

**BUSINESS  
FINLAND**

# **SMART MOBILITY WORKSHOP**

28 May 2019

# CHALLENGE COMPETITION WORKSHOP AGENDA

1. Introduction of Business Finland Challenge Competition. Overview of applications - Ulla Lainio, BF
2. Business Finland funding – Tom Warras, BF
3. Presentation by Kyyti
4. Presentations of Challenge Competition ideas
5. Group work
6. Concluding remarks and next steps



# FUNDING, NETWORKS AND INTERNATIONALIZATION SERVICES

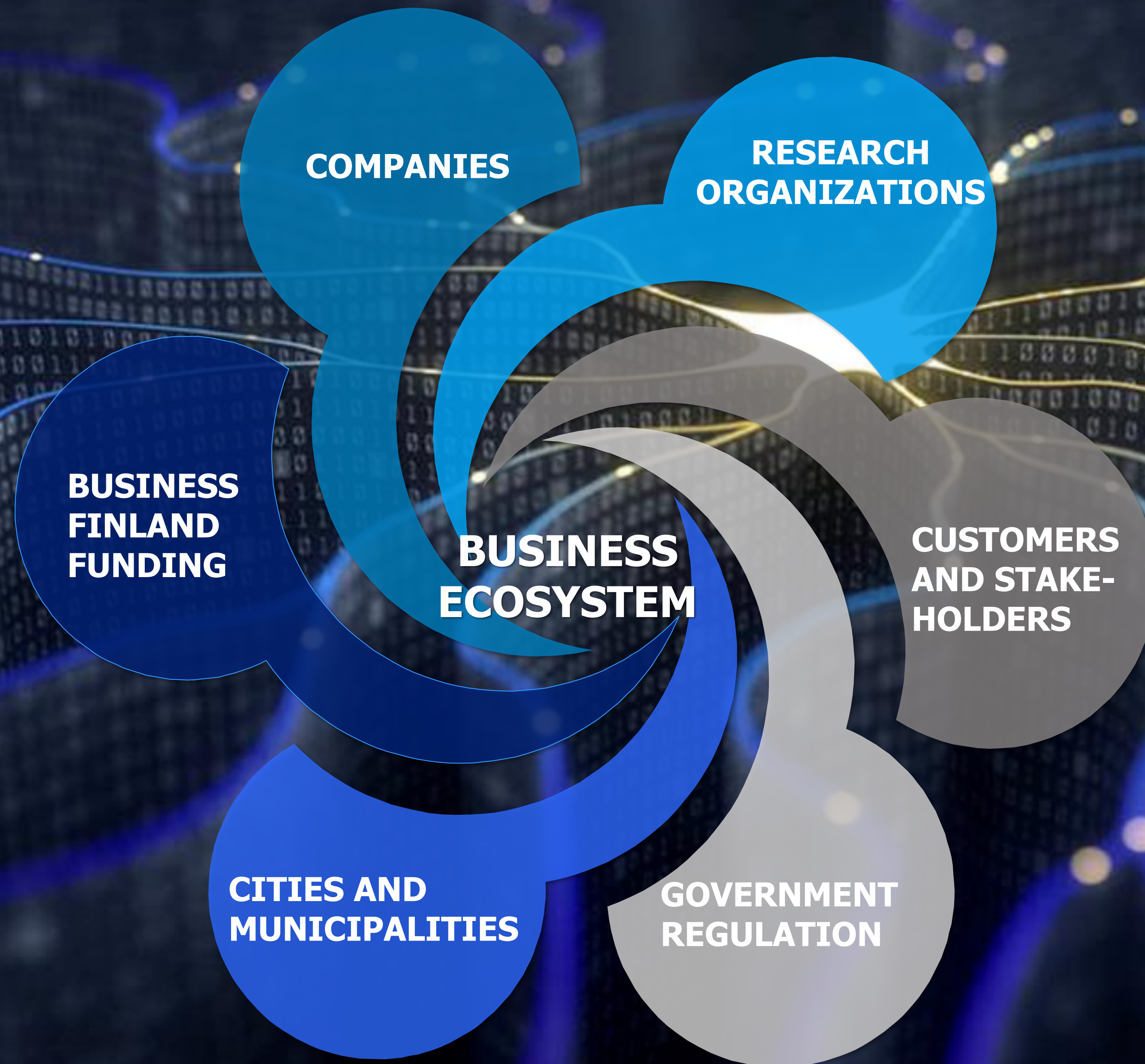
Smart Mobility program runs from 2018 to 2022 with a total budget of EUR 100 million

For companies registered in Finland the program offers innovation funding, market intelligence, networking and internationalization services e.g. trade missions

Targeted at companies, research organizations, municipalities and cities, and e.g. service, ICT and manufacturing industries

Challenge Competition for an own development project or a joint-project with other companies and research institutes

