

Route Planning and Optimization

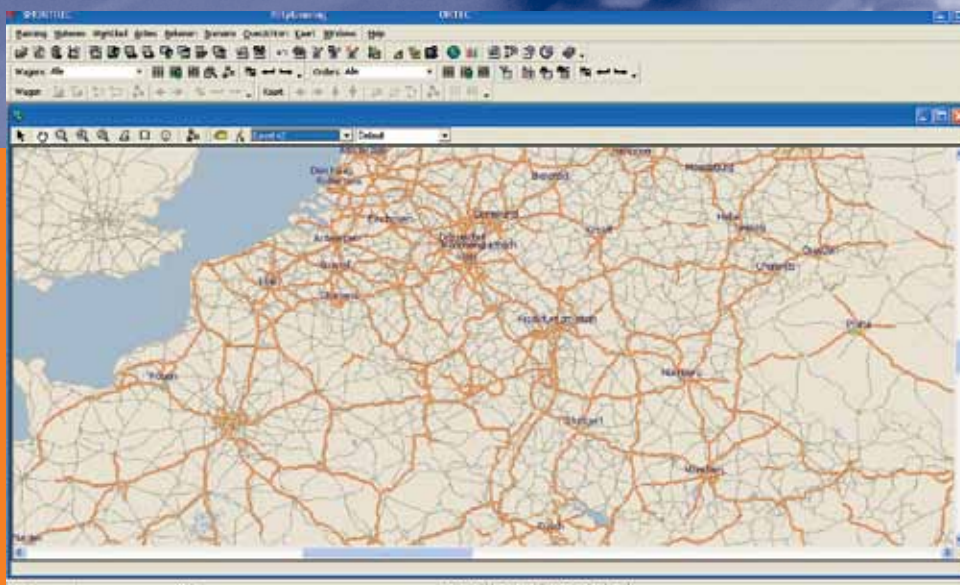
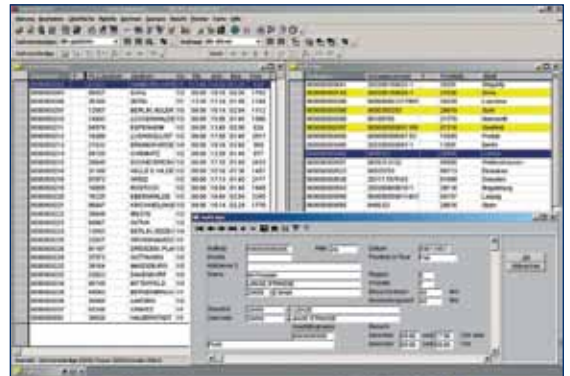
ORTEC Shortrec®:
Transparency in route planning

The challenge:

Complex transport tasks with various loading and unloading depots, the use of a wide range of different vehicle types, the specific load requirements and the high time and cost pressures. The variety of requirements make optimum route planning a challenge for every planner.

With the route planning solution ORTEC Shortrec®, ORTEC developed an application to solve your planning challenges within seconds. Using actual orders and accounting for order, customer and vehicle-specific restrictions, ORTEC Shortrec® calculates the optimal routes - whether you're transporting general cargo or bulk goods. The calculation is based upon the order and vehicle data, customer information, vehicle and tariff costs as well as the work, driving and break times for the drivers. ORTEC Shortrec® delivers route plans that are

tailored to the available transportation fleet or vehicle types and includes additional transportation data, mileage, costs and times. A calculated route can be manually adjusted in ORTEC Shortrec® at any time and the new calculated mileage, costs and times will instantly be displayed. ORTEC Shortrec® helps to achieve a complete overview even for complex route plans.



ORTEC Shortrec® – It's benefits

- Effective reduction of transport costs through reduced distance, driving time, vehicle utilization
- Reduction of the planning and dispatching time required
- Increased transparency for the route planning and vehicle costs
- Greater flexibility for short-term changes (e.g. rush orders)
- Quick simulation of different planning scenarios
- Results overview in graphical and tabular form
- Comparison of planned routes with actual driven routes
- Automatic consideration of the restrictions, such as goods receiving time windows
- Company specific configuration through various modules



Compatible and integrated

ORTEC Shortrec® can be integrated or connected to existing IT and EDV systems. The software is available as a Windows®** application and as a specially configured SAP®* solution. The connection to systems can be made via the ORTEC developed interface middleware ORTEC Connect. A fully integrated SAP® ERP solution is also available in ORTEC LEO®, the SAP® ERP certified add-on.

