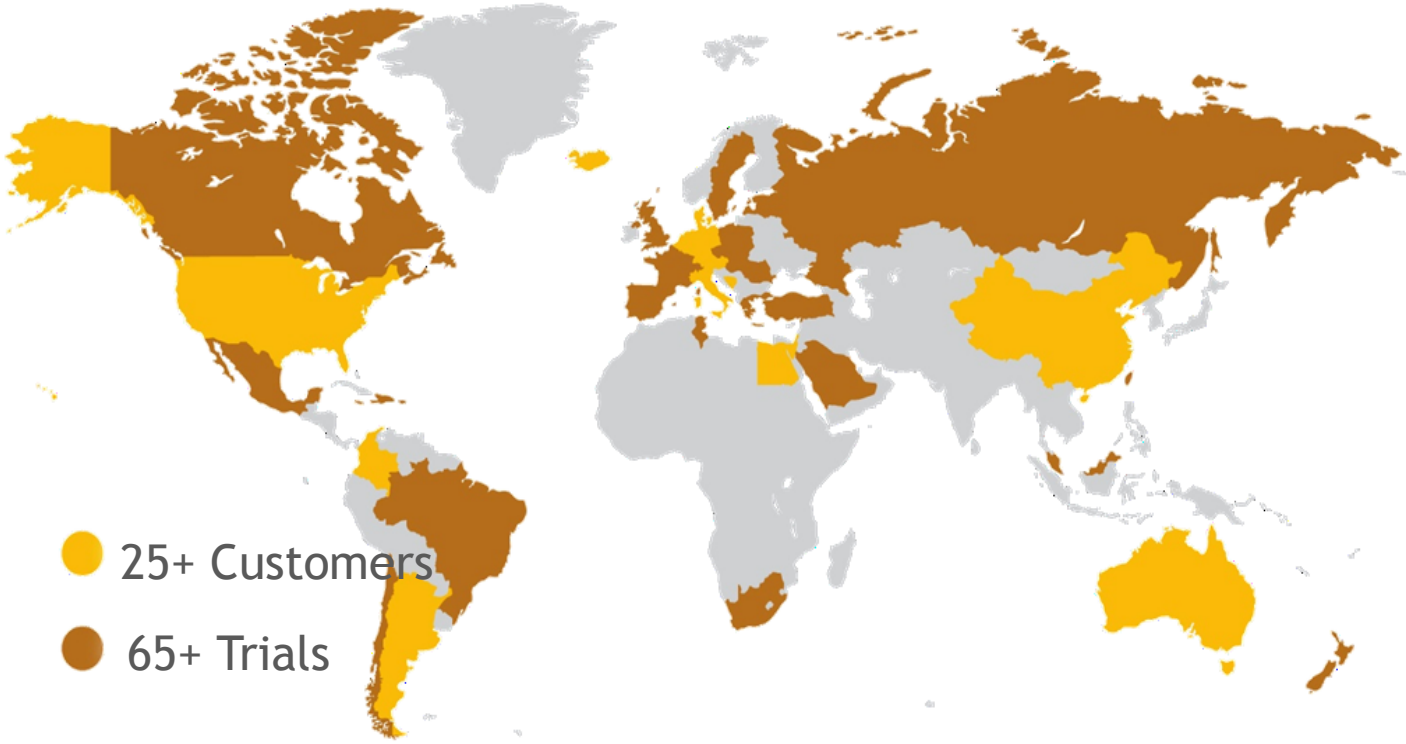
ALCATEL-LUCENT IS LEADING THE VECTORING MARKET



BBWF 2014, Amsterdam

Broadband INFOVISIONAWARDS

Best Broadband Access Innovation - Fixed
Alcatel-Lucent – G.fast Vectoring

Most Innovative Solution Provider
Alcatel-Lucent – VDSL2 Vectoring

9.4M+ VECTORING LINES SHIPPED

9.2M+ SLV PROCESSORS SHIPPED FOR 9.2M+ LINES

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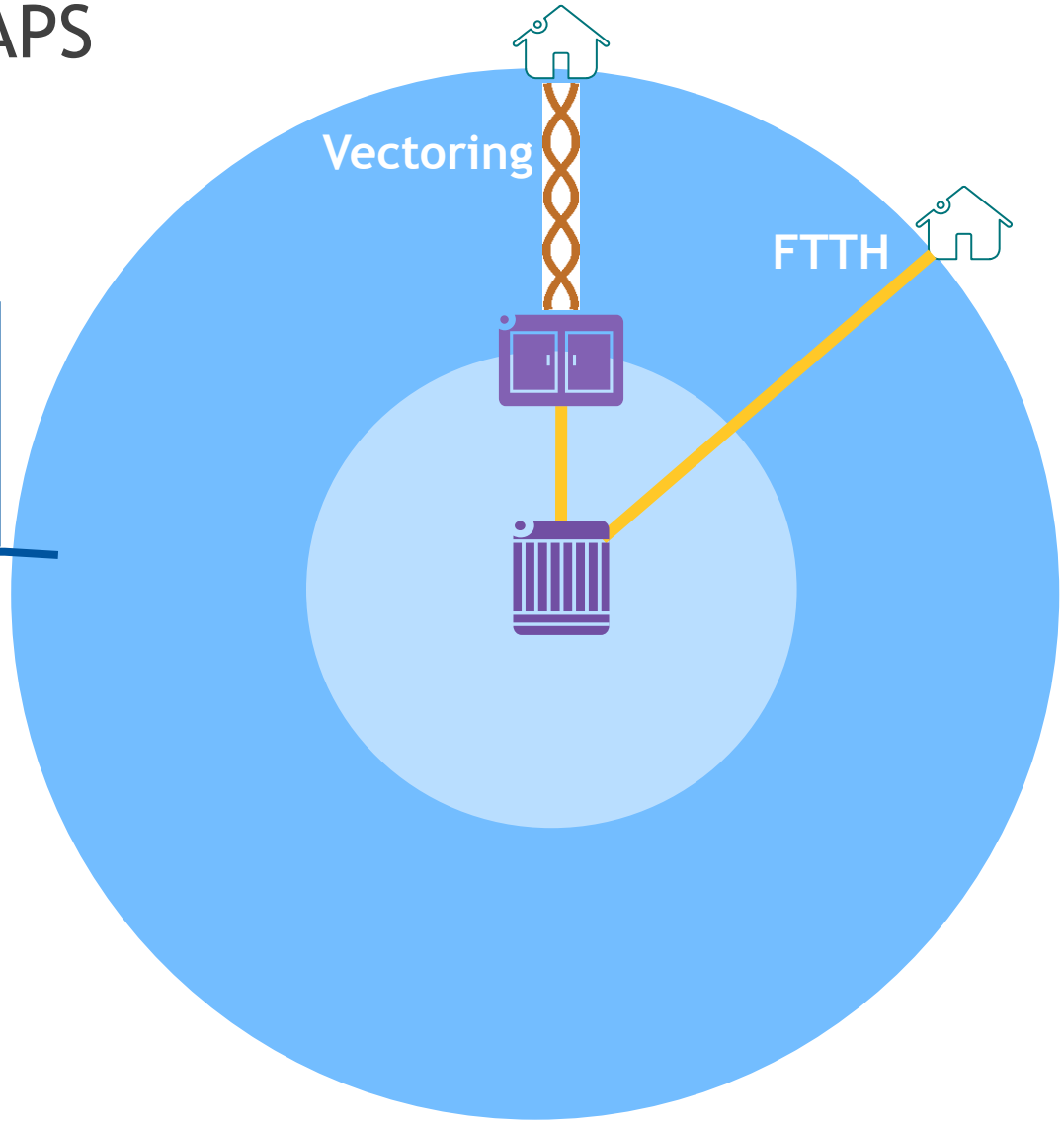
ULTRA-BROADBAND TECHNOLOGIES

