

# How to bring self-driving buses to the streets of Europe?

## The Sohjoa Baltic Project

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[www.sohjoabaltic.eu](http://www.sohjoabaltic.eu)



EUROPEAN  
REGIONAL  
DEVELOPMENT  
FUND



SOHJOA BALTIC



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# Sohjoa Baltic

## Baltic Sea Region transitioning into eco-friendly autonomous last mile public transportation

Total Budget ~3.8 M€ - Timeline 10.2017 –9.2020



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## Objectives

Bring autonomous public transportation into cities

Reduce CO2 emissions using eco-friendly vehicles

Enhance safety and accessibility in public areas

Build trust in the autonomous technologies

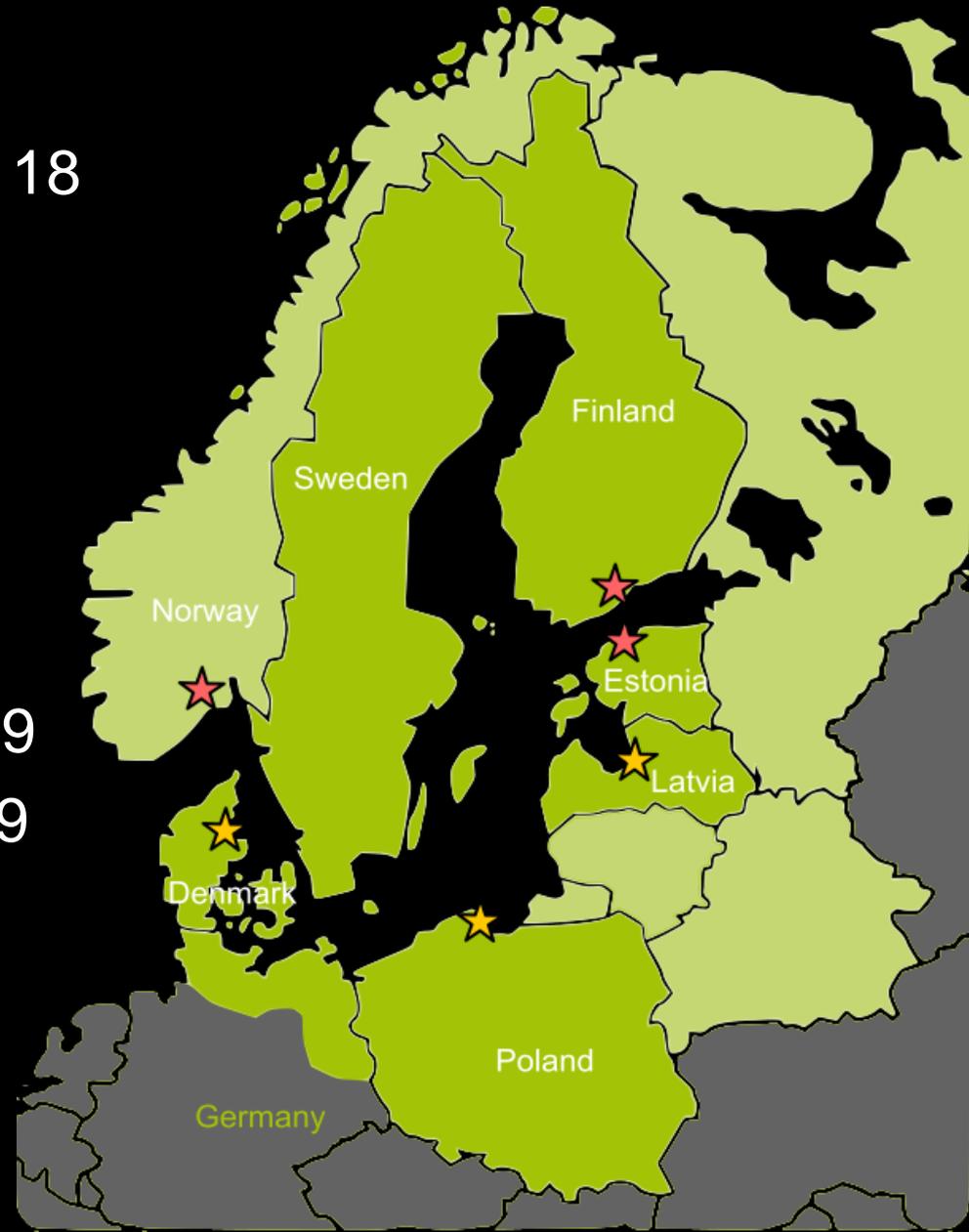


## Large scale pilots (~ 1 year)

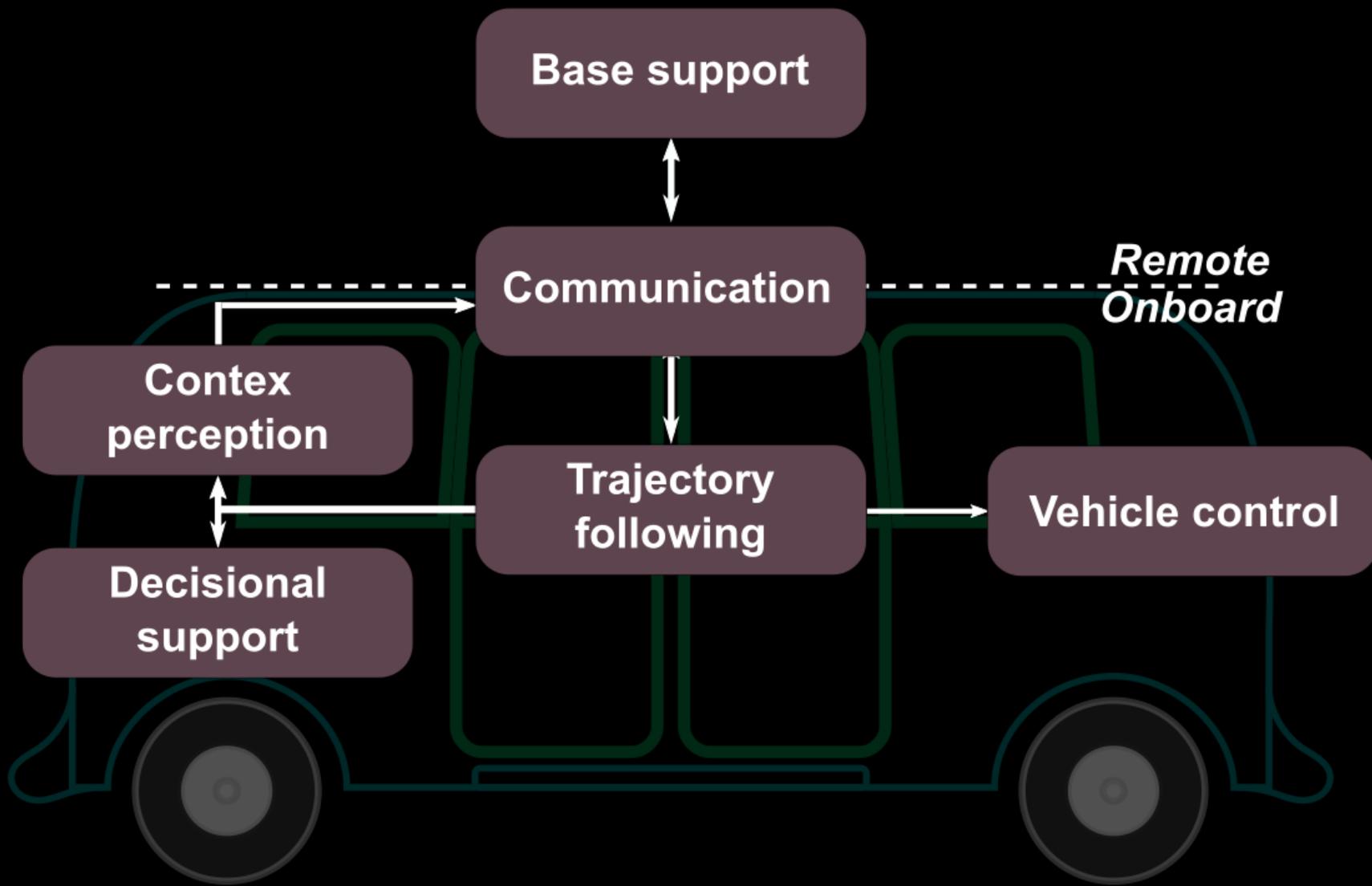
- Kongsberg (Norway) Oct 18
- Helsinki (Finland) 2019
- Tallinn (Estonia) 2019

