



# INNOVATION IN SEA TRAFFIC MANAGEMENT

A Triple helix approach

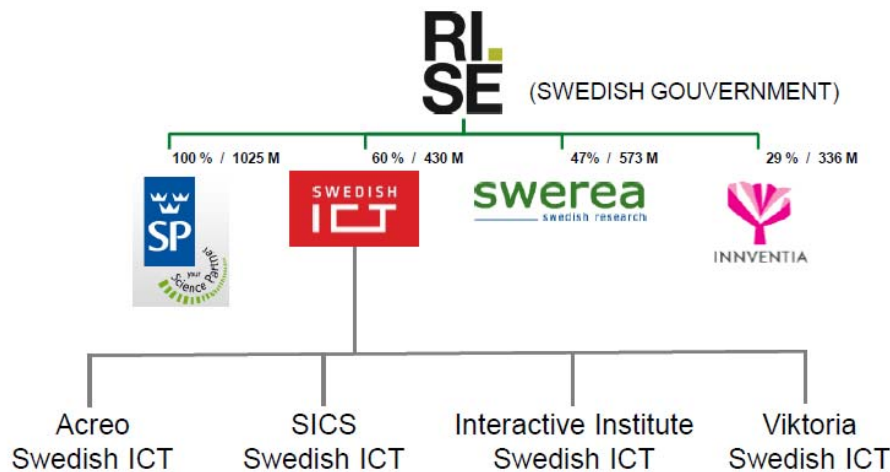
Per-Erik Holmberg  
Viktorias Swedish ICT



# SHORT FACTS

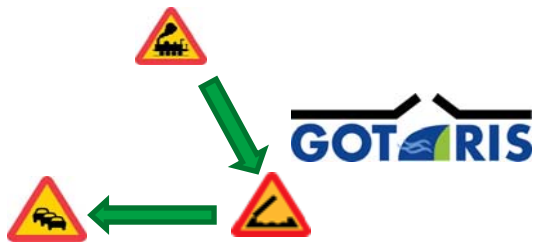
## VIKTORIA SWEDISH ICT

- ICT research institute – Sustainable Mobility
- Situated at Lindholmen Science Park, Göteborg, Sweden
- Established in 1997 (a **Non Profit Research Institute**)
- **Partly owned by industry (5%) and Chalmers (4%)**
- **Majority owner Swedish ICT (gov)**
- Roughly 50 persons and growing
- 47 % PhDs



# AGENDA

## WHY - TRIPLE HELIX



TWO EXAMPLES

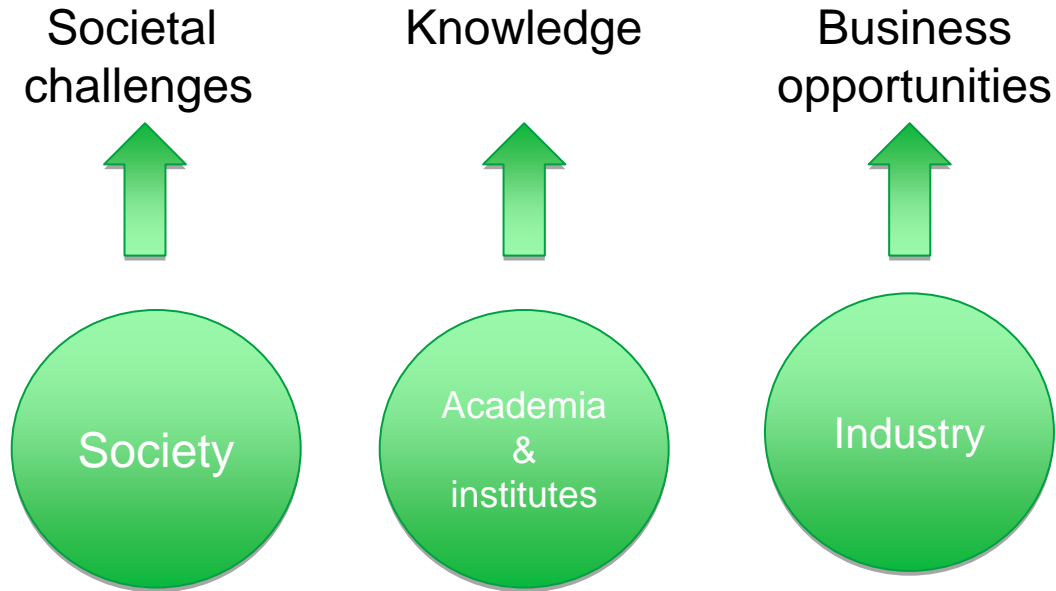


## HOW - TRIPLE HELIX

We can't solve problems by using the same kind of thinking we used when we created them.

