

**Co-investment and
commercial
agreements or
wholesale-only: which
model will spur more
incentives to invest?**

Fiesole, 13/12/2019

VHCN investment scenario

European targets and private investments

The Gigabit Society targets for 2025

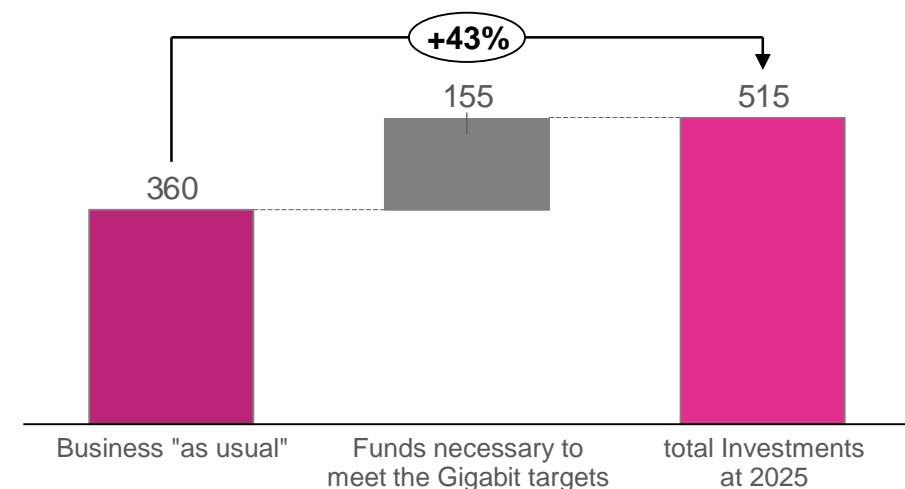
In the Gigabit Society Communication, the European Commission sets the following targets for 2025:

- Gigabit connectivity for all main socio-economic drivers,
- Uninterrupted 5G coverage to all urban areas and all major terrestrial transport paths,
- **Access to Internet connectivity of at least 100 Mbps, upgradable to Gigabit speed, for all European households.**

Gigabit National plans

Country	Year	Target	Connectivity / service	Coverage / take-up
UK ⁽¹⁾	2025 (2033) ⁽¹⁾	50% (100%) ⁽¹⁾	FTTH	Coverage
Sweden	2025	98%	1 Gbps	Coverage
Holland	2023	50%	1 Gbps	Take-up
France	2022	80%	FTTH	Coverage
Germany	2025	Gigabit society targets		
Italy		Not declined		

Investments gap and VHCN indicators



New regulatory objectives & new incentives

From access to network to infrastructure sharing

- The previous telecom package was focused on stringent access regulation to existing networks (typically copper networks owned by incumbent operators or their hybrid fiber-copper evolution) in order to ensure that all access seekers could benefit from the same conditions (e.g. quality, speed and price of services).
- The new Code recognizes that regulatory burdens (i.e. access based regulation) can hinder investments in VHC networks and introduces new regulatory objectives:
 - ✓ “promote **connectivity** and access to, and **take-up** of, **very high capacity networks**”
 - ✓ “facilitating convergent conditions for, **investment in**, and the provision of, electronic communications networks”
 - ✓ “ensuring connectivity and the **widespread availability** and **take-up of very high capacity networks**”
- Under the new Code, these incentives are represented by the lifting of regulatory burdens in two specific cases in which some kind of «**open infrastructure sharing**» is guaranteed:
 - ✓ **co-investments** initiatives; and
 - ✓ **wholesale-only** operators.

