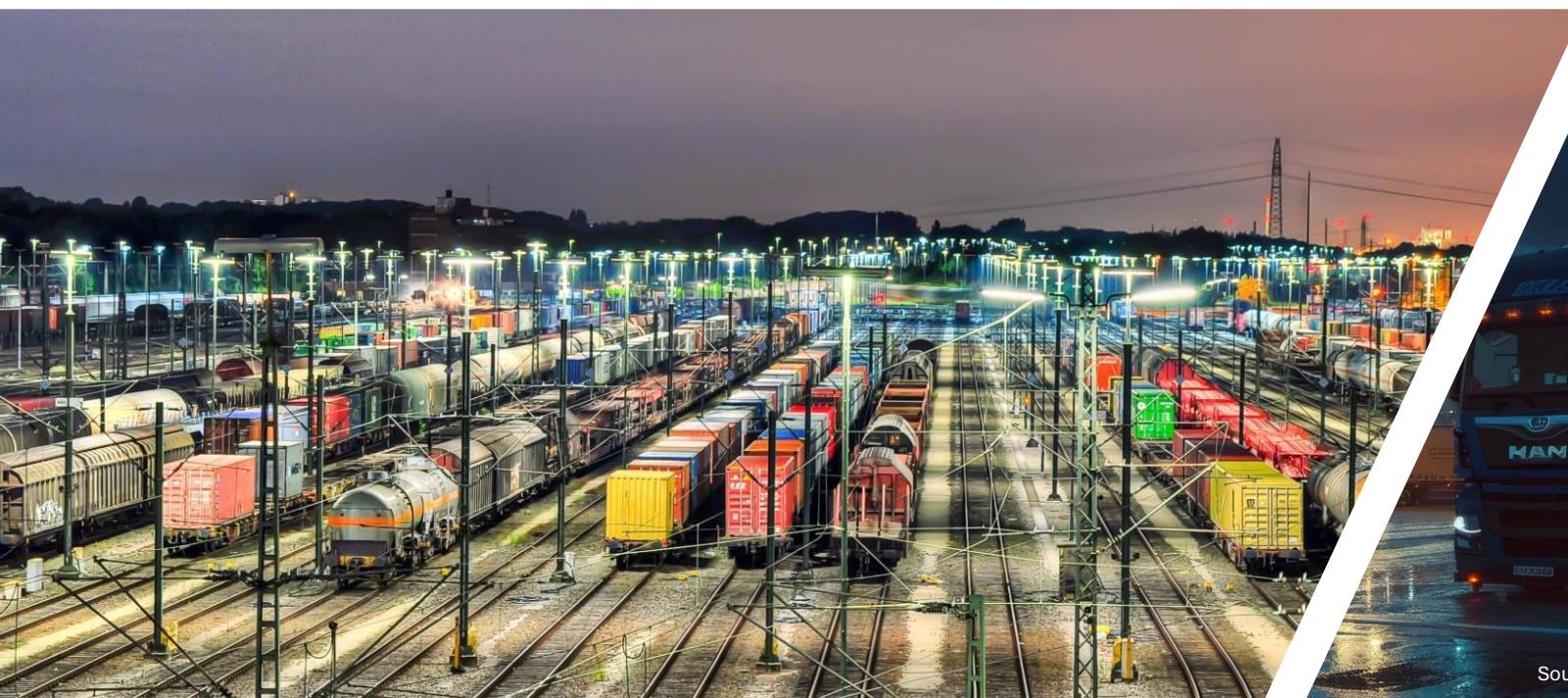




## **Quiet through the night: More liveable cities through transport when everyone is asleep?**

**Annual POLIS Conference 2025  
Utrecht 26.11.2025**

**Daniela Kirsch, Fraunhofer IML**







Urban delivery traffics are stuck in congestions during the day – like all of us!



