



cutting through complexity

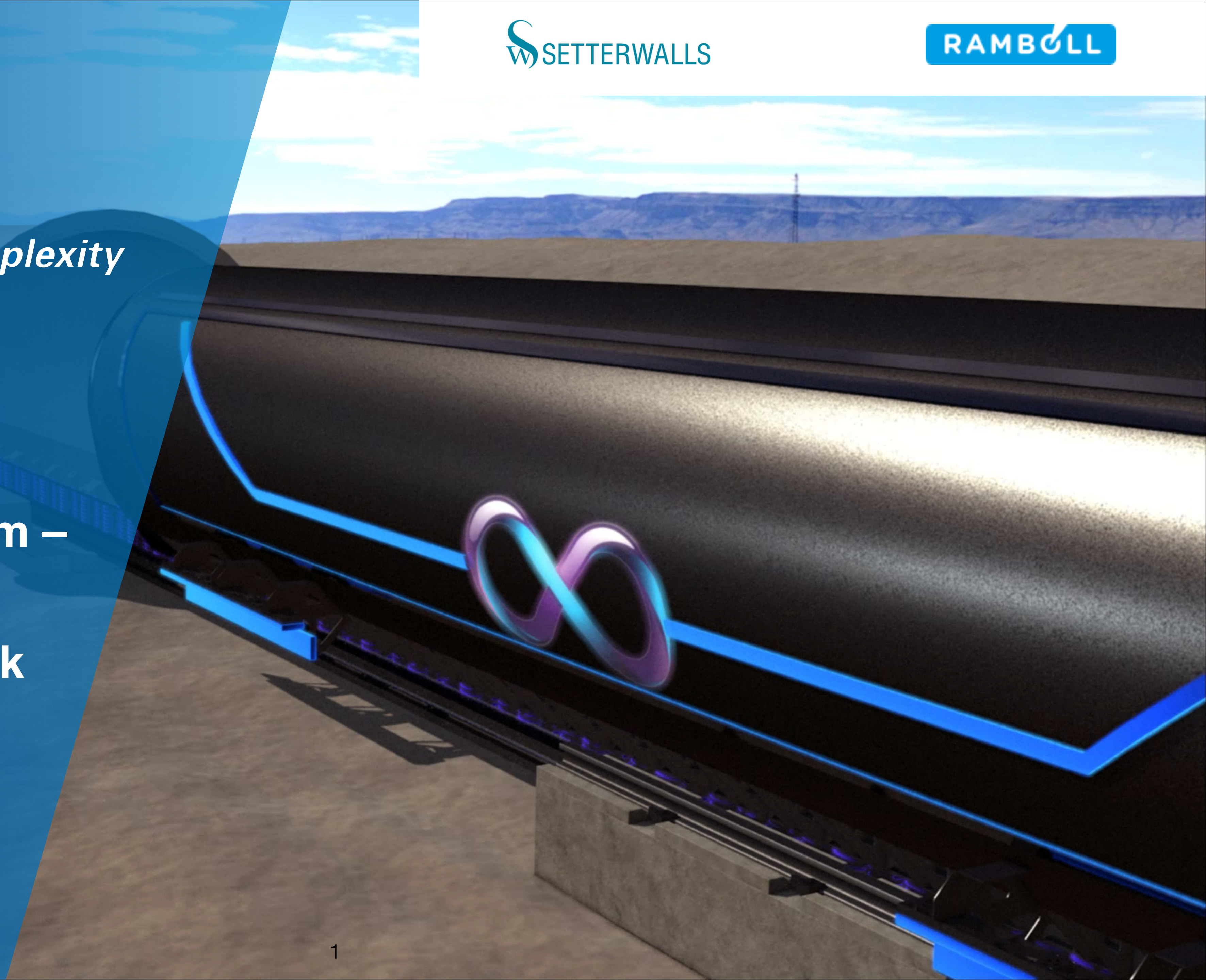
FS Links

**Enabling the Stockholm –
Helsinki super region**

Hyperloop One network

**Pre-feasibility study including
Hyperloop One technology**

4th of July 2016





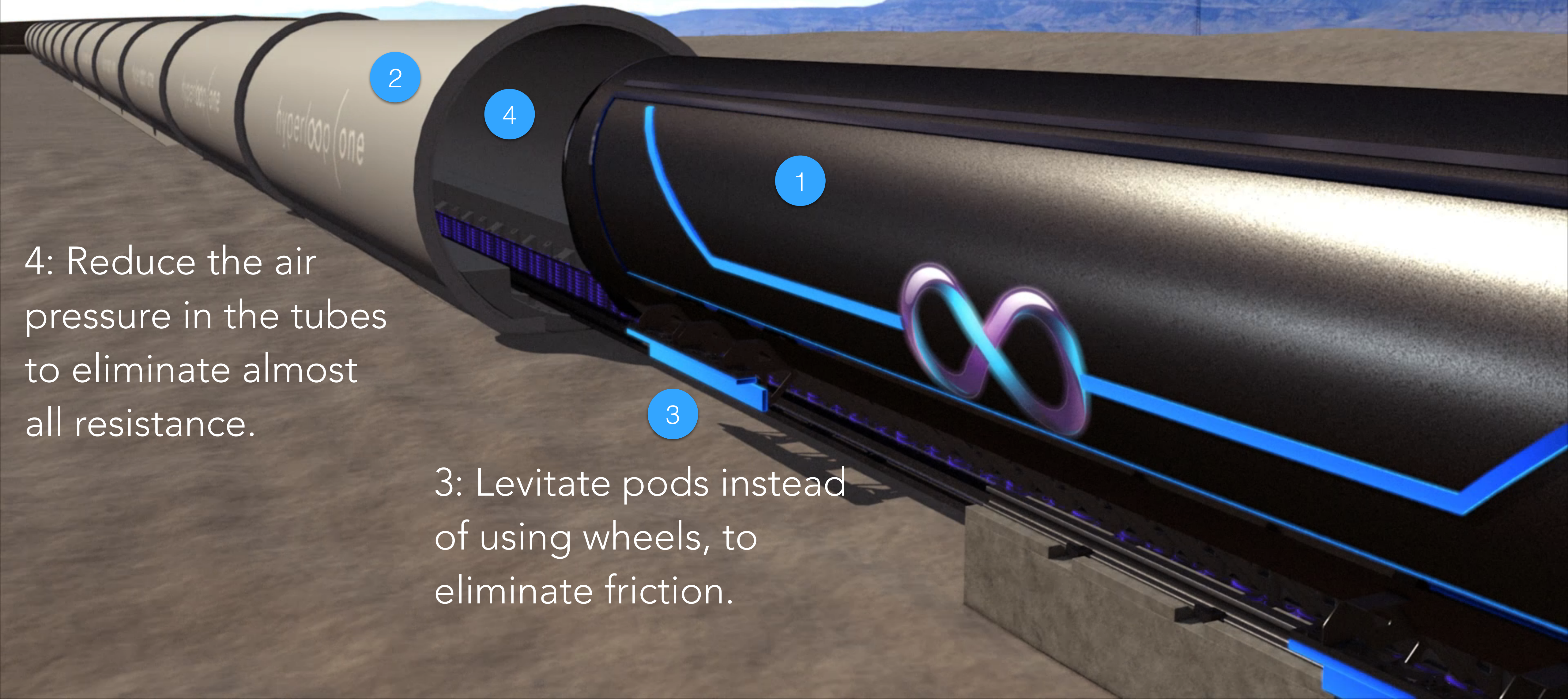
Rob Lloyd
CEO Hyperloop One

We are building Hyperloop

Right Now

2: Pods operate in tubes, which creates a controlled environment.

1: Start with a pod, which can be sized to carry freight or passengers.



3: Levitate pods instead of using wheels, to eliminate friction.

4: Reduce the air pressure in the tubes to eliminate almost all resistance.

Hyperloop is happening

Real Fast

Development pathway from POAT to full system.