*SAP is a trademark or registered trademark of SAP AG in Germany and in several other countries.

**Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

ORTEC Shortrec® – an overview

Transports planned in ORTEC Shortrec®:

- Outbound Distribution
- Inbound Distribution

Planning processes available in ORTEC Shortrec®:

- Manual
- Semi-automatic
- Automatic

Operative planning supported in ORTEC Shortrec®:

- Bulk, consolidation loads and complete loads for material and bulk goods transport
- Planning for single and multi-day routes
- Single and multiple depot planning
- Depot orders (customer to depot or depot to customer orders)
- Pickup and Delivery orders (customer to customer orders)
- Cross-docking (two-step transports via hubs)
- Reloading (loading at a depot and then reloading at a different depot)
- Interfacing to telematic systems for vehicle communication
- Compartment and tank transport
- Vehicle transport



Route Planning and

ORTEC Tactical Route Planning (ORTEC TRP)

ORTEC TRP is a strategic optimization tool for planning regular customer deliveries. With this two-step planning process, not only is the optimal delivery day determined, but the optimal route as well.

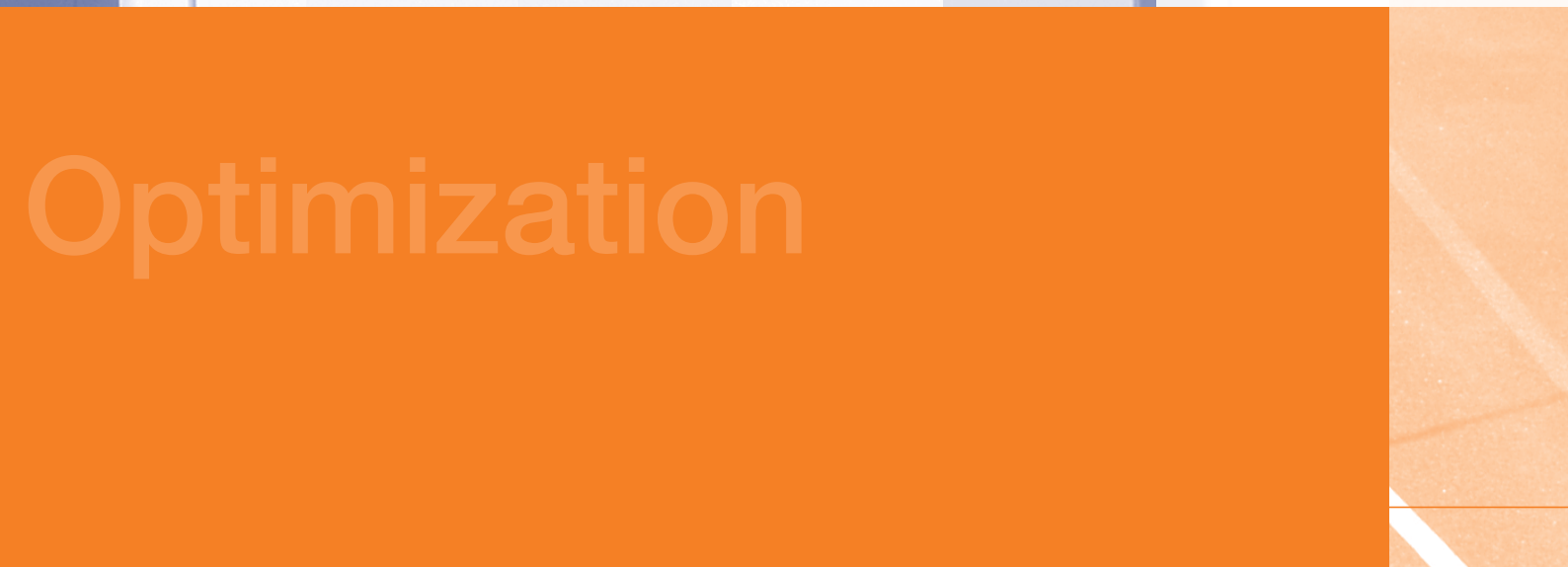
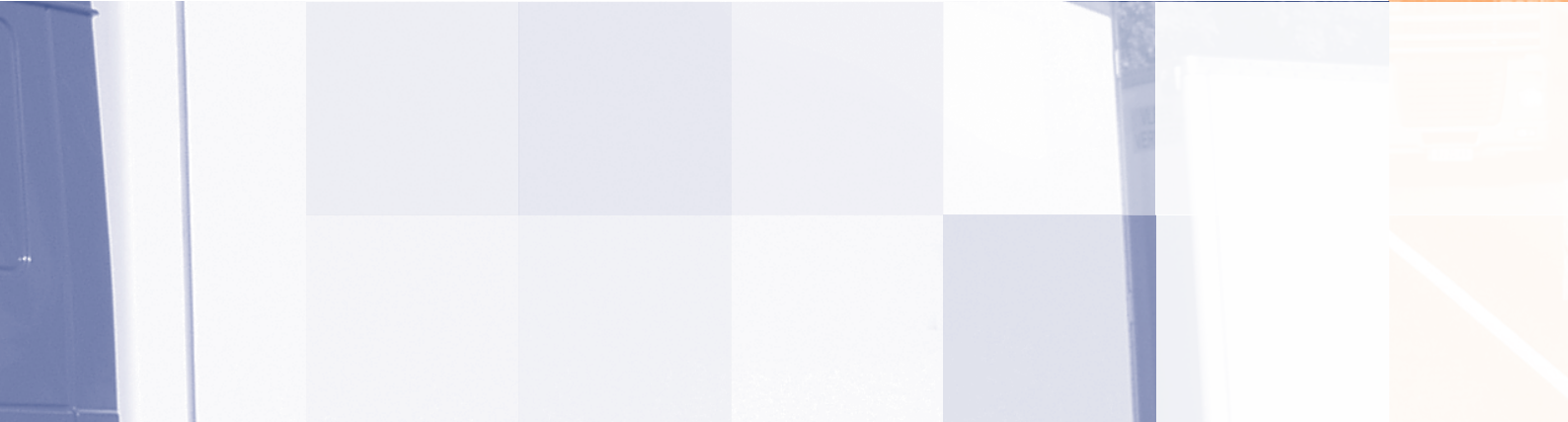
ORTEC Shortrec® supports tactical and strategic planning:

