77th Session

INLAND TRANSPORT COMMITTEE

ForFITS UNECE-wide implementation

Status report

Mitigation of environmentally harmful effects of inland transport
Item 4 (b) (ii)

ForFITS background

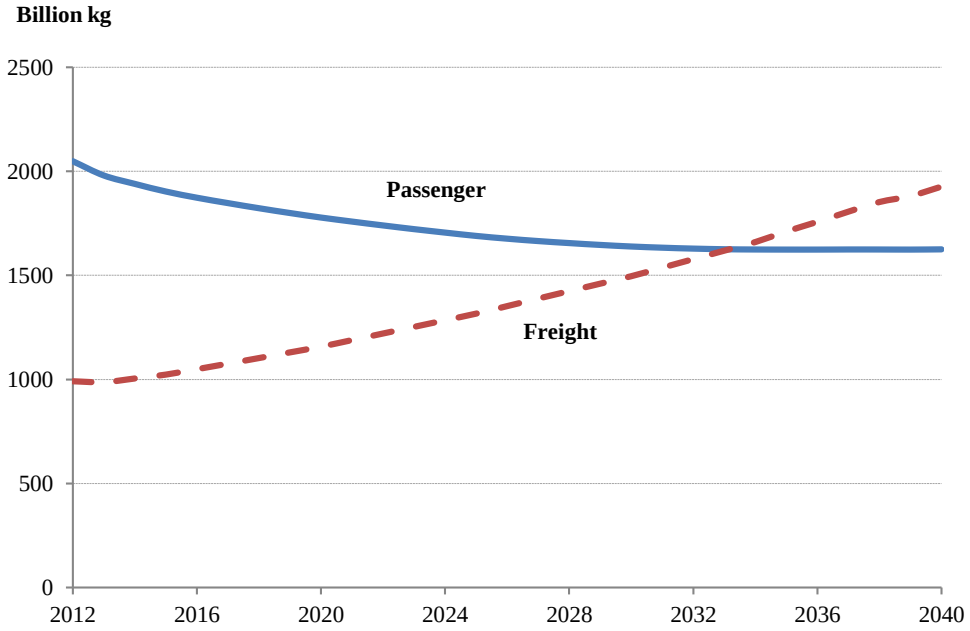
- Developed under the framework of a United Nations Development Agency (UNDA) project implemented from 2011 to 2013
- Projects transport activity, energy use and CO_2 emissions under different policy scenarios
- Currently applying model to UNECE region as follow-up to UNDA project

Status/Challenges

- Provisional results from 22 member States
  - 11 member States which returned questionnaires
  - 11 member States with high levels of available data or subjects of previous ForFITS studies
- 56% of population and 77% of GDP (PPP) for UNECE region in 2012
  - Biased towards member States with high data availability
  - Lack of data in remaining member States pose difficulties
- Data gaps for all member States
  - Vessel and aircraft data
  - Average annual travel, load and fuel consumption

Provisional Results

- Projected well-to-wheel CO_2 emissions from inland transport to 2040
  - 90 % increase in freight
  - 20 % decrease in passenger



- Population growth < economic growth
- Fuel efficiency improvements
- Saturation of passenger car market in high-income countries

Future Steps

- Consolidating the current functionality
  - Technical review of analysis to-date
  - Baseline projections for remaining member States

- Adding functionality focused on assessing the effects of different policy decisions on CO_2 emissions
  - Provide results to inform decisions by Member States on transport policies relating to transport activity and CO_2 emissions
  - Scenarios to be modelled will be identified after further discussion over the next months.

- Questions? – ForFITS@unece.org

Thank you for your attention

www.unece.org/trans

Backup – Why use ForFITS?

- **Today** – What is the current annual level of transport CO_2 emissions in a country? Transport system characterized by inputs including:
  - Vehicle stock, annual vehicle travel, average fuel consumption, average vehicle load, breakdown of powertrain types in current fleet
- **Tomorrow** – How will the level of transport CO_2 emissions change in the next decades in a country? Adjustable inputs include:
  - GDP and population growth
  - Fuel taxation schemes
  - Modal shift (eg shift to public transit)
  - Usage of biofuels
  - Technology improvements

Backup – Acronyms and Definitions

GDP	Gross Domestic Product
ForFITS	For Future Inland Transport Systems
PPP	Purchasing Power Parity
UNDA	United Nations Developed Agency
Well-to-wheel	CO_2 emissions both from vehicle operation and from production and distribution of fuel used for operation

Backup – Member States analyzed

Member States		
• **Austria***	• **Belgium***	• **Canada***
• **Czech Republic***	• Denmark	• **Finland***
• France	• Georgia	• Germany
• Hungary	• **Ireland***	• Italy
• Latvia	• **Lithuania***	• Montenegro
• **Netherlands***	• Norway	• Poland
• **Slovakia***	• Slovenia	• **Switzerland***
• United States		

Member States which submitted questionnaires highlighted in **red bold**
Bulgaria also submitted a questionnaire and will be included in the next round of analysis