Full system test

Dec 2016

$\geq 1,000 \text{ km/h}$

Q1 2017

Today

World's first Hyperloop One
business case published



cutting through complexity

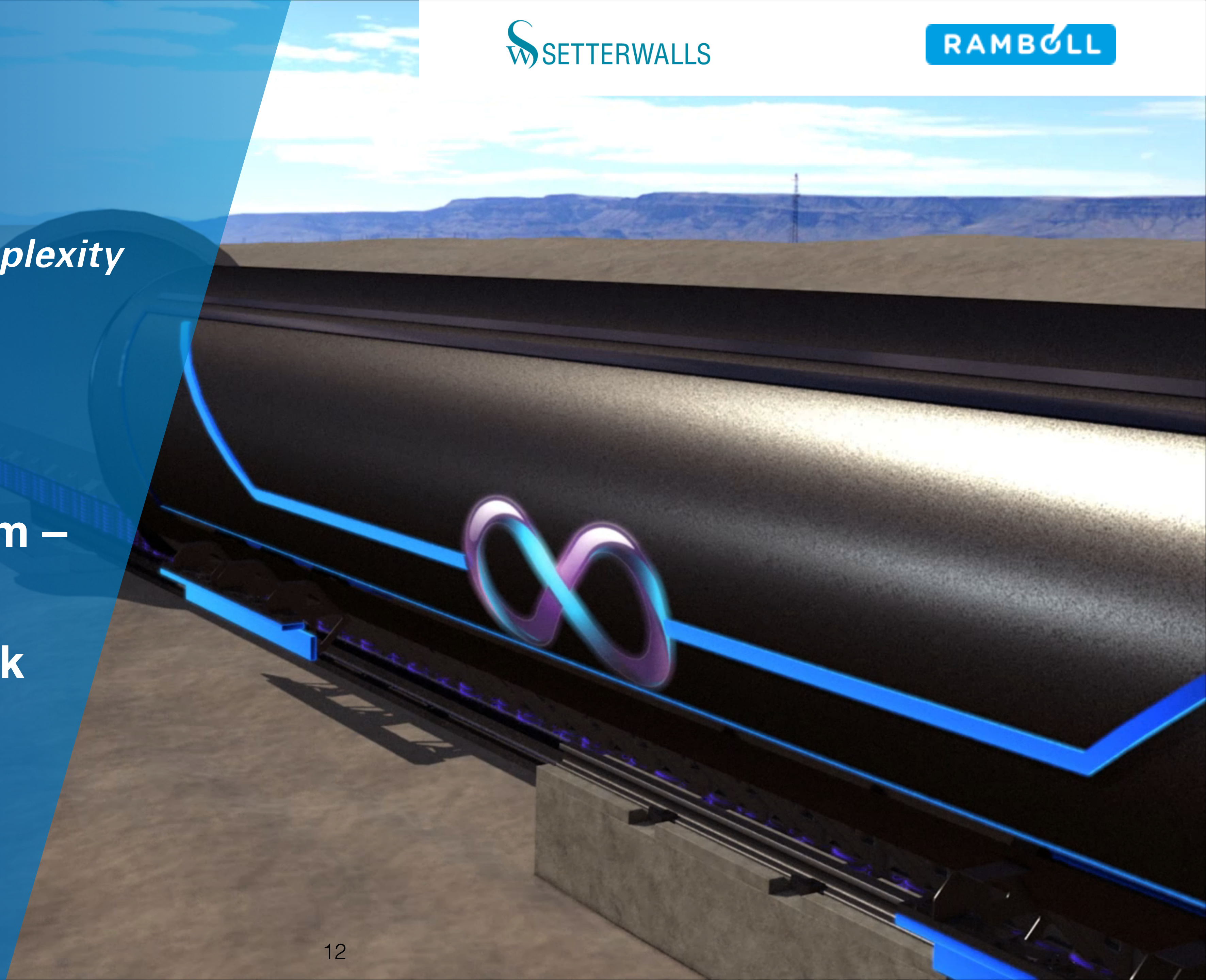
FS Links

**Enabling the Stockholm –
Helsinki super region**

Hyperloop One network

**Pre-feasibility study including
Hyperloop One technology**

4th of July 2016