FILLING THE GAPS

Need for cost-optimized solution to avoid entering the home with fiber



Building owners started to charge money to allow us enter buildings

Operator in APAC

30,000 phone calls in 40 languages to connect 7.000 HH

Operator in WE

30% of subscribers change their mind about FTTH

Operator in Europe

Technician not allowed to enter the home if husband is not present

Operator in the ME

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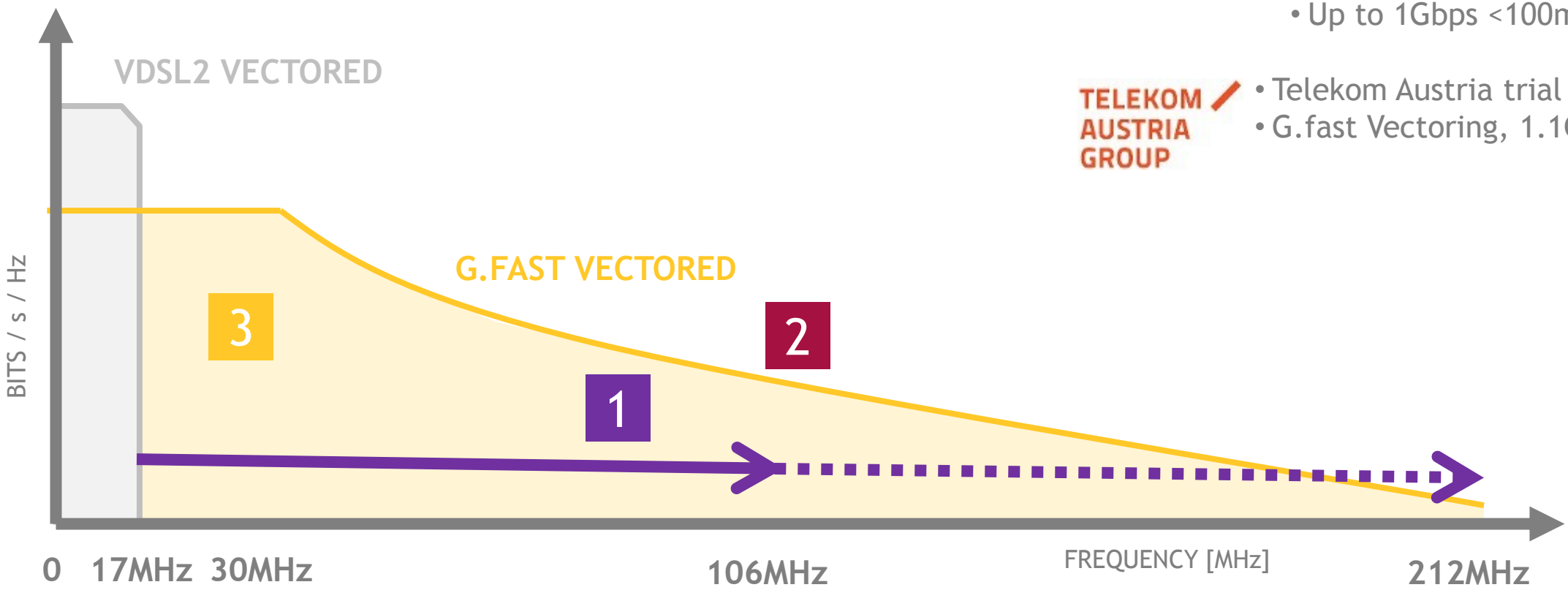
G.FAST: CONCEPT