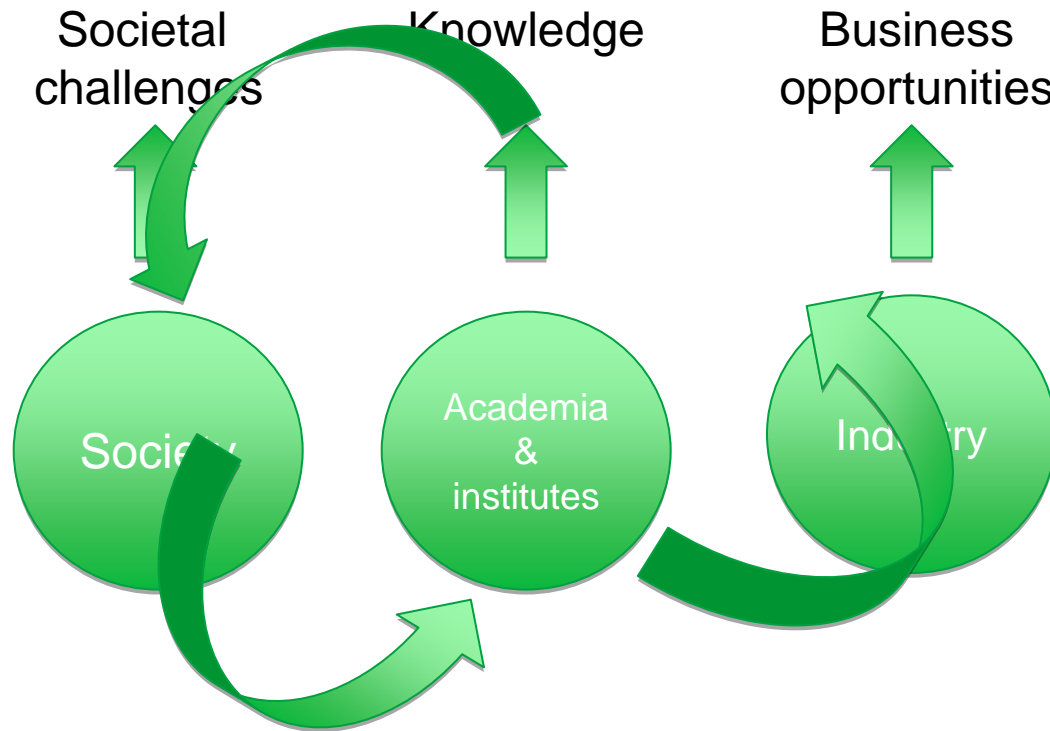
***Albert Einstein***

# WHY - TRIPLE HELIX



”Who will solve the problem that no one owns”