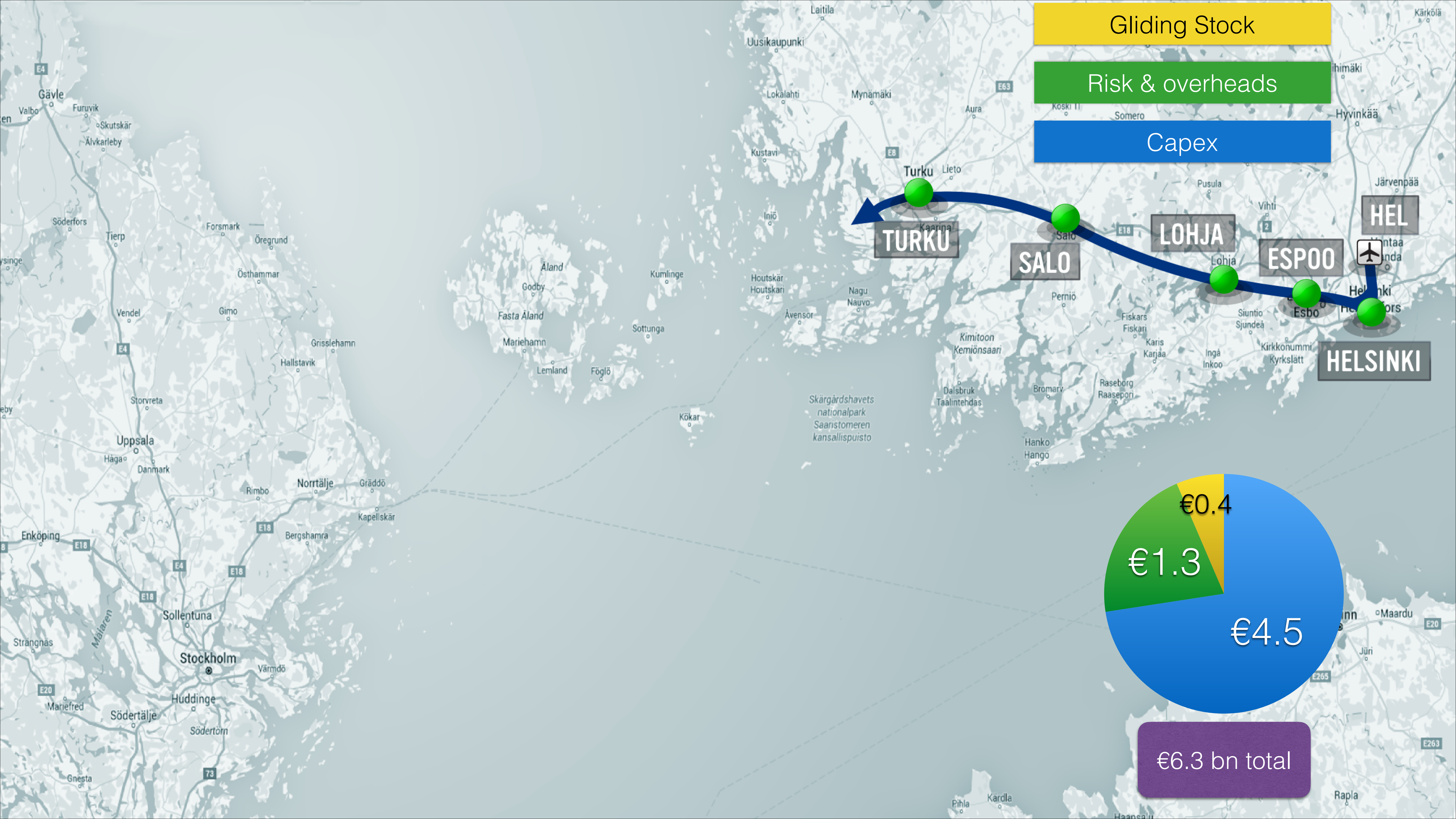
3h 30m

11 h

17h 30m









UPPSALA

ARN

NORRTÄLJE

STOCKHOLM

TURKU

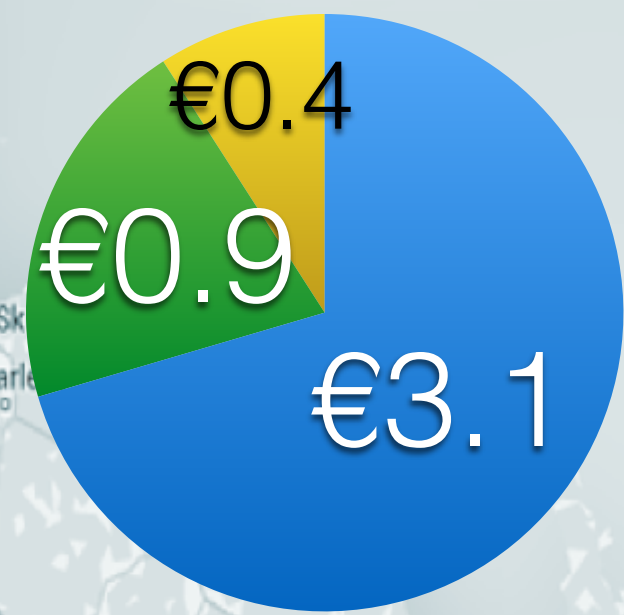
SALO

LOHJA

ESPOO

HEL

HELSINKI



€4.5 bn total

UPPSALA

ARN

NORRTÄLJE

STOCKHOLM

Gliding Stock

Risk & overheads

Capex

TURKU

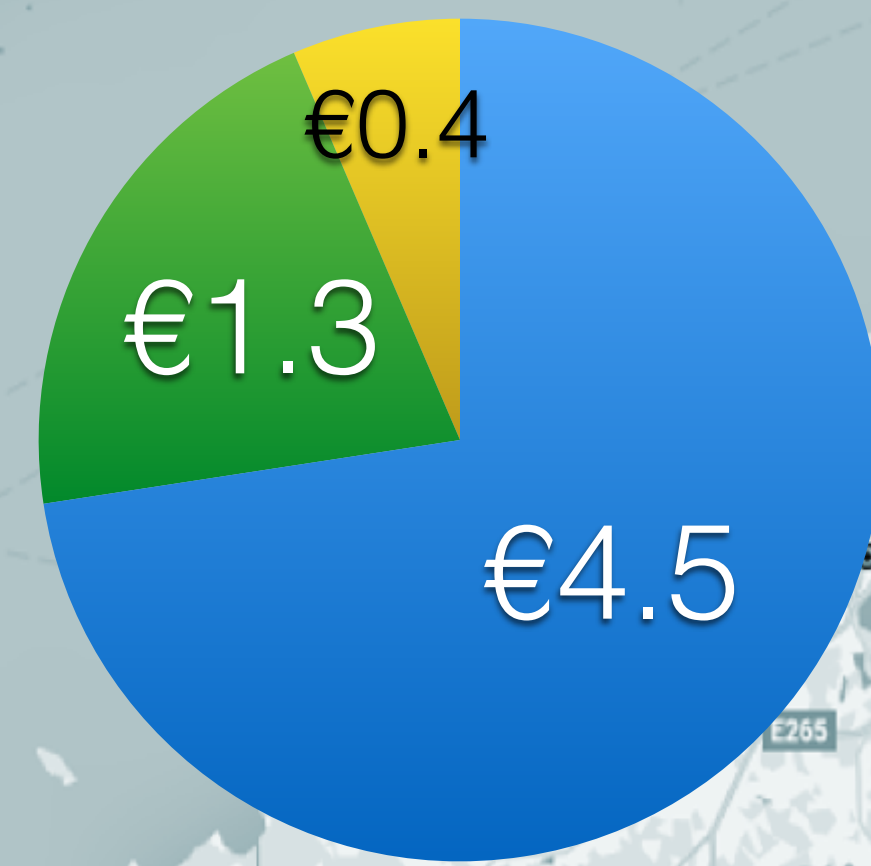
SALO

LOHJA

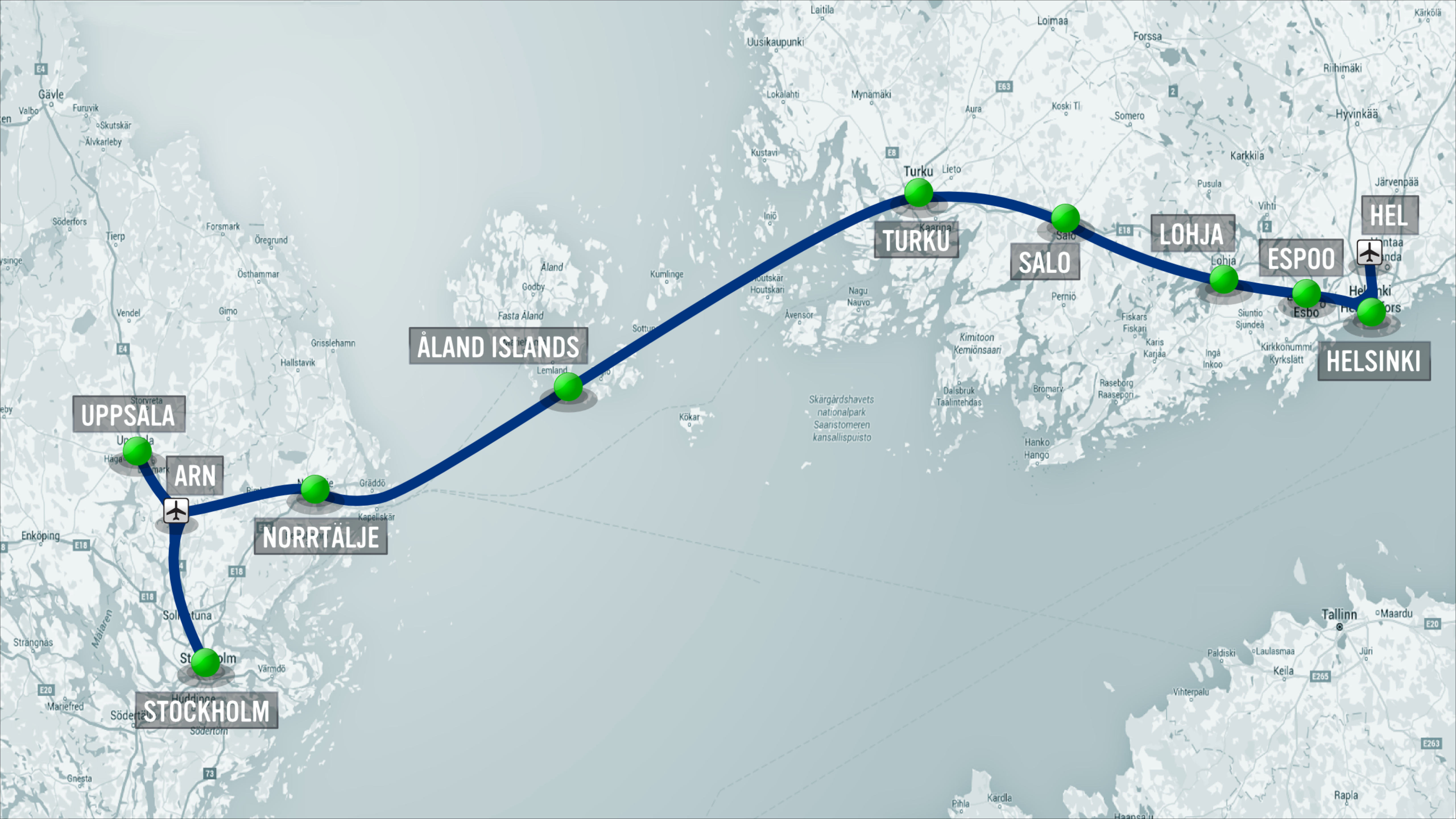
