



**XXIV<sup>th</sup> World  
Road Congress  
Mexico 2011**  
Mexico City 2011.

# ROAD USER CHARGING IN NORWAY – UNIQUE IN THE WORLD?

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**Statens vegvesen**

# NORWAY



*Norway in Europe*

Capital: Oslo

Population: 4.9 million

Area: 385 252 km<sup>2</sup>



*National Tourist Routes in Norway - Hardanger*



## BRIEF HISTORY

- Long tradition of road tolling in Norway
- Viking age: *Frostatingsloven* – Farmers were obliged to support construction with manpower
- The Norwegian participation spirit (*dugnadsånd*)
- 1814: the first Norwegian Parliament
- 1824: The first road law – more responsibility from local to central government
- 1828: Spending exceeds income – need for more local involvement



*Grindgut – an early solution*



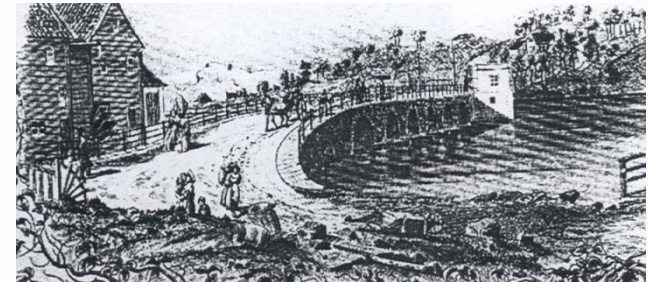
## BRIEF HISTORY

Bergen, a tolling pioneer.

Challenging topography – increased acceptance for financing tunnels and bridges through tolls. Bergen introduced Norway's first toll ring in 1986.



Nygårdsbroen – road tolling from 1851 to 1871.



A private road tolling company was established in 1953 to finance the construction and maintenance of Puddefjordsbroen (picture), Eidsvågs-tunnelen, Løvstakktunnelen and the railroad-tunnel through the mountain Ulriken.



## KEY FIGURES 2010

- 9,6 billion kroner (1,2 billion euros) to construction of national and county roads in 2010
- 5,5 billion kroner collected through road user charging (2010)
- Appr. 50 road tolling schemes in Norway
  - 40 with AutoPASS
  - 3 manual collection schemes
  - 7 ferry projects
- Appr. 160 toll plazas
- 1 fuel tax system (Tromsø)
- 10 more schemes approved by parliament
- 310 million vehicles passing toll plazas annually (2008)
- 1,6 million vehicles have an AutoPASS-tag (OBU)



# TYPES OF SCHEMES

## Single road project



*E18 Vestfold South*

## City schemes



*Bergen toll ring*

## Charging on ferry



*Imarsund mainland connection*



# USE OF MONEY

## Principles

- Road tolling has a financial purpose, i.e. to maximise revenues and NOT to reduce traffic levels.
- Toll cordons in urban areas can also finance the construction and operation of public transport
- Road users paying tolls should benefit from the concerned toll-financed project, directly or indirectly



# PUBLIC ACCEPTANCE

Why is road user charging accepted?



