TABS!

3 ideas from 10 Norwegian broadband deployment studies

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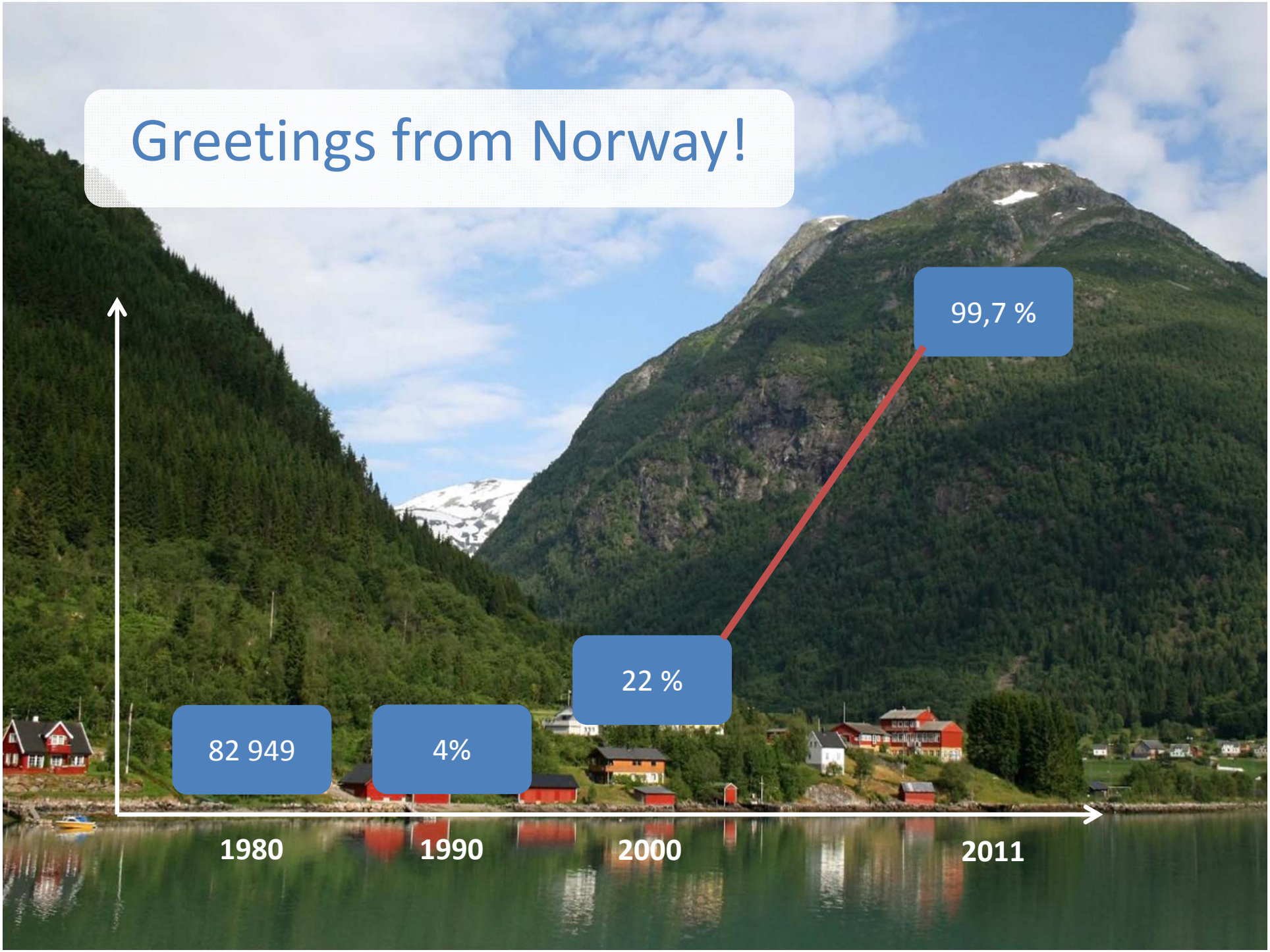
Greetings from Norway!