ESPOO

HEL

HELSINKI



€6.3 bn total



UPPSALA

ARN

NORRTÄLJE

STOCKHOLM

ÅLAND ISLANDS

TURKU

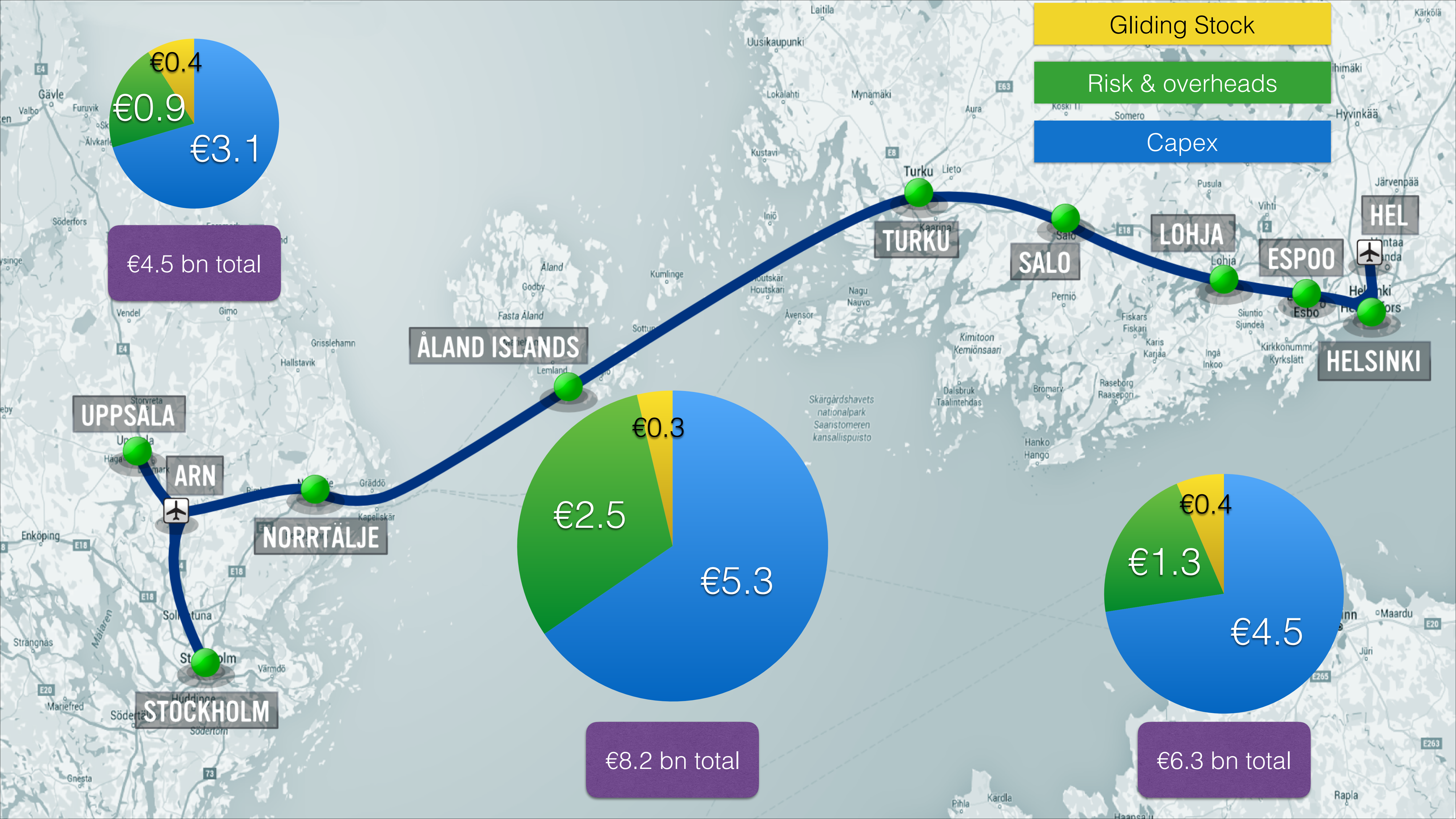
SALO

LOHJA

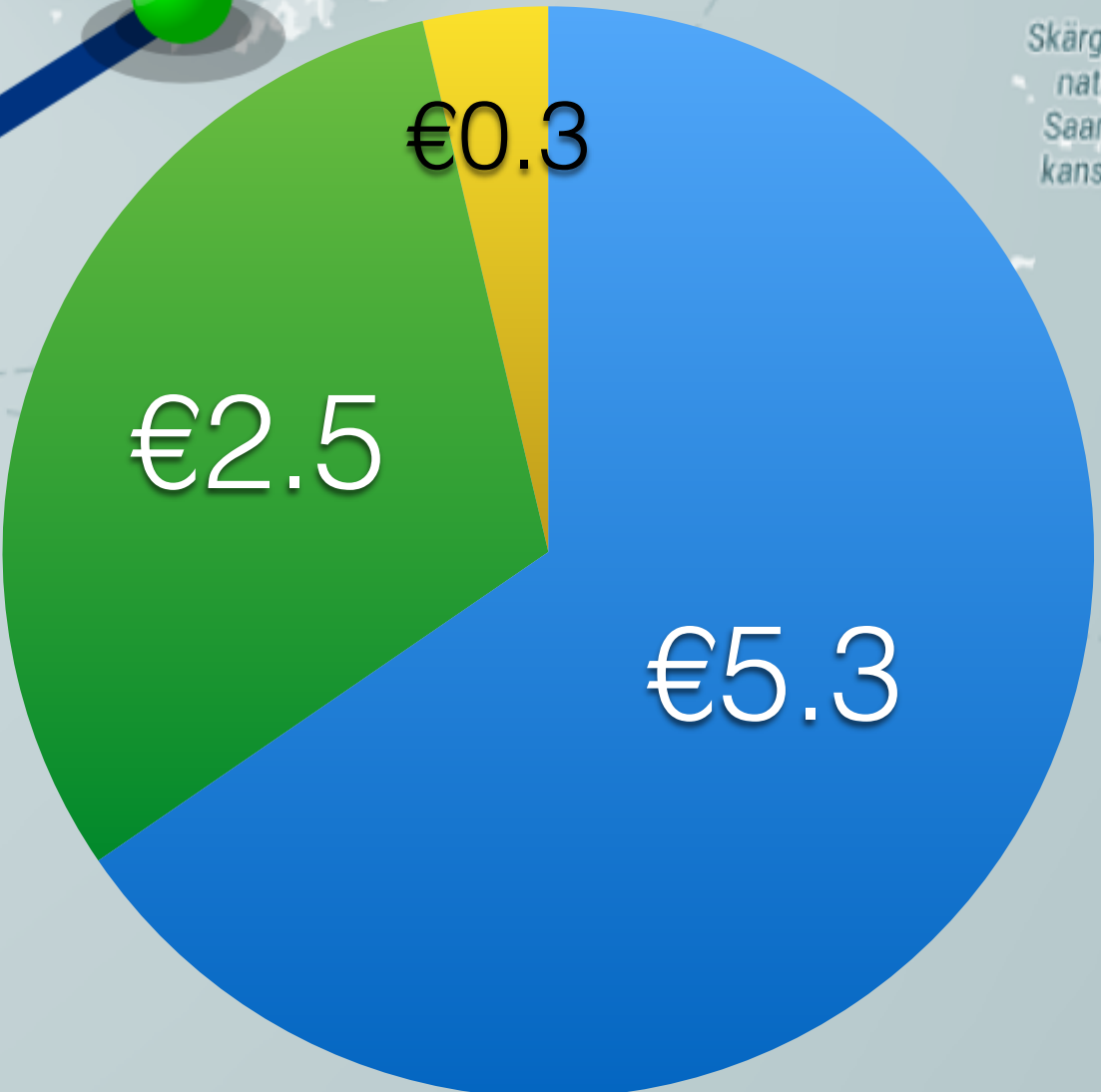
ESPOO

HELSINKI

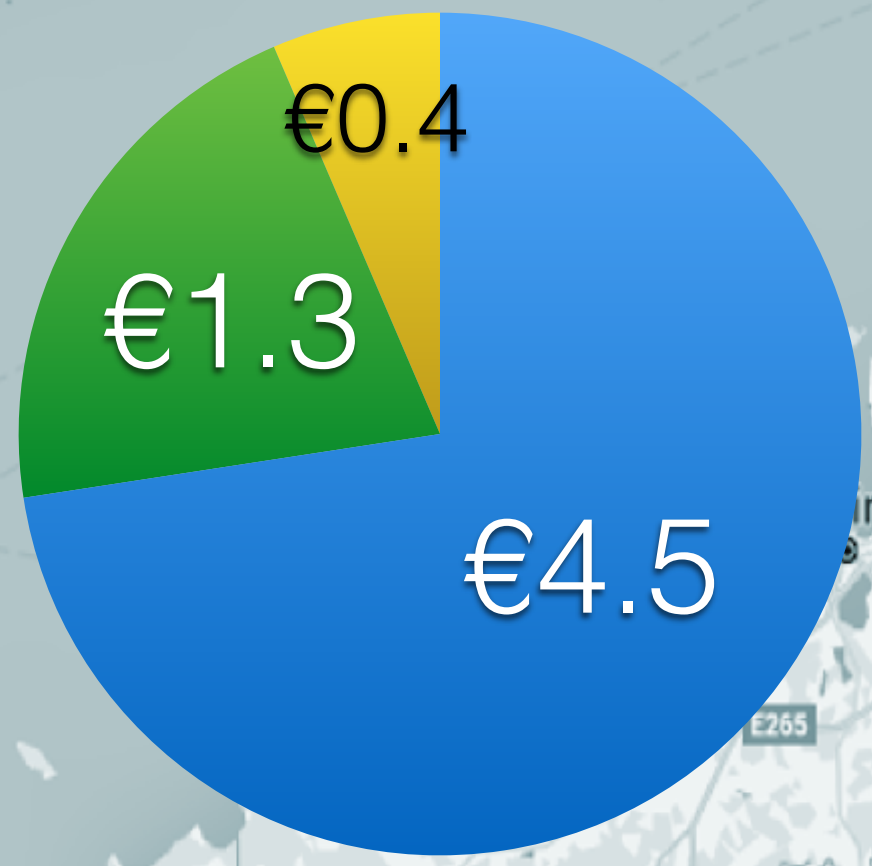
HEL



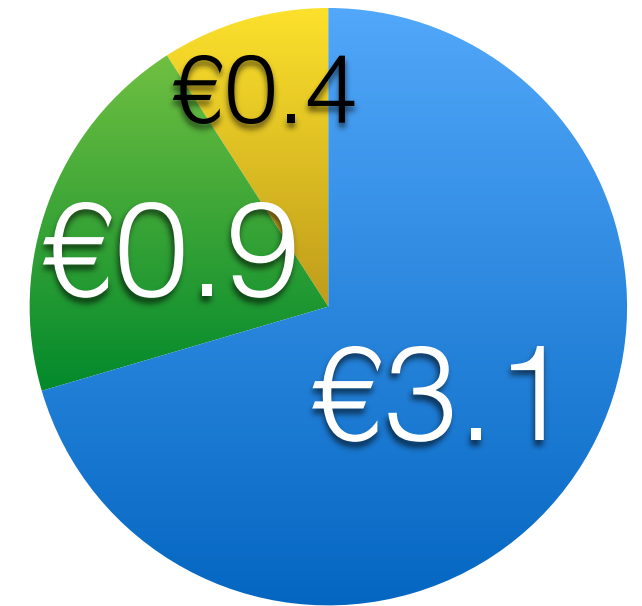
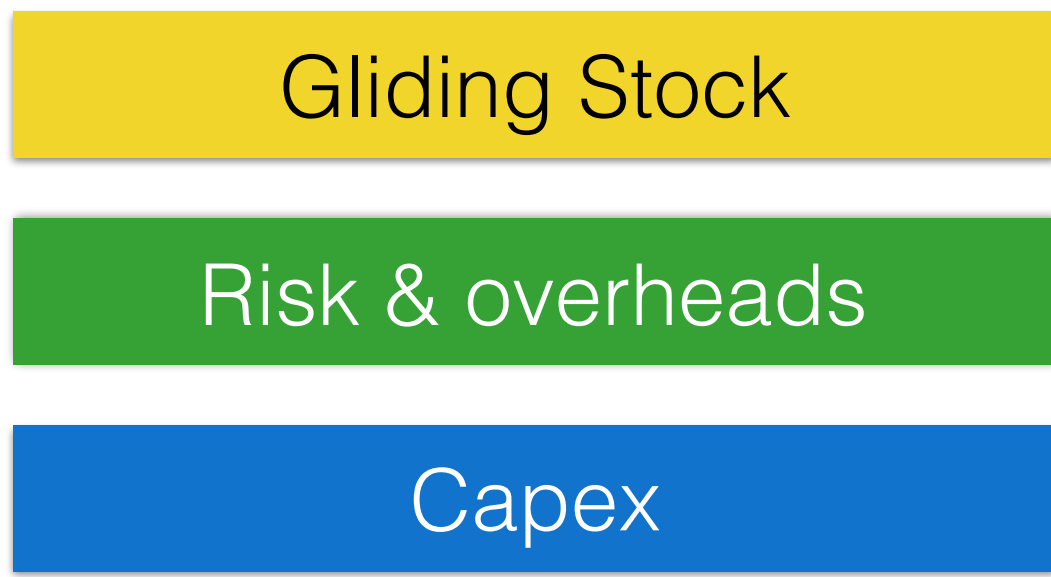
€4.5 bn total