1 MORE BANDWIDTH
- G.fast: up to 106 or 212 MHz

2 SHORT DISTANCE
- To reduce attenuation at high frequencies

3 HIGH BITRATES
- Standard targets:
  - 150Mbps @ 250m
  - 200Mbps @ 200m
  - 500Mbps @ 100m
  - Up to 1Gbps <100m

TELEKOM AUSTRIA GROUP
- Telekom Austria trial
- G.fast Vectoring, 1.1G @ 70m



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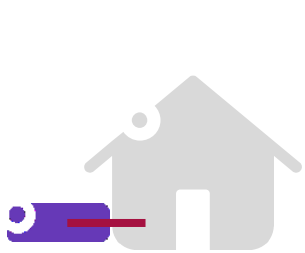
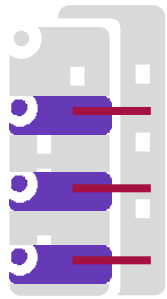
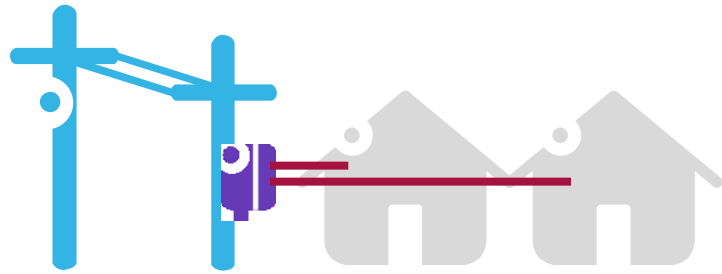
FIRST G.FAST PRODUCTS TO ACCELERATE FTTH DEPLOYMENTS
AVOID ENTERING THE HOME – REDUCE TIME & OPEX



FTT-FRONTDOOR



FTT-FLOOR



FTT-POLE/MANHOLE

FTT-BUILDING

SINGLE-USER

7368 ISAM ONT
- Single G.fast or VDSL2 port
- GPON uplink
- Reverse powering
- DSL pass-through for smooth introduction

G-010V

VDSL2 FTTfd ONT

G-010F

G.Fast FTTfd ONT (1H15)

MULTI-USER

Multi-port DPU
- G.fast DPU
- GPON/GE Uplink
- Reverse powering
- G.fast Vectoring
- 4 port prototype today
  - 12 trials completed
  - 8 more lined up this year

4-port prototype

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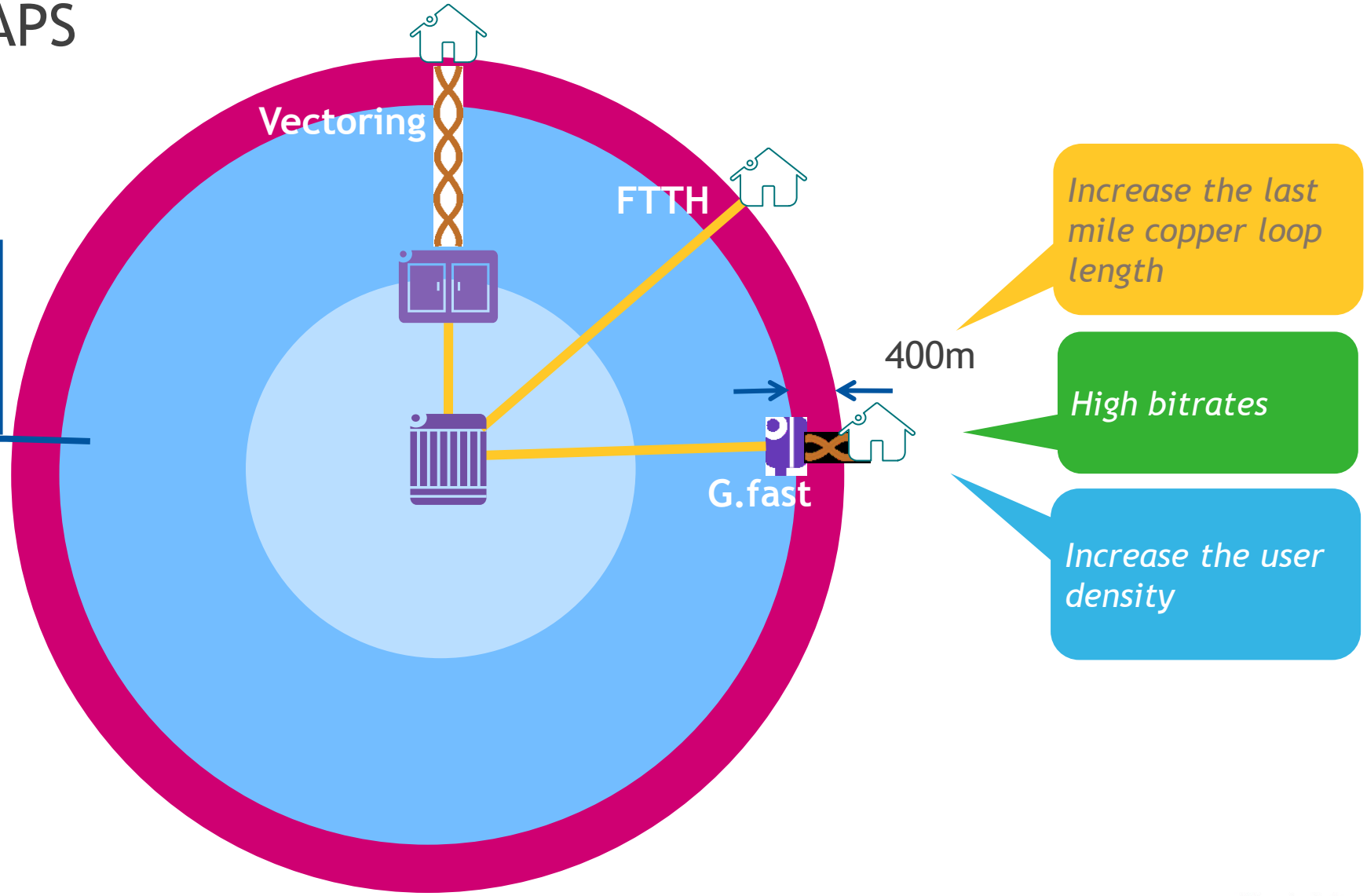
ULTRA-BROADBAND TECHNOLOGIES