- Analysis and reorganization of set routes
- Simulation of different delivery service strategies
- Transport and cost controlling
- Offer calculations
- Fleet capacity coordination
- Management Information System (MIS) for strategic evaluation
- Strategic optimization for regular customer deliveries (PERIOD SCHEDULER)

Additional modules integrated in

ORTEC Shortrec®:

- Load Space Optimization with ORTEC Loaddesigner® VSO
- Pallet Optimization and Order Picking Control with ORTEC Loaddesigner® PPO
- Carton Optimization with ORTEC Loaddesigner® CPO



Our software solutions:

SAP®* Integrated:

- ORTEC LEO®** Logistics Execution Optimizer
Certified add-on to logistics optimization in SAP ERP with integrated carton, pallet and load space optimization, as well as route planning and optimization
- ORTEC MLS – Mobile Logistics Solutions
Certified add-on to Warehouse Management in SAP ERP for picking planning and control, including paperless picking

* SAP R/3 is a trademark or registered trademark of SAP AG in Germany and in several other countries.

**ORTEC LEO, ORTEC Loaddesigner and ORTEC Shortrec are registered trademarks.

***Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Photos: www.pixelquelle.de

Windows®*** applications:

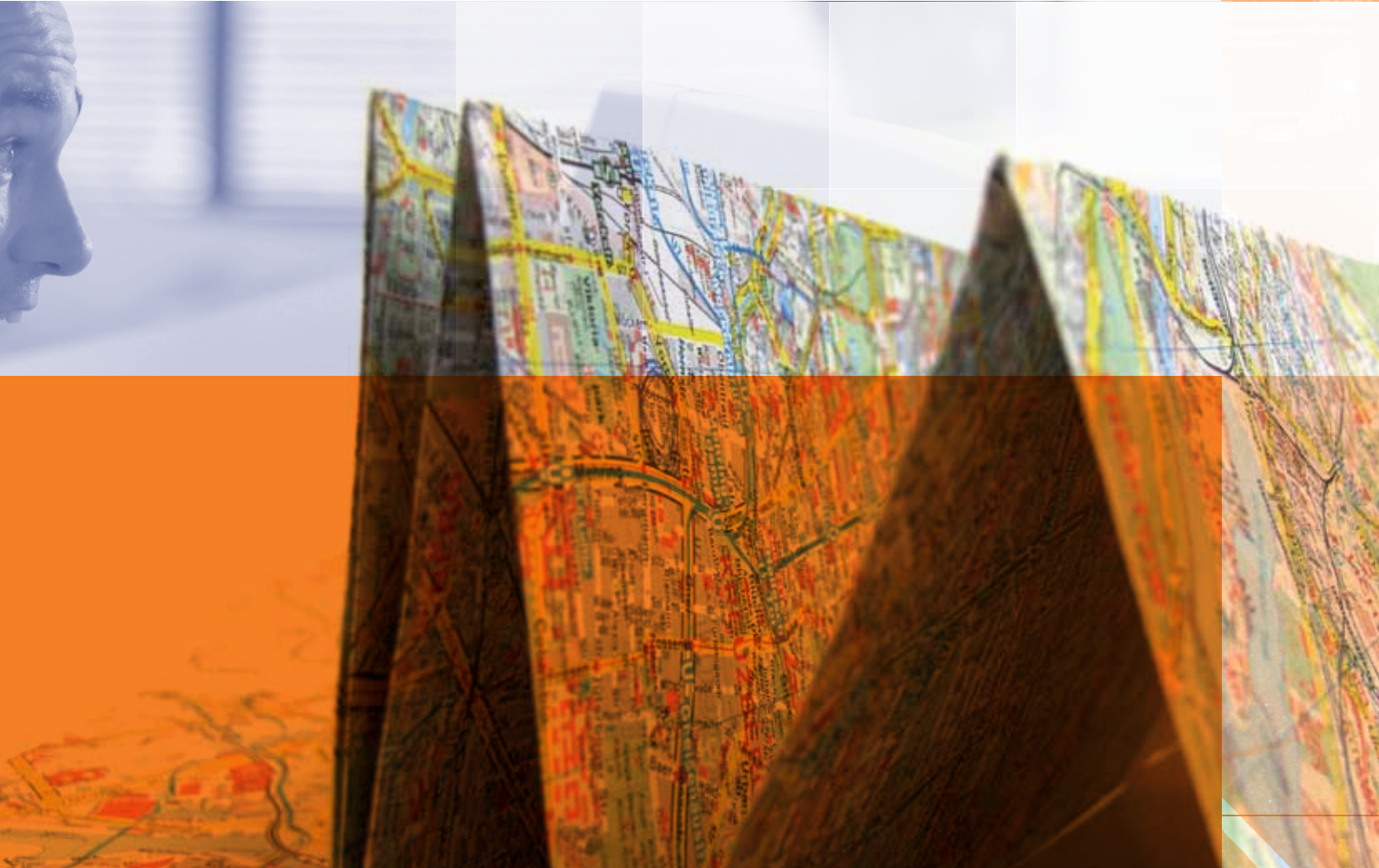
- ORTEC Transport und Distribution (ORTEC TD)
Route planning and optimization, main focus on real time route planning and dispatching in a multi-user environment
- ORTEC Tactical Route Planning (ORTEC TRP)
Territory and delivery day optimization including sequencing of each route, creation of selection trips with optimizing the utilization of resources
- ORTEC Service Planning (ORTEC SP)
Route planning and planning of field service
- ORTEC Loaddesigner®***
Carton, pallet and load space optimization, as well as order picking