€8.2 bn total

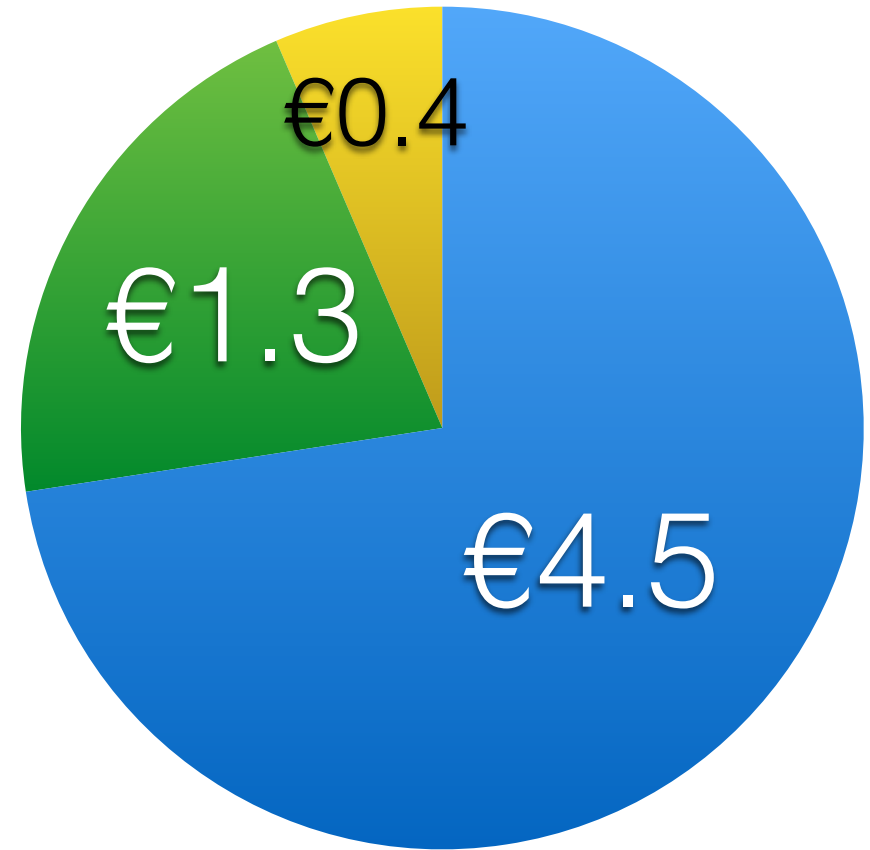


€6.3 bn total



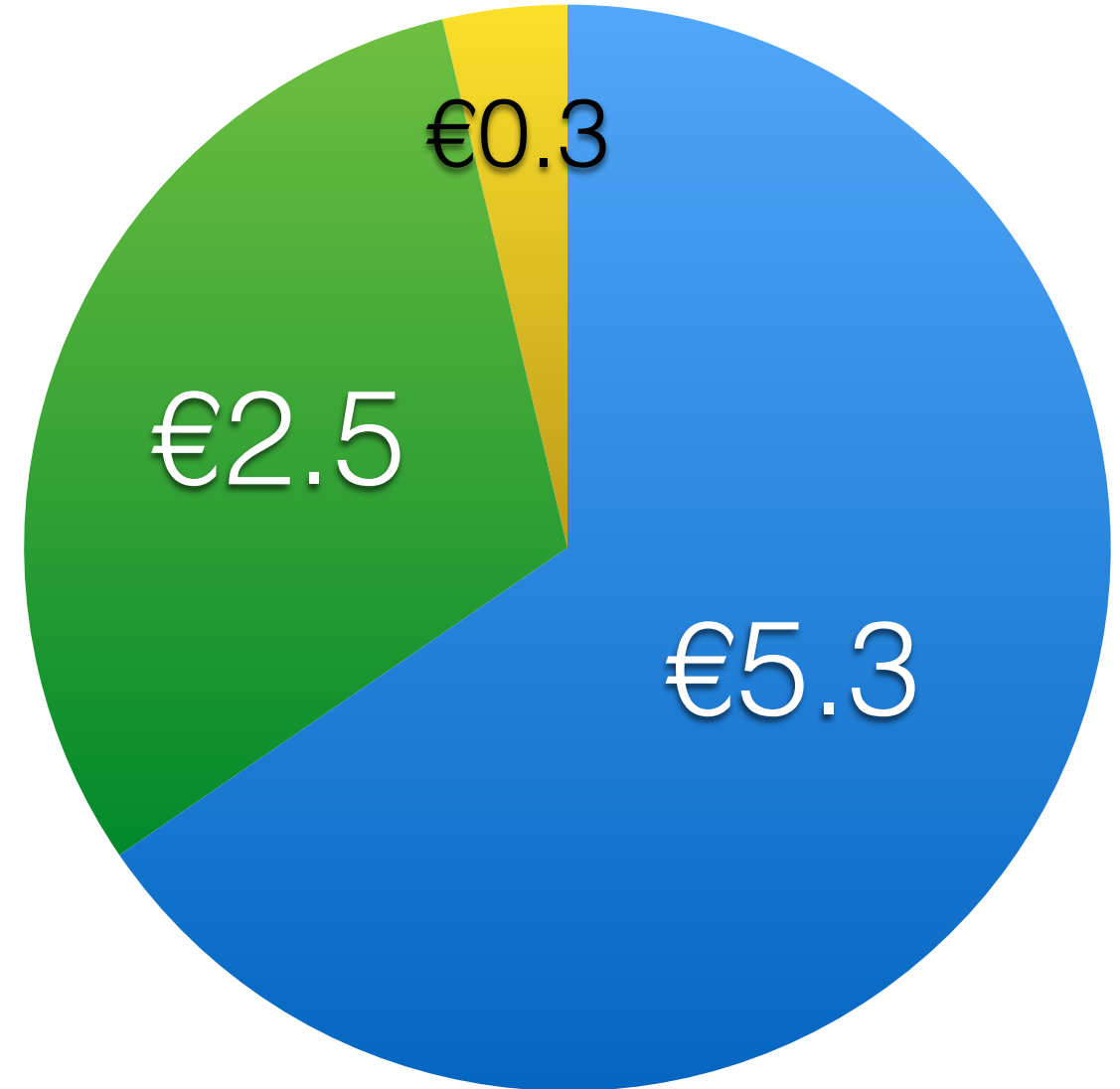
€4.5 bn total

Sweden
Mainland



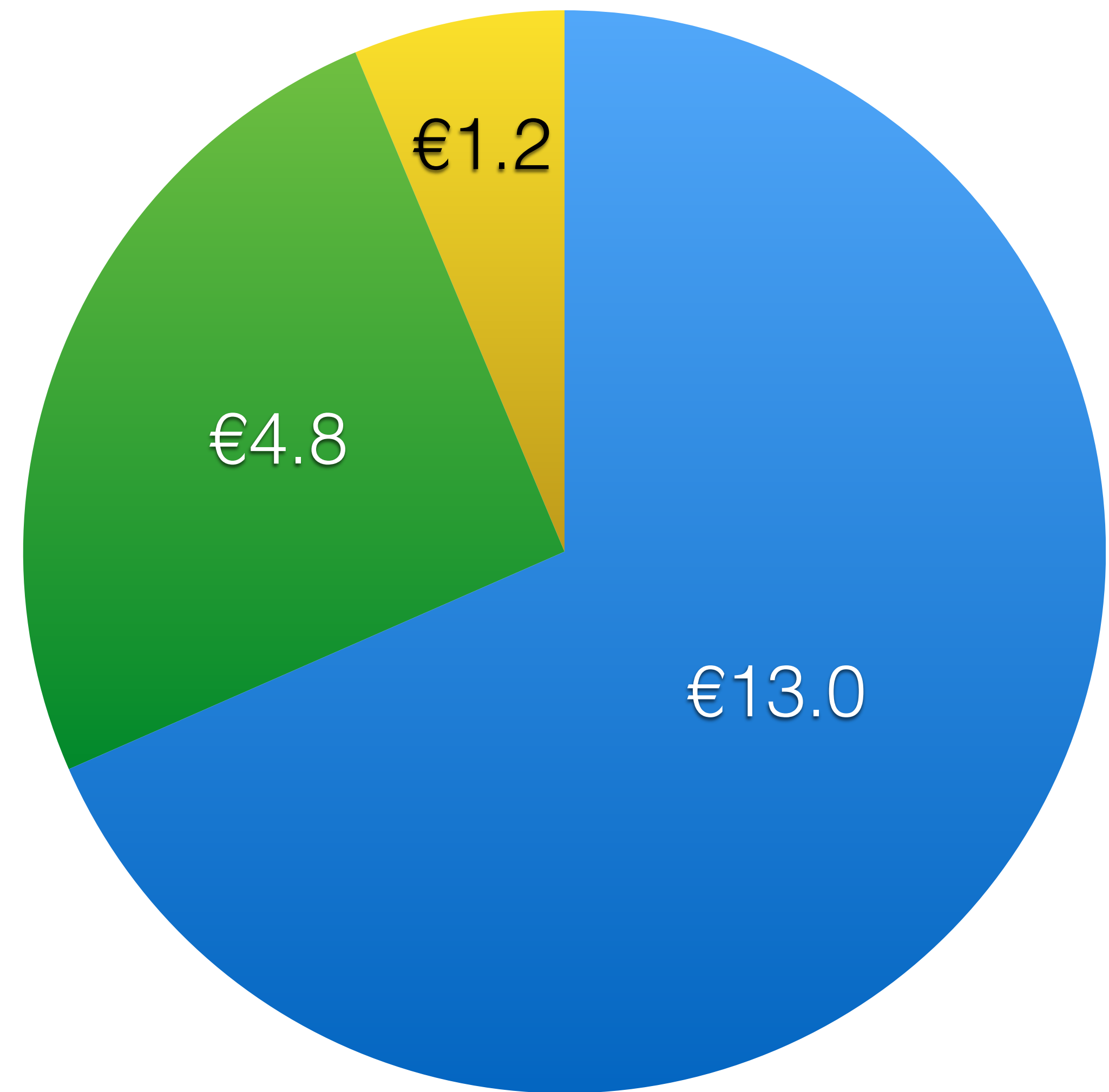
€6.3 bn total

Finland
Mainland



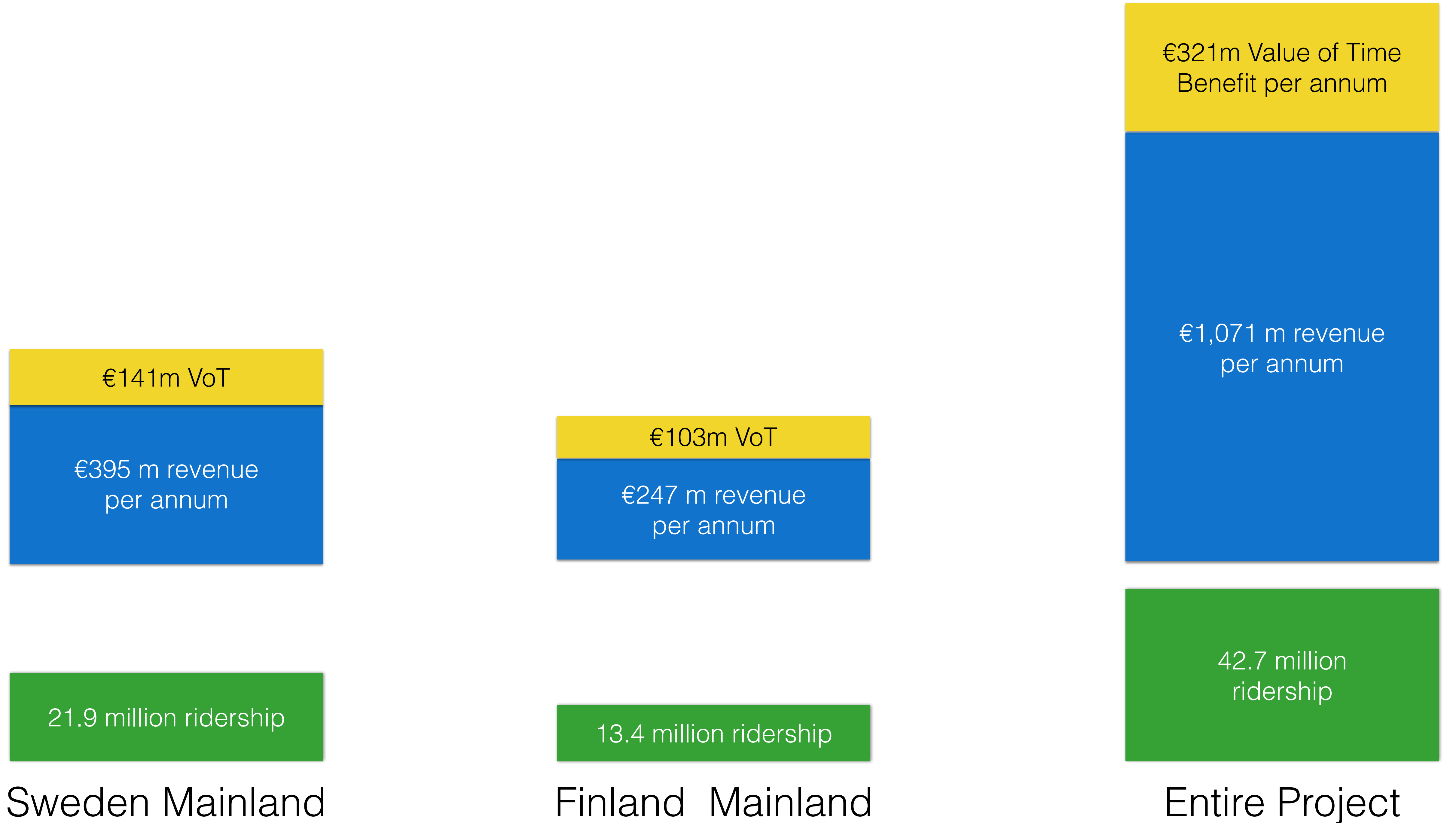
€8.2 bn total

International
Link via Åland



€19.0 bn total

Entire
Project



All phases produce surplus over operational costs.