Toll financed bridges/tunnels replacing ferry connections



Tolls are earmarked for the concerned road or infrastructure project



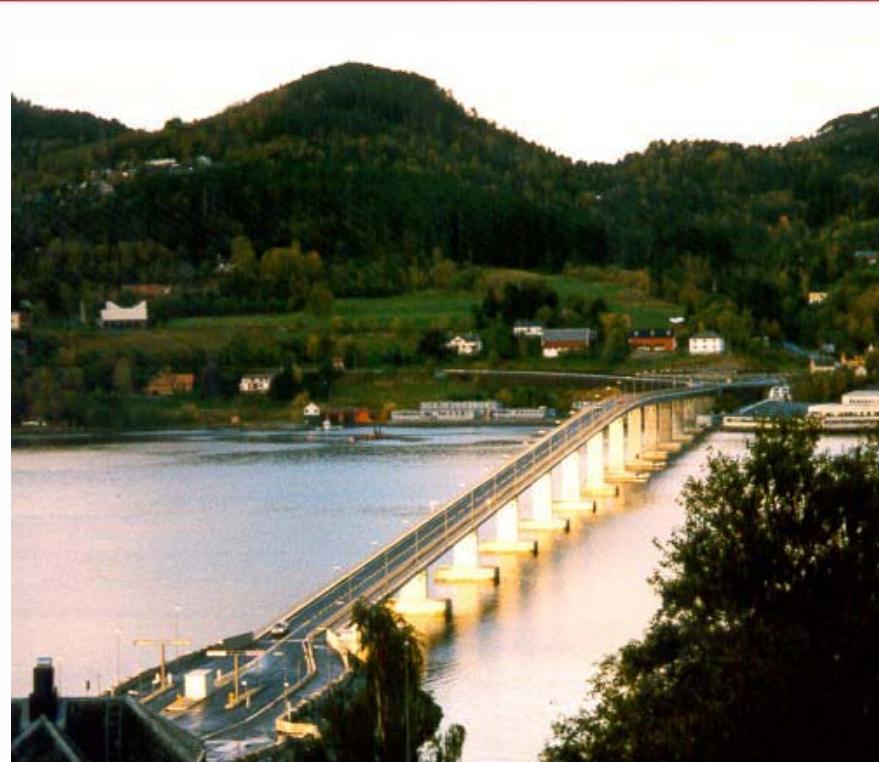
Tolling is fully automatic, enabling the cars to simply drive through the toll plaza without stopping





# ORGANIZATIONAL FRAMEWORK

- All projects based on a local initiative
- Political consensus locally and nationally
- Non-profit toll companies owned by local authorities
- Tolling period usually up to 15 years
- No competition between the toll companies
- Low risk for the toll companies and their lenders
- Extensive regulations

