

VX FIBER

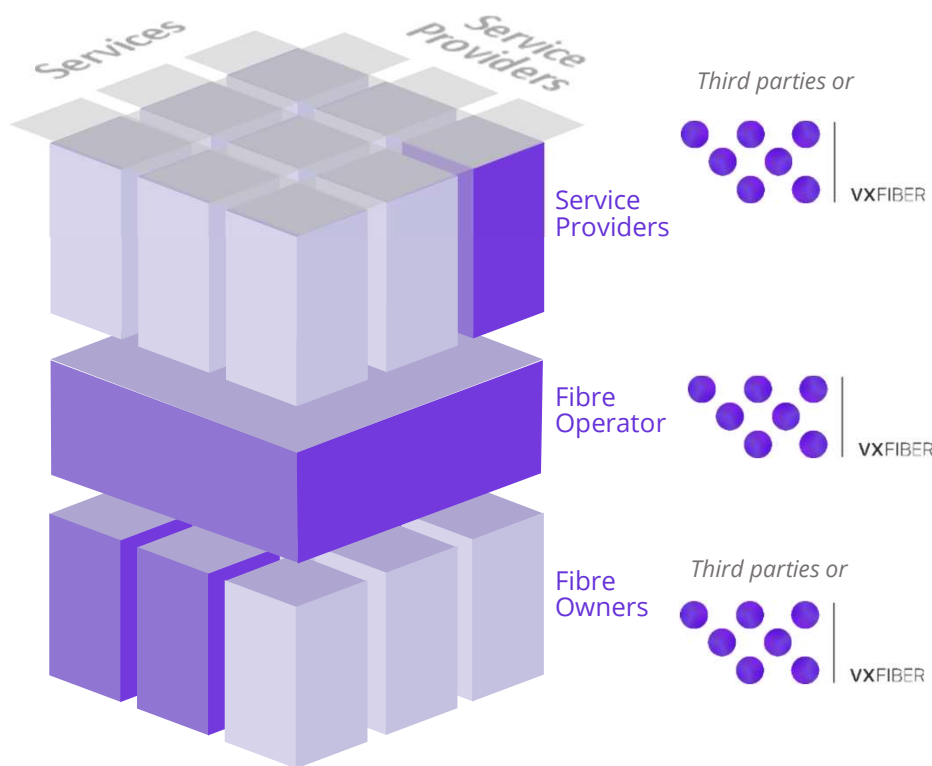
enabling the digital future

VX Fiber as Investor

November 10th, 2022

VX Fiber is a Fibre Operator

- but can act in all layers in the 3LOM model



Partner ISP responsibilities

- | | |
|---|---|
| <ul style="list-style-type: none"> • Internet service <ul style="list-style-type: none"> - ISP licence - Product bundle (e.g. TV OTT) • Marketing and sales • Subscriber router (IAD) • Customer service | <ul style="list-style-type: none"> • Subscriber billing • Installation and maintenance in subscriber premises |
|---|---|

VX Fiber as Neutral Fibre Operator

- | | |
|--|--|
| <ul style="list-style-type: none"> • Design network architecture (active layer) • Active equipment <ul style="list-style-type: none"> - Core network equipment, e.g. routers and servers - Access equipment, e.g. distribution and access switches - Network termination devices on the subscriber premises • Software (BSS/OSS, API), Operator Sales Portal, DHCP Server | <ul style="list-style-type: none"> • Maintain network with very high uptime • 24/7 proactively and continuously monitoring <ul style="list-style-type: none"> - Network traffic - Fibre values - Unreachable subscribers • Onboarding and management of Service Providers • Second- and third-line support for ISPs during troubleshooting |
|--|--|

VX Fiber's Active Open Access approach offers flexibility, efficiency, and makes VX Fiber a partner of choice

- VX Fiber has developed an **advanced system** based on tightly packaged software and hardware to produce an **Active Open Access solution**
- In the Open Access model, the subscriber finds an attractive service package and chooses ISP on VX Fiber's subscriber portal
 - The service is provisioned immediately
 - The service contract is between the subscriber and the ISP
 - The ISP is paid by the subscriber
 - VX Fiber charges the ISP or the fibre owner (alternative models)
- The Open access model makes VX Fiber a partner of choice
 - for public authorities (Councils and Government),
 - for other passive infrastructure owners such as utilities, land & real-estate owners, developers, and tower companies,
 and VX Fiber does not compete with these partners in the large business and corporate segments
- VX Fiber offers simple Service Provider onboarding
 - It's system lowers the barrier to entry for smaller SPs who can simply log on to its powerful SP portal
 - Using smaller SPs to reach 30-40% take up and then introducing larger SP is a strategy for high take-up (60%+)
- The active open access model is highly scalable