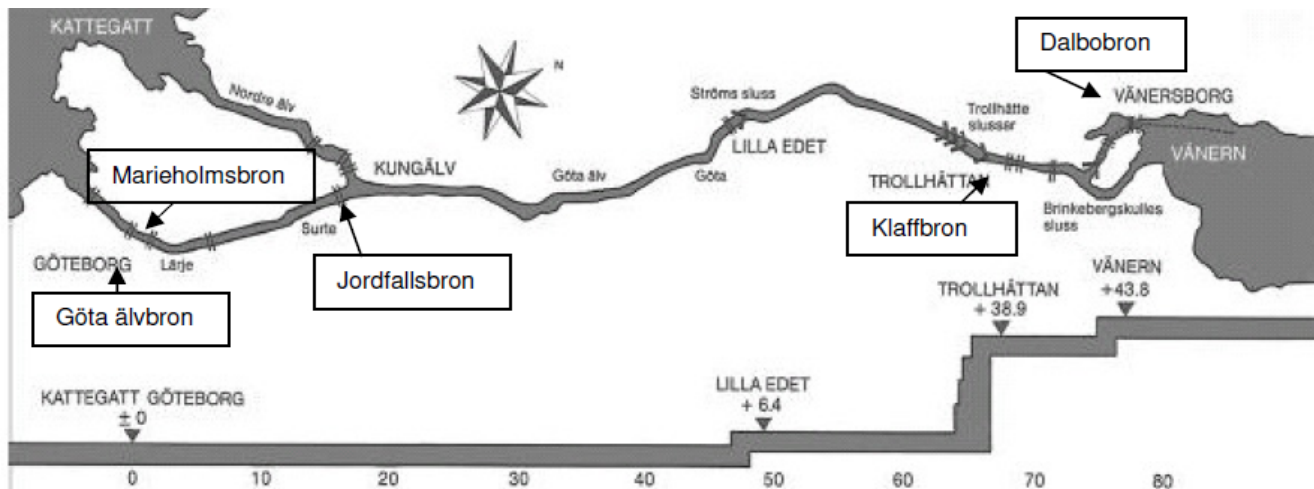
# WHY - TRIPLE HELIX



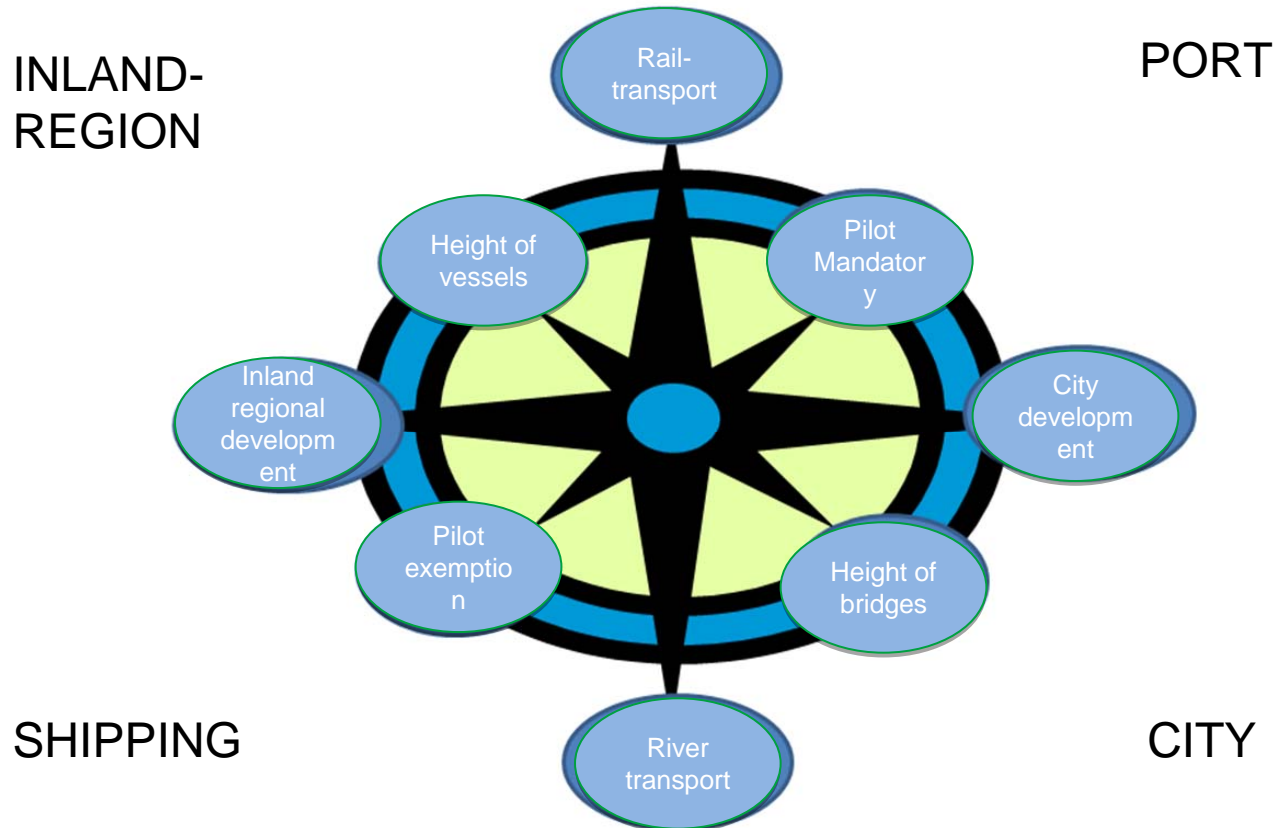
# THE GOTRIS EXAMPLE

(GÖTA ÄLV RIVER INFORMATION SERVICES) – RIVER TRAFFIC MANAGEMENT

- The River Göta Älv
  - Connects the inland of Sweden (Lake Vänern with the sea)
  - Divides the city of Gothenburg which is expanding
    - New bridges
    - Increased train traffic over the river
  - 1300 ships/year – 1.9 Milj tonnes/year