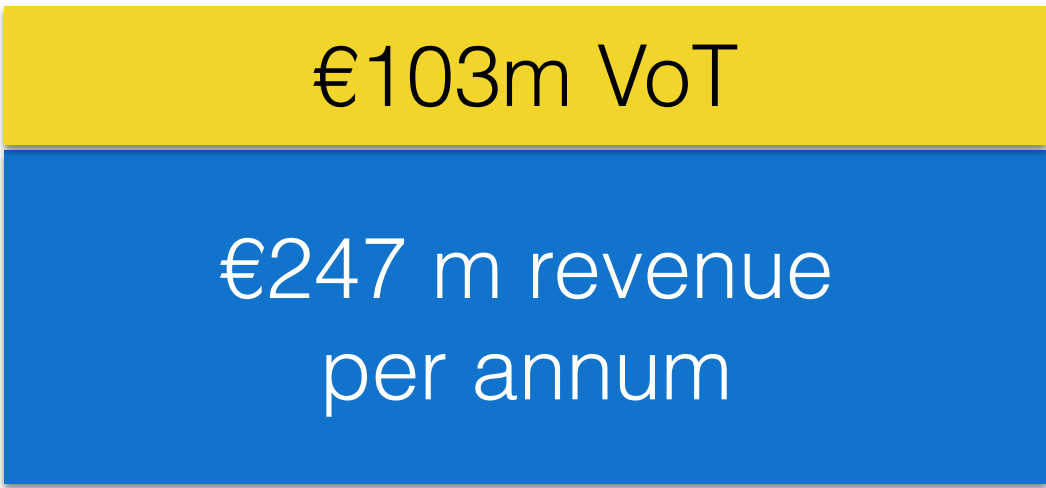
Capex payback dependent on project finance model.

Wider Economic Benefits and regional cohesion in addition to these results.
WEBs strongly likely to justify substantial Govt and EU contribution.

Øresund Link precedent suggests revenues and WEBs produced vastly outweigh the capital cost of strategic infrastructure within c.10 years.



