

THE BENEFITS OF FIBER BROADBAND FOR THE REAL-ESTATE MARKET

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In assistance to



Fibre to the Home
Council **Europe**

Purpose and Methodology

- The benefits of FTTH/B to real-estate players and individual home owners have long been theorized, but there is a distinct lack of primary research material expressing these benefits from the real-estate players themselves.
- The FTTH Council Europe commissioned this study to get the message back from those real-estate players who have direct experience with FTTH/B to real-estate players considering broadband solutions and network providers negotiating with real-estate players.
- The methodology of this study was as follows:
 - Direct interviews with 8 real-estate companies in France, Netherlands, Sweden and the UK;
 - Analysis of existing regulation in EU countries for broadband obligations in new buildings.

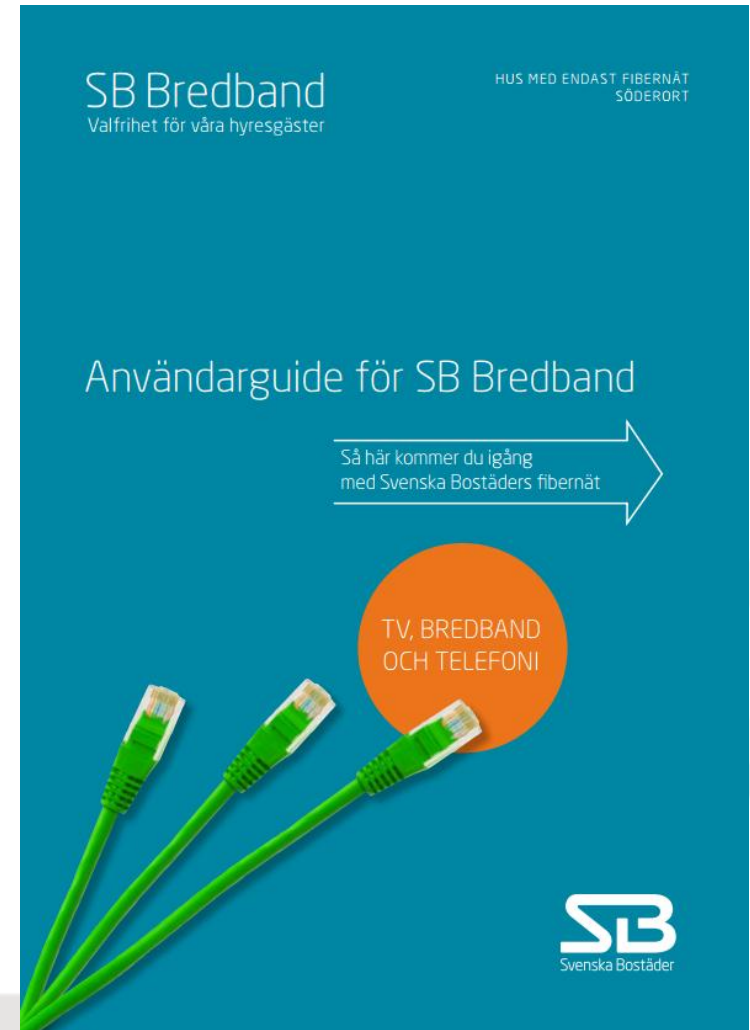
Who takes the initiative for Real-Estate FTTH /B?

- The initiative for FTTH/B in real-estate can come from any of the players in the ecosystem (except the end-users, obviously) depending on the circumstances



Services Offered

- Service Providers offer to real-estate customers the services we've come to expect from FTTH/B: high-speed broadband (often symmetric), TV content and VoD and IP Telephony.
- However, real-Estate players can be involved in various ways in service delivery:
 - Because they offer their own dedicated services
 - Because they use the network for their own operations,
 - Because they request specific services from service providers
 - Because they partner with service providers to offer specific services
- The idea is generally to ensure that a rich service portfolio is on offer in order to maximise the value to the end-user. Scale sometimes makes this difficult.
- **Utility:** « We have found a local ISP willing to work with us on service experimentation, but none of the larger established players are interested. »



Services Offered by Real-Estate

Own Dedicated Services

In-building and garden wifi services

Interaction console between tenants and landlords

Utility metering console

Amenities booking console

Services for Own Operations

Building Access Management

Remote amenities management (elevators, doors and windows, etc.)

Remote heating management

Utilities management (especially for social housing)

Services Offered by Service Providers

Services Requested by Real-Estate

On-demand bandwidth

Social pricing for minimal universal internet connection

Home security

LAN services between tenants

Services in Partnership

Health monitoring

Elderly care programs

Theoretical Framework for Benefits

- There are three key areas in which real-estate players could theoretically benefit from FTTH/B deployment:

Attractiveness

Customers are willing to pay more rent / purchase price to access the fibered property