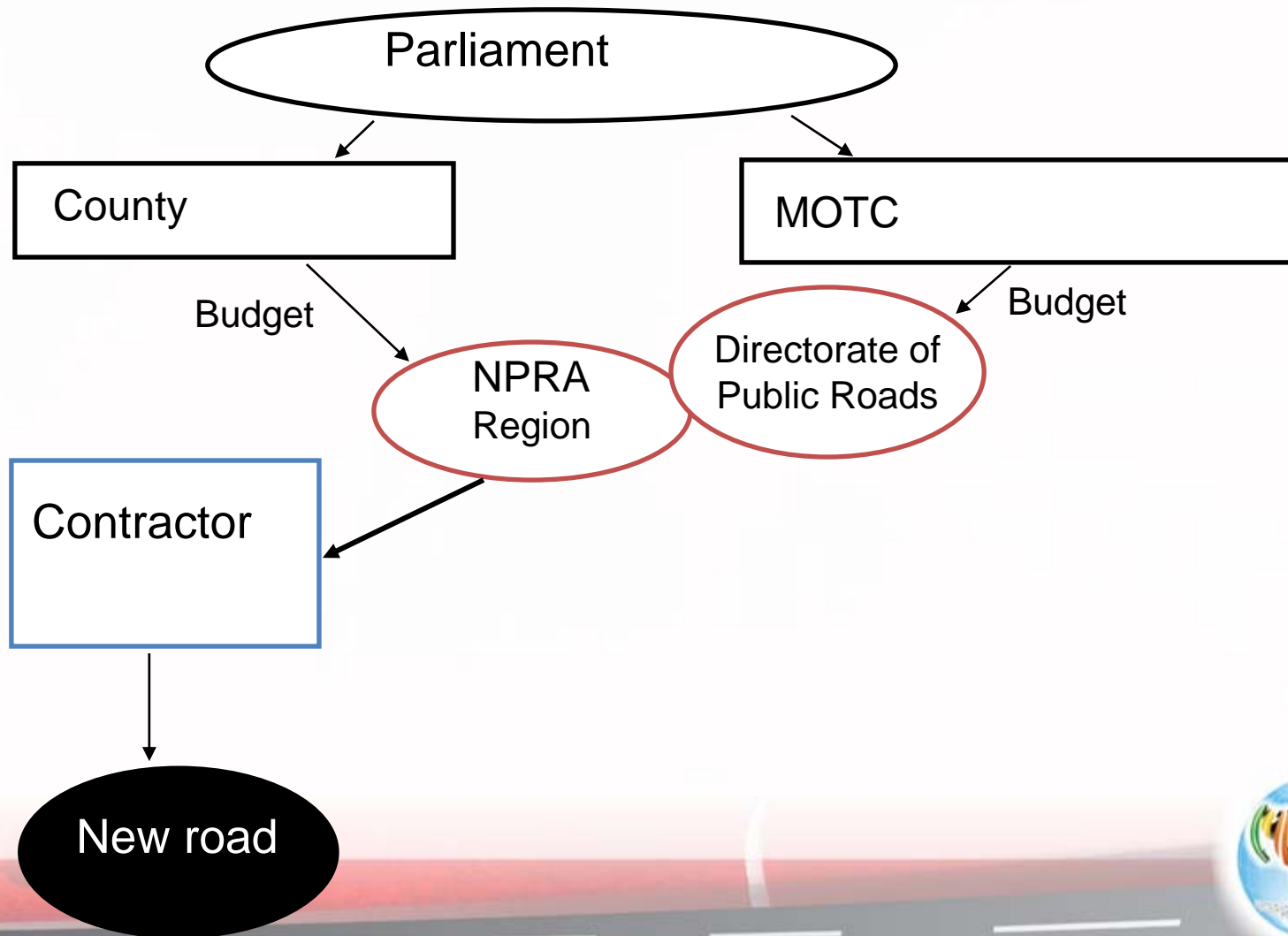


*Sykkylvsbrua, Møre og Romsdal*



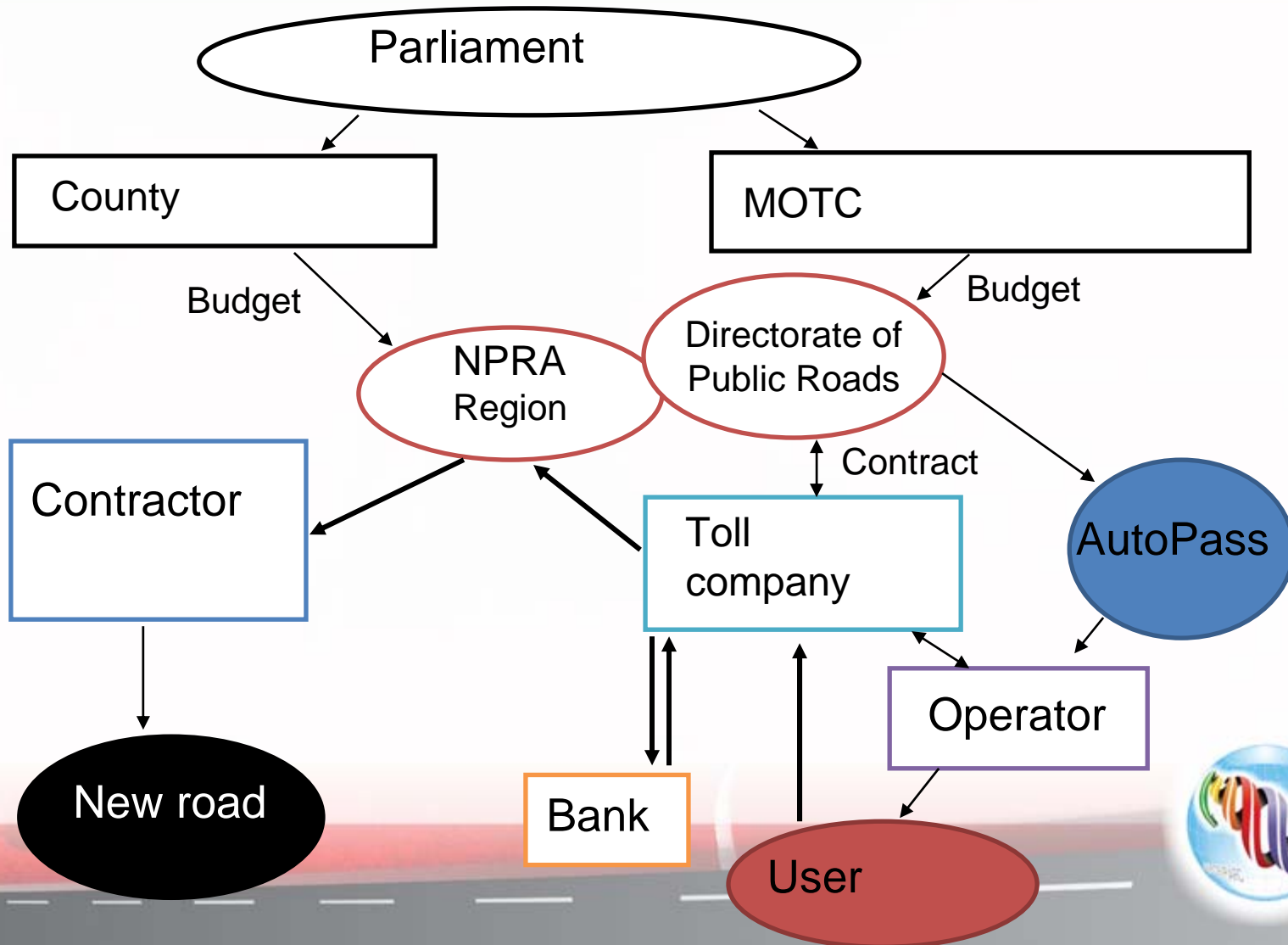
# ORGANIZATIONAL FRAMEWORK

## Financing of road construction



# ORGANIZATIONAL FRAMEWORK

## Financing of toll roads



# ELECTRONIC FEE COLLECTION

## Free-flow systems

- The use of modern technology plays a vital part in Norwegian toll financing
- Electronic Fee Collection used in almost every project
- Most toll plazas are now free-flow systems
- OBUs and automatic number plate detection eliminate cash handling
- 90 % of all tolls paid using EFC