Loss of time



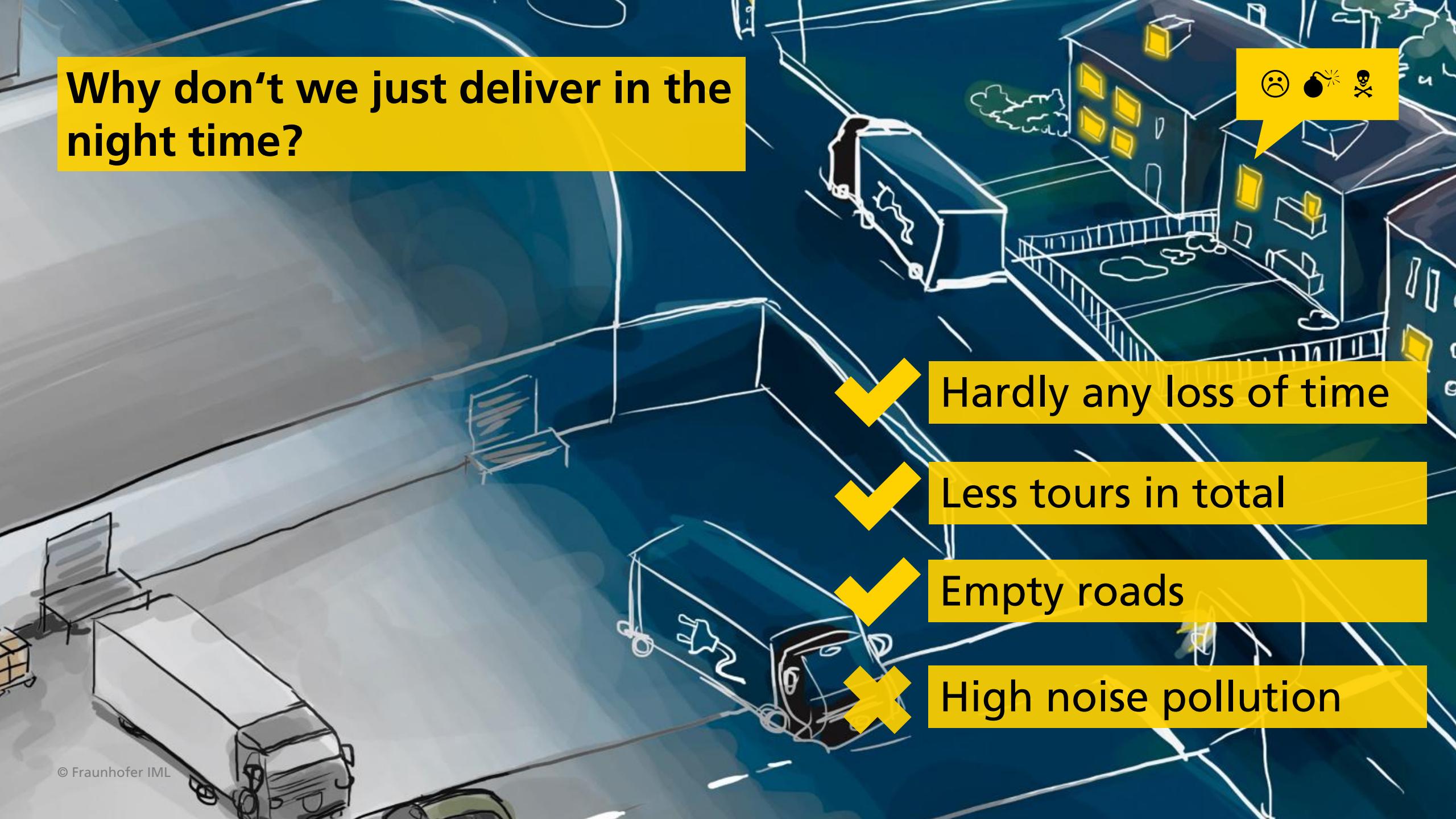
Bad Plannability



Noise emissions



Environmental impact



Why don't we just deliver in the night time?