Subscribers	Service Providers	Fibre Operator	Fibre Owner
<ul style="list-style-type: none"> ✓ More services, more choices - generates high take-rate ✓ Competition removes long contracts and data caps ✓ Self-Service via portal marketplace (24/7) ✓ Change of service provider is immediate, low cost and without need of home visits ✓ Specialized support from ISP ✓ Efficient use of infrastructure results in long term lower prices 	<ul style="list-style-type: none"> ✓ Limited capex as hardware installation is done by fibre owner and changes between service providers does not require home visit ✓ Direct subscriber relationship ✓ Limited SAC - web-based sales portal ✓ Easy ISP onboarding ✓ Full service security - separation between subscribers, networks and services 	<ul style="list-style-type: none"> ✓ High take rate results in low capex per subscriber ✓ Low opex as network monitoring can be scaled across many networks 	<ul style="list-style-type: none"> ✓ Low capex per subscriber thanks to high take rate ✓ Low risk of overbuild ✓ Can focus on infrastructure - not subscribers ✓ Controls smart city initiatives ✓ Shorter time to and higher revenues

Partner of choice for public authorities (Councils and Government), as well as other passive infrastructure owners such as utilities, land & real-estate owners, developers and tower companies

Long success story in fibre which is being applied to new opportunities



Bostream 2001 - 2004

- Third largest broadband service provider in Sweden
- 110,000 subscribers
- Today owned by Telenor (Bredbandsbolaget)



Bostream

ZITIUS 2005 - 2014

part of the QuadraCom Group

- Largest fibre operator of open access networks in Sweden
- 70,000 subscribers on 75 networks, of which 21 owned by the company (passive infrastructure)
- Successful exit to Telia, with now c.300,000 subscribers



ZITIUS

VX Fiber 2014 -

- Fibre owner, operator, and service provider in the UK, Germany and Austria
- c. 250,000 subscribers
- Operator of the largest open access FTTP network in South Africa
- >100 ISPs, including all South African Tier 1 ISPs



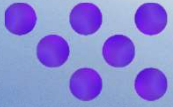
VX Fiber's Experiences with Investments in Open Access Networks

International UK, Germany	Austria
<p>VX Fiber's DNA is to operate fibre networks as [Neutral] Active Network Operator (ANO).</p> <p>If there are no or little Fiber networks VX Fiber has decided to build fibre networks on its own.</p> <p>Starting in UK and Germany where the open access model is widely unknown – no ISP landscape supporting open access networks</p> <p>VX Fiber set up its own ISP – LilaConnect in UK and Germany</p> <p>Meanwhile VX Fiber has built 150,000 homes passed in UK and Germany</p>	<p>In Austria, VX Fiber acts as:</p> <ul style="list-style-type: none"> Active network operator in Upper Austria Fibre deployer and operator in Dietach <ul style="list-style-type: none"> Acting as investor and network operator Offering own service (LilaConnect) with initial connection sale (full open access later) <p>Next areas</p> <p>VX Fiber will also start with own service – but networks are open for ISPs especially if their offer differentiates from the LilaConnect offer</p>
<p><u>German subsidies:</u></p> <p>Initially only offering own service (LilaConnect)</p>	<p><u>Austrian Subsidies:</u></p> <ul style="list-style-type: none"> BBA 2030 with strong focus to Open Access Provides possibilities to combine deployment in areas where subsidies are granted to communities or regional players with privately funded deployment to get full fibre coverage

VX Fiber's Experiences with Investments in Open Access Networks

View on the Austrian Market

- Austria is small sized structured resulting in many local or regional players
- Communities / regions are giving their support only in return for a share in the fibre network (e.g. Liezen)
- **What is the risk for overbuild?**
 - Open Access / neutral operator will decrease this risk
 - Duty to accept "Mitverlegung" is increasing risk of overbuild
- **Do the subsidies in Austria work as intended?**
 - Attracting investors who now understand the fibre market - "gold rush"?
 - Big 1st shot caused high interest resulting into increased deployment cost and potential bottleneck in deployment capacities - less homes for same money?



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THANK YOU