FILLING THE GAPS

Need for cost-optimized solution to further decrease cost



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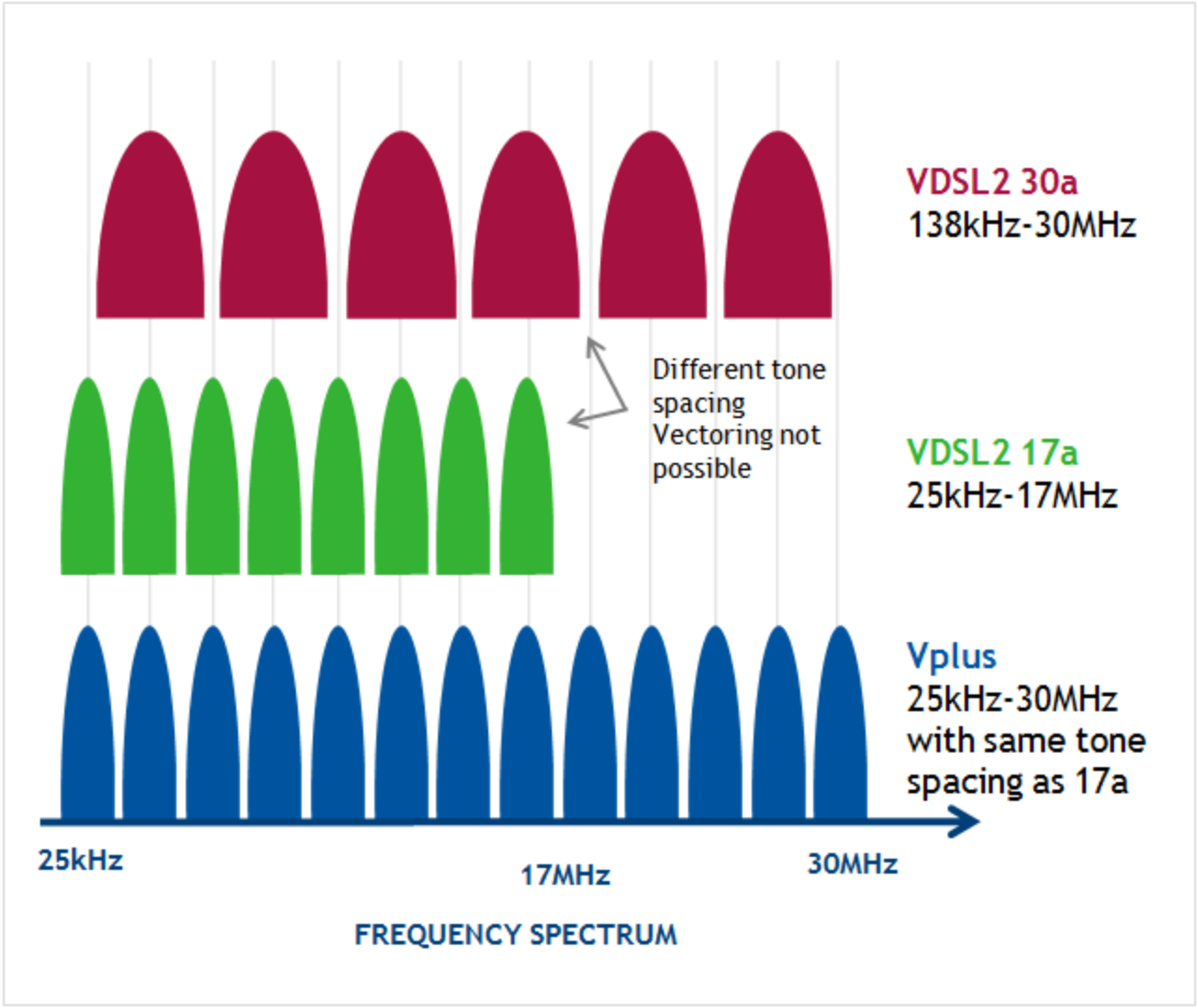
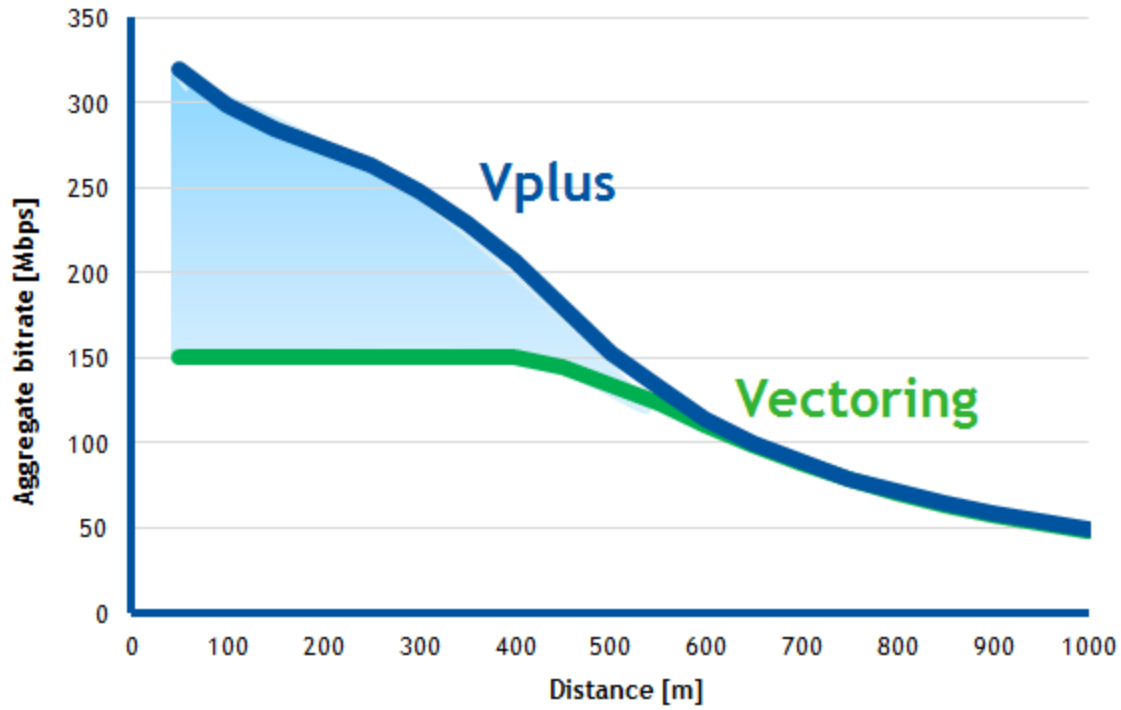
VPLUS FILLS THE GAP BETWEEN VECTORING AND G.FAST