Main ideas

Use building level data if you can!

Deployment studies in Norway from 1999 to 2009

Year	Method
1999	Sample survey of 20 municipalities
2000 - 2009	Survey of all broadband network owners at municipality level

The eternal coverage study dilemma

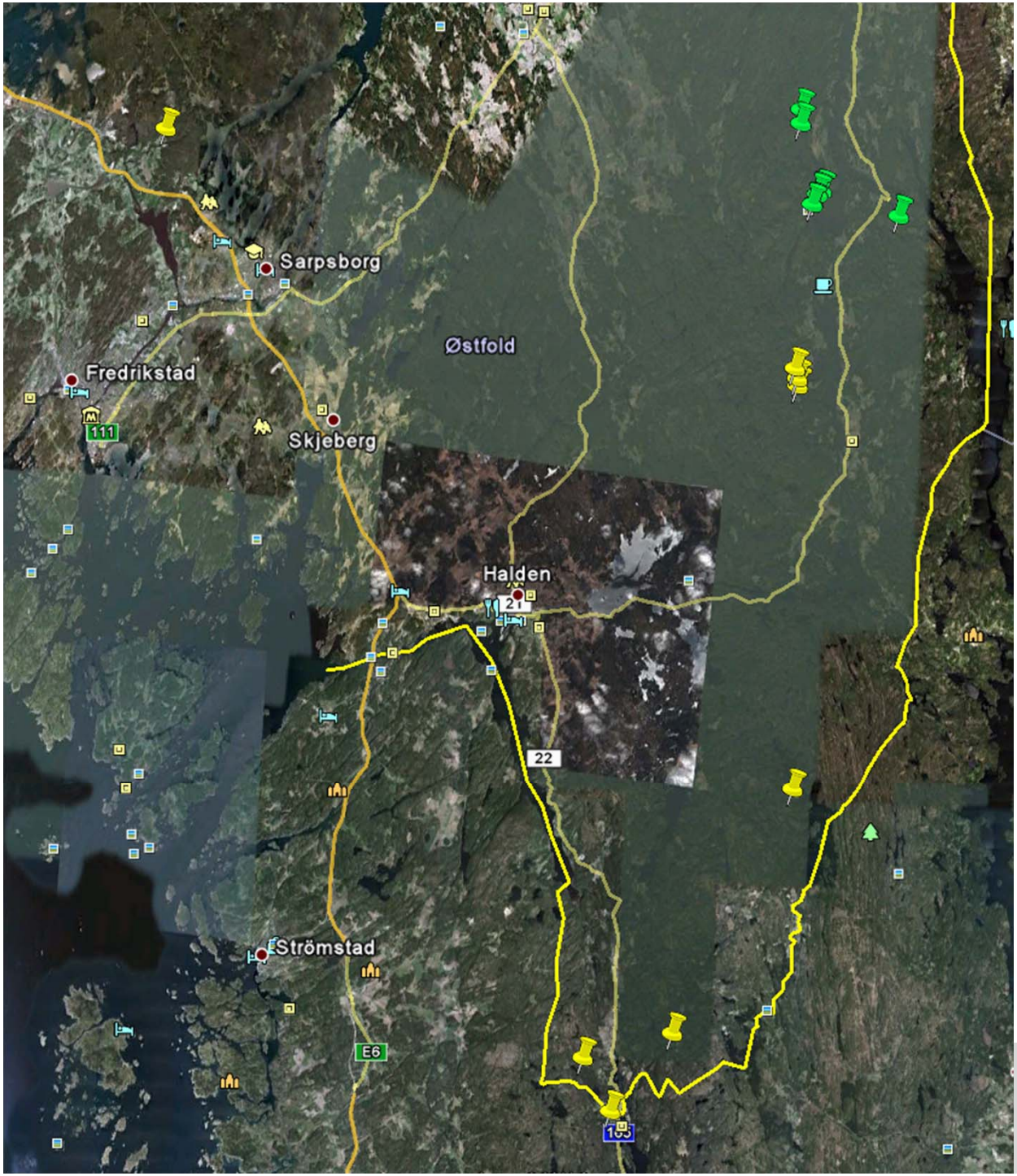
Example: Moss municipality

Access method	Municipality coverage
DSL 1 mbit/s	70%
Mobile 3G	40%
HFC	20%
FTTH	10%
Total for Moss	??

