



Smarter and Safer
Airports

 **Solutions & Services for Industry**

Actemium and Protec: Strong partners ensure high quality

Together, Actemium and Protec cover the full range of airport technology from installations and equipment to systems and services. They offer extremely wide-ranging expertise that is always tailored precisely to customer needs.



Actemium plans, installs and maintains facilities for key industries and public sector customers. Actemium is part of the VINCI Energies Deutschland group of companies and thus part of the VINCI S.A. Group, the world's leading company for concessions, construction and related services. Protec Automation is a successful company in the automation sector and the specialist for solutions in airfield lighting control technology.

„We ensure innovative solutions across a complete service portfolio, including on-site.“

Non-stop reliability

Back-up features and redundant systems ensure that facilities keep on running, even in the event of failures. Closely monitored manufacturing and installation and a quality assurance system that is focused on high stand-

ards ensure reliable airport operation with significantly less down-time.

Highly cost-effective

- ✦ Cost-optimized energy supply
- ✦ Taxiway management fully harnesses infrastructure capacity.
- ✦ Energy-optimized lighting control
- ✦ A fully integrated control system boosts cost-effectiveness.

Effective environmental protection

Lower energy consumption and full utilization of infrastructure thanks to intelligent systems and resource-friendly construction enhance the energy balance of airports.

Professional partner

- ✦ Energy supply, emergency power and UPS systems
- ✦ Ground power supply/ 400 Hz systems
- ✦ Airfield lighting systems
- ✦ Airfield lighting equipment, controls and other devices
- ✦ Apron lighting
- ✦ Control technology
- ✦ Refueling/Tank storage
- ✦ Maintenance and service



Energy supply, emergency power and UPS systems

Decades of experience ensure reliable energy supplies

Our energy management expertise ensures uninterrupted power supplies and thus smooth airport operations – at all times.

We harness our decades of experience in electrical engineering and control technology to optimize the efficiency and reliability of energy supplies, and airports are no exception. Our comprehensive service portfolio ranges from energy supplies for medium and low voltages and transformer stations for high voltages to low-voltage systems, protection technology and electrical installations.

We also install energy control systems based on our own Viewstar ICS pro-

cess control technology, which has a proven track record extending over decades.

Further areas of activity for airports include energy management and backup strategies with emergency and uninterrupted power supplies (UPS).



We are the **specialists** for complete systems

Airfield lighting systems need to function reliably at all times. We are the specialists for supplying, installing and maintaining complete systems from small airfields to large airports.



We're experts in system technology and have been a partner to small and large airports for many years when it comes to integrating equipment and systems to develop complete airfield lighting systems.

Using controlled processes that ensure maximum quality, we integrate the equipment and systems of numerous manufacturers with our system

technology to form a cost-optimized system with high standards in safety, availability and efficiency.

Our customers and their specific project requirements are at the heart of our activities. As part of the VINCI Group, we can also implement large-scale projects efficiently.