## Show cases (~ 1 month):

- Zemgale (Latvia) - May 19
- Gdansk (Poland) - Sep 19
- Vejle (Denmark) - Oct 19



**Is FULL automation possible  
in urban ITS?**



## Sense, Perceive, Understand

Perception is “*the way you understand something using one of your senses (measure)*”

- Child following a ball -

Which physical quantity do you measure?

How do you understand the situation?

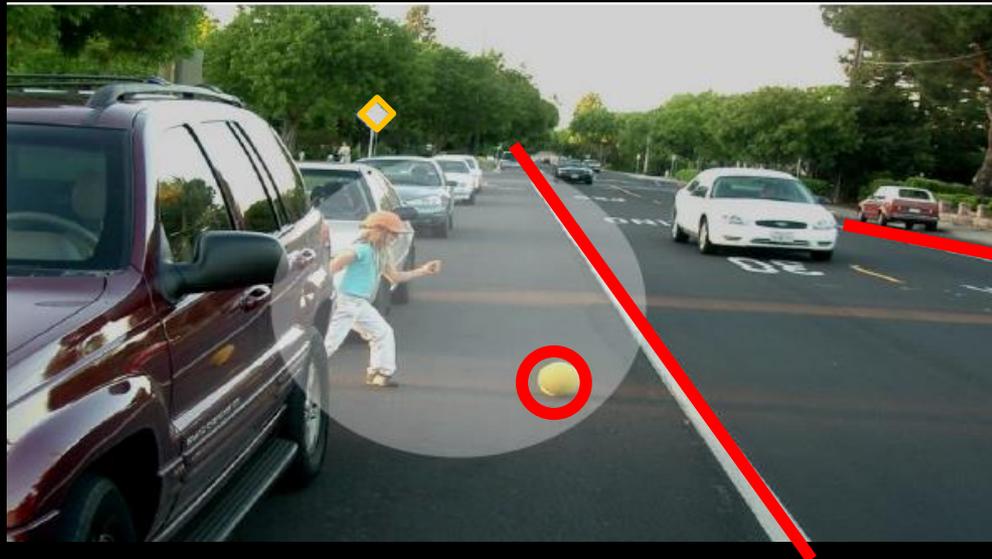


## Sense, Perceive, Understand

Perception is “*the way you understand something using one of your senses (measure)*”

- Child following a ball -

Geometric information – distances, lines, circumferences, reference frames, ect.