Investment choices: key elements / incentives

Incumbent vs new entrants

	Incumbent	New Entrants
Technologies	<ul style="list-style-type: none"> • Opportunity to upgrade copper networks to a hybrid fiber copper (VDSL) • Differential cost upgrade vs new FTTH 	<ul style="list-style-type: none"> • FTTH networks
Competitive environment	<ul style="list-style-type: none"> • Competition by cable operators • Evaluation of low risk of entry from new entrants 	<ul style="list-style-type: none"> • Absence of investment by the incumbent and cable operators
Main goals	<ul style="list-style-type: none"> • Ability to obtain incremental revenues • To preserve or enhance current customer base 	<ul style="list-style-type: none"> • To build up a brand new customer base through migration from existing wholesalers

Characteristics of investment models in the market

Closed co-investment vs wholesale only

- **«Closed» co-investment among existing operators**
 - Vertically integrated companies, typically incumbent(s)
 - Sharing of costs and risks
 - Different cases in the telecom markets (i.e. fixed and mobile)
 - The agreement is limited to coinvestors: latecomers are typically not accepted and access is usually denied or discriminated
- **Wholesale only model**
 - New entrants, not vertically integrated
 - The investors bear all the costs and the main risks (mitigation of risk is possible through long-term purchase agreements or similar arrangements)
 - The model is relatively new in the telecom market but quite usual in others markets (i.e. energy, railways etc..)

**Both investment models are driven by market incentives
(independently from any policy incentives)**

Characteristics of investment models in EECC

Open co-investment vs wholesale only model

	«OPEN» CO-INVESTMENT	WHOLESALE ONLY
Players	<ul style="list-style-type: none">• Incumbents & other active vertically integrated operators	<ul style="list-style-type: none">• Generally new entrants or incumbent's network spin-off
Strengths	<ul style="list-style-type: none">• Less infrastructures duplication• Risk sharing• Balance between competition and investments• The risk of discrimination is mitigated	<ul style="list-style-type: none">• Less infrastructure duplication• Neutral platform• No legacy constraints• Increased retail competition• Access to third parties (also small operators and new entrants) guaranteed by nature• No risk of discrimination
Weaknesses	<ul style="list-style-type: none">• Prevalence of vertically integrated operators and difficult participation of small operators• The main incentive is the promise to withdraw regulation	<ul style="list-style-type: none">• The investment risk is borne by a single entity (risk mitigation is possible with long-term purchase agreements)• Long payback period

NRAs interventions

Open co-investment vs wholesale only model

	Open co-investment	Wholesale-only
Check agreement terms to guarantee that it is open to new participants	YES	-
Price control and discrimination	YES (latecomers pricing)	NO (intervention not expected but possible in case of dominance)
Access refusal	- (third parties access can be denied)	NO (no needed)
Check the impact on the retail market	YES (possible retail market damages because of the access refusal)	NO (no incentive to discriminate)