# Business Ecosystems generate growth and innovation



# NEW LOGISTICS

# 5G





# SMART MOBILITY CHALLENGE COMPETITION

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# SMART MOBILITY CHALLENGE COMPETITION 10 THEMES

## FROM FOREST TO SEA FROM DOOR TO DOOR

1. Cyber security in traffic or in remote operations
  2. Autonomous or automated logistics and supply chains
  3. New system electrification solutions / electric vessels, vehicles or moving machines
  4. Artificial Intelligence and sensor data fusion and open data in smart vehicle or traffic solutions
  5. Disruption of traffic, mobility services and digitalization from user's perspective
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# SMART MOBILITY CHALLENGE COMPETITION 10 THEMES

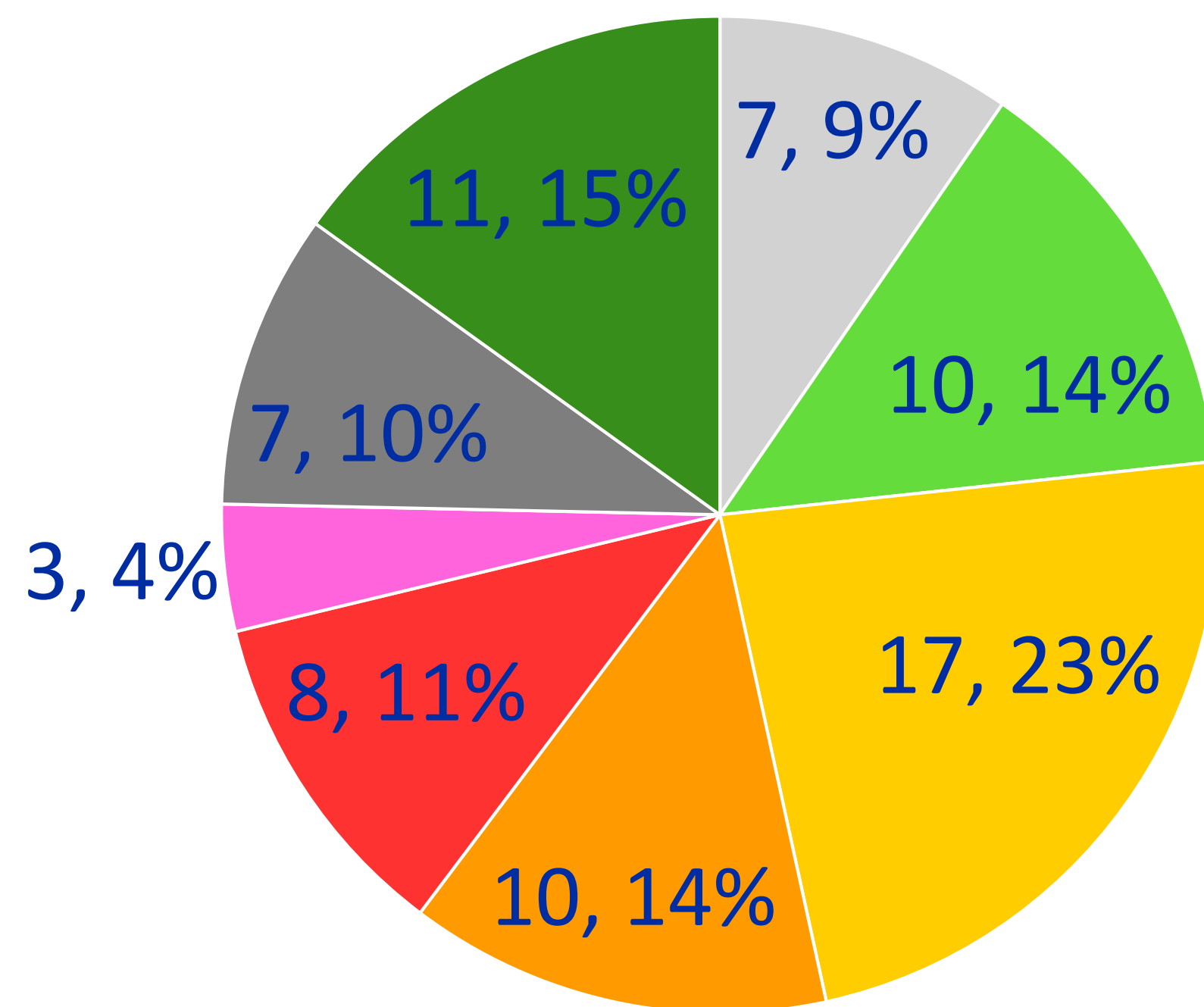
## FROM FOREST TO SEA FROM DOOR TO DOOR

6. Analytics and use of open traffic data or integration of system data
  7. Arctic sea traffic and Arctic routes, logistics
  8. Solutions for reaching or under cutting the tightening emission limits
  9. MaaS (Mobility as a Service), transportation of goods and passengers
  10. Other solutions or technologies improving the Smart Mobility theme
-



# SMART MOBILITY CHALLENGE COMPETITION IDEAS = 73 pcs

Amount and % share of Ideas



■ Drones ■ Marine Industry ■ MaaS ■ Traffic ■ Electric Vehicles ■ Platforms ■ Forest Industry ■ Logistics

