

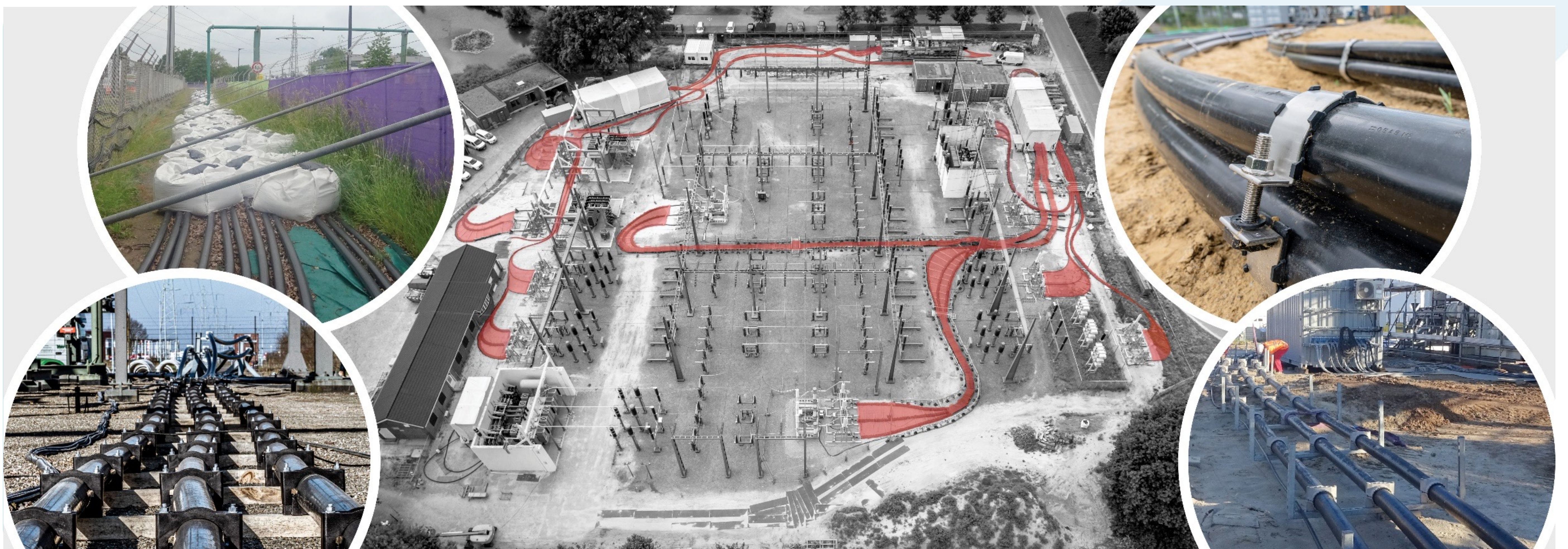
Deployment of temporary site cables

How can they be installed quickly, efficiently, and in a short-circuit proof manner?

The Challenge: Conventional installation methods for temporary site cables (MV/HV) are often suboptimal or unsafe, relying on standard mounting hardware or untested configurations that lack verified short-circuit resistance.

The Objective: To develop a solution that allows temporary site cables to be made short-circuit proof* quickly and efficiently.
*) in accordance with IEC 61914

The Outcome: An innovative product that enables faster, more efficient, and fully short-circuit proof deployment of temporary site cables (see *Updates* below)



CONVERSATION TOPICS

Related to the current installation of (single core) temporary site cables:

- no specific mounting hardware available
- installation method not always tested for short-circuit resistance
- a lot of time-consuming (de-)installation work
- lack of uniformity: differences in method of installation and cable spacing
- considerable environmental impact (especially when using ballast)

OBJECTIVES

To develop a solution that allows temporary site cables to be made short-circuit proof quickly and efficiently:

- suitable to safely hold the cables together when lying loose on the ground
- successfully short-circuit tested without requiring a mounting surface
- based on the correct mounting distance, calculated for all relevant aspects (including the mechanical load on the cables during a short-circuit)
- with minimal environmental impact (light weight and reusable)

UPDATES (spring 2026)

Deployment of temporary site cables at HV station 'Rommerskirchen' (DE) during the renewal of overhead lines.

- 380 kV cables 6x1x1200 mm² in flat formation @ CTC distance = 250 mm
- HV cables held together with innovative *Temporary Site Restraints* (TSRs) over a distance of 1 km (see picture below)
note: in line with objectives listed alongside
- due to a very tight schedule, the use of conventional mounting hardware was not possible (too time-consuming, both during the installation and during the dismantling of the cables)

FOCUS AREAS 2026 - 2027

FOCUS AREA 1

informing all stakeholders involved in temporary site cable deployment about potential areas for improvement

FOCUS AREA 2

promoting the dissemination of essential knowledge required to calculate the correct mounting distance for temporary site cables

FOCUS AREA 3

initiating early-stage consultations to determine the optimal installation method for temporary site cables in a given scenario / at a given substation

FOCUS AREA 4

avoiding less suitable mounting hardware (see *Conversation Topics* and *Objectives* above) when securing temporary site cables against short-circuit forces

FOCUS AREA 5

minimizing or avoiding ballast when securing temporary site cables against short-circuit forces



Project participants

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