**For co-investments, regulatory interventions and surveillance are heavy.
Litigations are highly expected**

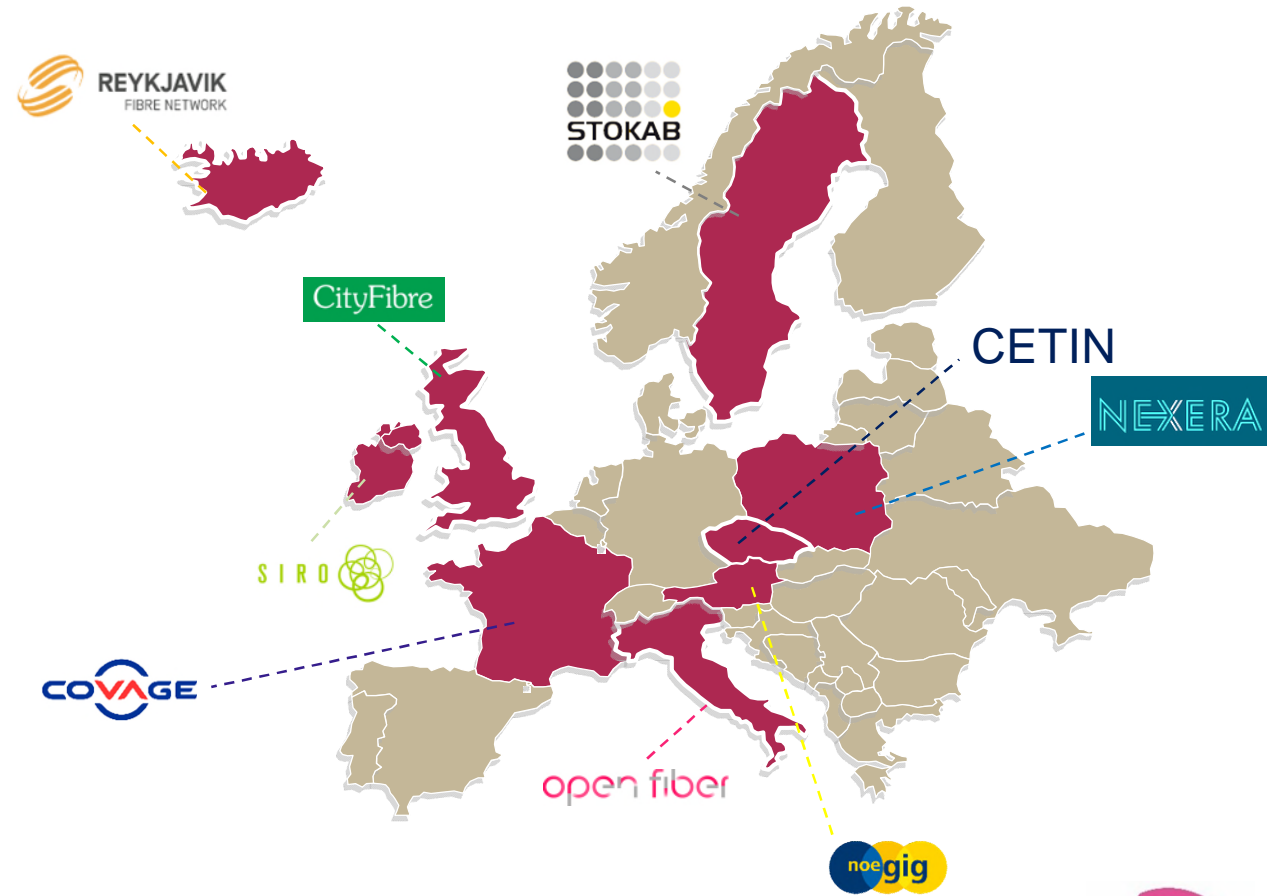
European scenario

Cases of open co-investment vs (main) wholesale only model

Open co-investment model



Wholesale only models



Incentives for VHCN investments

Final considerations

«CLOSED» CO-INVESTMENT MODEL

- In case of high remuneration of legacy copper and unclear processes on copper decommissioning, incumbents likely won't invest in VHCN. Moreover, VHCN demand is still not enough high to compensate the loss of copper networks revenues.
- Incumbents could launch or participate in a co-investments as a reaction to new entrant investments.
- Co-investment model leads towards a oligopolistic market structure in the access market.

«OPEN» CO-INVESTMENT MODEL

- Cumbersome procedures set by the EU Code could hinder the strike of new co-investment agreements.
- BEREC Guidelines on co-investment will be provided only by the end of 2020, generating doubts about the interpretation of incentives so far.

WHOLESALE ONLY MODEL

- Wholesale only operators invest in VHC network because of absence of legacy constraints
- Such model emerges naturally in the market without specific regulatory provision (even if the EECC shows a favor for it, by important deregulation rules)
- Wholesale only model guarantees fair competition in the downstream market and therefore it does not constrain the structure of the services market

VHCN: desirable policies and NRAs tools

Policies	Regulatory tools
Promote UBB services take up	<ul style="list-style-type: none">• To ease the recognition of VHCN services for end-customers• Copper network switch-off
Mitigate VHCN investment risk	<ul style="list-style-type: none">• Evolution of copper prices• Copper network switch-off
Guarantee fair competition for VHCN roll out	<ul style="list-style-type: none">• Ex-ante rules and ex-post interventions in case of abusive behaviours of incumbents
Reducing VHCN deployment cost	<ul style="list-style-type: none">• Fair prices and procedures for access to physical infrastructure

Thank you for the attention