



Next2Met
Interreg Europe



European Union
European Regional
Development Fund

Fibre to the Home (FTTH) Infrastructure in Lower Austria

DI Christoph Westhauser, MAS

Lower Austrian Broadband Coordinator
Office of the Lower Austrian Federal Government

christoph.westhauser@noel.gv.at

Virtual Meeting 14th May 2020

What is broadband?

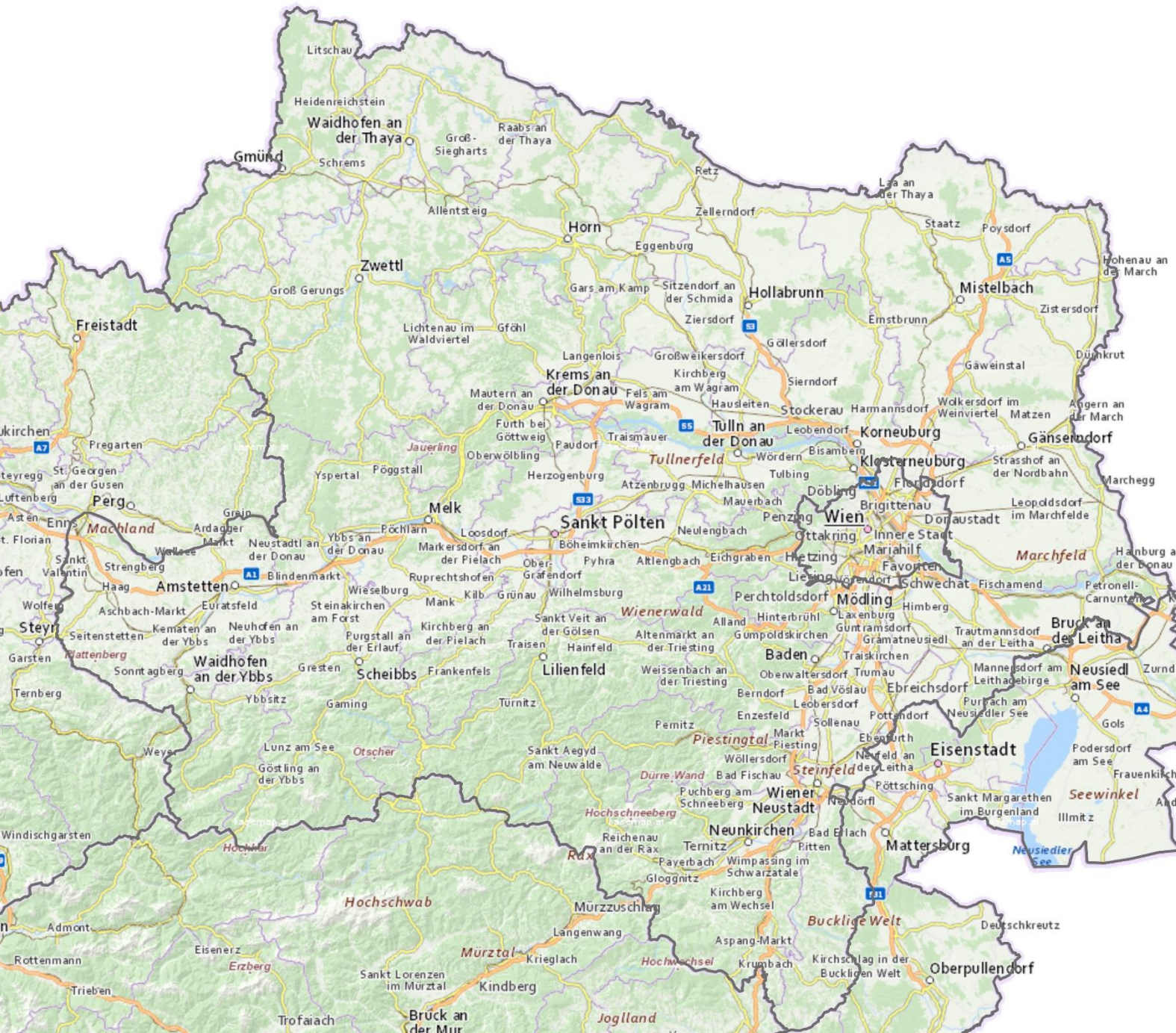
Broadband is
...if it works!