# FUNDING FOR INTERNATIONAL GROWTH

Impacts for  
Finland

**Horizon 1:**  
Grow current  
business, 1-2 years

**Horizon 2:**  
Build emerging  
business, 2-4 years

**Horizon 3:**  
Create options for the  
future, 5-10 years

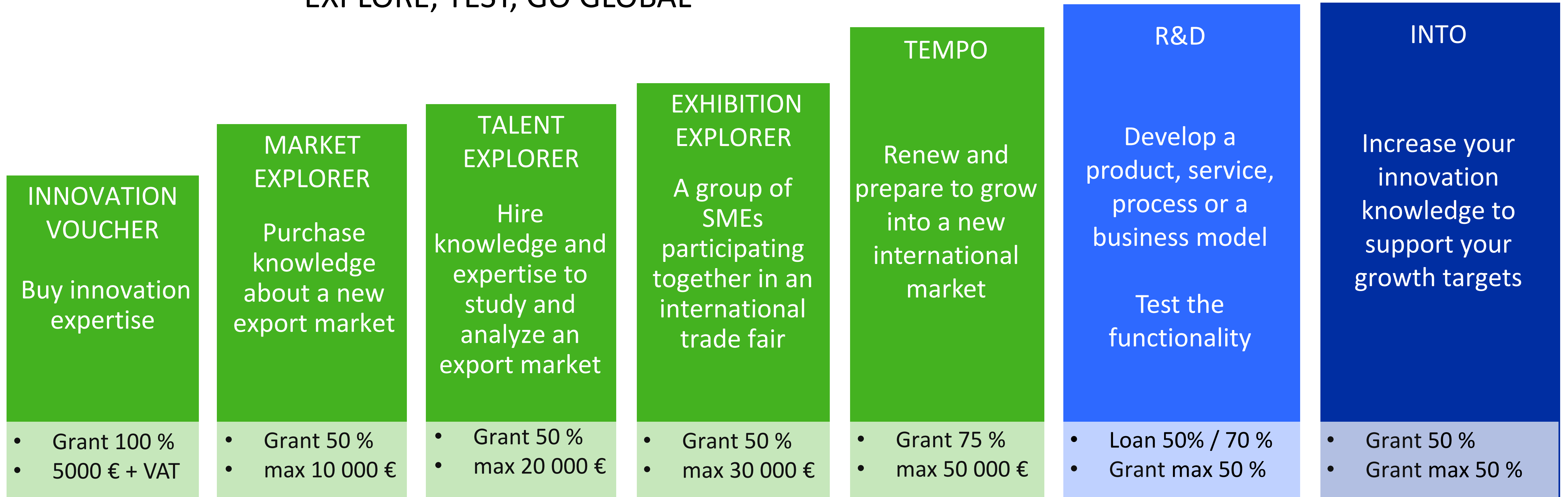
Time

# FUNDING SERVICES

## FOR COMPANIES

RESEARCH, DEVELOP, RENEW, GROW

EXPLORE, TEST, GO GLOBAL



The amount of funding depends on the company's needs and resources.

## FOR RESEARCH ORGANIZATIONS: CO-INNOVATION AND CO-CREATION FUNDING

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# **Business Finland's funding for joint actions**

Tom WARRAS

National EUREKA Coordinator

NCP for Transport and Energy Programmes

28.5.2019

# BUSINESS FINLAND

- Business models
- Digitalization
- Ecosystems
- E2E supply chain solutions
- Autonomous technologies
- Sustainability
- Data sharing
- Platform economy
- Trust, safety & security
- PPP
- Standards
- Testbeds
- ...

## SMART LOGISTICS

The supply chain is being transformed by smart mobility solutions.  
With digital expertise and industrial know-how, Finland is well positioned to be a global leader in smart logistics.



# Business Finland's programs combine different impact horizons

Developing competitive business ecosystems and platforms for global market disruptions  
Enabling new partnerships and access to test and pilot environments