# CONFLICTS OF INTERESTS

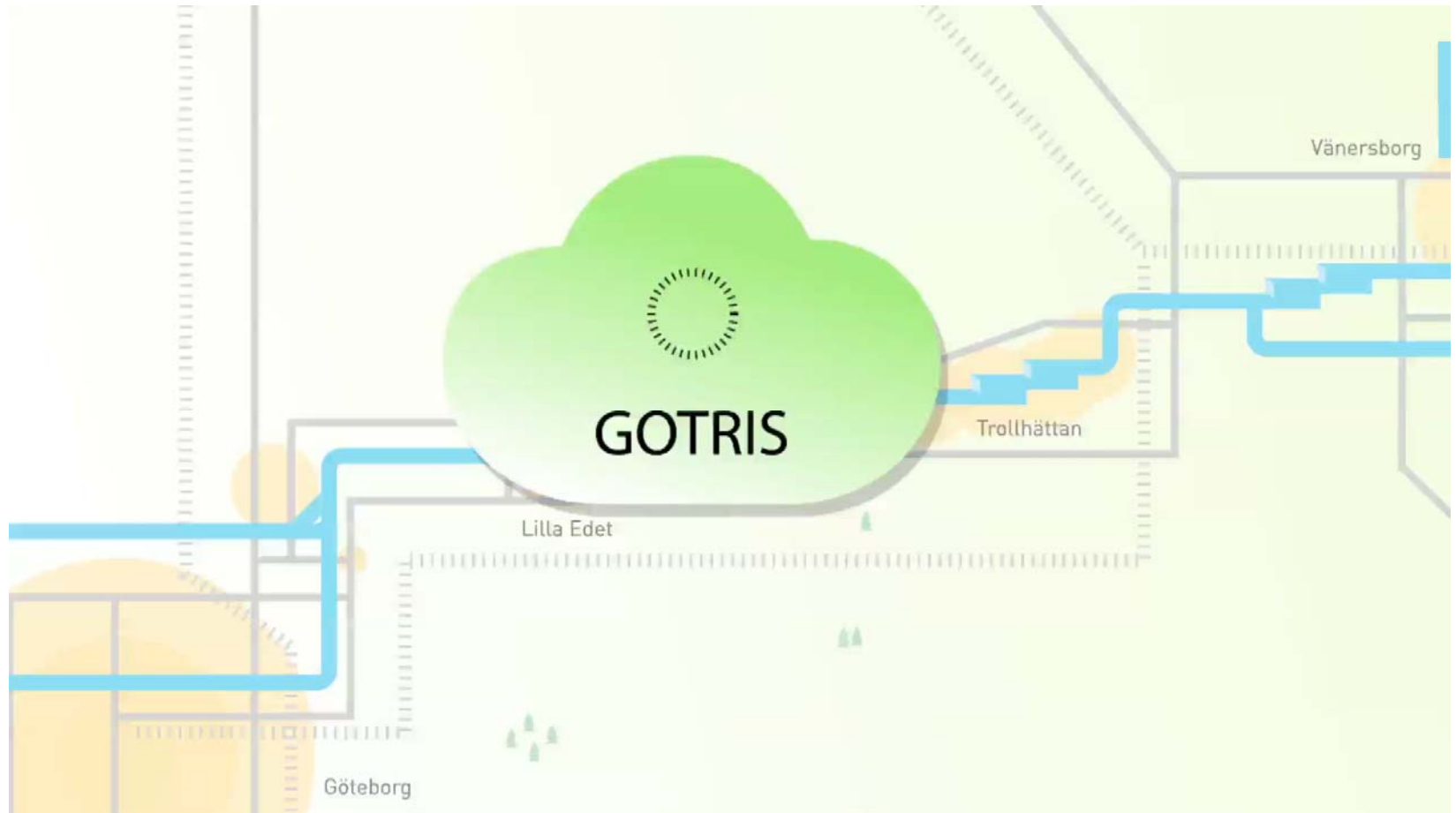




# OPEN INNOVATION PROJECT

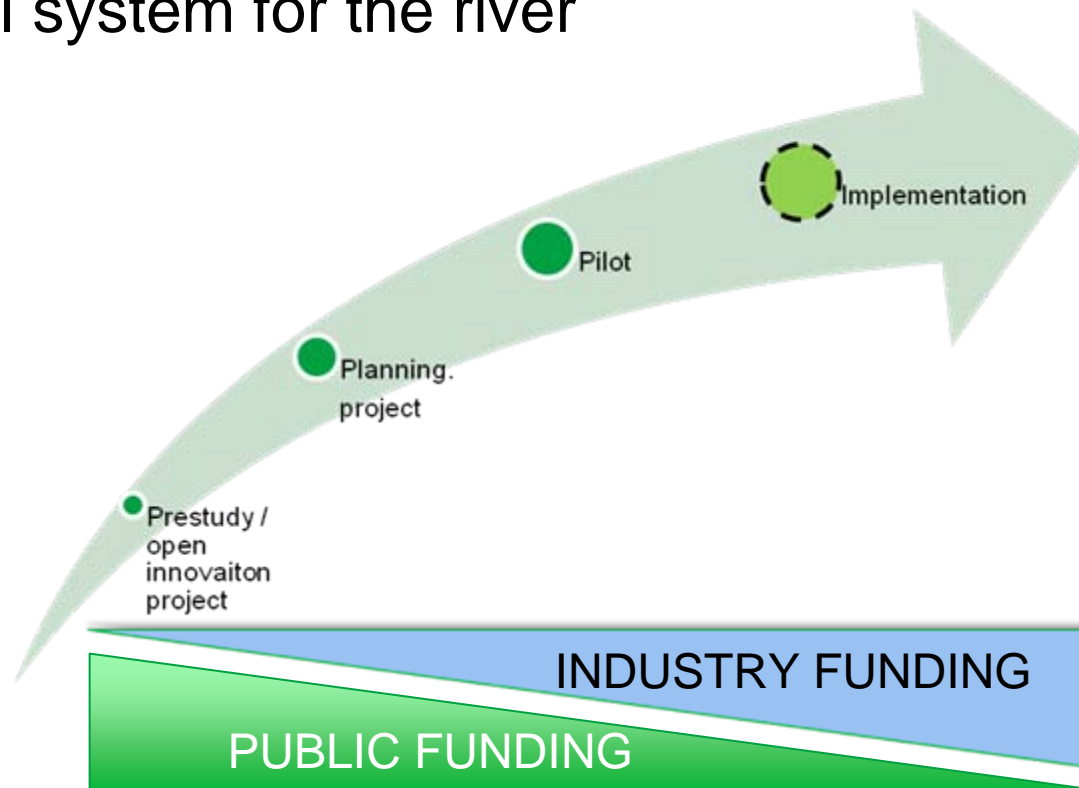


# THE IDEA



# READY TO LAUNCH...

- Pilot starts in december for 9 months
- Evaluation, assesment & preparation for procurement.
- County planning permit for new bridges, presumes traffic control system for the river