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COMPLEMENTING FTTH WITH FTTX TO SOLVE THE BITRATE EQUATION

1 INVESTMENT

- From FTTN (4x) to FTTH (15x)
- The closer to the subscriber, the closer the cost to FTTH

2 TIME TO MARKET

- Deploying FTTH is time consuming
- Re-using existing copper can speed up deployment

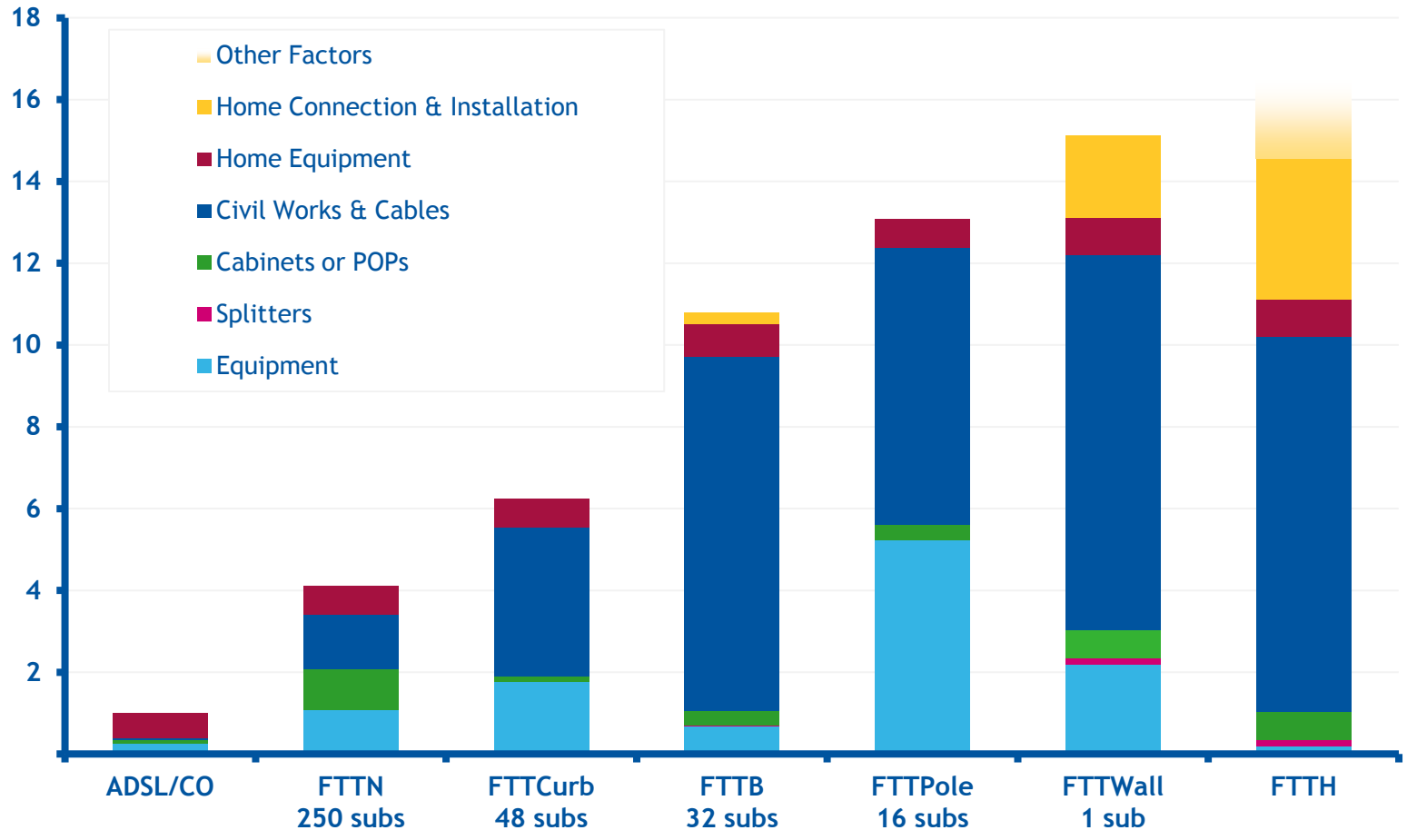
3 BANDWIDTH

- FTTH: 1G and more
- FTTx: 100M (VDSL2 Vectoring today), 100s with Vplus / G.fast

4 OTHER FACTORS

- (-) Aerial fiber, existing ducts
- (+) difficulty to enter the home

FTTx COST COMPARISON, CAPEX + INSTALLATION



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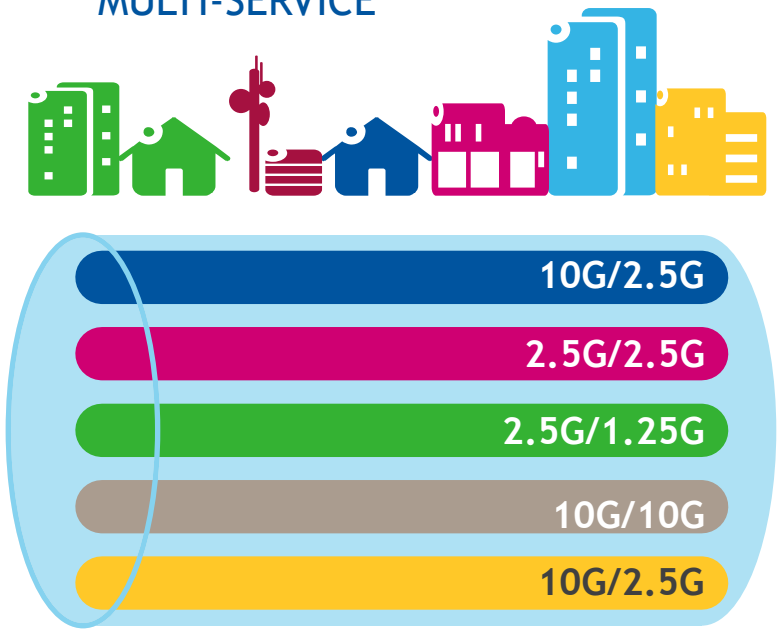
UNLOCK THE FULL POTENTIAL OF YOUR FIBER NETWORK