Impacts for Finland

Increasing exports by exploiting rapid shifts in innovation and market trends

Unleashing new business opportunities, strengthening the required capabilities

**Horizon 1:**  
Grow current business, 1-2 years

**Horizon 2:**  
Build emerging business, 2-4 years

**Horizon 3:**  
Create options for the future, 5-10 years

Time

# Ambition: a globally competitive solution

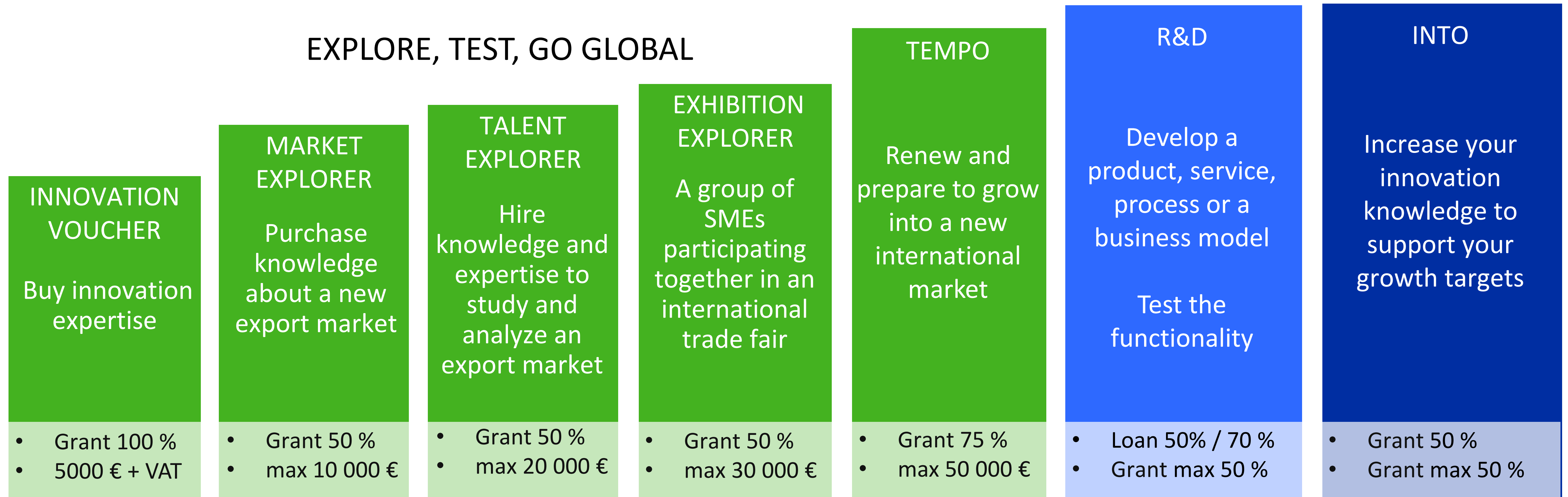


Haastekilpailun ja tämän työpajan avulla haetaan (myös) niitä alueita, joissa Suomi voi menestyä. Alueita, joissa tarvitsemme toinen toisiamme ja liittolaisia:

- Verkottuminen kotimaisena klusterina, jossa täydentäviä osaamisia
- Liittoutuminen Pohjoismaissa tai muissa maissa standardien ja liiketoimintamallien edistämiseksi
- Sopivat kansainväliset yhteistyökumppanit ekosysteemin rakentajina

# Funding services for companies

RESEARCH, DEVELOP, RENEW, GROW



The amount of funding depends on the company's needs and resources.

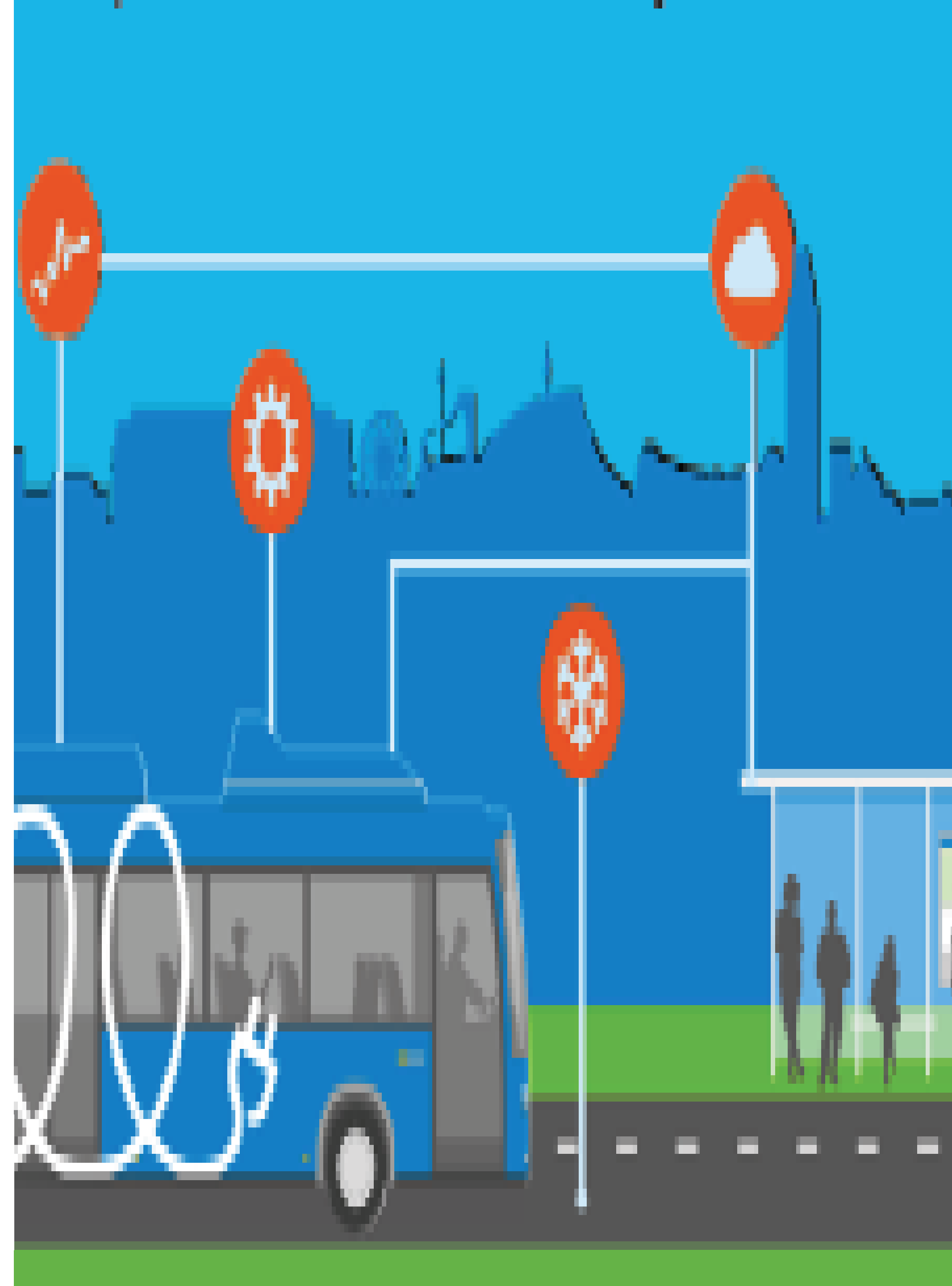
**For research organizations:** CO-INNOVATION AND CO-CREATION FUNDING