TARGETS TO ACHIEVE BY 2030

- ultrafast broadband
- nationwide coverage
- **future-proof** (scalable symmetrical connections with minimal latency)

Broadband supply
at prices affordable for
households and businesses

= FTTH
fibre (connections)
to the home



**1.7 million residents
approx. 800,000 fixed-
line connections
in 573 communities**

**500 of these
communities have less
than 5000 inhabitants**

= rural communities

STRATEGY: "MODEL LOWER AUSTRIA" OR SEPARATING THE LAYERS



Service level: private ISPs

Development and provision of (Internet) services

- Extensive competition
- Short economic life cycles < 2 years
- 10-15% of total costs



Network operation level: private active network operator

- Routers, switches, modems and software
- Medium economic life cycles 5 - 7 years
- 10-15% of total costs



Infrastructure level: passive network infrastructure

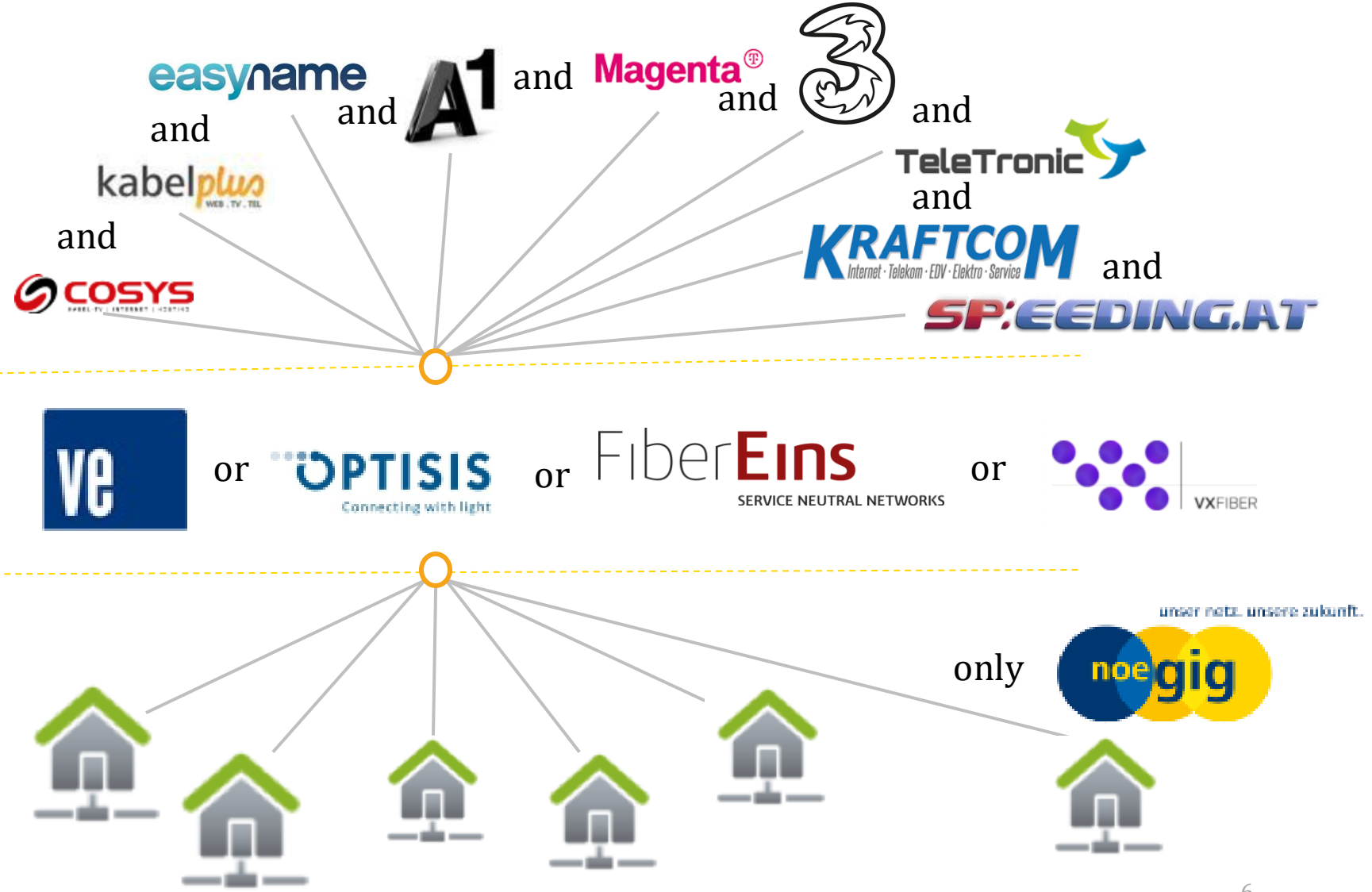
- Cable ducts, tubing, cables, cabinets, buildings
- Long economic life cycles > 25 years
- **70-80% of total costs**