Sweden Mainland



Finland Mainland



Entire Project

A few lessons learned from the Öresund fixed link (opened in 2000)

Travel time savings & labor market effects

7,7 billion EURO in benefits has been generated through reduction of commuting & traveling costs

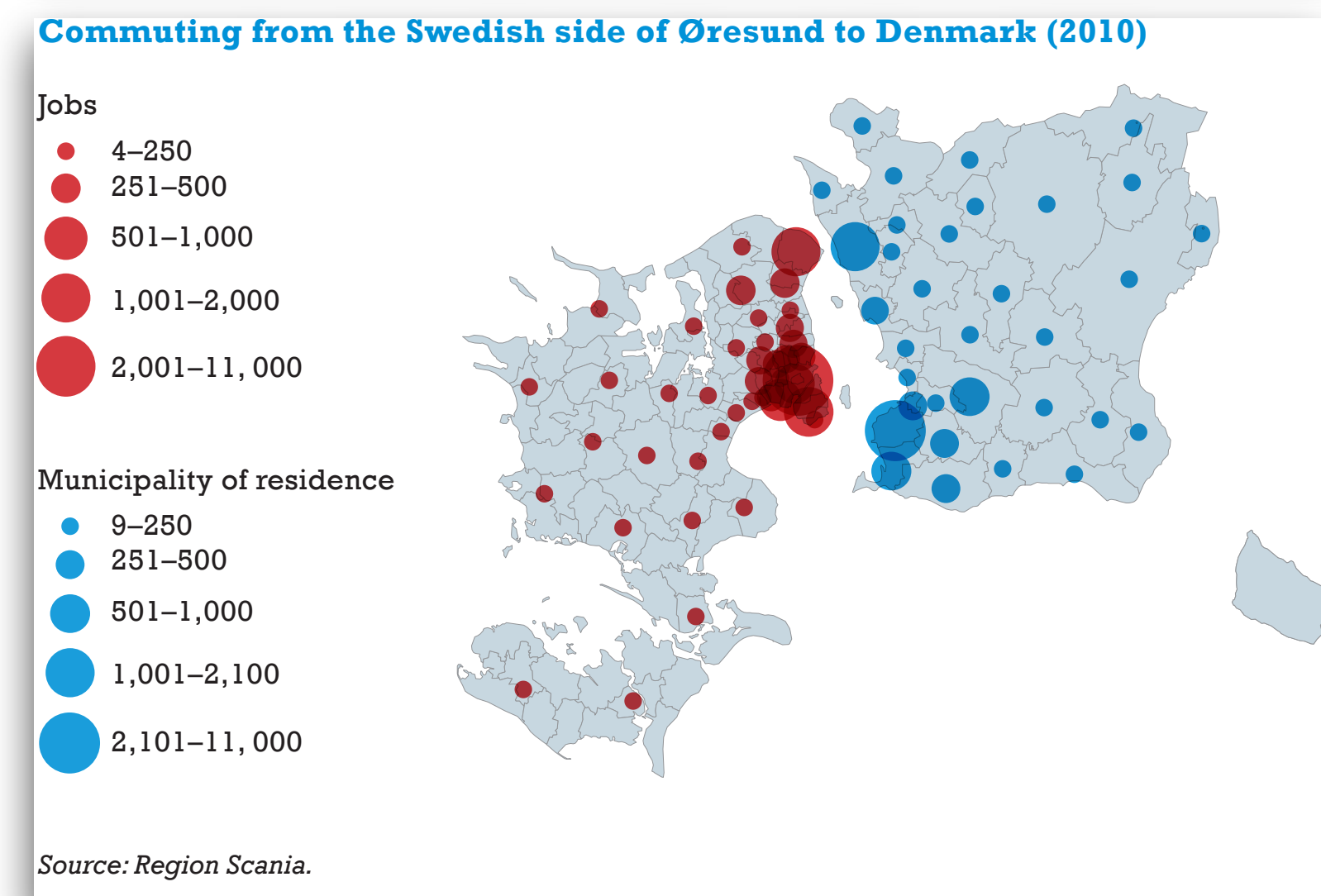
2 800 people commuted across Öresund in 1999, while 18 000 people commuted in 2013

Employment effects

76 000 jobs were created in the Öresund-region in first decade after the bridge opening

Change in logistics patterns

Immediately after the opening, the volume of goods transported by rail increased by 33 %



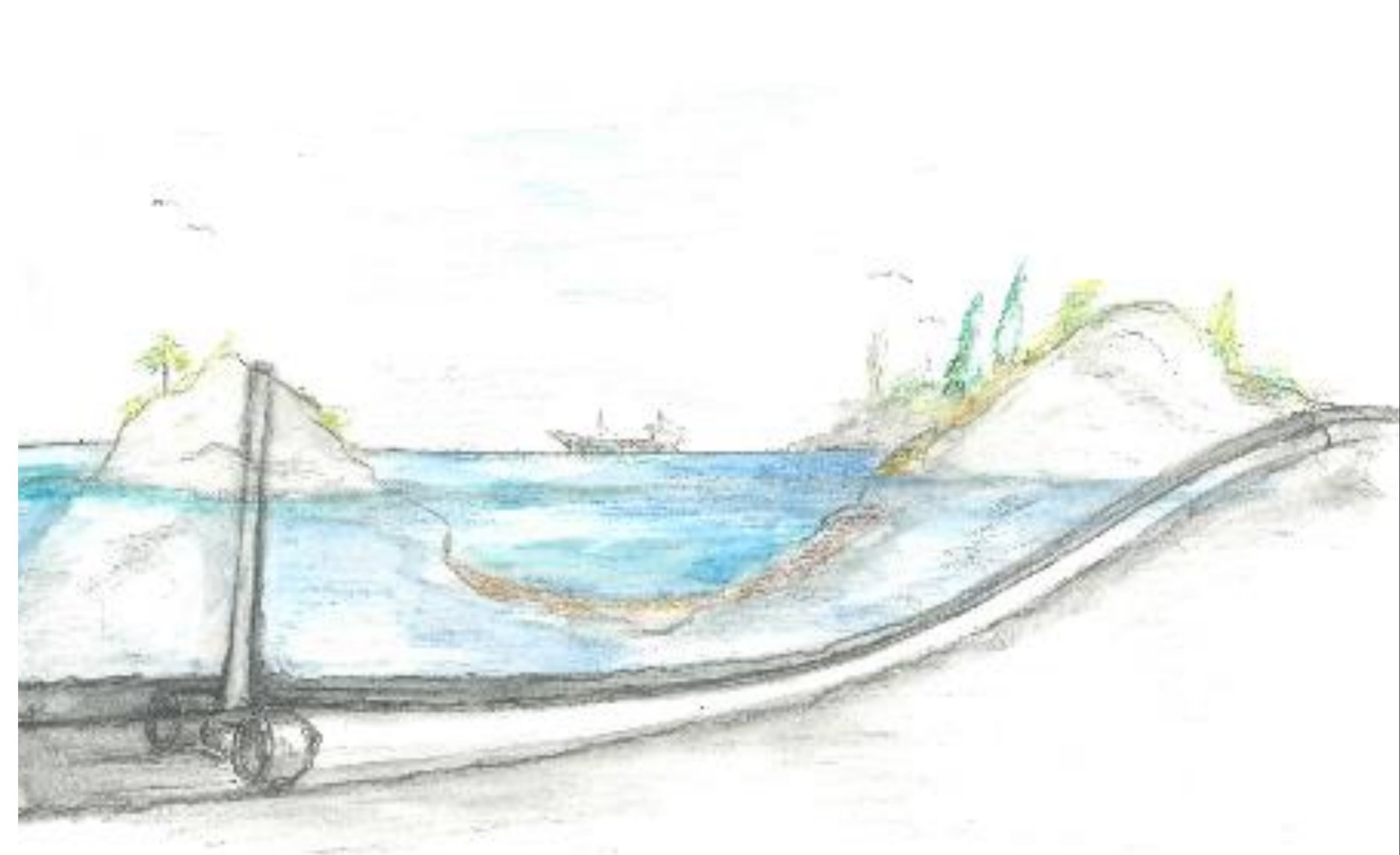
The 500 km corridor consists of three main technical solutions (1/2)



The 500 km corridor consists of three main technical solutions (2/2)



Dug down



Sub-sea tunnel

Pylons

not to scale

Strategic legal considerations (1/2)

Procurement models and financing

1A)

- Öresund-bridge
- ESS
- Sandviken-Gävle
- Sydney-model

1B) Financing

- Public and private investors

2) Structuring

3) Presumption: a technology supply to a vehicle owned by industry, investors, Sweden and Finland - this vehicle

- procure suppliers and goods, and arranges
- P3 - financing

Strategic legal considerations (2/2)

Procure, Build and Operate

- What is Hyperloop One?
- New legislation?
- Permissions - general and environmental
- Decision making procedures
- Right of way
- Tax issues