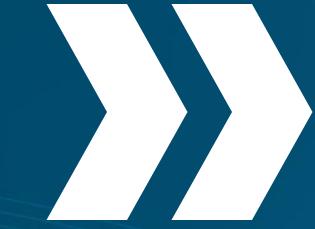


✓ Hardly any loss of time

✓ Less tours in total

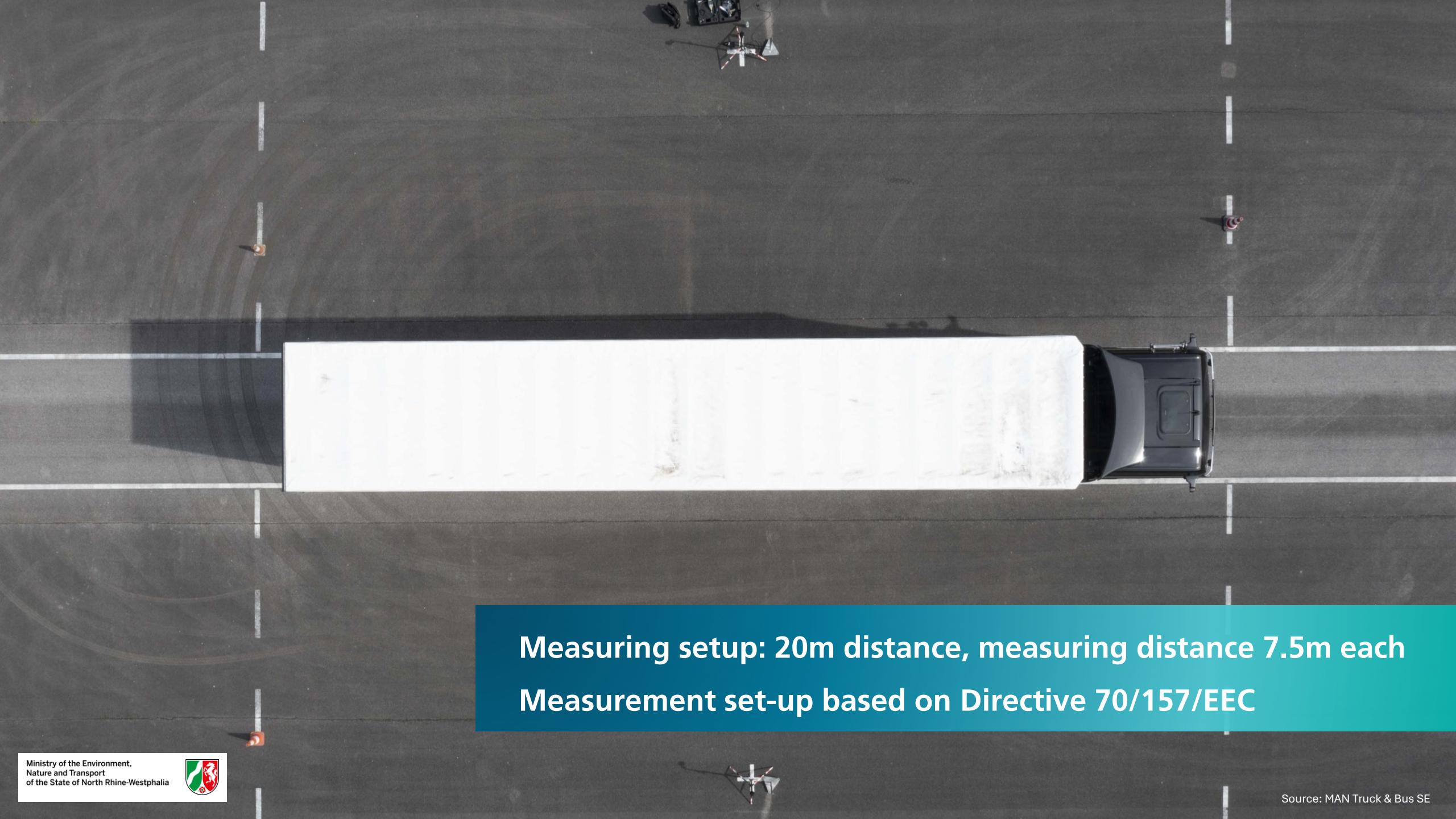
✓ Empty roads

✗ High noise pollution

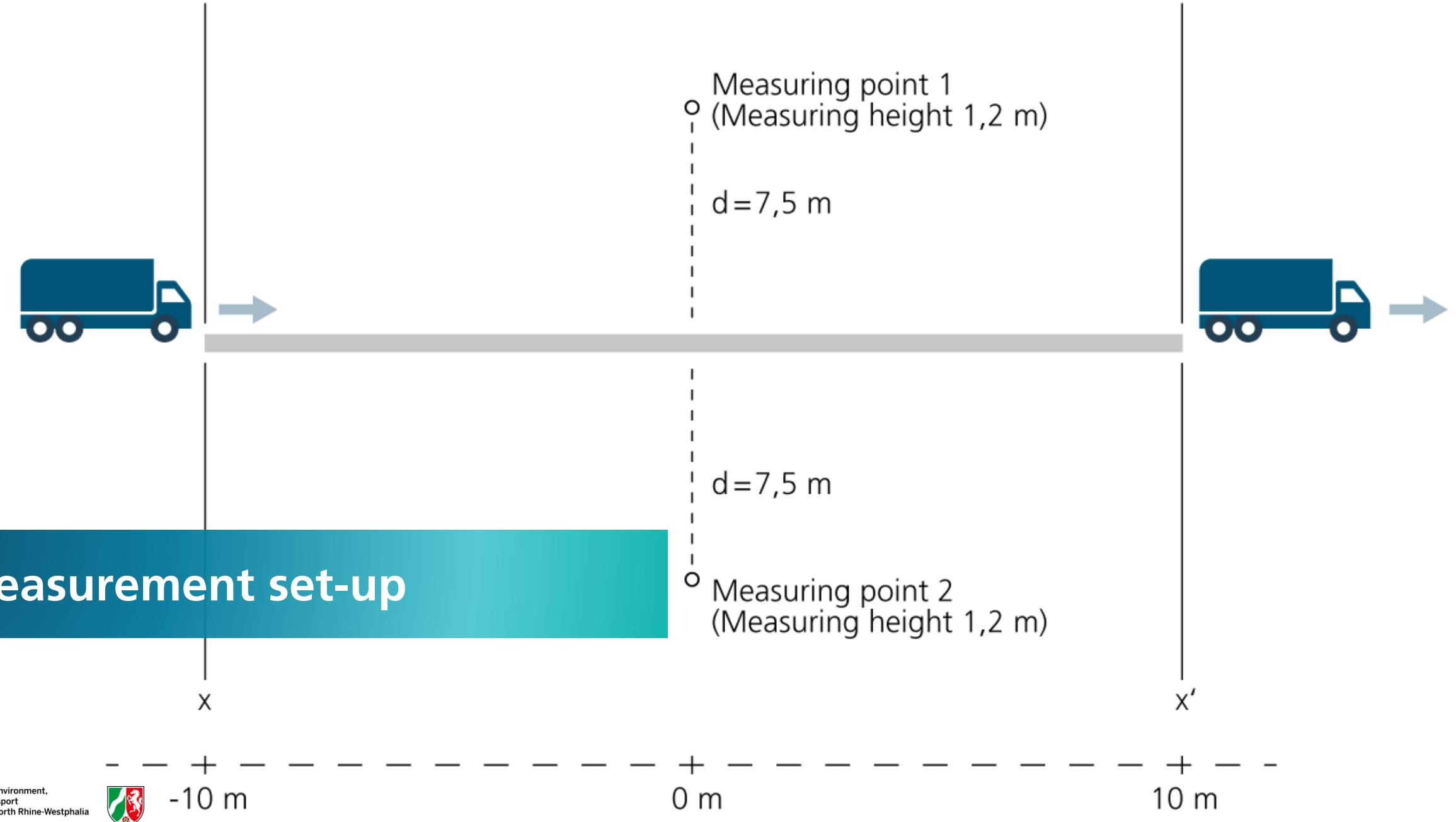


Low-noise delivery is possible in certain areas – but how loud are electric trucks?





Measuring setup: 20m distance, measuring distance 7.5m each  
Measurement set-up based on Directive 70/157/EEC



