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FRAUNHOFER INSTITUTE FOR TRANSPORTATION AND INFRASTRUCTURE SYSTEMS IVI

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HEAVY HAULAGE 4.0 – ONLINE PLANNING SYSTEM INTUITIVE. RELIABLE. FAST.



CHALLENGE

Anyone who has ever seen an oversized and heavy goods vehicle at a tight intersection has probably asked themselves: Will that work out?

This question does not only occur to fascinated onlookers, but also to professional dispatchers. In times of increasingly large and complex transport tasks, finding an answer to the question is becoming more and more difficult.

Heavy-duty shipping agencies usually determine suitable routes based on aspects such as bridge weight restrictions, clearance heights, and others. Although this data can be measured objectively, the trafficability of narrow passages is often merely estimated on the basis of personal experience.

The most substantial disadvantages of this practice are:

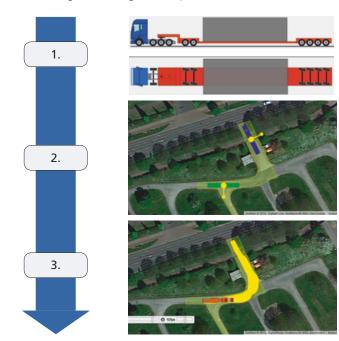
- trafficability is not guaranteed if vehicles become wedged, consequences for traffic and infrastructure can be severe,
- the assessments of approval authorities and shipping agents may deviate form each other – as a result, costly reschedulings and delays may become necessary.

With TruckTrix®, the Fraunhofer IVI offers the first objective and safe trafficability analysis.

SOLUTION

The innovative TruckTrix® system reliably takes you to your destination in only three steps:

- 1. Configuration of vehicle and cargo
- 2. Specification of start and destination, start of computation
- 3. Viewing of resulting video clip



TRAFFICABILITY ANALYSIS

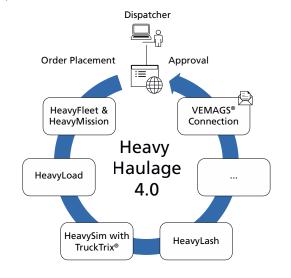
TruckTrix® automatically tests the trafficability of narrow passages. In addition, it is always available online – even directly at the critical location.

Benefits at a glance

- objective analysis results for both the route plan and the application for approval according to §29 III StVO
- time and cost savings during the planning and execution of oversized and heavy haulages
- minimization of planning risks and traffic obstructions, as well as shorter routes due to guaranteed statements regarding the trafficability of narrow passages
- video animations supplied for the support of drivers and accompanying staff
- automatic journey from start to destination no trial and error required
- suited for complex vehicles and cargo types (overhanging, steered trailer axles, etc.)
- 3D collision testing takes both ground clearances and heights of cargo and obstacles into account
- data basis: satellite images such as Google Earth or official survey maps – if desired, up-to-date aerial images can be supplied by a UAV (www.horus.mobi)

OUR OFFER

A spin-off enterprise and the Fraunhofer IVI are currently developing the first comprehensive online planning system for oversized and heavy haulages. A modern website will combine tools such as HeavyFleet (fleet management), HeavyLoad (axle load analysis), HeavySim (trafficability testing) and HeavyLash (securing of cargo) to bring Industry 4.0 to the heavy-duty transport sector.



At the moment, trafficability analyses can be ordered from the Fraunhofer IVI. The website will be launched in spring 2017.