Need and usage of N3G vehicles in construction

Anne Fokke de Vries (Bouwend Nederland) & Nicolas Gaubert (FNTP)

16 June 2020
FIEC – European Construction Industry Federation

- 32 national Member Federations in 28 countries (25 EU, Norway, Ukraine & Turkey)
- represents construction companies of all sizes carrying out all forms of building and civil engineering activities
- the construction sector employs ≈12.7 million people representing more than 6% of EU27 total employment
- in 2019, investment in construction represented 9.5% of EU27 GDP
The use cases of N3G vehicles

- Construction sites of different types
  - Road construction - from earthworks to surfacing
  - Construction of buildings
  - Demolition of buildings
- Landfill and recycling sites
Building demolition site near Paris La Défense
Hospital earthworks in Orleans
Demolition works

Earthworks
Need for high ground clearance

- Access roads, construction sites and landfills are challenging
- Need for high ground clearance to operate properly
- Protect the vehicle and its components on site
- Large tyres for lower pressure on the ground’s surface
- Large tyres for high load bearing capacity
- High ground clearance for allowing tipper trucks to tip into pavers
Tipper trucks tipping into pavers
Low mileage in urban areas

Use in urban areas around 10 to 15% of annual mileage

Depends on construction and landfill site locations
Side effects of potential registration ban

- **LOWER CAPACITY → MORE VEHICLES**
  - E.g. 1 large concrete mixer needs to be replaced by 1.5 small concrete mixers

- **INCREASE IN ENVIRONMENTAL IMPACT**

- **INCREASE IN COSTS OF TRANSITION TO A CIRCULAR ECONOMY**
Closing remarks

- Support for increased safety around the trucks
- Substantial need for off-road capabilities
- Support for vehicle industry’s proposal: differentiation of trucks in the direct vision requirement
CONSTRUCTION 4.0
BIM
COMPETITIVENESS
SOCIAL INFRASTRUCTURE
WATER NETWORKS
ENVIRONMENT
ENERGY NETWORKS
TRANSPORT INFRASTRUCTURE
EMPLOYMENT
ENERGY EFFICIENCY
IT-NETWORKS

CONSTRUCTION IS THE SOLUTION INDUSTRY

YOUTH EMPLOYMENT
RESOURCES EFFICIENCY
JOBS
SKILLS TRAINING/EDUCATION
ENERGY PRODUCTION
STANDARDISATION
CLIMATE CHANGE
INFRASTRUCTURE
INNOVATION
RECYCLING