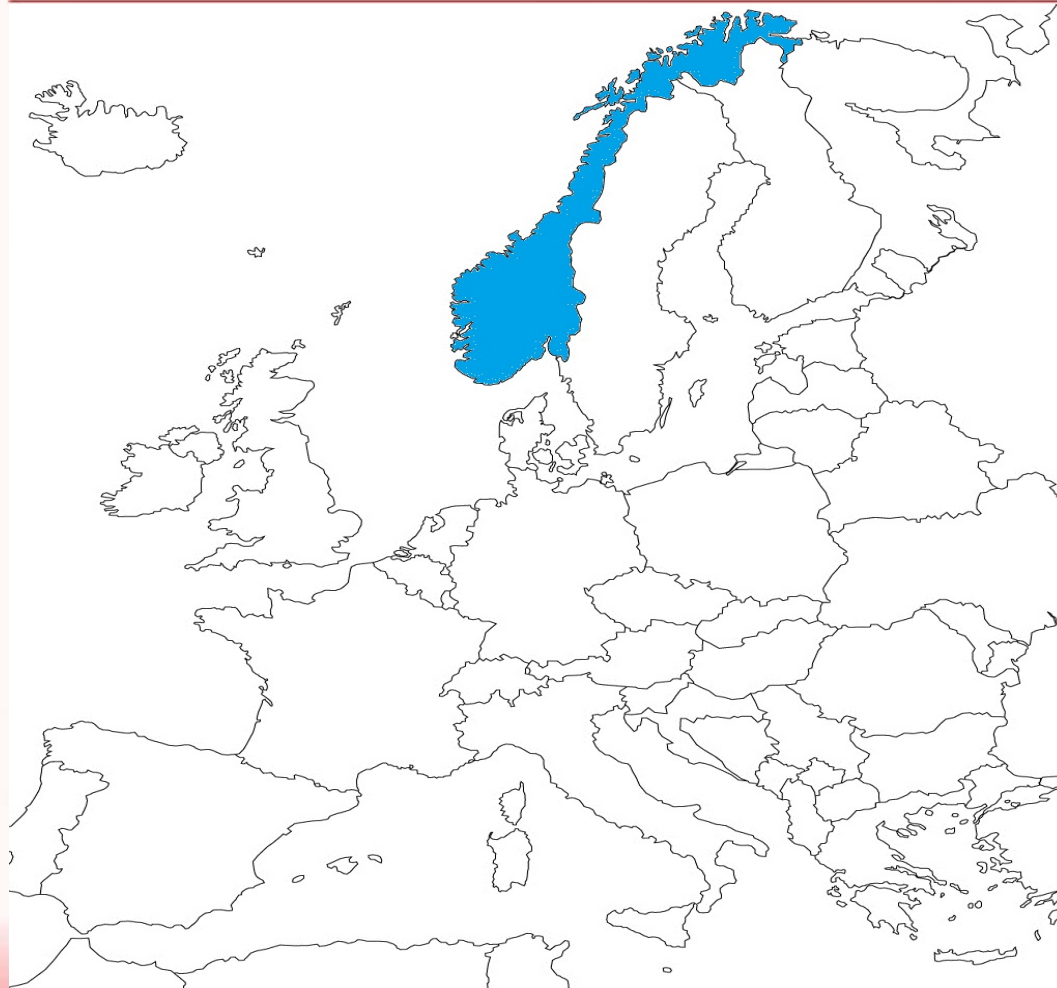


*Toll plazas in Oslo before and after*



# ELECTRONIC FEE COLLECTION

## AutoPASS

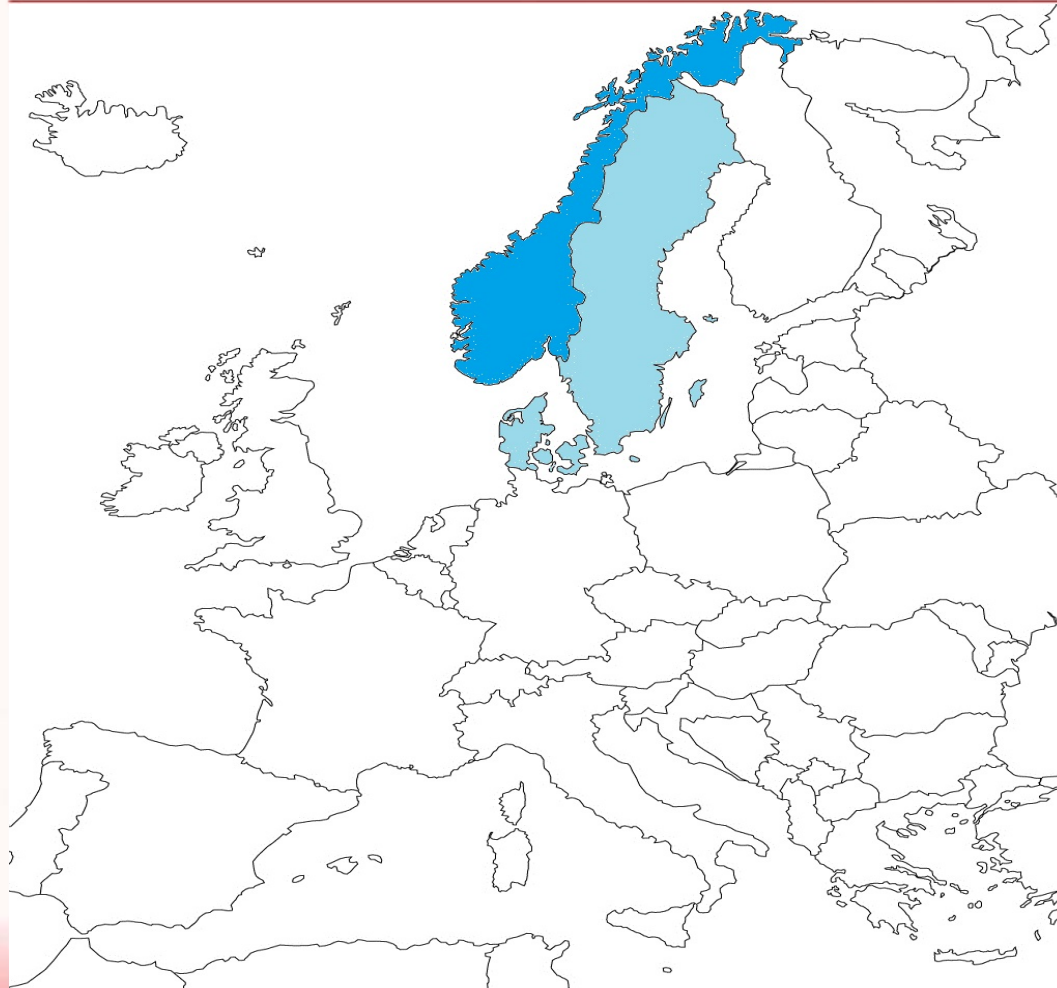


- Introduced in 2001
- ASB from 2004, enabling cars to use one OBU for all Norwegian toll stations