# CASE: LIVING LAB BUS

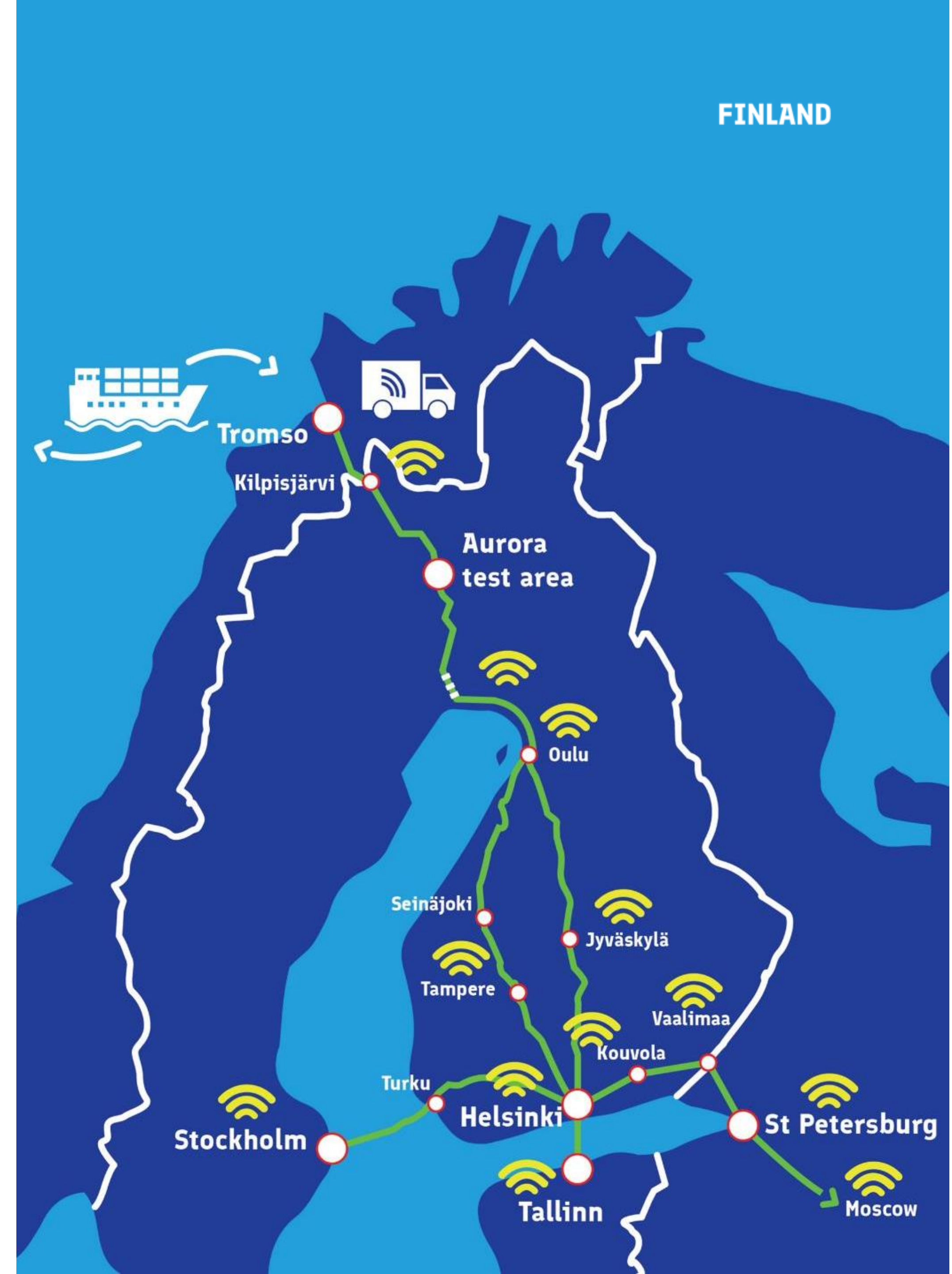
Open innovation platform for technology and service developers and providers using operational public transport fleet