Rented property cycles faster between tenants and occupancy rates go up

New developments sell faster because of customer demand for connected homes

Customer Satisfaction

Tenants are generally happier with their homes

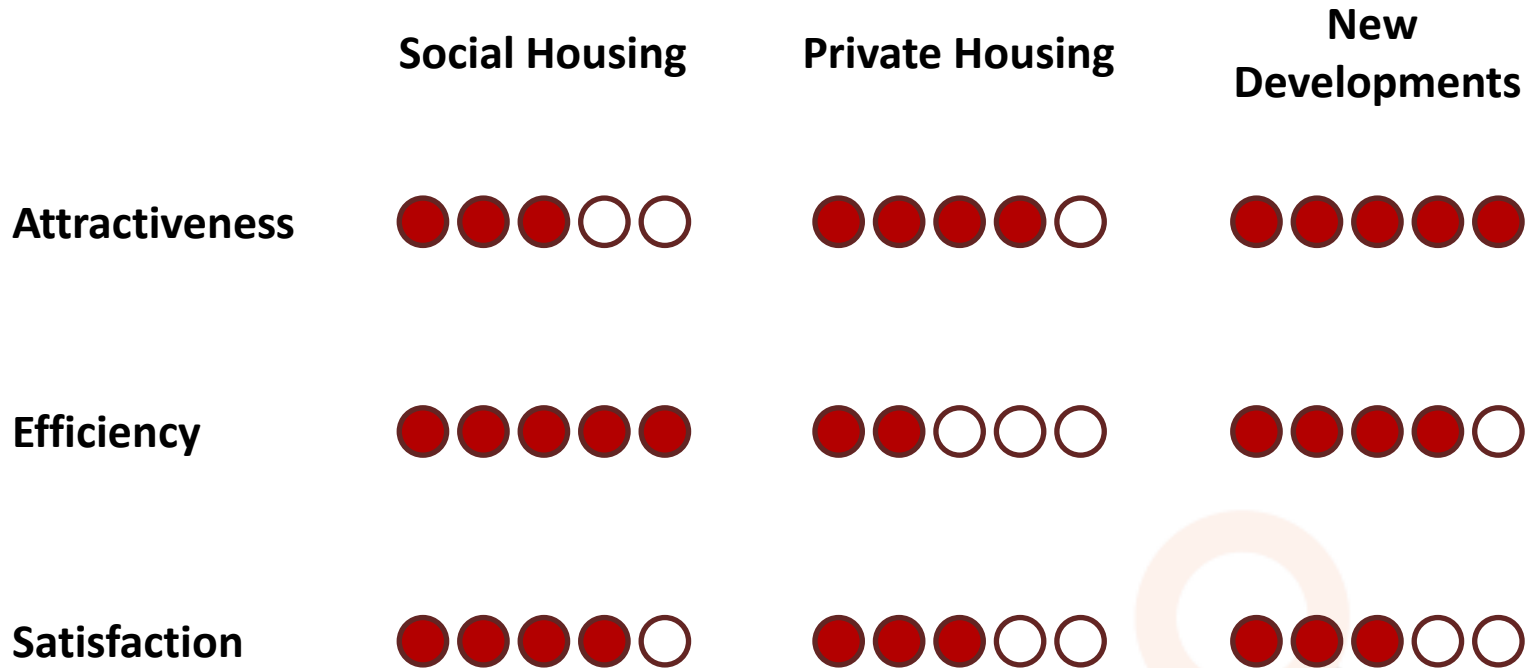
Building Efficiency

Savings on utility bills for the common parts of buildings

Better security allows for less degradation

Better monitoring allows for faster intervention when amenities fail

Summary of Benefits



Benefits for Service Providers

- There are clear benefits for service providers participating in such projects:
 - In new developments, even when copper is installed in parallel, the take rates for fiber are very high, in the 60-70% range.
 - In social housing, the take-rates can reach 30-50% in less than a year (depending on pre-existing contracts signed by tenants)
- There are essentially two reasons why the take-rates are higher:
 - Real-Estate companies involve themselves in marketing the FTTH/B services to tenants
 - **Utility:** « We don't sell the services, but we do advertise them to our utility customers. »
 - Satisfied tenants and owners speak amongst themselves and represent a form of 'street team' for the FTTH/B services.
 - **Developer:** « Today, fully 78% of the 100 homes on the greenfield site have subscribed to FTTH. »