## Passing at 20 km/h (L'WA,1h )

E-Lkw  $\leq$  7,5 t



E-Lkw  $\leq$  27 t



E-Lkw SZM



CNG-/LNG-  
Lkw  $\leq$  27 t



CNG/LNG SZM



Diesel SZM

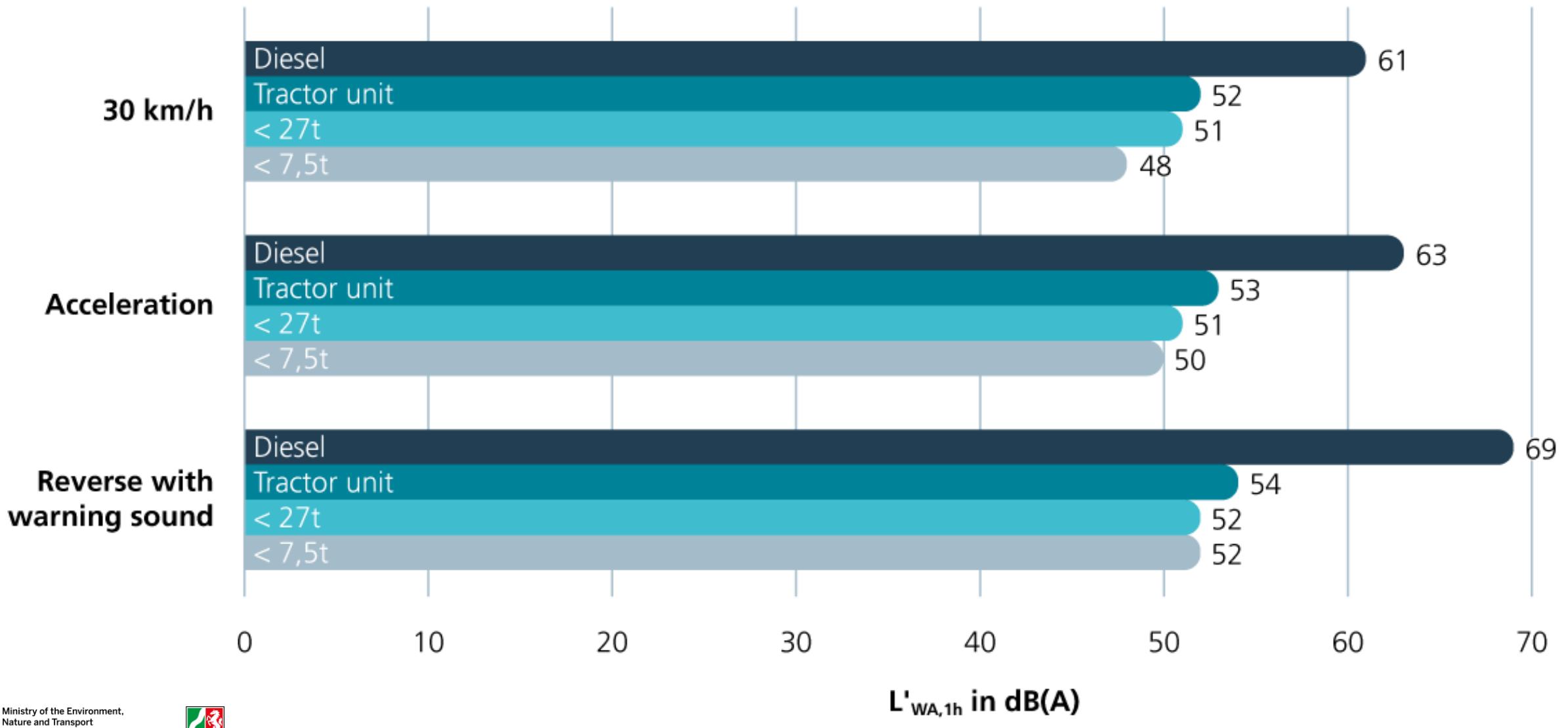


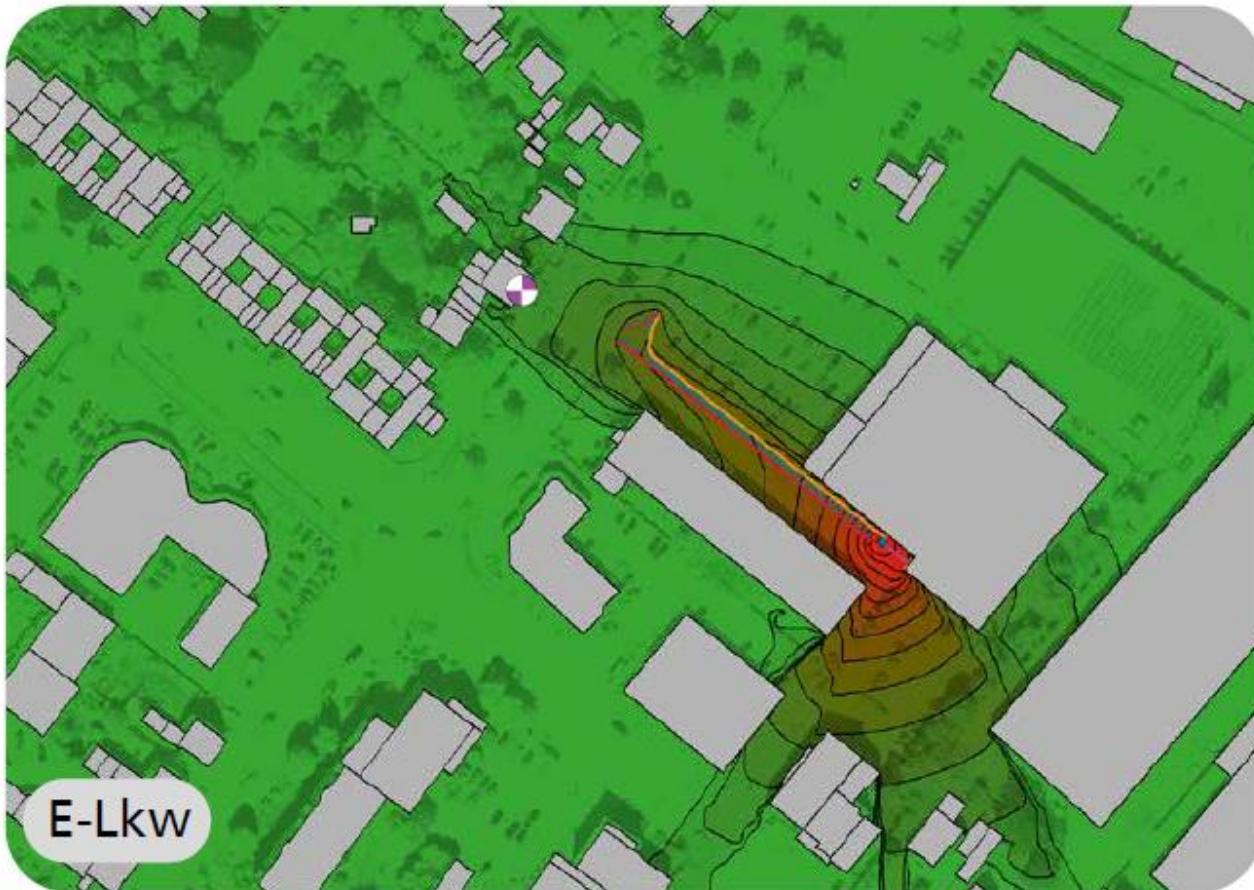
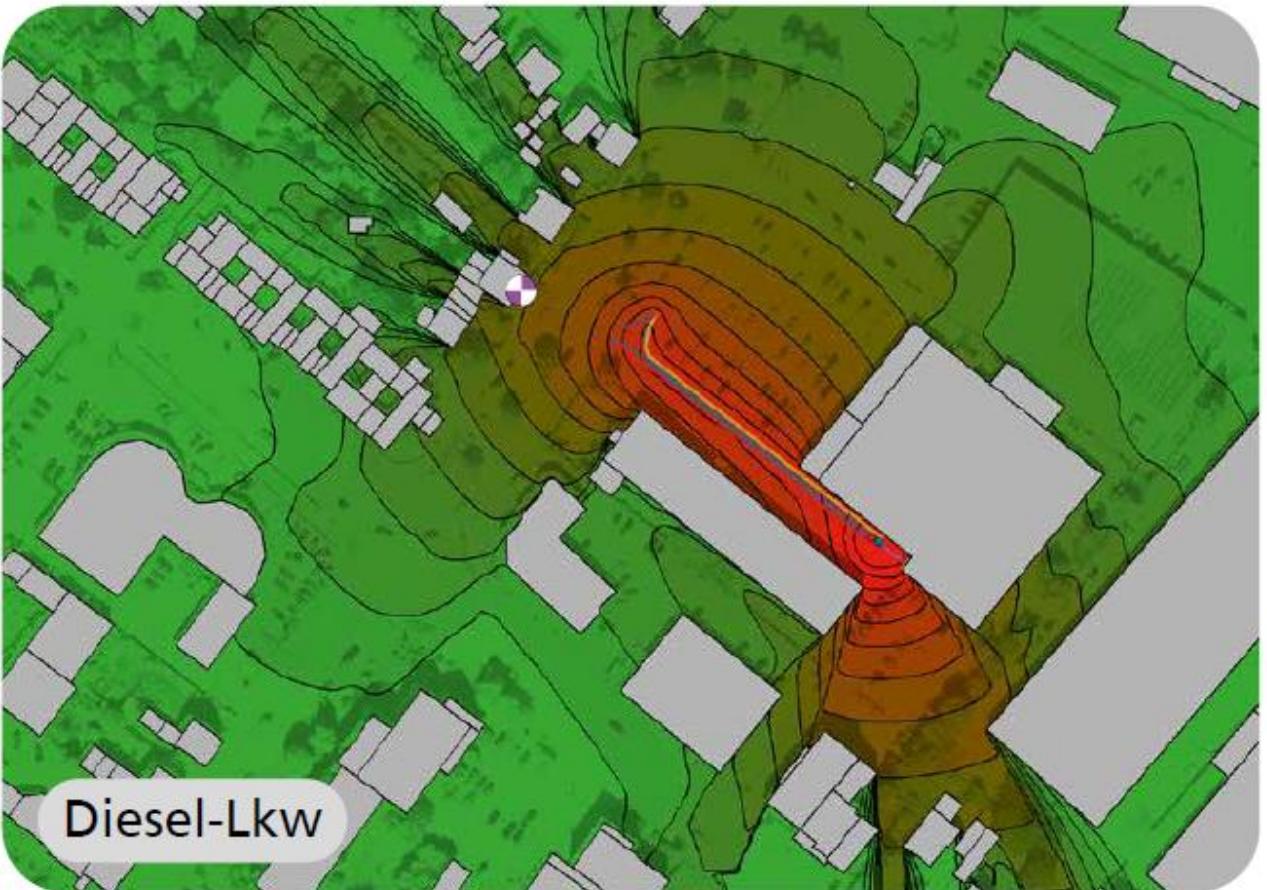
dB(A)