STRATEGY: "MODEL LOWER AUSTRIA" OR SEPARATING THE LAYERS



3-Layer Open Model (3LOM)

Services
Neutral network operation
Passive infrastructure



STRATEGY: "MODEL LOWER AUSTRIA" OR SEPARATING THE LAYERS

No state funding

No state funding

State funding for infrastructure development

Prerequisite: approx. 40% infrastructure orders in the areas to be built and connected

Service level:

Development and pro

- Extensive network
- Short
-
- Active network
- Modems and software
- 10-15 years
- 10-15% of total costs

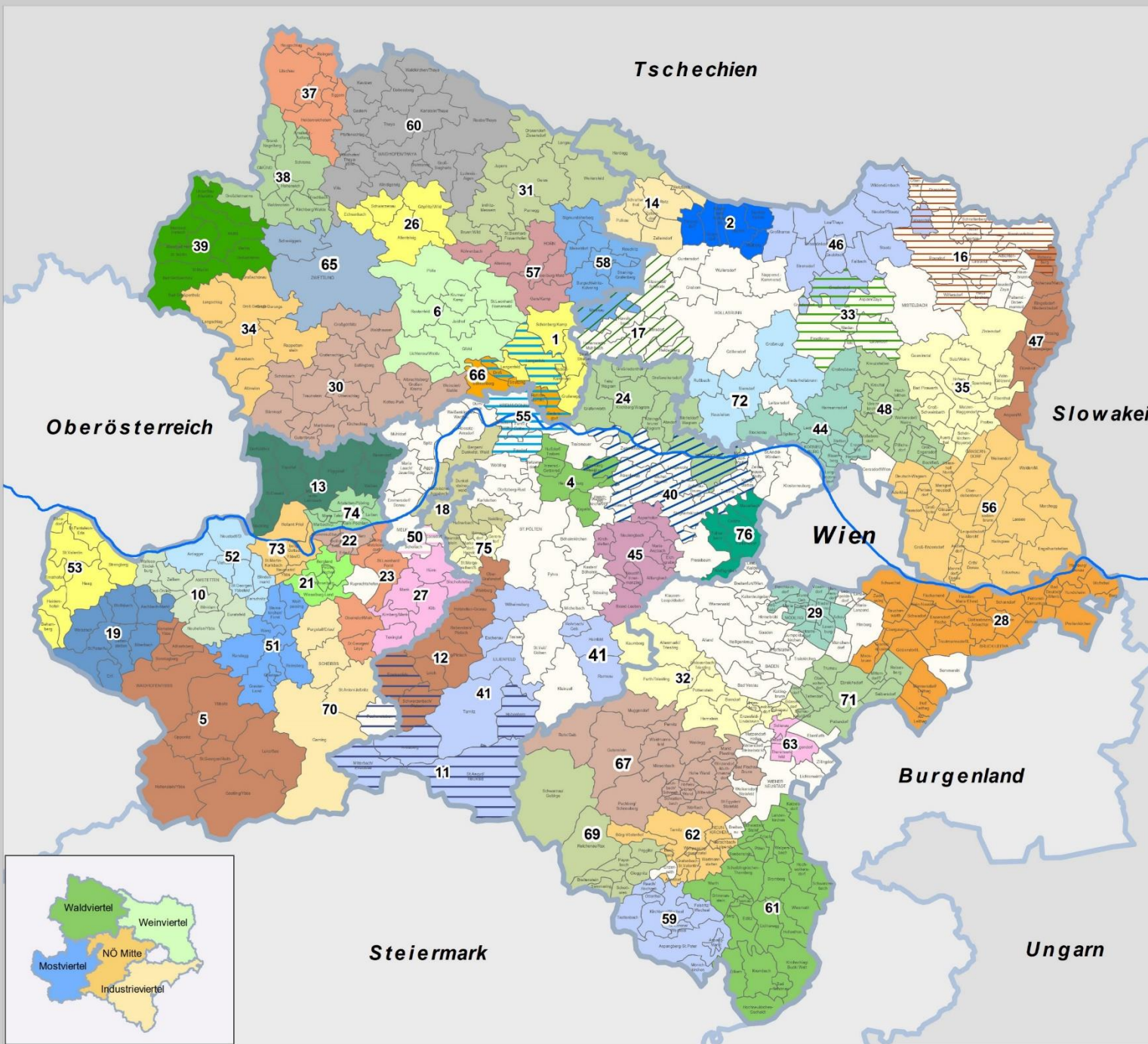
Infrastructure level: passive network infrastructure