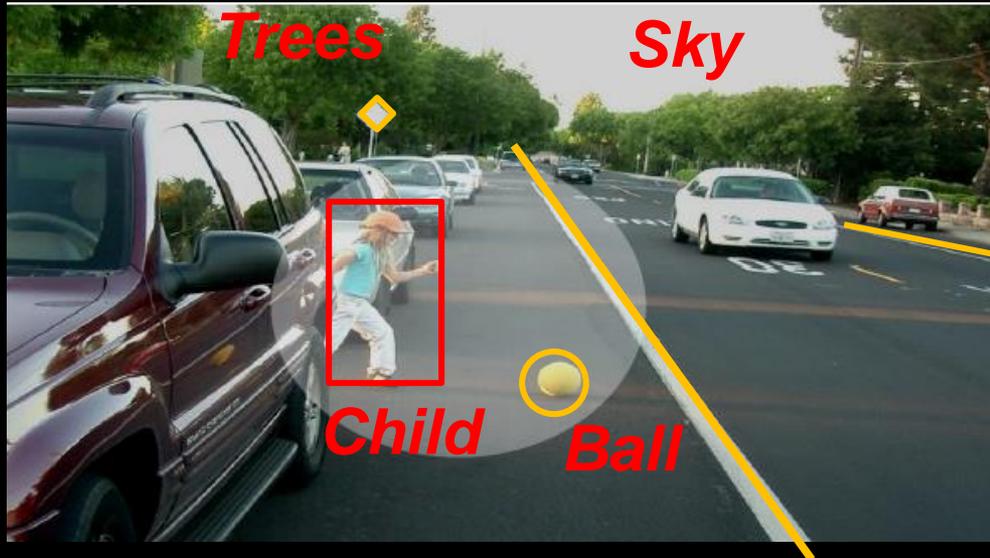


## Sense, Perceive, Understand

Perception is “*the way you understand something using one of your senses (measure)*”

- Child following a ball -

Semantic information – child, ball, sky, trees ect.