# ELECTRONIC FEE COLLECTION

## AutoPASS - EasyGO

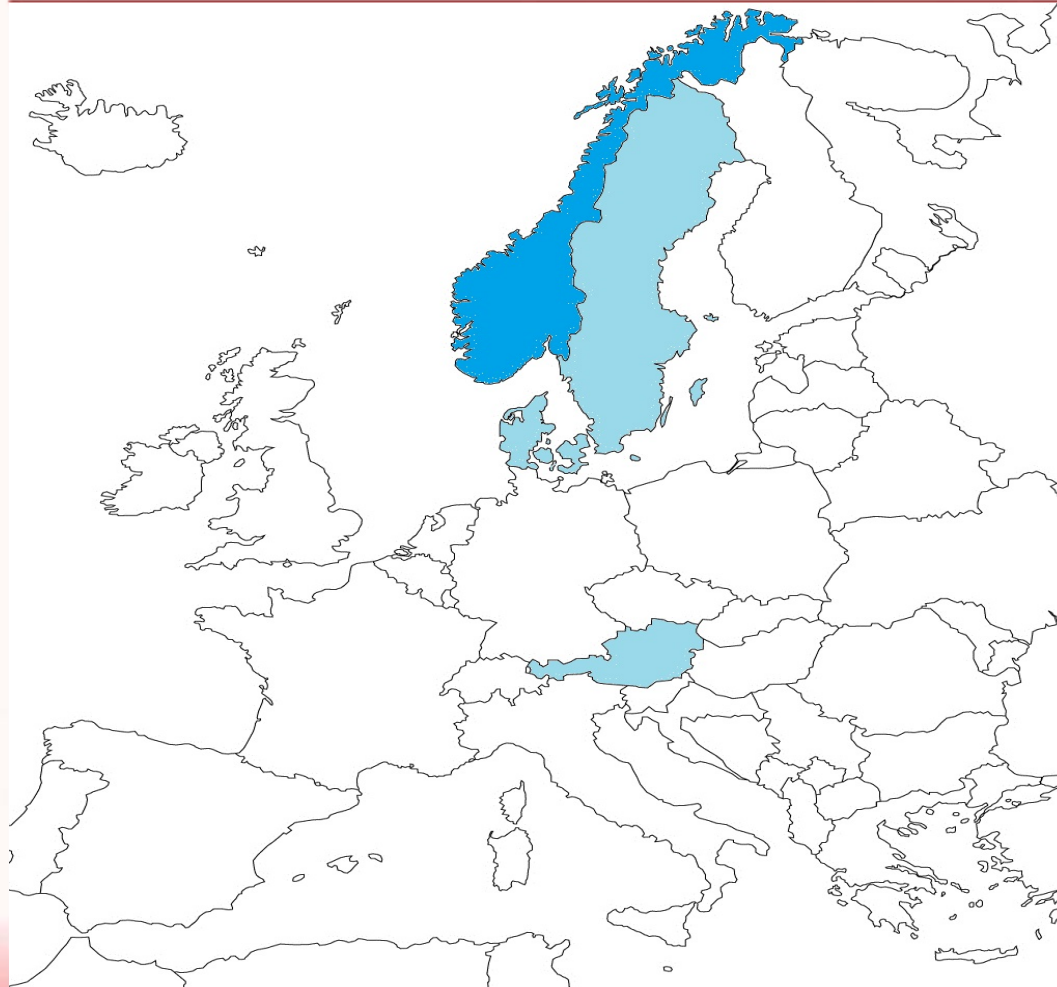


- Introduced in 2007
- Enables cars to travel through Norway, Sweden and Denmark with one OBU