- Cable ducts, tubing, cables, cabinets, structures

70-80% of total costs

Private companies, free market and competition

Draft plan for blanket coverage of communities with fewer than 5000 inhabitants already prepared in 2017 to ensure fibre optic cable installation during construction projects (work on sewerage and water supply systems etc.)



61 Gemeinsame Region
Bucklige Welt

62 Schwarzatal

0 4,75 9,5 19 Kilometer

N

Abteilung Raumordnung und Regionalpolitik

Quelle: Amt der NÖ Landesregierung
Verwaltungsgrenzen: BEV, Gr.L., 1988 Wien, NÖGIS
E-mail: post.ru2@noel.gv.at
Datum: August 2018

Vervielfältigung nur mit Genehmigung des Urhebers

COORDINATED INSTALLATION OF FIBRE OPTIC INFRASTRUCTURE PER HIGH LEVEL PLAN AND MANUALS

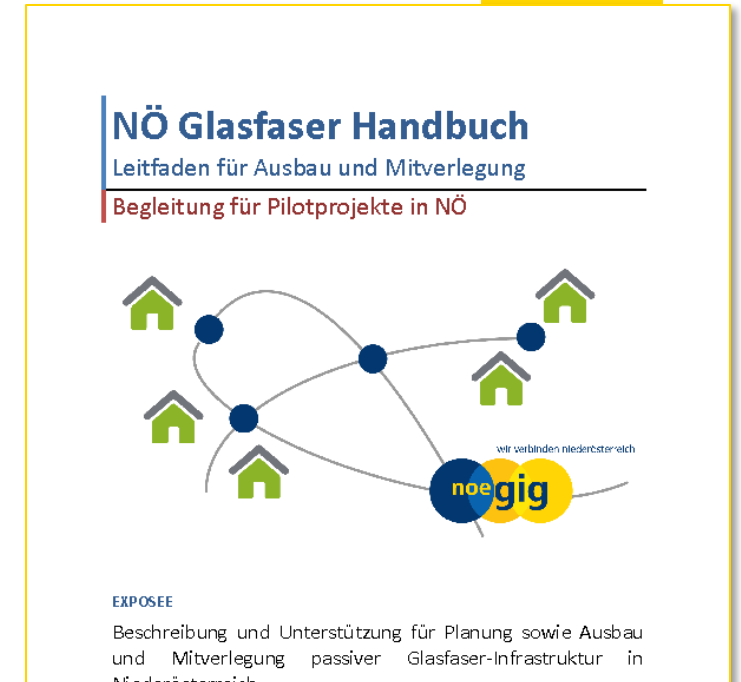


On-going collaboration with local community / local authorities for extending the network:

- a) Local authorities pay for additional excavation work
- b) Planning, material and calibration provided by nōGIG