# THE MONALISA EXAMPLE

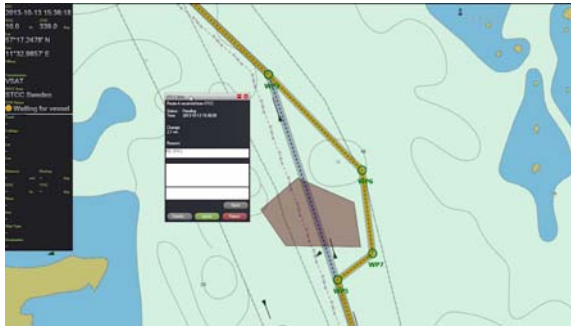


- SEA TRAFFIC MANAGEMENT



- GREENER
- SAFER
- MORE EFFICIENT

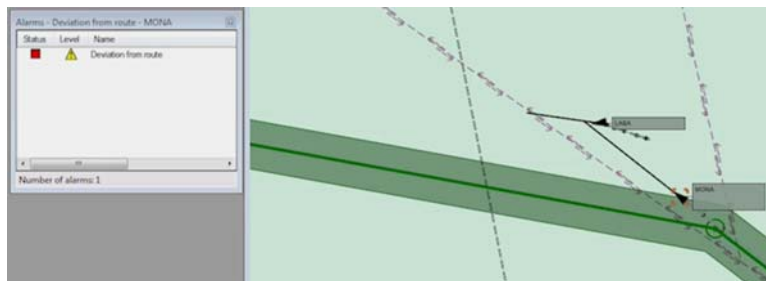
# SEA TRAFFIC MANAGEMENT



## ROUTE PLANNING & EXCHANGE SHIP-SHORE-SHIP



## DYNAMIC SHIP SEPARATION



## ANOMALIES WARNING

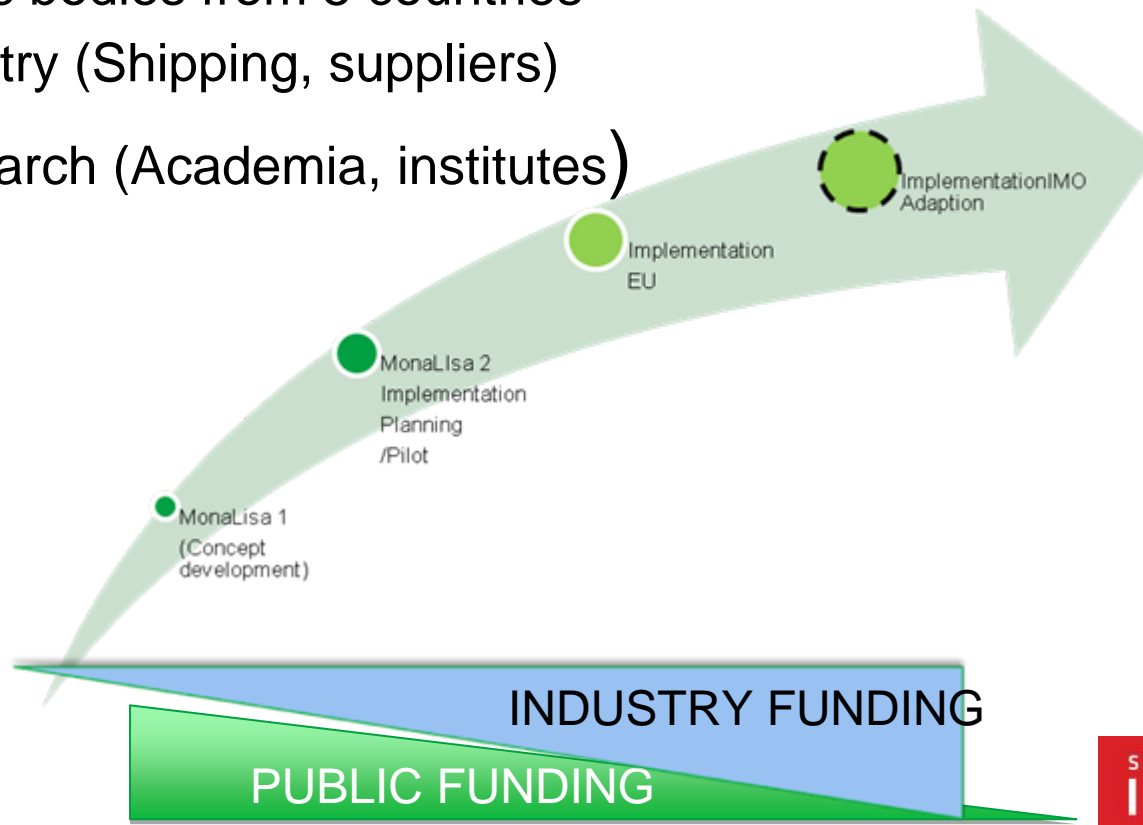
Just-in-Time port operations,  
"Virtual Laycan"

[www.viktoria.se](http://www.viktoria.se)