- An open platform for new technologies and services for development, testing and demonstration
- Quick prototyping and testing for faster commercialisation and credible verification and references
- Real context and real users for measuring user acceptance, gaining feedback and development ideas
- Co-development ecosystem or new mobility service value chains and information exchange
- Project timeline until summer 2019



# CASE: DIGITAL LOGISTICS

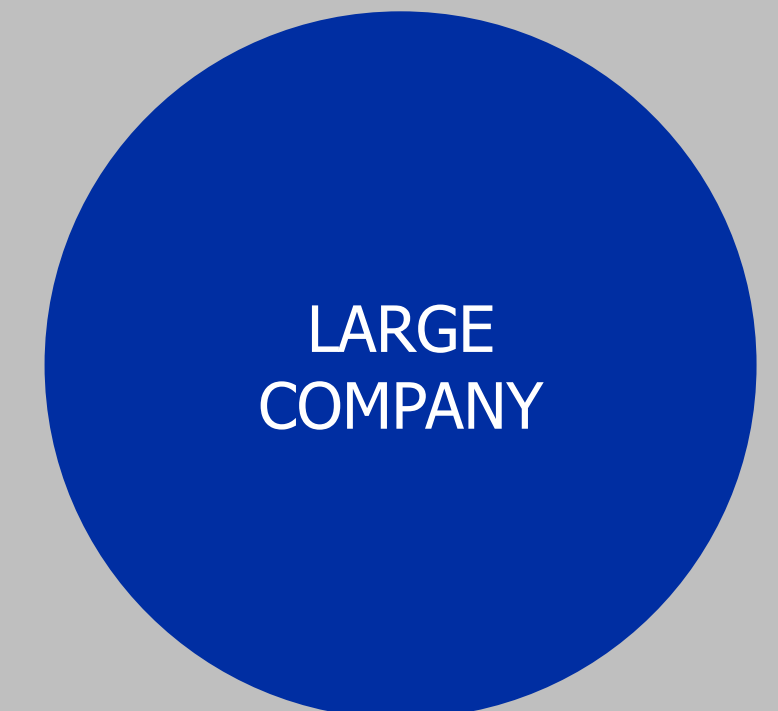
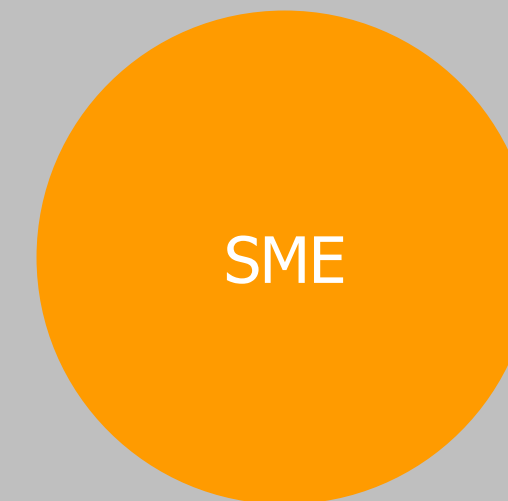
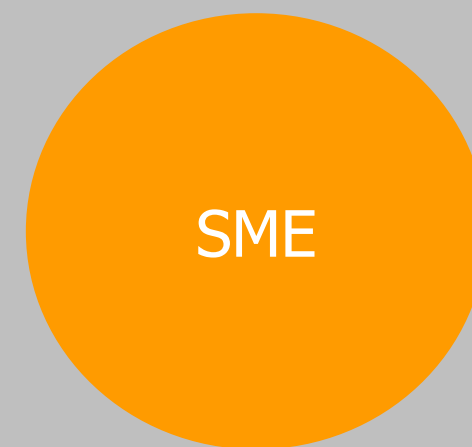
- Corridor as a Service (CaaS) streamlines transport logistics.
- It positions Finland as a key logistics hub for Asia.
- Intelligent digital logistics technology saves time and fuel while improving capacity utilization.
- Cross border priority/platooning drive service.
- Delivery transparency to traders with real-time tracking.
- Accurate delivery time with steady driving speed.



# FUNDING FOR JOINT ACTIONS

**Companies can participate in research targeting** and, **together with research organizations**, develop new knowledge and innovations for their business needs.

- Common goal + plan
- Need to collaborate on projects
- The projects are implemented in parallel