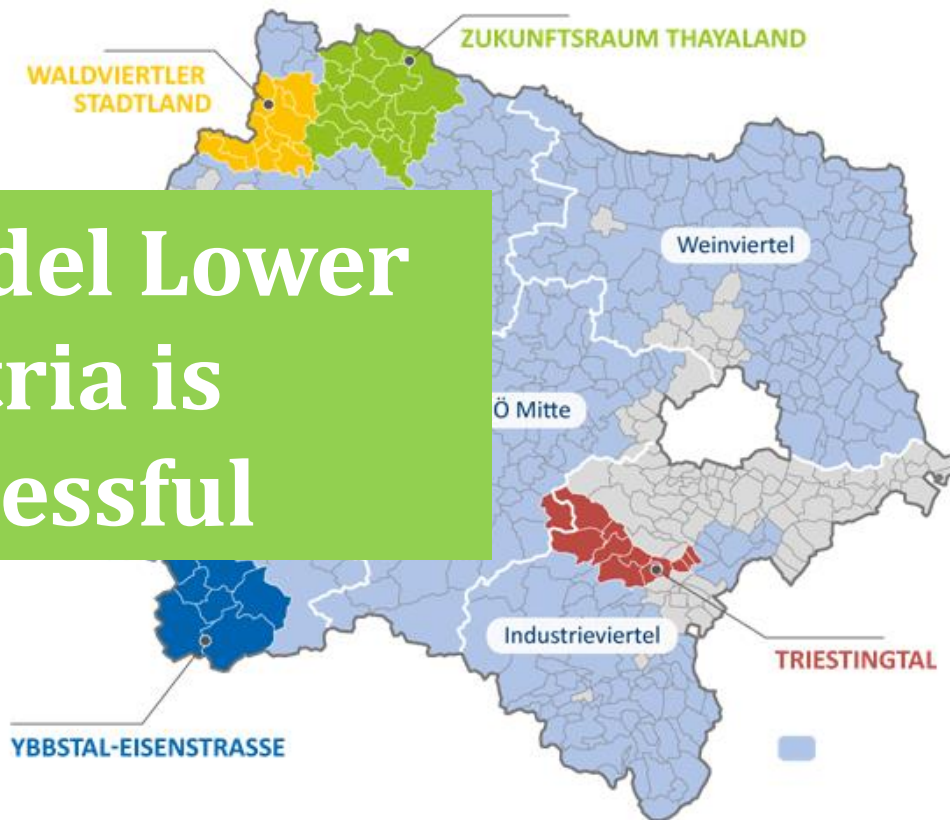
On activation: nōGIG is replacing the upfront cost of the communities arising from excavation work.

Already 22,000 passive "homes passed" connections in 484 communities



FOUR PILOT REGIONS WITH 38 COMMUNITIES

✓ Model Lower Austria is successful



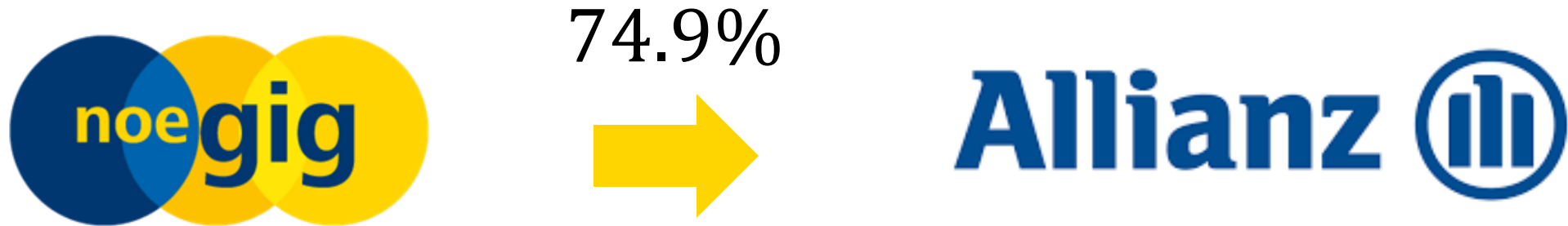
Founding of public company (nÖGIG) to provide for network extension...

...and to apply for federal government funding

Resulted in 35.000 connections of which +15.000 are active



END OF 2019: INVESTOR ENTERING THE PROJECT



Allianz Capital Partner on board with + €300 Mio. package, enabling to install additional 100,000 FTTH connections in the next 3 years (“Phase 2”).

Strong interest for investing in the next phases of the project!

After 30 years, Allianz is returning the shares and the installed passive network will be the sole property of the Province of Lower Austria.

