## HOW TO GET LESS TRUCKS ON THE ROAD?

Efficient Logistics through The Physical Internet

#### WHY? The current state-of-the-art of logistics is not sustainable

Annual greenhouse gas emissions of the logistics sector (transporting and storing of goods) need to be reduced by a factor 3 to keep the increase in average global temperature well below 2°C by 2100. Nonetheless, the total transport emissions are expected to increase without counteractions.

PEOPLE

**PLANET PROFIT** 

Congestion in the EU costs 1 % of EU's annual GDP. Meanwhile, insufficient infrastructure in developing countries results in major congested cities across the globe.

In Europe, 50% of the trucks is filled with air. The total annual cost of these logistics inefficiencies is estimated to amount up to approximately €160 billion.

#### **HOW?** The Physical Internet



Organize transport similar to e-mail traffic: break up the freight in modular packages and ship them using the shared infrastructure of companies: shared transport, shared warehousing, etc. As such, the Physical Internet Initiative supports SDG 9 to invest in infrastructure and innovation to foster growth of new industries and information and communication technologies.

### WHAT? Enabling Collaboration and Green Transport

To bridge the gap between the current state of the logistics industry and the future state of the Physical Internet, we develop tools and models to enable multi-dimensional collaboration in transportation and logistics, and to promote the use of environmentally friendly transport modes. Our models are developed in close collaboration with manufacturers, logistics service providers and ICT companies, resulting on average in savings of 20-30%.

# CURRENT STATE FUTURE STATE **COLLABORATIVE SHIPPING** Partner Identification, Cost Sharing, Synchronization of ordering policies **SYNCHROMODALITY**



Identifying optimal modal split Synchronization of freight allocation



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