With no detailed data, one can only say that coverage is between 70% and 100%

Deployment studies in Norway from 1999 to 2011

Year	Method
1999	Sample survey of 20 municipalities
2000 - 2009	Survey of all broadband network owners at municipality level
2010 + 2011	Survey of all network owners at household and building level



With building-level data, we can pinpoint the excact location of homes and enterprises without broadband access.

What TABS knows about each building:

Copper network

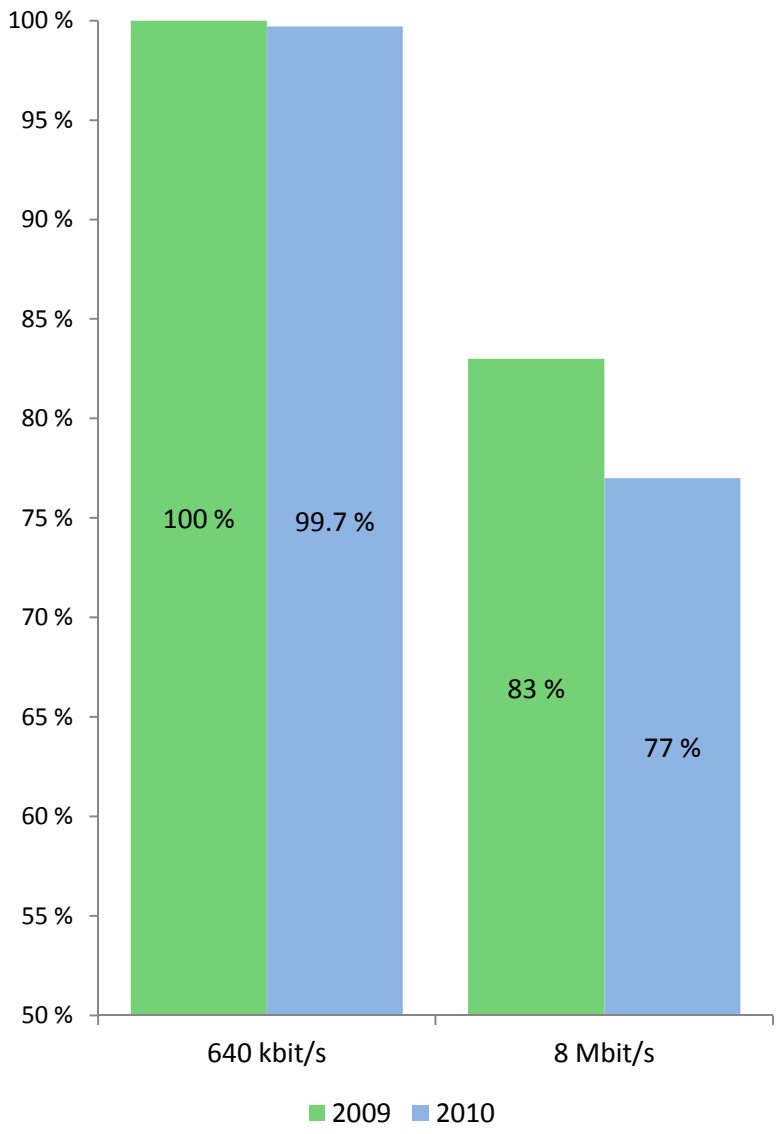
- Distance to nearest exchange
- Copper diameter
- DSLAM equipment in exchange

Fiber & HFC

- Distance to nearest fiber node
- Fiber connection?
- HFC connection?