ACHIEVING AREA WIDE FTTH COVERAGE BY 2030



**Zone 1: FTTH networks
realized by private
telecommunication
companies ("MARKET")
350,000 connections**

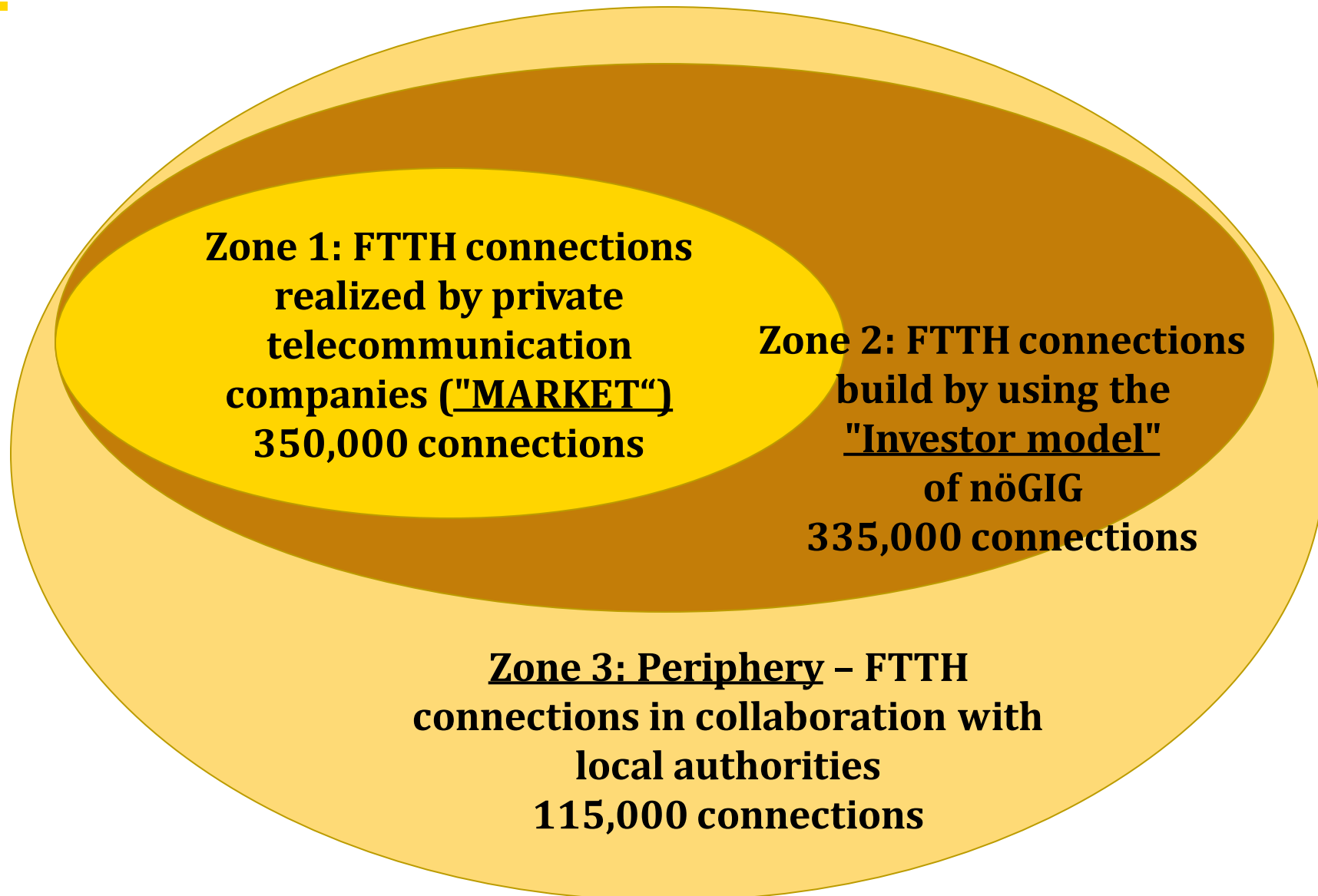