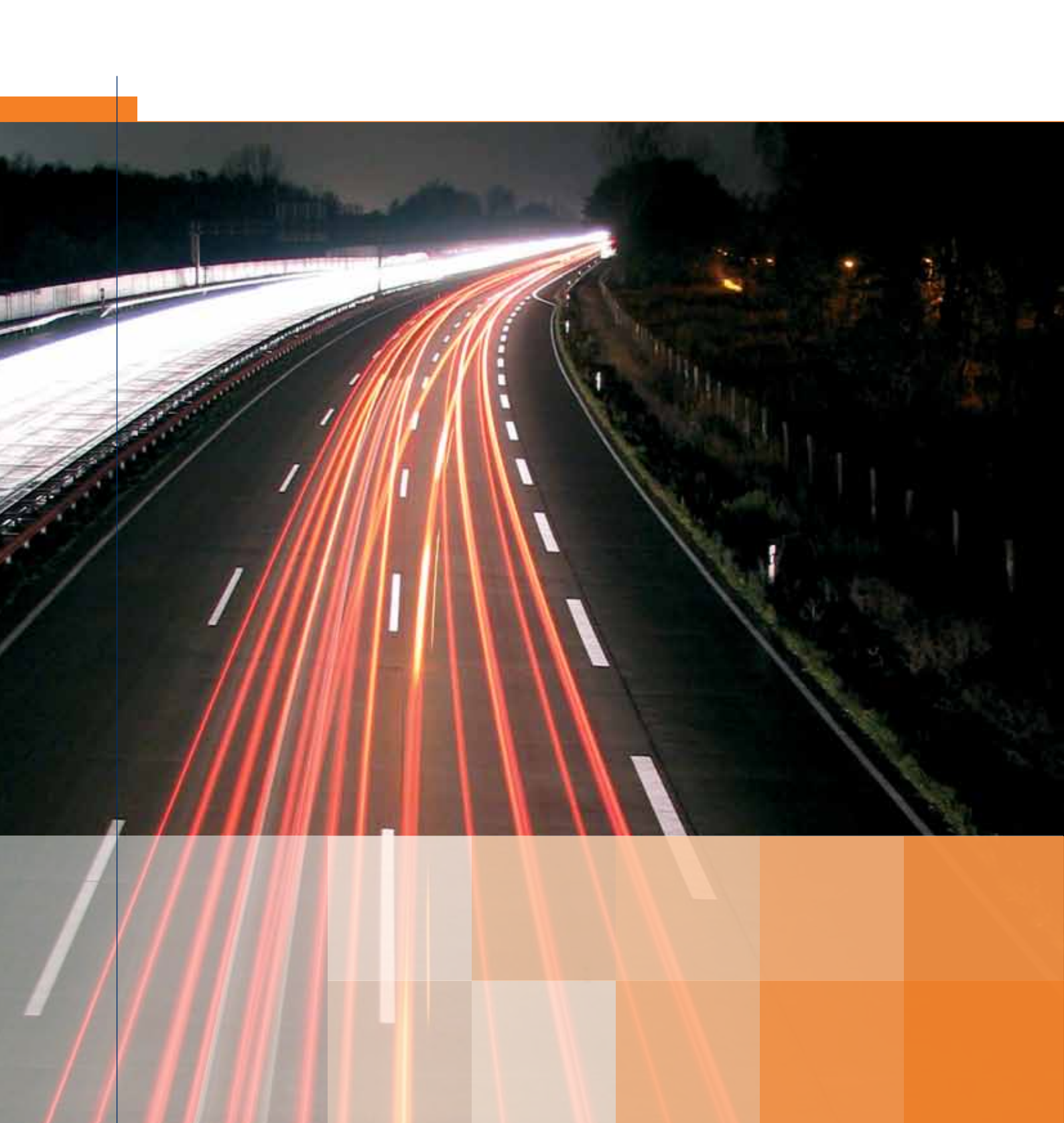


Do you want to know how ORTEC
can help you save costs and increase revenue?

The ORTEC Group

ORTEC is one of the largest providers of advanced planning and optimization software solutions and consulting services. Our solutions result in optimized fleet routing & dispatch, vehicle and pallet loading, workforce scheduling, delivery forecasting and network planning. ORTEC provides best-of-breed, custom-made and SAP® certified solutions, supported by strategic partnerships. ORTEC has over 1,250 customers worldwide, 700 employees and several offices in Europe, North America, Asia and the Pacific Region.





info@ortec.com / www.ortec.com

North America +1 (678) 392 3100

Germany, Austria and Switzerland +49 (0) 4431 7377 0

The Netherlands +31 (0)182 540 500

Belgium +32 (0)16 244 220

France +33 (0)1 44 25 05 25

Asia Pacific +65 (0)6725 6468

Central and Eastern Europe +40 (0)21 31 10 227

United Kingdom and Ireland +44 (0)24 7632 3218

International +31 (0)182 540 500