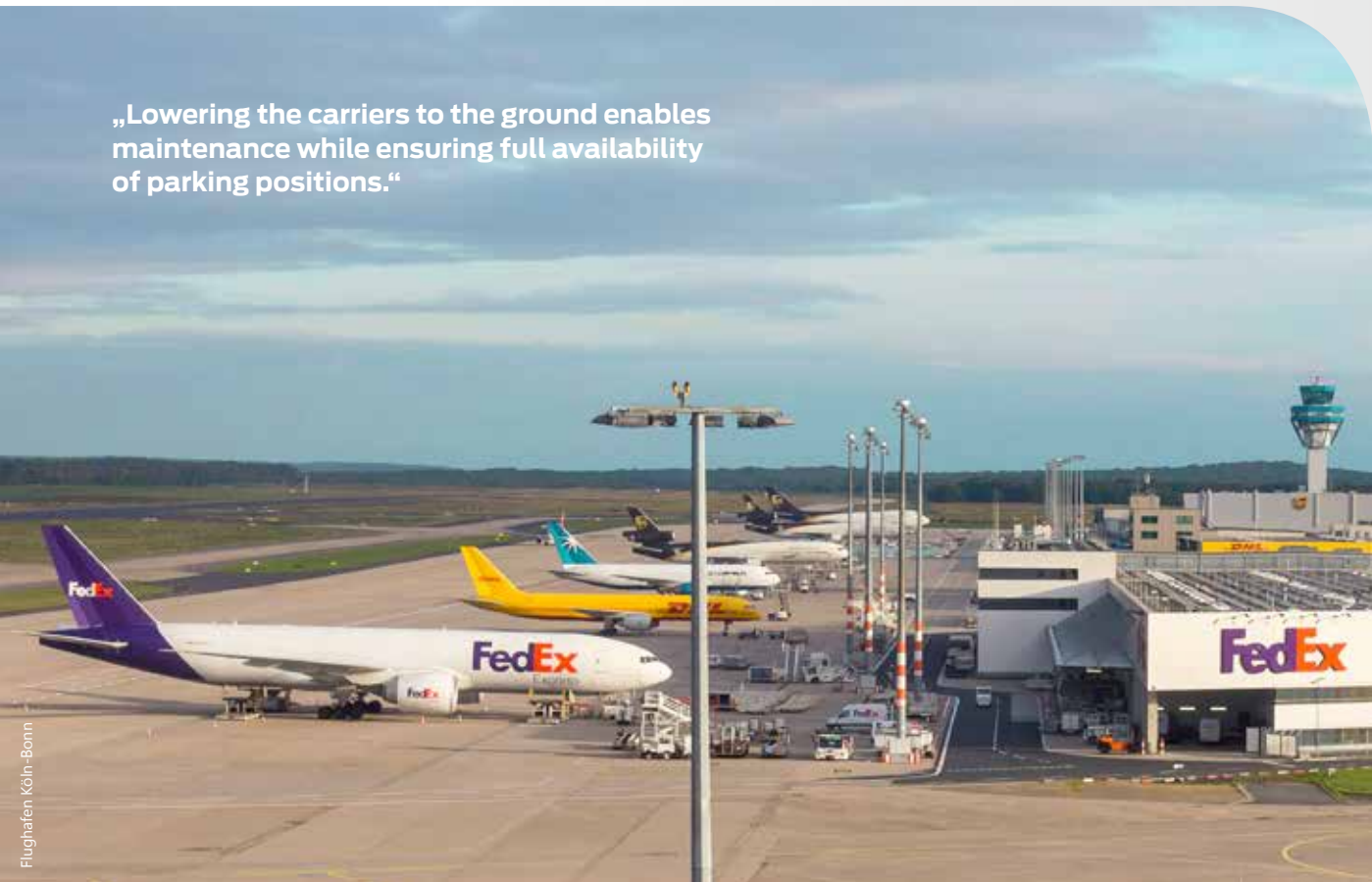


**„We supply
equipment and
systems – for
small airfields and
major international
airports.“**

Complete airfield lighting systems – what we offer

- ↯ Support already at the planning
- ↯ SELV-compliant design by implementation of DIN EN 62870 (VDE 0161-105)
- ↯ Supply of:
 - Airfield lighting components
 - Cables, plugs, transformers
 - Constant current regulators
 - Individual lighting control systems
 - Controls for airfield lighting management systems
- ↯ Installation and professional project management
- ↯ Commissioning and testing
- ↯ Maintenance and servicing

„Lowering the carriers to the ground enables maintenance while ensuring full availability of parking positions.“



Flughafen Köln-Bonn

Apron lighting/infrastructure

Reliable lighting thanks to simple maintenance

The safety and security of passengers, goods and equipment calls for intelligent, high-availability lighting and power supply systems that are operational in all weathers, day and night.

Where required, we supply and install floodlight masts with electrically powered equipment carriers that can be lowered to the ground. This enables maintenance while ensuring full availability of parking positions. The carriers can be fitted with floodlights, cameras and antennae. Power is supplied via cables that run through the mast to plug contacts. In this way cables aren't fed through with the carriers as they are lowered. Maintenance can be carried out by a single person and is not weather-dependent. A lift platform is not required.

We also install special (emergency) power supplies for the apron infrastructure. These are planned and built to customer specifications at our in-house electrical enclosure production facility.



Actemium

Full service from planning to maintenance and renovation

We supply the full range of control systems for power supplies and airfield lighting including taxiway management (Surface Movement Guidance and Control System = SMGCS).

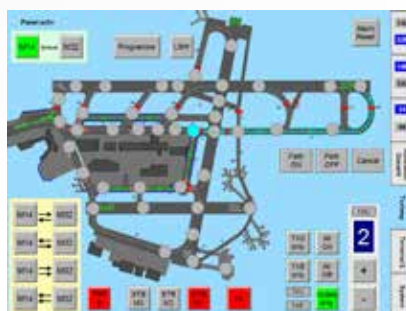


We offer our customers full service for control and instrumentation technology. This means

- ✦ We provide our customers with support right from the system planning stage.
- ✦ We supply the hardware and software.
- ✦ We ensure perfect installation and professional project management.

✦ Our services also include the commissioning and testing of systems.

✦ Maintenance and other services are also part of our portfolio, as are the replacement, renovation and expansion of systems.