Mobile / radio

- Coverage by technology
- Signal strength



- Avoiding the errors that the "eternal dilemma" will cause

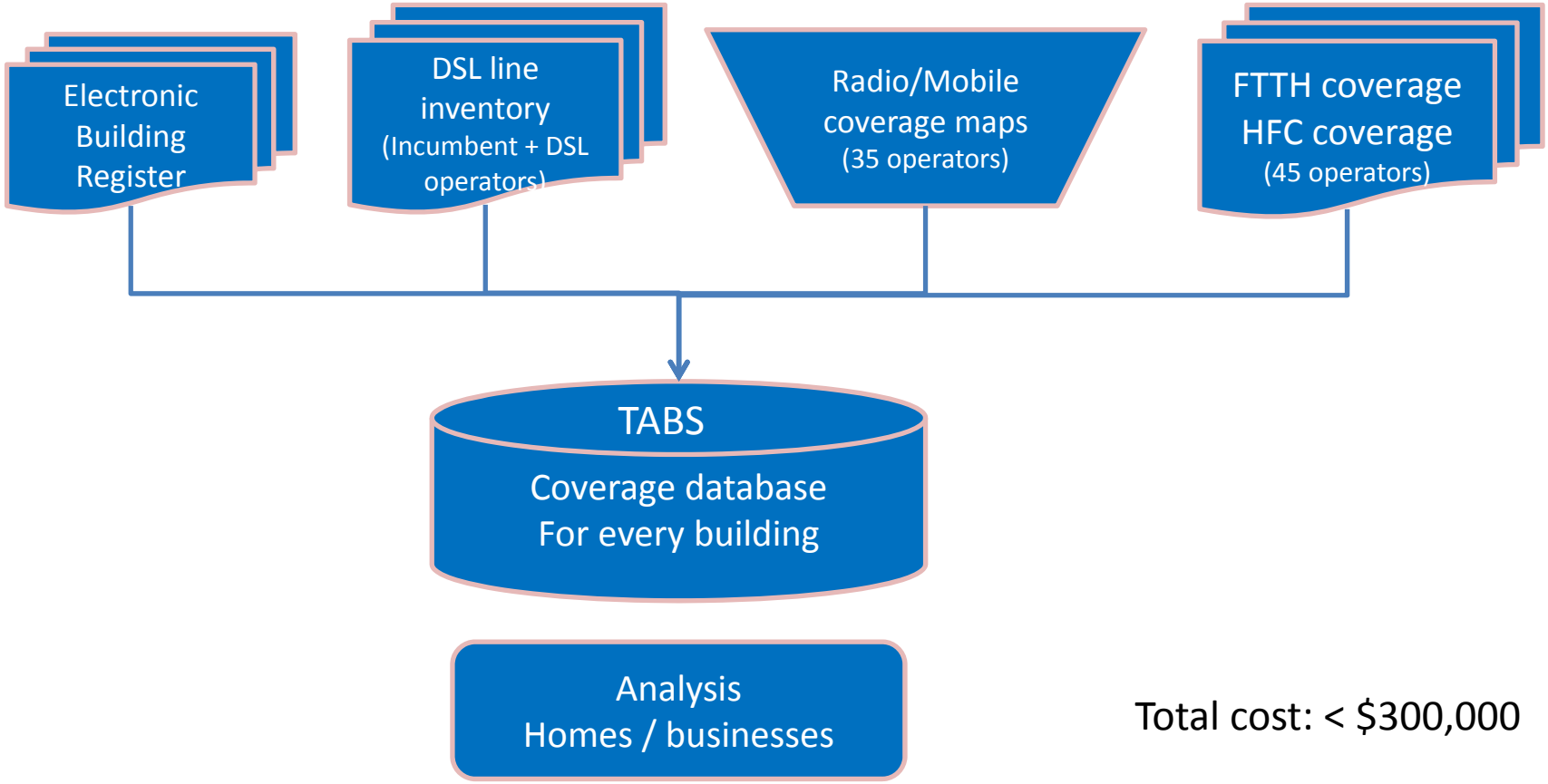
Main ideas

Use building level data if you can!

