



Networked companies suffer from inefficient utilisation of resources (e.g. deadheading traffic, excess product spoilage, unbalanced capacities) due to limitations in processing localised information in larger amounts and over larger ranges.

Logistics networks typically accumulate **OVER 1 BILLION** new items of information each month (customer orders, pallets, trailer images, postcodes, depot data, GPS tracking of vehicles, etc.), **generated every minute** of every day by **thousands of pallets** travelling on **hundreds of trailers** for more than **one million customers** scattered across hundreds of thousands of postcodes, each with **multiple different service requirements**. Every second, thousands of data items come on stream at any point of the network and need analysis to guide short-term decisions about lorry deployment (within minutes) as well as longer term plans for carrying capacity.

The patterns and dependencies that exist in the 50 million or more data elements created daily can only be meaningfully processed by intelligent data-mining approaches linked to strategic decision making based on longer term analyses of billions of pieces of information.

ADVANCE will support networked companies in improving their information collecting and processing infrastructure, **enabling strategic planning** coupled with **instant decision making**.

The project will deliver the open-source ADVANCE platform and comprehensive accompanying reference material. The ADVANCE software will provide a **dual perspective** on **transport requirements** and **decision making** dependent on the **latest snapshot information** and the **best higher-level intelligence**.