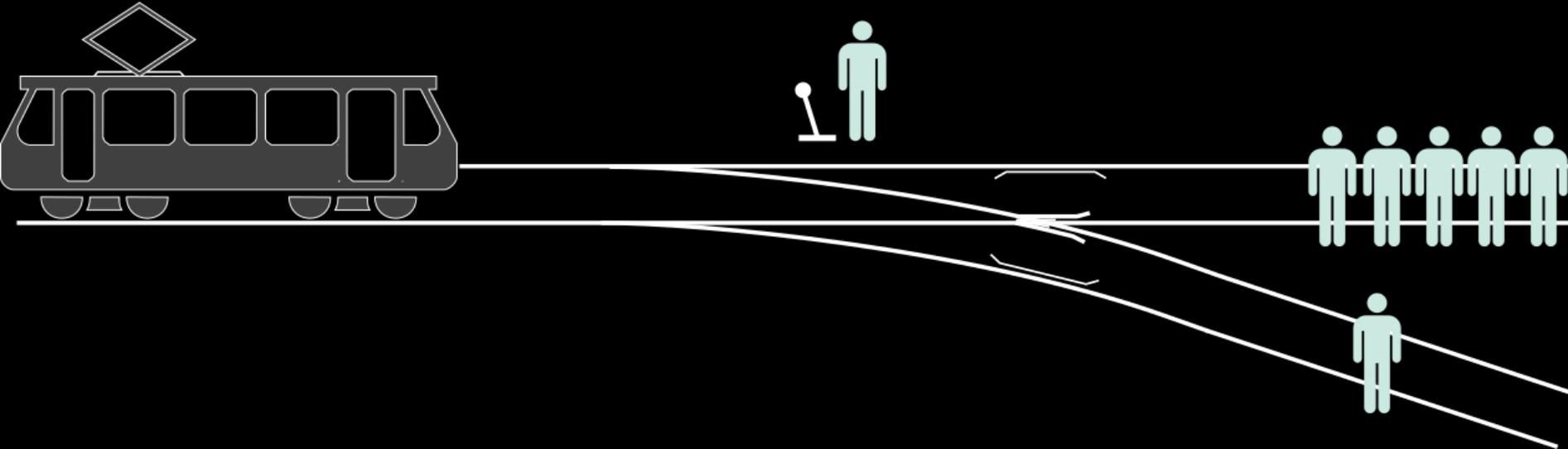


## Legal issues

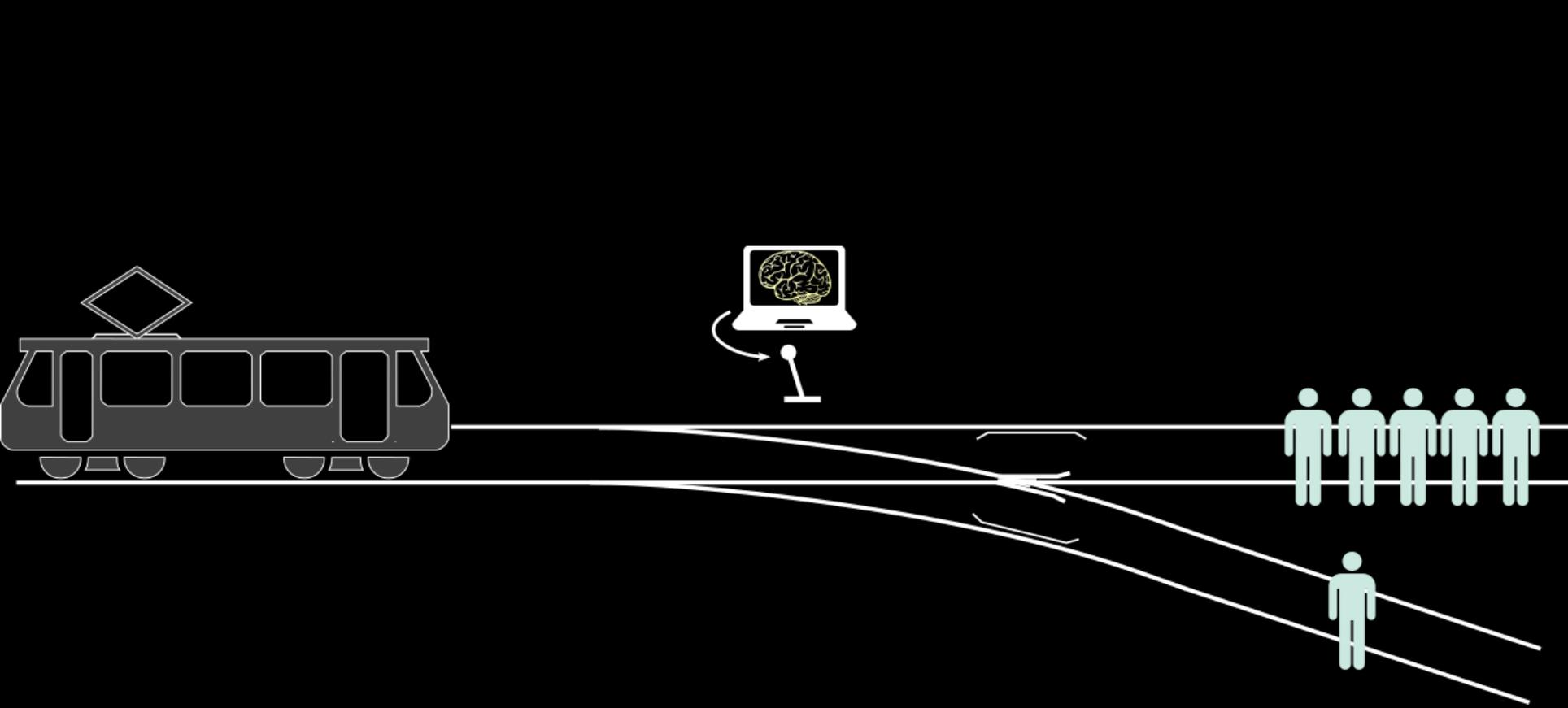
vehicle approval  
driving licenses  
road traffic