ACHIEVING AREA WIDE FTTH COVERAGE BY 2030



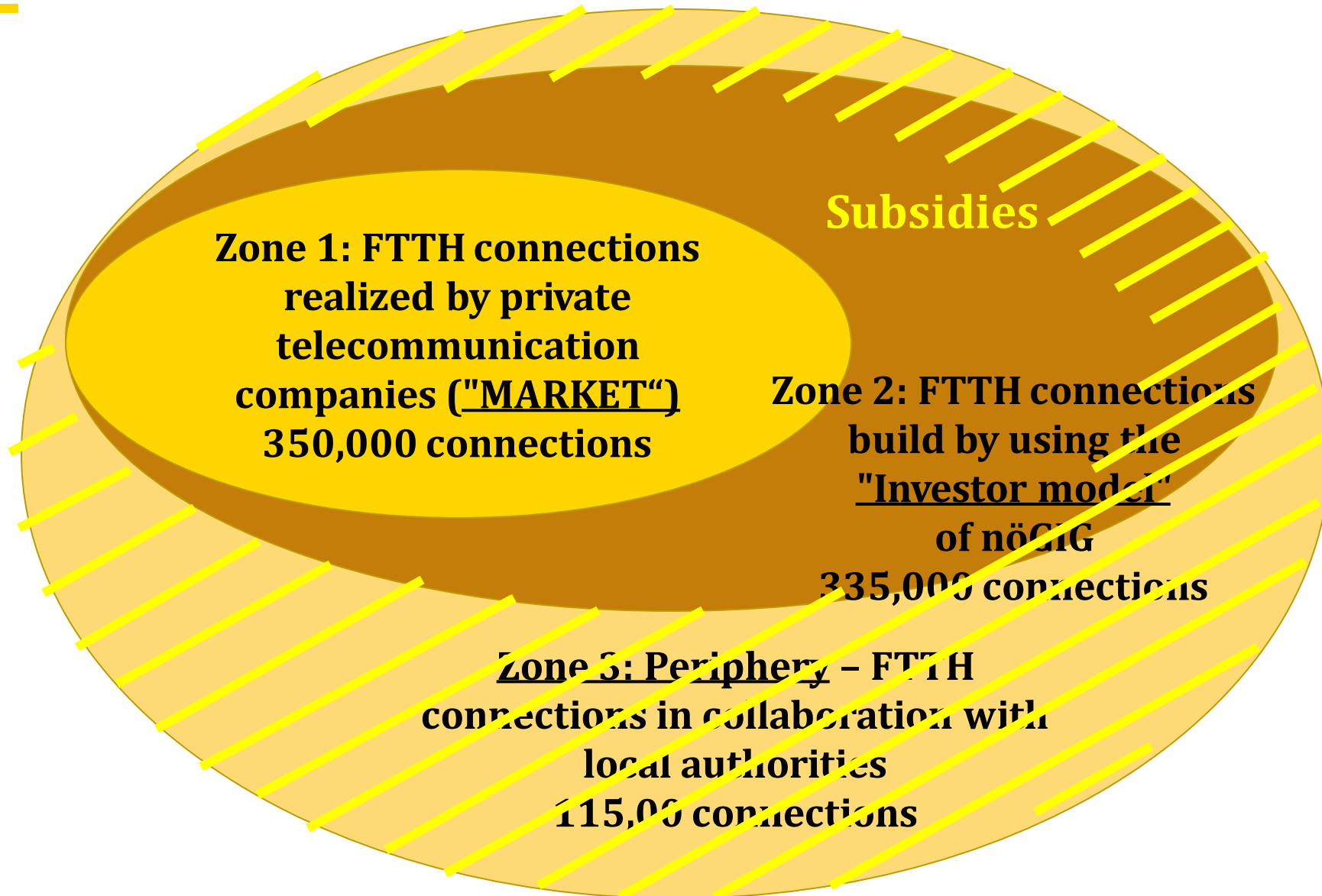
**Zone 1: FTTH networks
realized by private
telecommunication
companies ("MARKET")
350,000 connections**