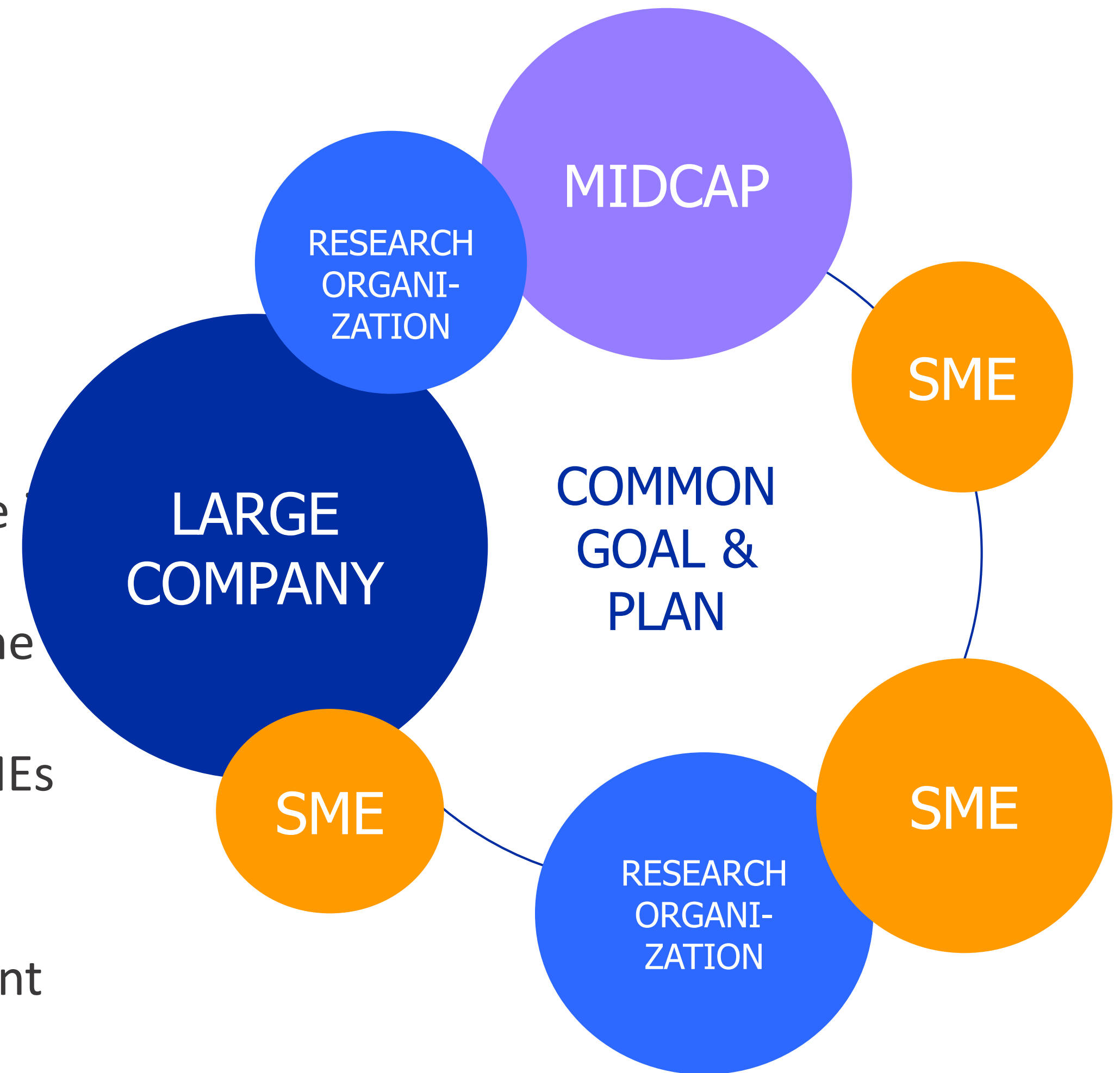
Companies can have different roles:

- own R&D project
- participation in a project of another company as a subcontractor, funding or other investment

# CO-INNOVATION FUNDING

## What are the criteria for the funding?

- Proved relevance and demand (problem-solution fit)
- The credibility of the joint action
  - Are the parties to a joint action right to achieve results
  - Is the work distributed in such a way that it makes sense terms of the results
  - Is the company's investment reasonable in relation to the results to be achieved and the exploitation paths
  - How does the joint action affect the development of SMEs and midcap businesses?
- The novelty value and competitive advantage of the solution model, market potential, societal influence as well as the joint action's international collaboration



# R&D FUNDING LEVELS

	SMEs	MIDCAP COMPANIES Turnover max. 300 M€	LARGE COMPANIES
<b>COMPANY RESEARCH PROJECT GRANT</b> Create new knowledge and competence	Grant max <b>50%</b>	Grant max <b>40%</b>	Grant max <b>40%</b> Large companies must buy services from SME's and / or research organizations or implement the project as a joint project with them. The share of the bought services has to be 40 % of the project's overall costs.
<b>DEVELOPMENT AND PILOTING LOAN</b> Develop or renew products, services and business model. Demonstrate the functionality of your solution	Loan <b>50% / 70%</b>	Loan <b>50% / 70%</b>	Loan <b>50%</b> Large companies must buy services from SME's and / or research organizations or implement the project as a joint project with them. The share of the bought services has to be 15 % of the project's overall costs.