data protection  
liability law  
criminal law

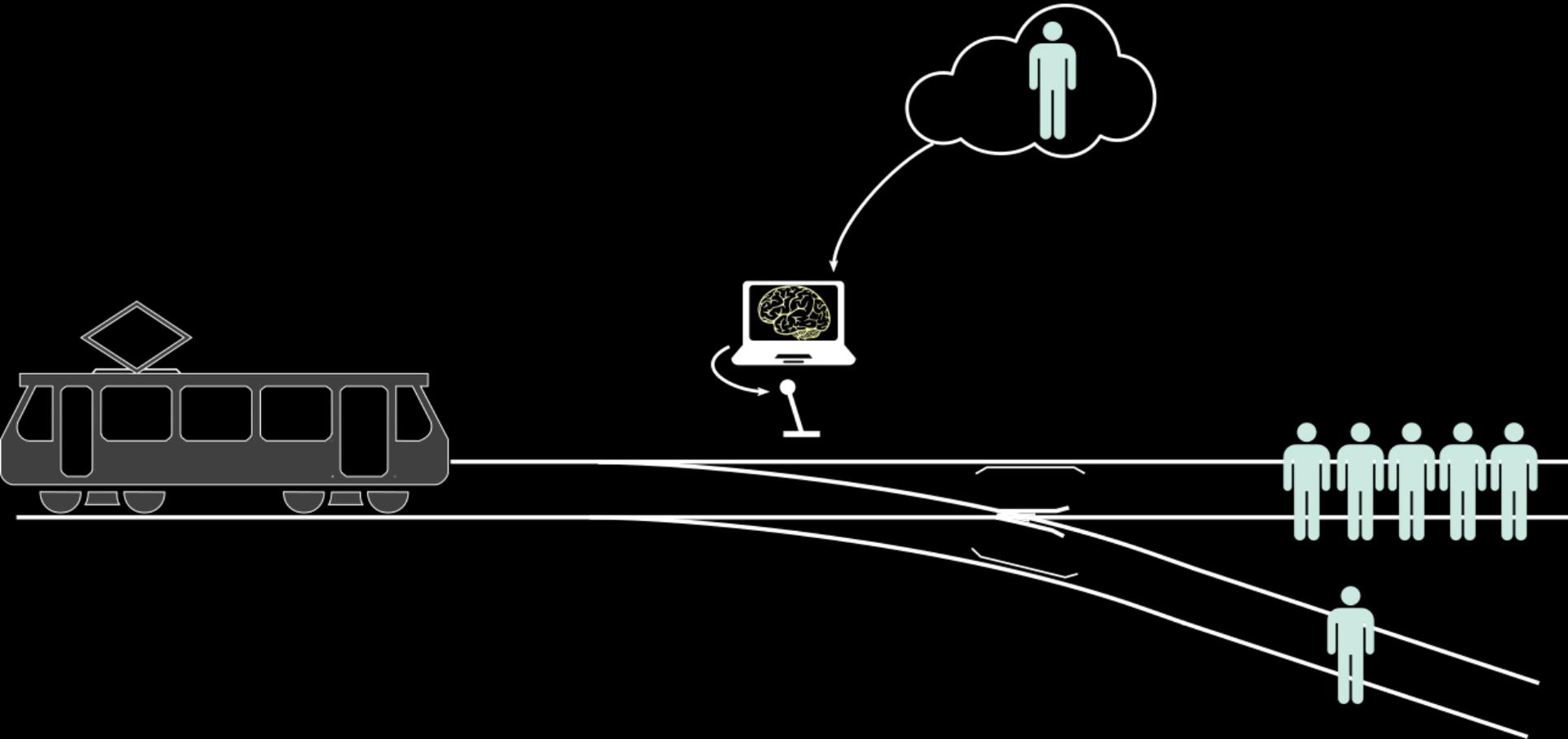
# Ethical issues



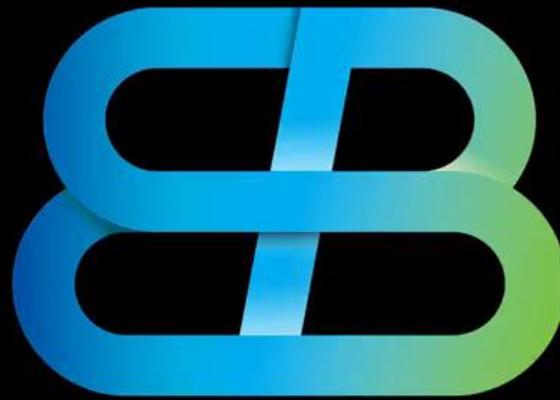
# Ethical issues



# Ethical issues



*“ Self-driving technology that doesn’t work in concert with public transportation is not a revolution worth fighting for ”*



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See this video on YouTube at <https://www.youtube.com/watch?v=UQi3ZOm8fFk>

[www.sohjoabaltic.eu/](http://www.sohjoabaltic.eu/)



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