36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62



# Comparison of measured values for e-trucks with literature values for diesel trucks





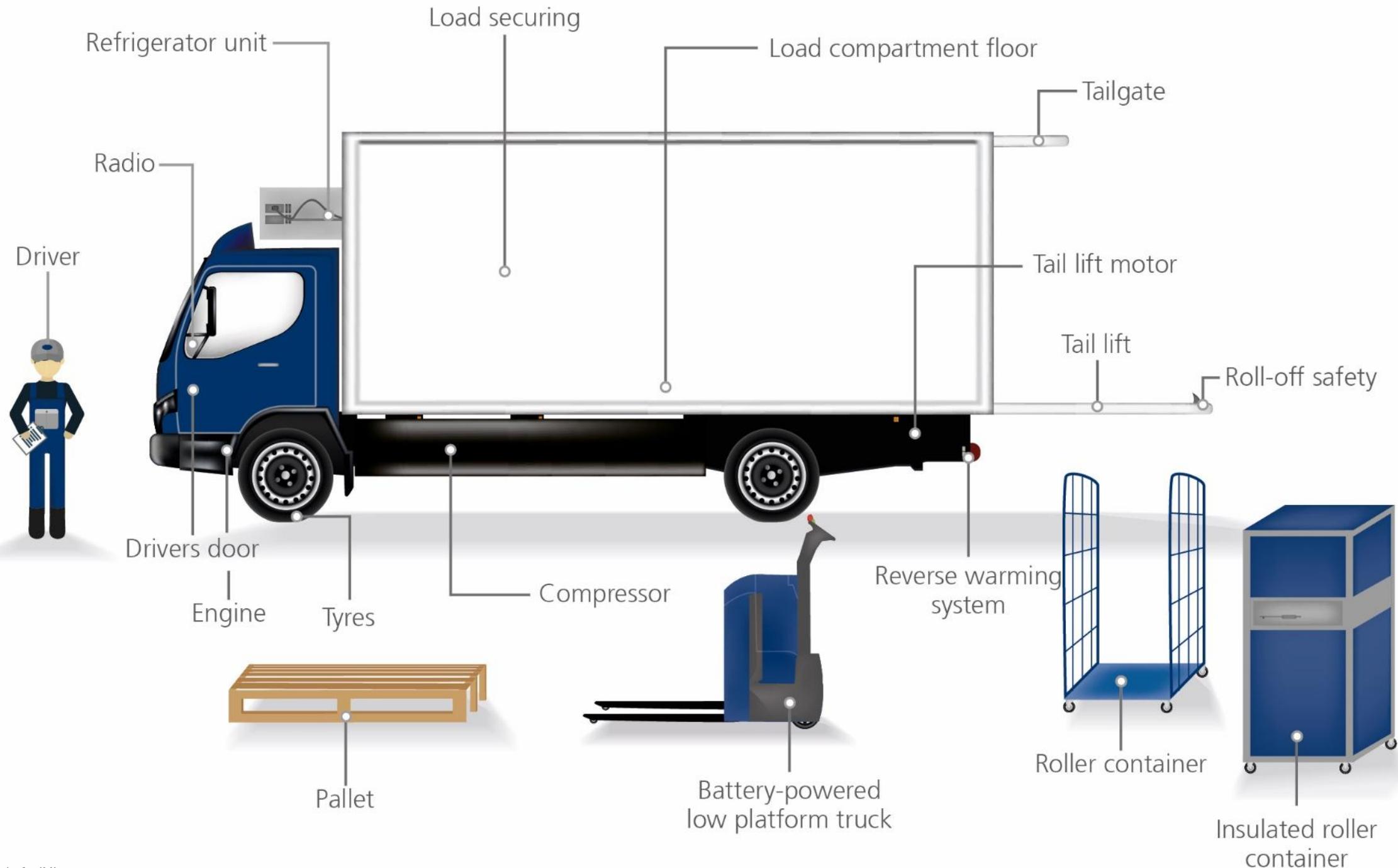
**Delivery to an open ramp  
with cooling unit and loading activities**





