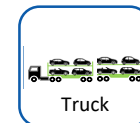
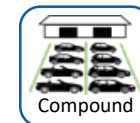
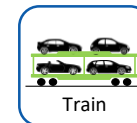




The Association of European Vehicle Logistics

WLTP and the impact on the vehicle logistics sector

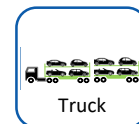
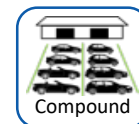
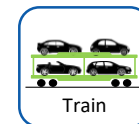
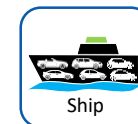
Mike Sturgeon
ECG



From NEDC to WLTP



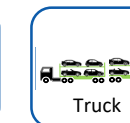
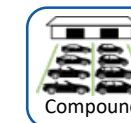
- The current test – New European Driving Cycle (NEDC) – was designed in the 1980s and is outdated
- Worldwide Harmonised Light Vehicle Test Procedure (WLTP) is the new improved laboratory test for fuel consumption and CO₂ emissions
- WLTP is complemented by the Real Driving Emissions (RDE) test which will measure pollutant emissions while driving in real driving conditions on the road



WLTP Introduces More Realistic Testing Conditions



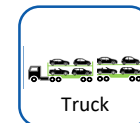
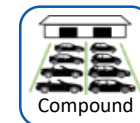
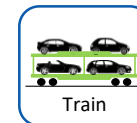
- Greater range of driving situations (urban, suburban, main road, motorway)
- Longer test distances
- Higher average and maximum speeds
- Higher average and maximum drive power
- More realistic ambient temperatures, closer to the European average
- Shorter stops, harder acceleration and deceleration
- Stricter car set-up and measurement conditions
- All optional equipment is tested separately e.g. different sizes of wheel, roof rails etc.
- Best and worst-case values are used instead of average values
- More realistic driving behaviour



Consequences of WLTP (1/2)



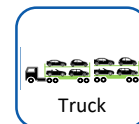
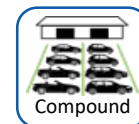
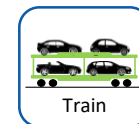
- WLTP will provide a much more accurate basis for calculating a car's fuel consumption and CO₂ emissions
- Reflects more real-world factors and therefore the on-road performance of a car
- Test times will increase 50% (20 min to 30 min) and testing in general will increase because much optional equipment results in a variety of different derivatives that need to be tested separately



Consequences of WLTP (2/2)



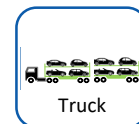
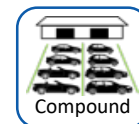
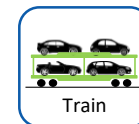
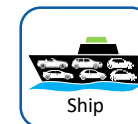
- CO₂ emission and fuel consumption figures will differ from NEDC figures which could impact vehicle taxes, retail prices and thus consumer demand
- From September 2017 it applies to new car models
- From September 2018 will apply to all new car registrations
- End-of-series vehicles of max 10% of one or more types approved under the old test (NEDC) can be sold until September 2019 - subject to conditions



Consequences for Vehicle Logistics (1/2)



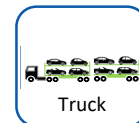
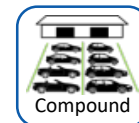
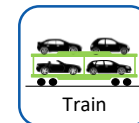
- **Stockpiling of storage capacity** – Storage facilities could start to crowd-out because of:
 - end-of-series sales
 - longer tests and more variations to be tested
- **Ending production of some car models/engines**
 - Stricter tests (WLTP and RDE) will lead to tighter type-approval of cars/engines



Consequences for Vehicle Logistics (2/2)



- **Customer pull forward** – Dealers / customers might anticipate the possible changes to taxation
- **Change in demand with model ranges** – differences in fuel consumption and possible tax increases may change demand patterns
- **Post-production options (PPO)** – activities may be switched from dealer to hub or vice versa by OEMs





The Association of European Vehicle Logistics

**ASK YOUR CUSTOMERS WHAT THEY
ARE PLANNING!**