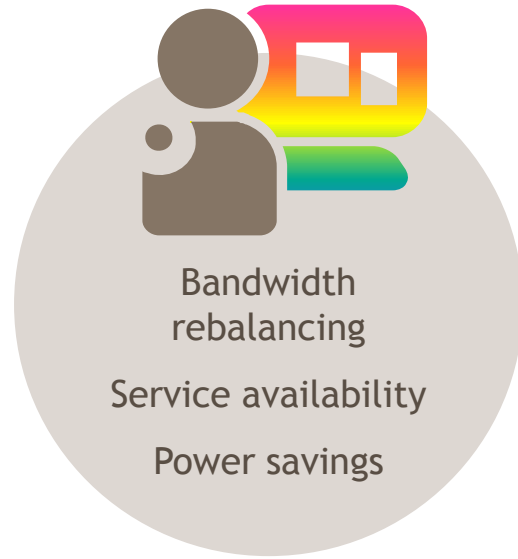
MULTI-SERVICE



MORE CAPACITY

MORE FLEXIBILITY

OPERATIONAL EFFICIENCY



GENERATE MORE REVENUES FROM YOUR EXISTING FIBER NETWORK

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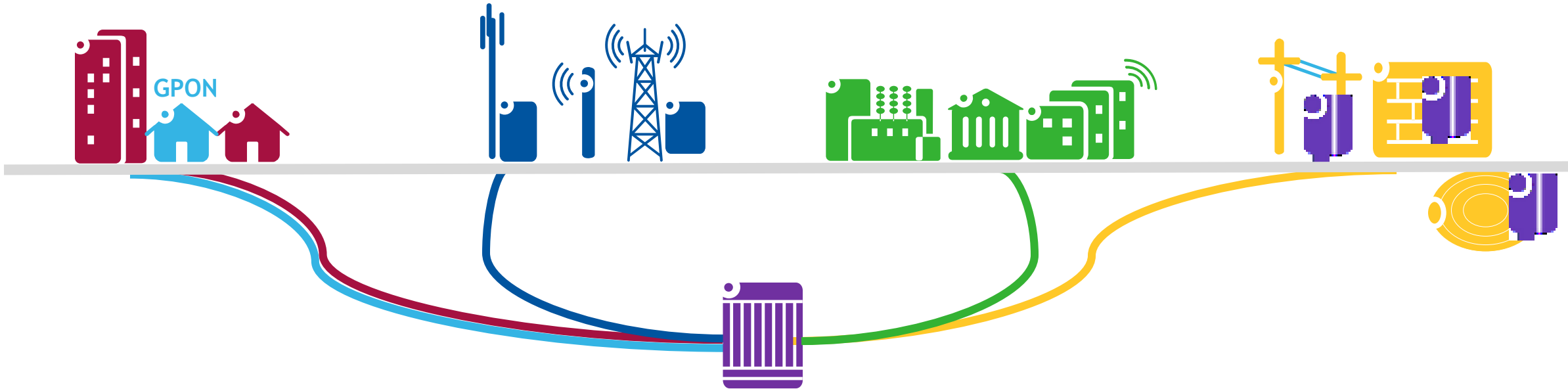
ONE CONVERGED NETWORK FOR ALL SERVICES

Add more wavelengths to cover more residential users or boost their bandwidth

Backhaul increasing cell sites volumes and traffic, over existing residential network

Add high-revenue generating business services

Backhaul large number of micro-nodes to boost bandwidth on copper loops



SIMPLIFIED OPERATIONS AND OUTSIDE PLANT

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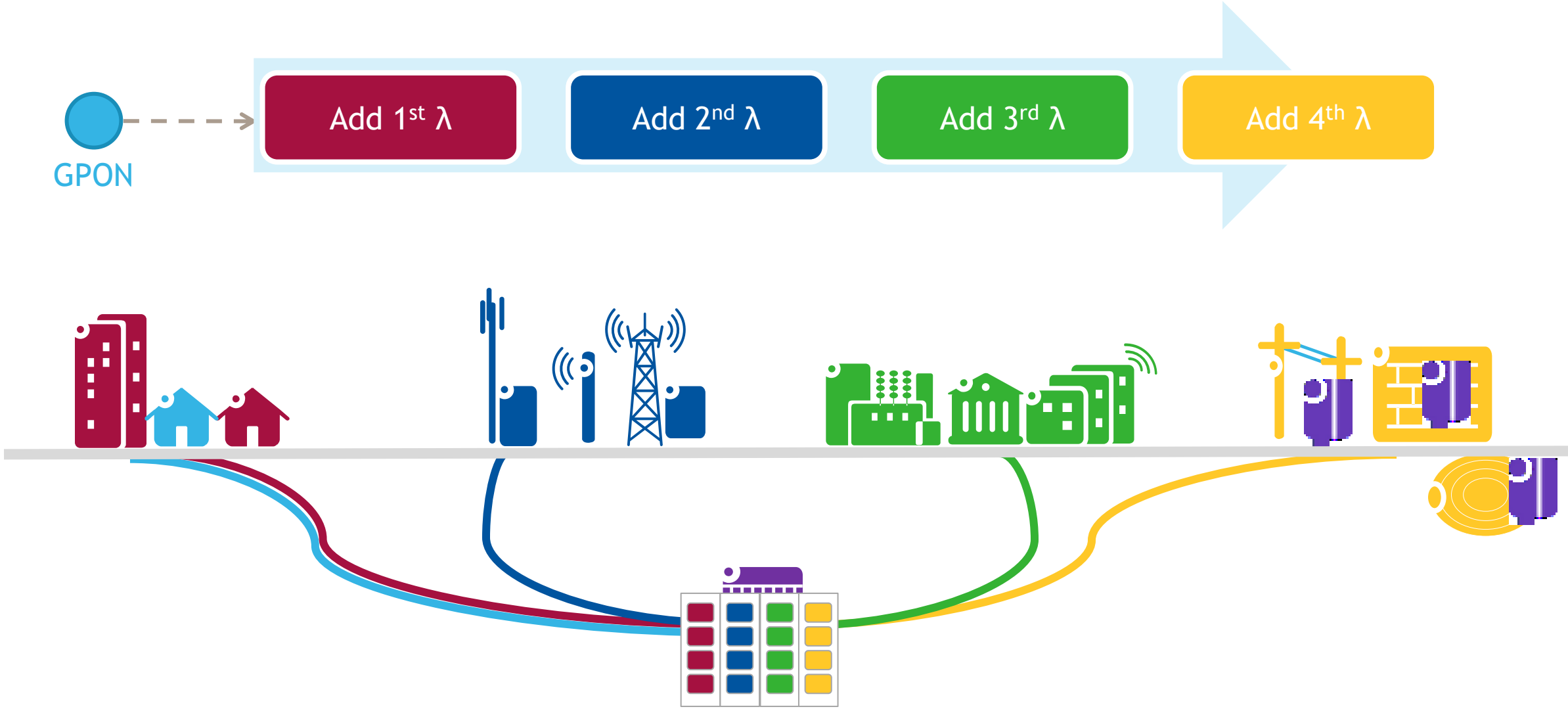
ALCATEL-LUCENT PAY-AS-YOU-GROW APPROACH