Reference project: New airfield lighting control system at CGN

- ✦ Fault-tolerant (redundant) control system for three runways, including taxiways and aprons
- ✦ 3 workstations in the tower
- ✦ 7 airfield lighting stations
- ✦ Control center as client/server system
- ✦ Individual lighting control system for TxCs, STBs, RLLs



„Your final destination – we supply installations and systems to ensure a safe arrival day and night, in all weathers.“

Station equipment

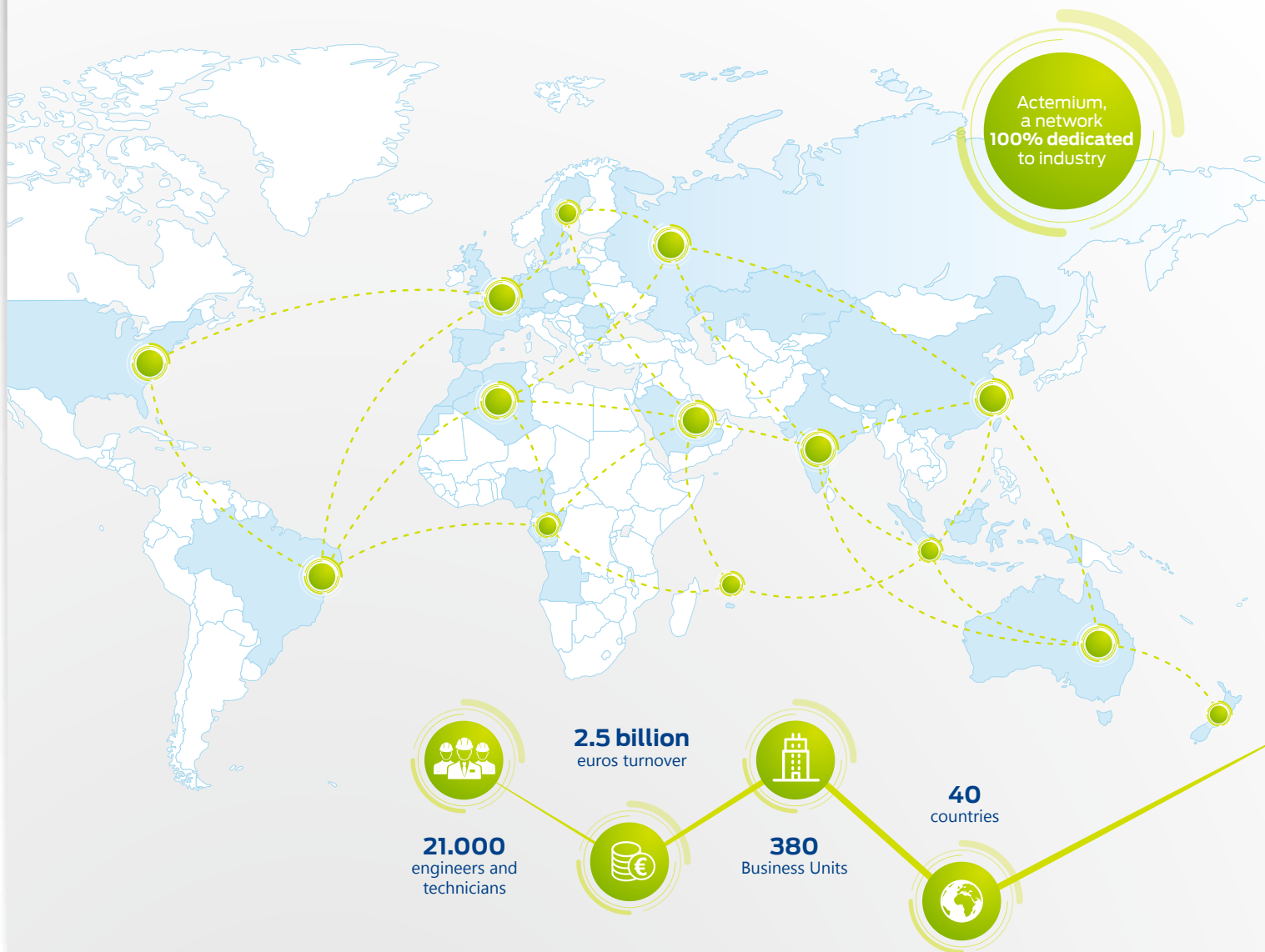
Components for high-availability airfield lighting systems

We supply components and complete substation equipment including emergency power supplies. Our portfolio includes airfield lighting CCRs in a container design and modules for electrical enclosure installation. We plan and build project-specific electrical enclosures for airfield lighting and emergency power systems at our in-house production facilities.



Preparing the future together

Your partner of choice for advancing technologies



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