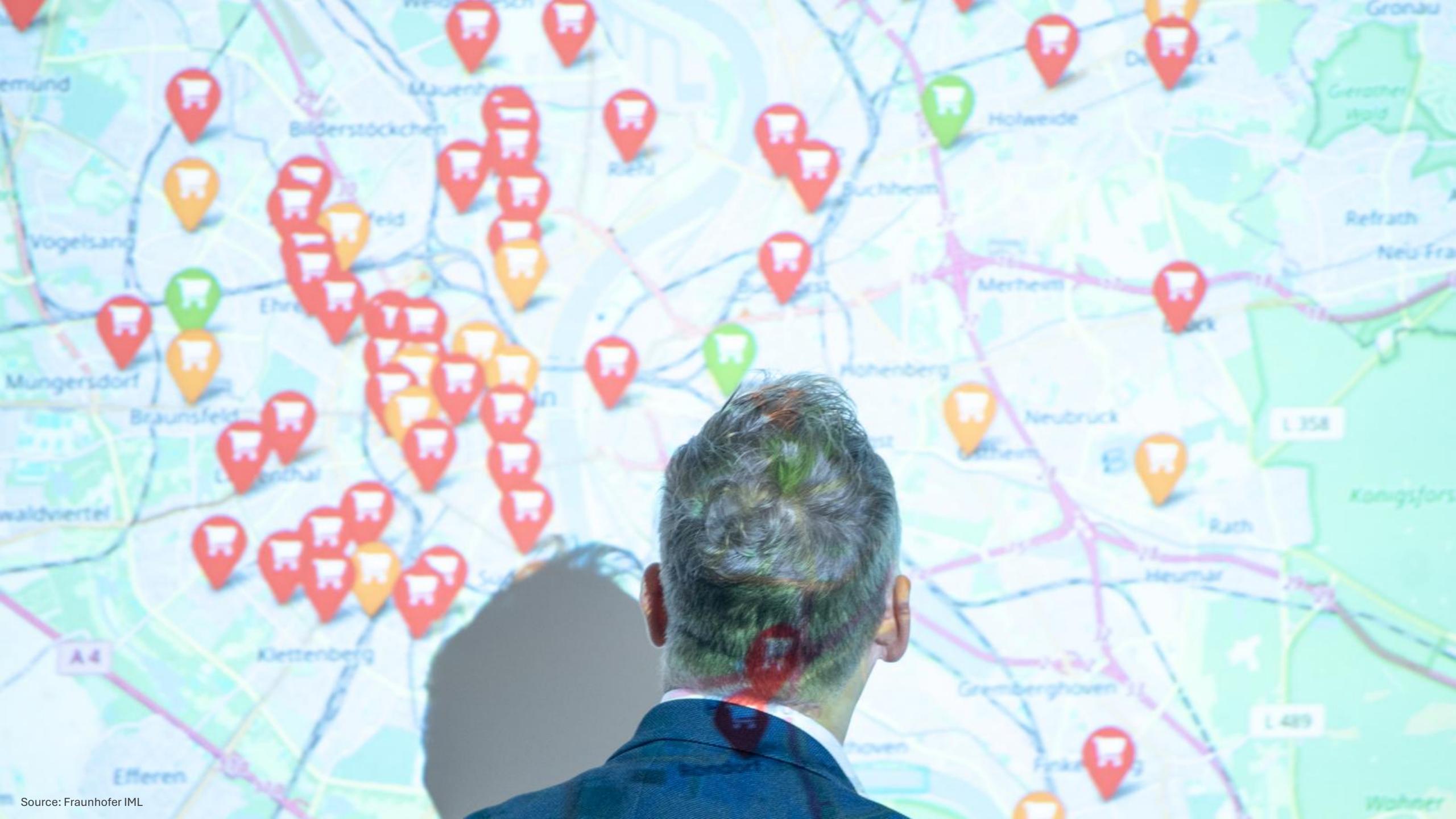


**E-trucks make low-noise delivery possible –  
but what about handling at the branches?**













Download:  
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