There are no
insurmountable
obstacles



We are
developing projects
and building partnerships
as fast as we are developing the tech

Global partnerships

May 2016



ARUP

SYSTRA

AECOM

BIG

\$130M raised – & counting

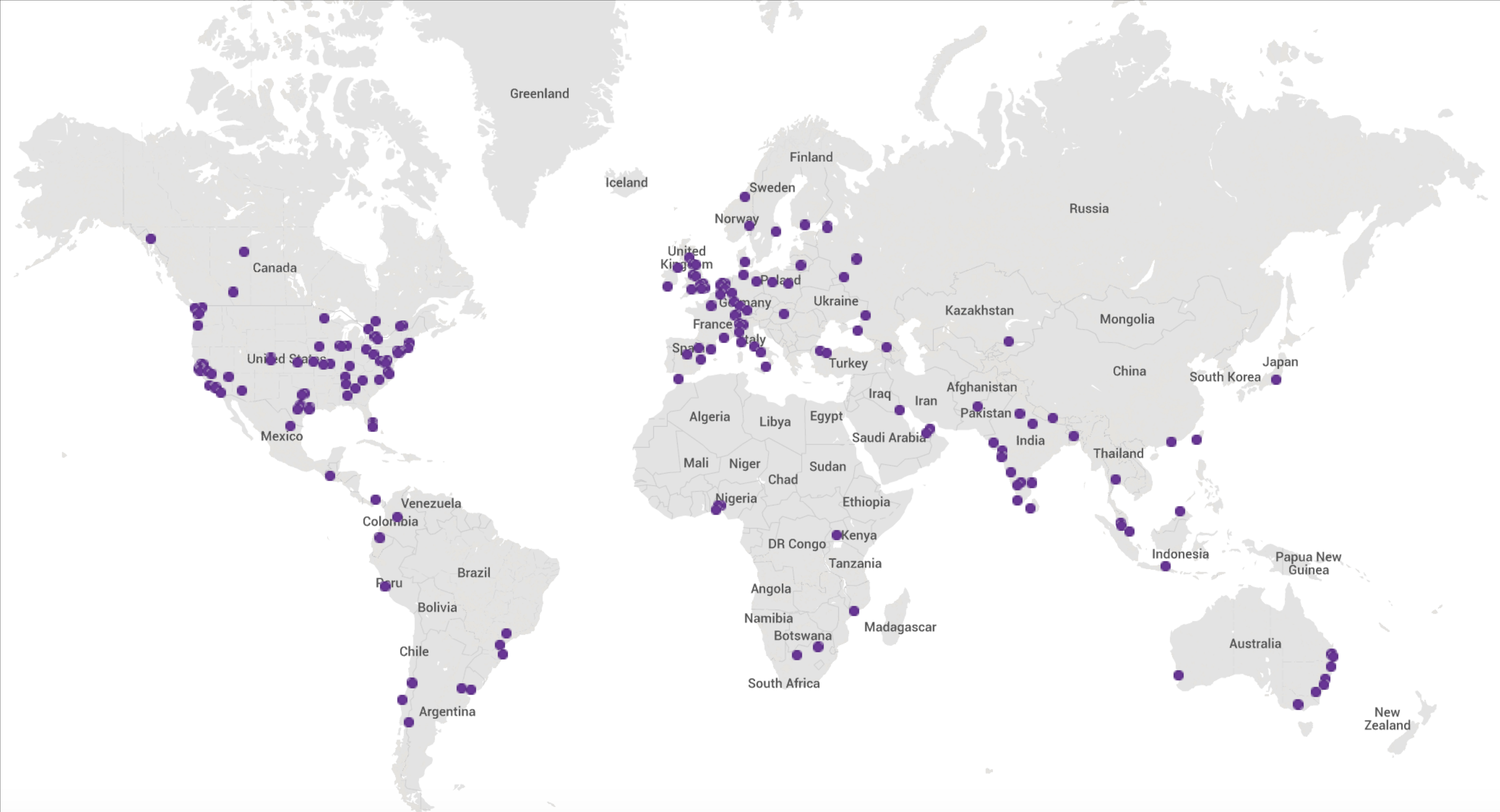
Jun 2016

40B media impressions

>250 worldwide entries

July 2016

to Global Challenge





Looks like a Baltic super-region to me.
Neu-Hansa baut sich im Norden zusammen.

Return of the
'Golden Banana'

We're a superpower.
Can we have some
proper public
transport please?

Everybody else
thinks it's good for
the economy...!

And some
places that
just want to
fast forward
to the future.

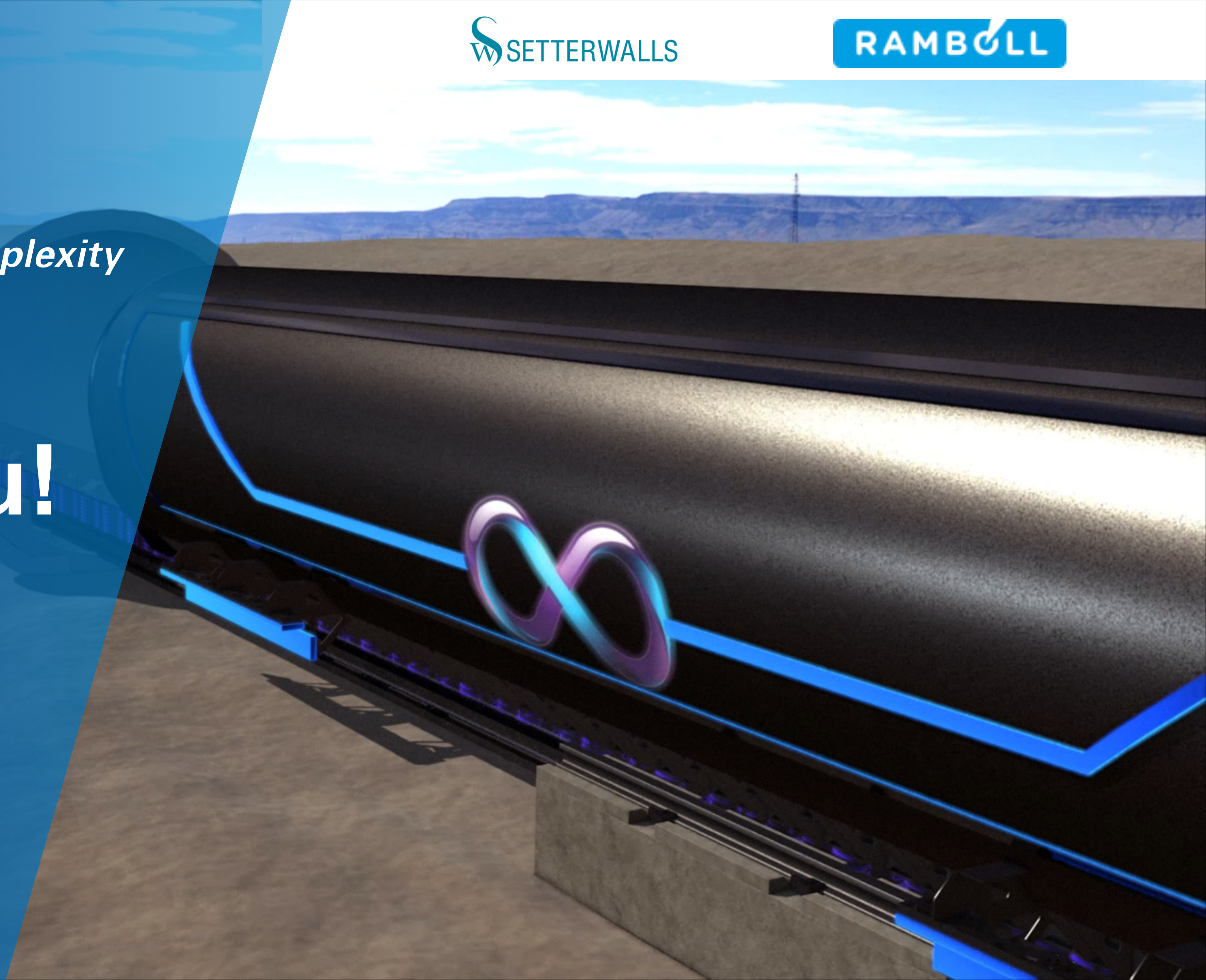
C21 Smart
supercorridors





cutting through complexity

Thank you!



Pressinformation

Åsa Hansson, KPMG Infrastruktur

Malcolm Sjö Dahl, Ramböll

Ulf Djurberg, Setterwalls

Alan James, Hyperloop One

Mårten Fröjdö, FS Links

Presskontakt:

Björn Bergman, kommunikationsdirektör KPMG

Tel: 070-876 24 53

E-post: bjorn.bergman@kpmg.se



kpmg.com/socialmedia



kpmg.com/app

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2016 KPMG AB, a Swedish limited liability company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative, a Swiss entity. All rights reserved.

The KPMG name, logo and “cutting through complexity” are registered trademarks or trademarks of KPMG International.