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# **Business Finland's program path for service businesses in mobility, transport and deliveries**

Tom WARRAS

National EUREKA Coordinator

NCP for Transport and Energy Programmes

28.5.2019

# MaaS Tekesin strategiassa 2014 alkaen



MaaS  
Ecosystem  
Analysis 2014



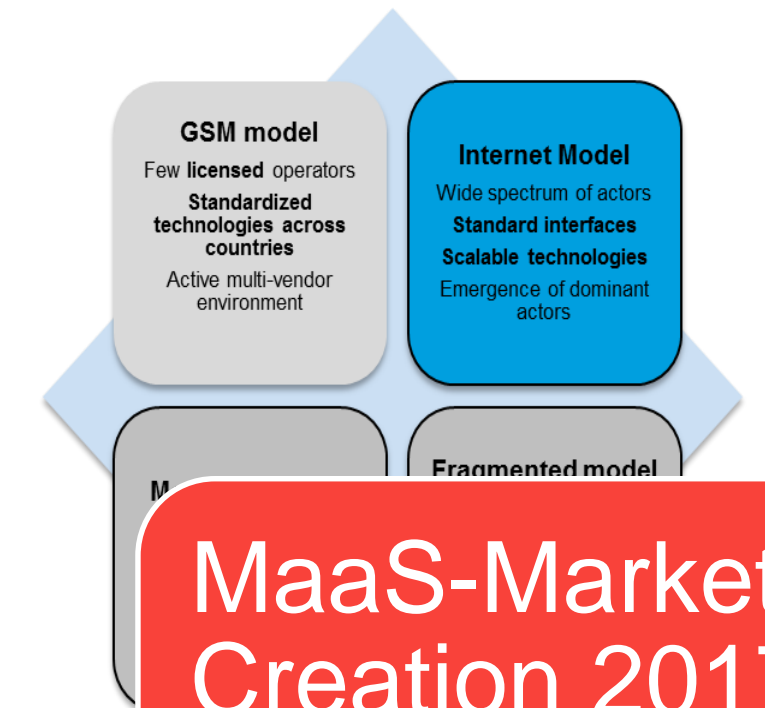
MaaS-haku  
2015

- Esiselvitys-rahoitus 50.000€
- Start-upit ja isot toimijat suunnittelivat



Liikennelabra

- Perustamisvaihe: datan hankinta Labran käyttöön
- Myöhemmin: yhteistyömalli



MaaS-Market-  
Creation 2017

- Will dynamic multiactor model dominate?
- Or super-platform?

# BOMAAS-projekti 2016-2017

- Kaikille toimijoille avoimet markkinat – mahdollisuus luoda uusia palveluita kysynnän mukaan
- Matalat sopimiskustannukset toimijoiden välisessä yhteistyössä
- Paikallisten liikkumispalvelujen tarjoajilla mahdollisuus liittyä globaaleihin matkaketjuihin
- Avoimuus uusille markkinakonsepteille – ei markkinastagnatioon johtavia rakenteita
- **Tavoitteet:**
  - **Matalammat tietojärjestelmäkustannukset**
  - **Palveluiden parempi saatavuus asiakkaille**



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# BOMAAS-projektin ratkaisuehdotukset



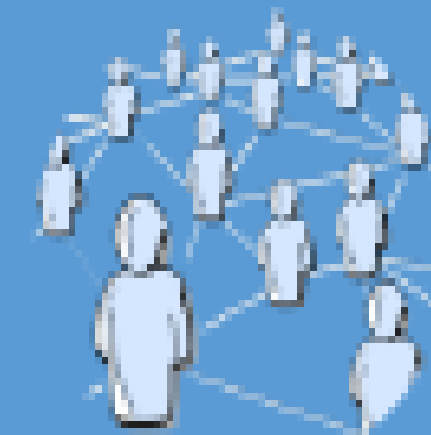
## Luottamusketjut

- Luottamusketjut ja -verkostot
- Yhden kahdenkeskisiä sopimuksia
- Palvelujen auditointi paikallisten toimijoiden kautta



## Monistandardi-arkkitehtuuri

- Avoin uusille palvelukonsepteille
- Nykyiset palvelut helppo integroida
- Mahdollistaa vaiheittaisen käyttöönoton
- Mahdollisuus useille rinnakkaisille palvelukanaville



## Hajautettu rakenne

- Ei koko järjestelmän kannalta kriittisiä tahoja
- Laajennettavissa uusille alueille
- Ei portinvartijoita
- Kaikilla mahdollisuus valita oma luottamusverkostonsa

# Liikkumisen dataan liittyviä haasteita, joita haastekilpailun ehdotukset haluavat ratkaista

Luottamusverkoston muodostaminen datan jakamiselle

Datan palvelu-kerrokset: User - Publisher – Service - Agreement layer

Logistiikkaketjun avoin data vs. luottamuksellinen tuotedata

Datan omistus, datan laatu, markkinamekanismit datan käyttöön saamiseksi?

Liikkumisen palvelurakenne: mitä ajoneuvoja, kulku-  
neuvoja, tarjotaan ja kuka omistaa?

Käyttäjäkokemus ja palvelun käytettävyys – mistä tulevat muutoksen driverit?

# Ruotsi-yhteys

DRIVE : SWEDEN

**On the 12th of June  
we invite you to Ericsson  
and Kista Science City**

There are still spots available so  
take the opportunity to learn  
more about Drive Sweden's call  
that opens in June.

Do you have an idea for a project?  
Pitch it at the meeting, but  
please send an email to  
[sofie.vennersten@drivesweden.net](mailto:sofie.vennersten@drivesweden.net) beforehand.



**Networking & Information June 12  
- Drive Sweden Open Call**

**Tom Warras**



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