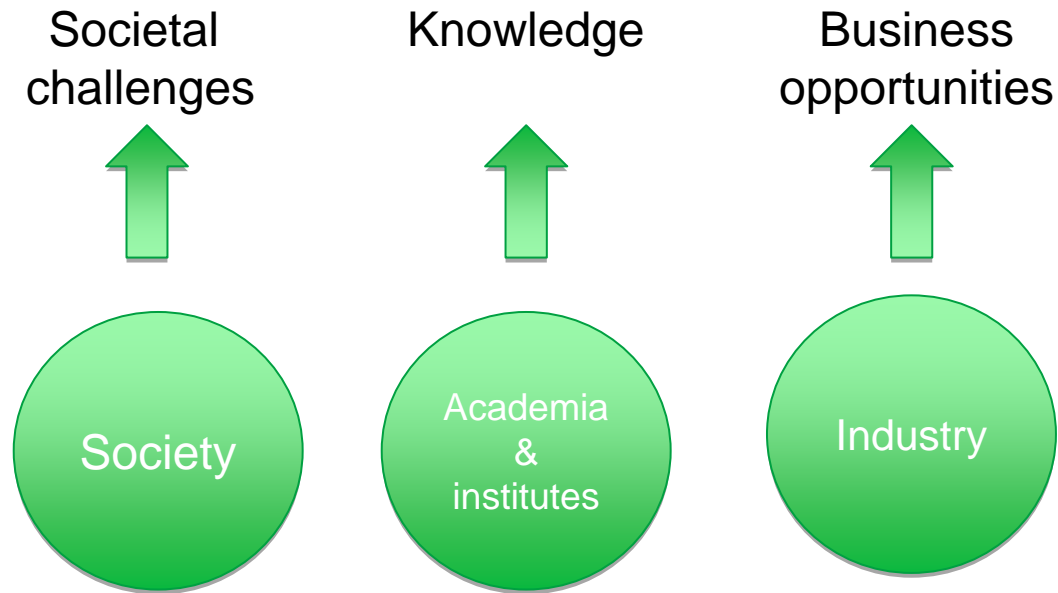


# EU-FINANCED PROJECT

- Swedish Maritime Administration coordinator
- 37 partners from 10 countries
  - Public bodies from 5 countries
  - Industry (Shipping, suppliers)
  - Research (Academia, institutes)



# HOW - TRIPLE HELIX



**"Respect the Why's"**

# HOW - TRIPLE HELIX



**Adress the IPR early in the process**



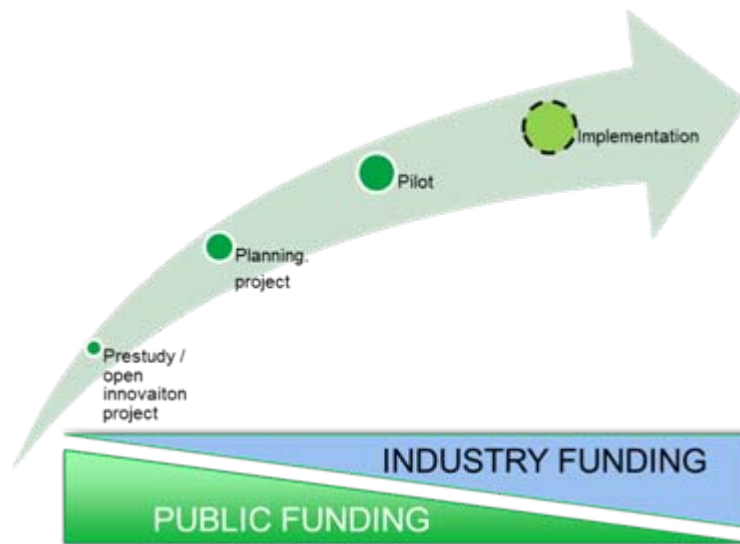
# HOW -TRIPLE HELIX



**Act through the platforms !**

**”It’s all about meeting eachother”**

# HOW -TRIPLE HELIX



Governments will always play a huge part in solving big problems. They set public policy and are uniquely able to provide the resources to make sure solutions reach everyone who needs them. They also fund basic research, which is a crucial component of the innovation that improves life for everyone.

***Bill Gates***

**Effective public support & funding**



THANK YOU FOR  
YOUR ATTENTION

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[www.viktoria.se/proejects/gotris](http://www.viktoria.se/proejects/gotris)

[www.viktoria.se/projects/mona-lisa-20-sea-traffic-management](http://www.viktoria.se/projects/mona-lisa-20-sea-traffic-management)