Optimum flexibility
With its innovative power electronics, SIPLINK allows efficient energy transmission on the medium-voltage level, too. Thanks to the DC transmission link in between, the two networks may feature different parameters. Users can profit from a number of advantages, among them lower costs for energy import, a controlled load flow during power transmission, and the provision of reactive power to optimize voltage control.

Innovative back-to-back technology for controlled power transfer and network operation
SIPLINK from Siemens can connect two or more separate medium-voltage networks with different voltages, frequencies, or phase angles. In doing so, it improves network stability and prevents any fault current increases. SIPLINK also dispenses with the need for expensive “top-up” energy as well as low efficiency diesel gensets, thus helping to reduce CO₂ emissions.
Easy to use, control, and expand
Operators can make easy use of SIPLINK, thanks to its built-in supervisory level for control and monitoring, as well as by visualizing and archiving the system status through an interactive PC operator interface. Reference values (for active and reactive power) may also be entered. In addition, SIPLINK improves both power supply reliability and power quality at the distribution level. It also offers economical alternatives when distribution networks need to be expanded, especially in densely populated areas—either by coupling the distribution networks or in stand-alone operation. Remote diagnosis is another cost-saving feature that helps to improve performance and reduce downtimes.

One technology – four uses
Power utilities and industrial customers may use SIPLINK as their technology to boost the efficiency of their new and existing networks by providing new options.

Consumption
- Local network imports energy from public network
- Specific definition of active and reactive power without any influence of frequency and network voltage on the public network side

Generation
- Local network exports energy to public network
- Specific definition of active and reactive power without any influence of frequency and network voltage on the public network side

Transfer
- Two local networks exchange energy for peak shaving
- Specific definition of active and reactive power, whereby no adaptation of short-circuit rating/power is required

Multiple supply
- Multiple permanent power supply for one strategic network
- Balancing of load from different sources without any influence of frequency and network voltage on the public network side

SIPLINK back-to-back solution