# ELECTRONIC FEE COLLECTION

## AutoPASS – EasyGO – EasyGO+

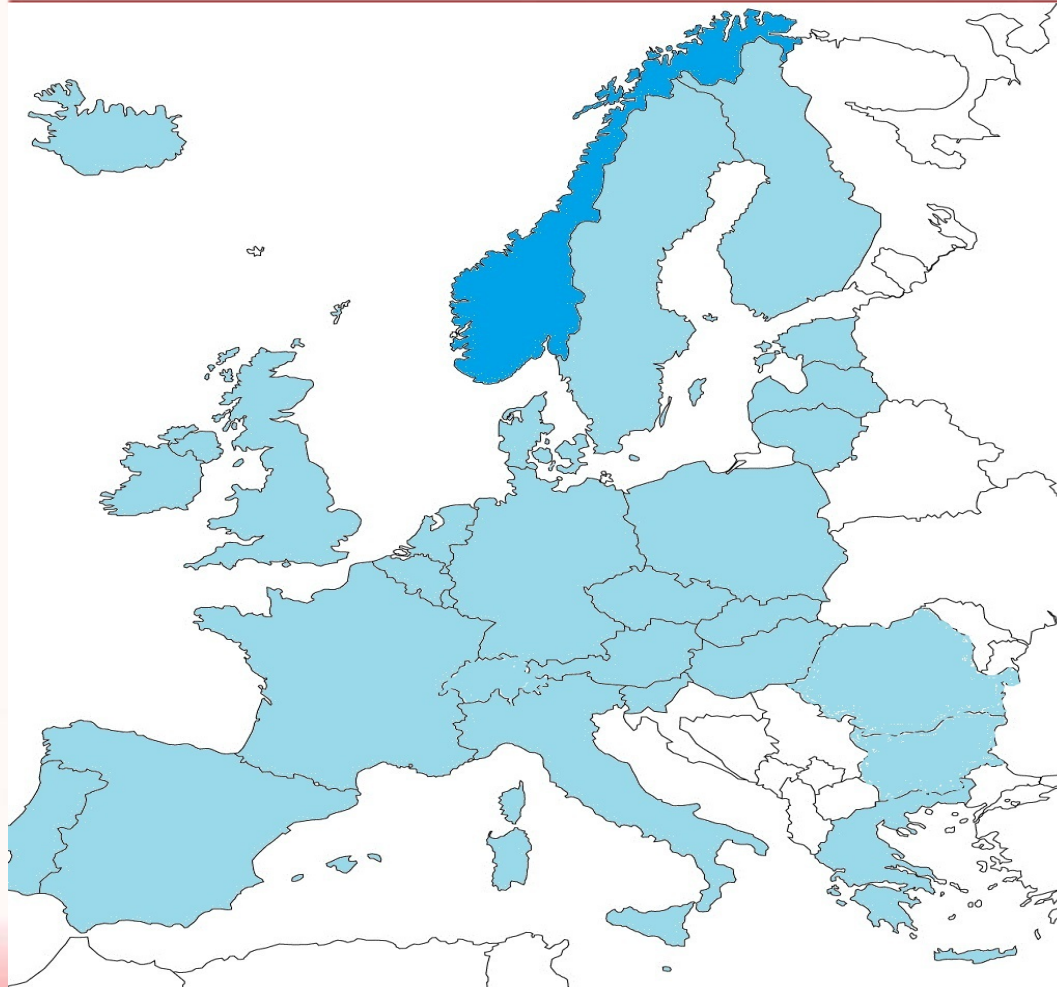


- Starting up in 2012
- Includes Austria (ASFINAG) in the EasyGO framework
- Only for HGVs