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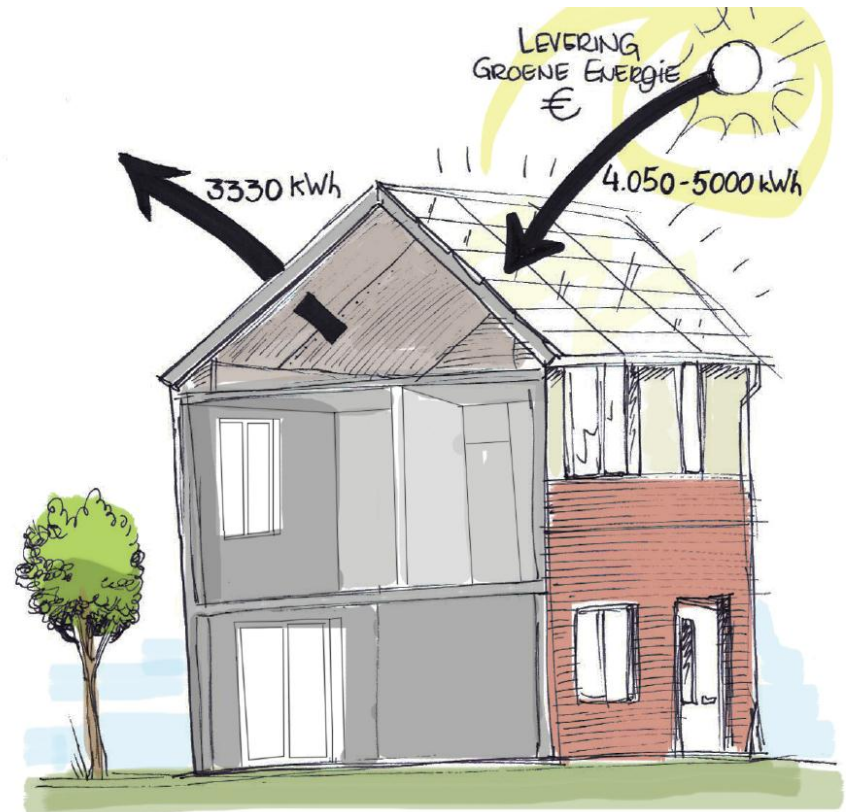
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Tomorrow: Carbon Neutral via FTTH/B

- With some other real-estate partners, a developer has pioneered a concept for a carbon neutral home that has been one of the 5 designs selected for future social housing concepts.
- One of the key reasons this home is Carbon Neutral is that all of the computing power for the home (be it for actual PCs or other intelligent devices) is in the cloud.
- **Developer:** « By delivering IT and triple play via fiber as a service, computers can be replaced by thin clients (with less than 10% of normal energy consumption). »



Legislation for Fiber in New Buildings

- For brownfield deployments, deployment models are largely dependant on regulation, but they do not specifically affect real-estate players.
- For greenfield deployments on the other hand, there are essentially three types of mandated deployments for access that do impact real-estate players:

Obligation to deploy fiber into every new home or apartment

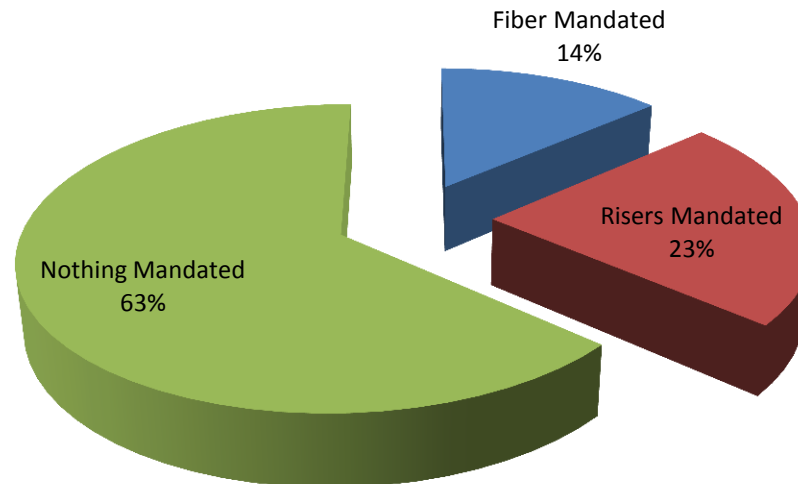
Obligation to deploy conduits for any network into every new home or apartment

No obligation to deploy any kind of access network into homes or apartments

Overview of EU Legislation

- Only a minority of EU countries (37%) have put legal obligations in place for fiber networks to be deployed in new builds or for communication risers to be open to any network deployment:

Legal Obligations for Fiber up New Buildings in the European Union*



** Graph does not include Malta, Luxembourg, Latvia, Estonia or Hungary*

Feedback on Legislation

- 2/3 of European countries have no legal obligation in place for new developments. Those that do however tend to be amongst the countries where deployment is ahead according to FTTH Council Europe numbers.
- Legislation however risks imposing models that become obsolete fast.
 - **Social Housing:** « The legal obligation comes from a law in 2009 that mandated 4 fibers per home, but market consensus has now moved to 2 fibers per home. If we deploy 4 we meet the obligation but service providers don't want to work with us, if we deploy 2, the fiber providers are happy but we're breaching the law... »
- Legislating works when the approach is simple and enforceable:
 - Sometimes the proposed legislation is so comprehensive (so as to allow any kind of network to be pre-deployed) that it's too expensive to deploy.
 - Often, the legislation is not strictly enforced and only respected if the construction players derive a direct benefit from it.
- Integrating the legislation into a building rating standard seems effective.

A good match that needs more visibility

- Real-estate players are very satisfied with FTTH/B involvement and all agree that they have derived various benefits from it.
- They also stress that awareness in their field is still too limited. Despite their successes, real-estate remains a slow moving industry.
- Legislative approaches, especially for new buildings, can help provided they are structured well.
- The breakthrough for FTTH/B in real-estate will be:
 - in the ability to combine communications with other utilities (metering, etc)
 - in the ability to drive more energy efficient homes to the market
 - in the ability to enable services that service providers have a hard time providing (health, elderly care, on-demand, etc.)