75% less introduction cost

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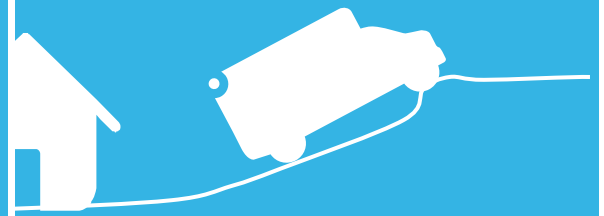
EXPERT SERVICES TO ACCELERATE ROI AND TIME TO MARKET

BELL LABS BUSINESS AND NETWORK MODELING

UNDERSTAND THE IMPACT OF 150 PARAMETERS AND CHOOSE YOUR BEST UBB SOLUTION

ORCHESTRATING COMPLEX TASKS

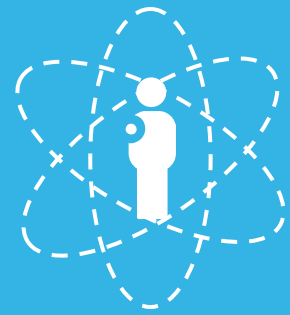
IN MULTIPLE STAKEHOLDER ENVIRONMENT



STATE OF THE ART WORKFLOW TOOLS AND PROCESSES

FAST TRACK PROGRAM

TOGETHER WE ACCELERATE YOUR LONG TERM EVOLUTION AND MAKE IT SAFE



EXPERTISE AND EXPERIENCE AT YOUR DISPOSAL

WHAT DOES IT ALL ADD UP TO

30% to 50% lower transformations costs

End-user average outage shortened from 20 min to **20 sec**

5x shorter on-site visits

Up to **1110** cabinets commissioned in a month

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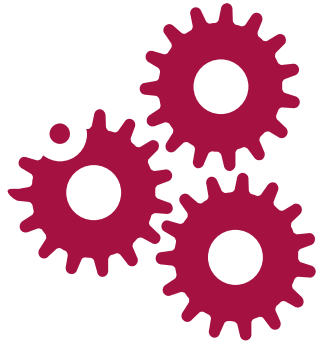
ALCATEL-LUCENT'S MISSION
TO HELP YOU GET TO FAST, FASTER

ACCELERATE ULTRA -BROADBAND

Market leading Ultra-broadband portfolio for any technology / deployment model

ACCELERATE ROI & TIME TO MARKET

Expert services & consultancy to help you plan and execute



ACCELERATE INNOVATION

Continuous innovation to boost speed, capacity and be platform for growth

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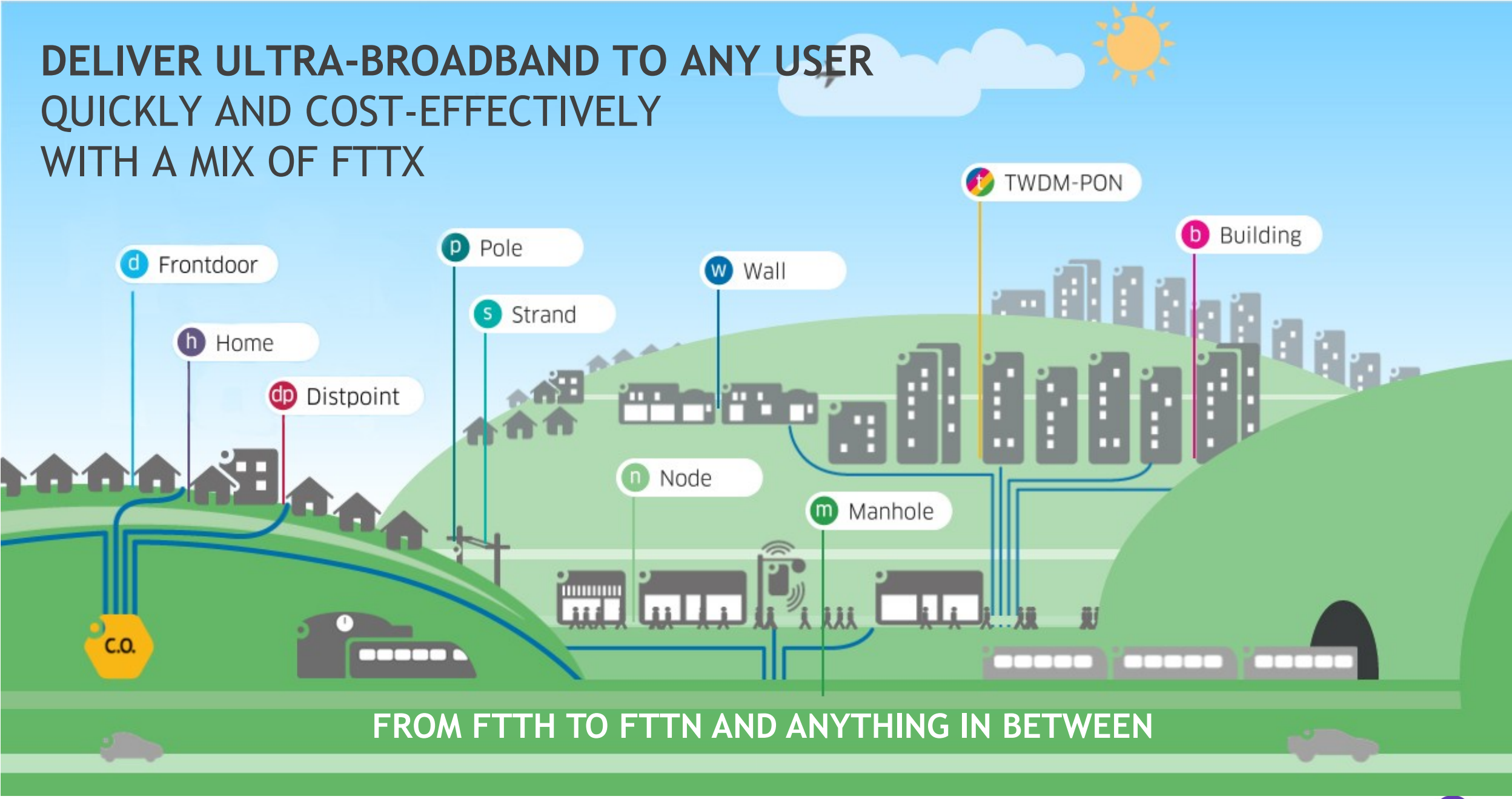
DELIVER ULTRA-BROADBAND TO ANY USER
QUICKLY AND COST-EFFECTIVELY
WITH A MIX OF FTTX