# ELECTRONIC FEE COLLECTION

AutoPASS – EasyGO – EasyGO+ – **EETS?**



- EU directive on the interoperability of electronic road toll systems in the Community
- Aims to set up the European Electronic Toll Service, enabling cars to travel through Europe with one OBU
- Intended start-up october 2012 for HGVs

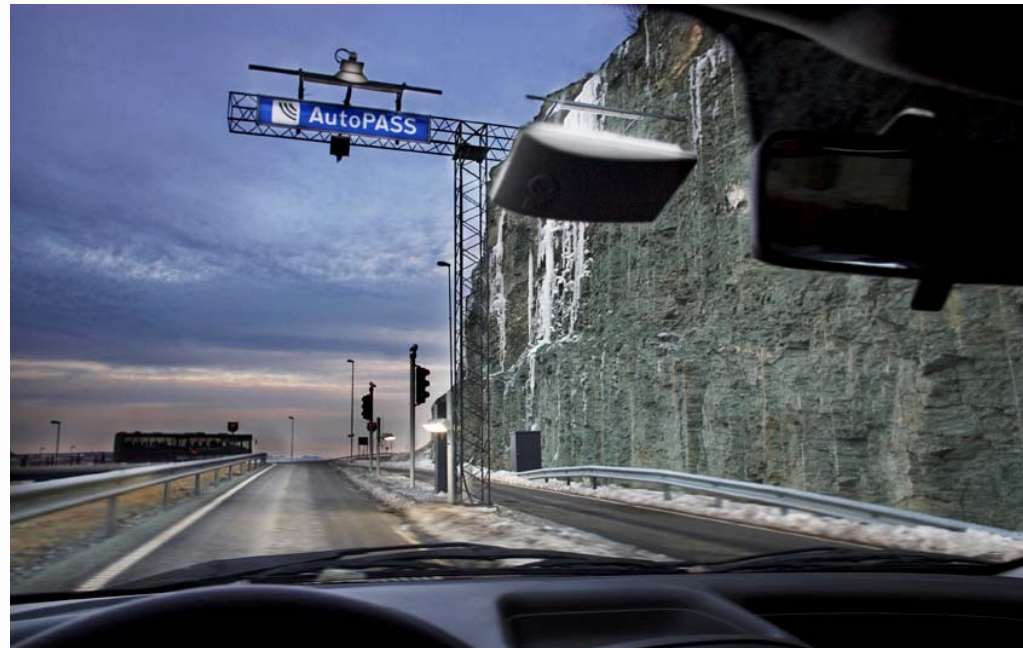




## FUTURE CHALLENGES

### Increase the share of vehicles with an OBU

- High OBU-ratio decreases the cost of toll collection
- Problems of collecting toll from foreign vehicles in free-flow systems.
- 2012: Mandatory OBU for vehicles heavier than 7.5 tons



# FUTURE CHALLENGES

## More efficient organization

- Today there are more than 40 toll companies, one for each road tolling project
- Inefficient way to operate toll collection
- Intention of merging these into a few regional companies
- Larger companies could take advantage of economies of scale, and get better loan terms



# ROAD USER CHARGING IN NORWAY

## Summary

- Great flexibility in designing the toll scheme
- Local consensus important
- Road user charging is an important tool to meet ambitious national targets for road construction
- A standardized collection system helps users to adapt to a complex system of schemes
- Electronic Fee Collection makes the system efficient for users as well as toll chargers



*National Tourist Routes of Norway - Atlanterhavsvegen*



*National Tourist Routes of Norway - Trollstigen*



# ROAD USER CHARGING IN NORWAY

Spørsmål om  
bompasseringen?  
Toll payment  
questions?



02012