It's easier than you think

TABS!

- how we got to building-level coverage information



Total cost: < $300,000

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Main ideas

Use building level data if you can!

It is easier than you think

Work <u>with</u> network operators

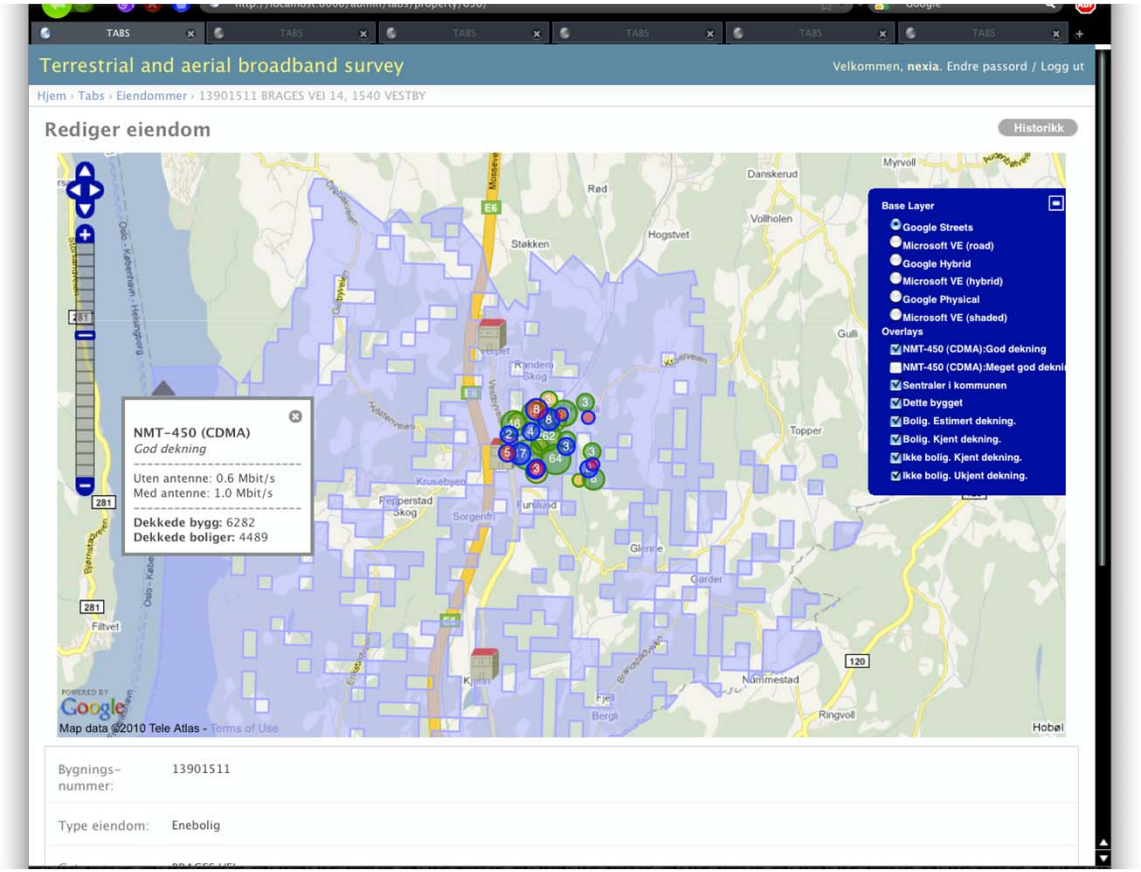
- Data security
- Competent analysis
- Strict confidentiality
- Find the strategists

Thank you!

Harald Wium Lie
Partner & Analyst
Nexia DA

+47 922 90 420
wium@nexia.no

What we know about every building in Norway:



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