FROM FTTH TO FTTN AND ANYTHING IN BETWEEN

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ALCATEL-LUCENT'S
ULTRA BROADBAND SYMPOSIUM
GET TO FAST
FASTER 2

ULTRA-BROADBAND TECHNOLOGY OPTIONS

Fiber to the Home

PON, PtP

Fiber to the Front Door

G.fast

Fiber to the distribution point

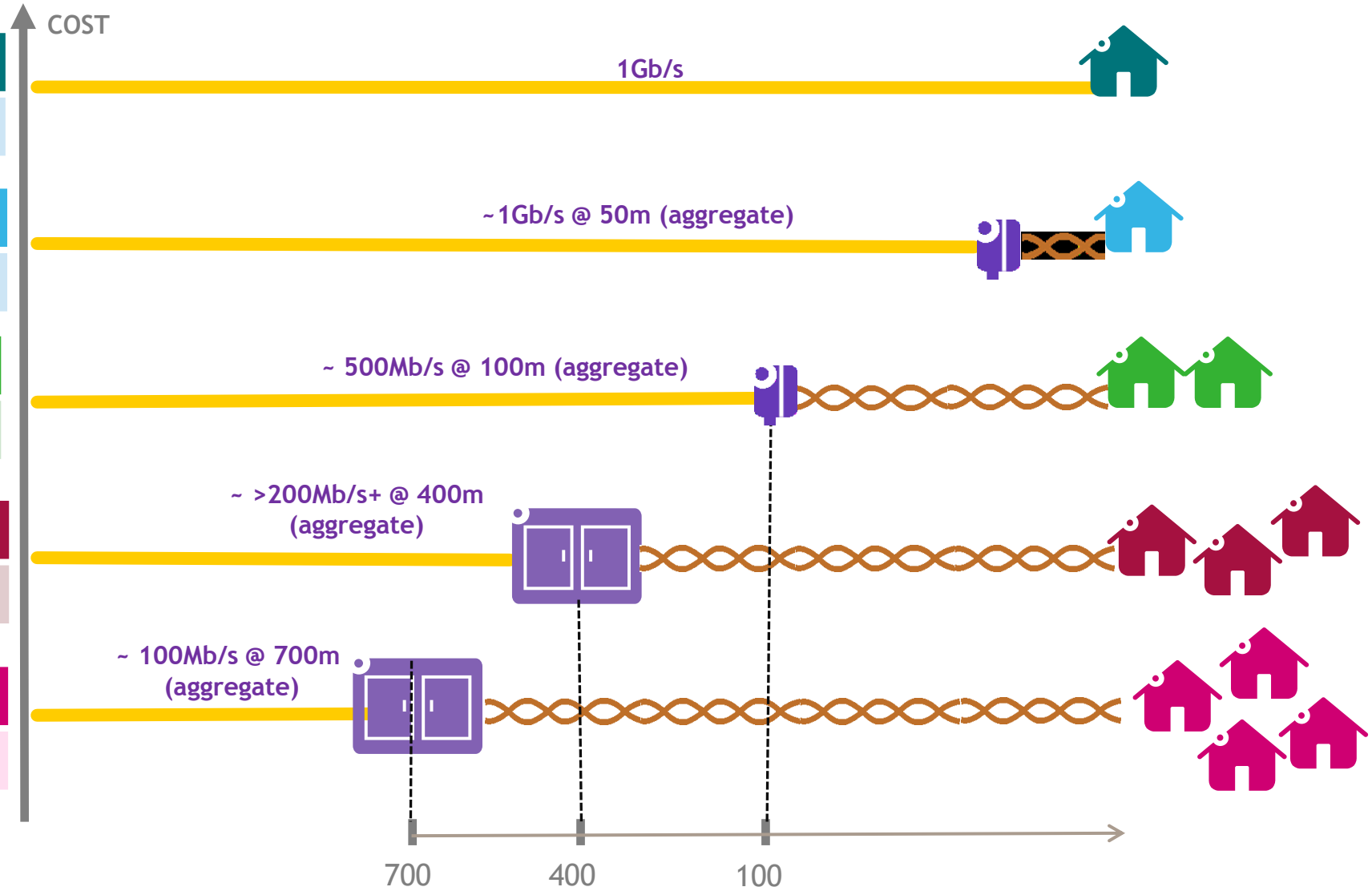
G.fast

Fiber to the x

Vplus

Fiber to the x

VDSL Vectoring



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