

# GlobalConnect: Copenhagen, Denmark

Putting DEIF Critical Power to the Test

*"We know it works, because we test it the hard way."*

Even the most developed national grids are sensitive to power anomalies such as voltage/frequency fluctuations, sags, spikes, surges, brownouts or even blackouts.

Because GlobalConnect's customer portfolio includes server hosting for critical business institutions like banks and media organisations, comprehensive redundancy and Tier classifications is at the heart of GlobalConnect's business case, promising its customers, "security with extra security. And then an extra layer of security – just to be safe."

When customers ask, if they can be sure GlobalConnect's back-up power systems work, Senior Group Manager Tore Heide Villund's confident reply owes a great deal to his faith in DEIF's power management system: "We know it works, because we test it the hard way."

"As well as monitoring operation rigorously and performing and documenting simulation tests, we put the entire system to the ultimate test twice a month by cutting our connection to the grid. As the UPSs kick in and the gensets start up, synchronising and identifying a reliable, quality power production level for our premises, you can't get greater certainty, and that is the level we maintain."

Resilient turnkey packages, DEIF's solutions incorporate intelligent power distribution and controls; switchgear; and generator and grid protection to guarantee uninterrupted power supplies in cases of mains failures.

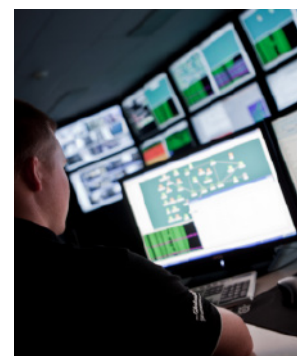
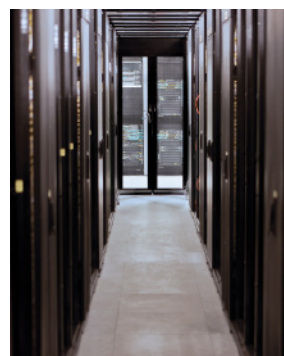
DEIF designs and integrates system architecture with unique standby capacities and can deliver record start-up from an impressive six seconds for multiple gensets in parallel; redundant control systems; or even an entire redundant power plant.

## GlobalConnect

GlobalConnect is Denmark's leading alternative provider of fibre network, data centres and cloud solutions. The company covers Denmark, Northern Germany and parts of Sweden with a 13,000 km network of optical fibres and 13,000 m<sup>2</sup> data centres.



[www.globalconnect.net](http://www.globalconnect.net)



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## Data

- ✓ Short-circuit limitation control
- ✓ Multi-master system (system does not rely on just one controller)
- ✓ AOP-1 test panel
- ✓ Close Before Excitation: Power Recovery in 10 Seconds
- ✓ Redundant Communication, Hot Standby: No Loss of Generators
- ✓ Patent-pending DEIF Emulation: Safe & Complete Solution Test

## Product



Automatic Genset Controller, AGC-4

## The DEIF Solution

The application consists of two AGC-4 Mains and three AGC-4 DG. The gensets have a 1000kW capacity each.

Because of a limitation on the busbar's short-circuit effect, the Power Management System's demand maximum was set at 3000kW, and a Short-Circuit-Limitation function was developed to prevent more than three sources (mix of generators and transformers).

The AGC-4 units on the busbar for this application later became an integrated AGC-4 PMS functionality with option T1 (Critical Power).

## Case Diagram