**Zone 2: FTTH networks
build by using the
"Investor model"
of nōGIG
335,000 connections**

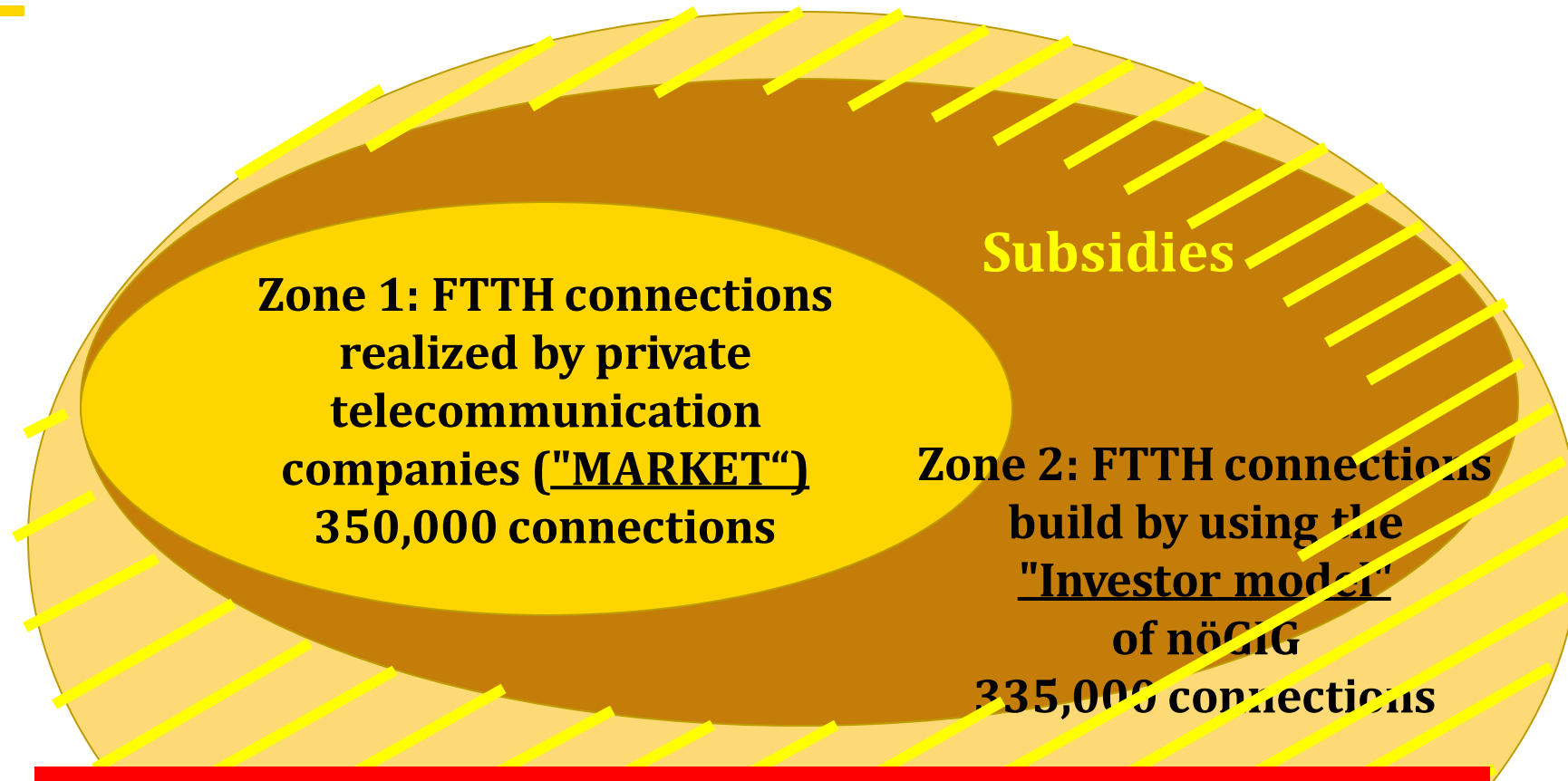
ACHIEVING AREA WIDE FTTH COVERAGE BY 2030



ACHIEVING AREA WIDE FTTH COVERAGE BY 2030



ACHIEVING AREA WIDE FTTH COVERAGE BY 2030



Area wide coverage will cost €2.2 billion, whereby €1.45 billion provided through commercial companies and nōGIG with investors (2/3) and €0.75 billion in the form of public funding / state aid



FIBRE INFRASTRUCTURE FTTH IN LOWER AUSTRIA

LOWER AUSTRIAN BROADBAND
COORDINATOR, CHRISTOPH WESTHAUSER

