

## Danube InGrid 2.0

Project of Common Interest HU | SK

### Technical progress - Východoslovenská distribučná, a.s.

November 2023

#### WP2 Transmission and distribution system management

##### T2.1 Modernization of 11 HV / MV transformers

- T2.1.1 MS8 Installation of 1 HV/MV transformer Košice
  - Finished April 2023
- T2.1.2 MS9 Installation of 2 pc. (cumulative) of HV/MV transformers S. Ľubovňa
  - To be finished in Q4 2023 as planned

##### T2.2 Reactive power flows management in TSO/DSO interface 4 units

- T2.2.1 MSVSD10 Installation of 1 unit (cumulative) compensation devices (coil) Košice
  - Finished January 2023
- T2.2.2 MS10 Installation of 2 units (cumulative) compensation devices (coil) Sobrance
  - Workpackage started in Q4 2023

##### T2.3 Fault current management (Arc suppression coils) 11 units

- T2.3.1 MSVSD 2022 Installation of 1 unit (cumulative) of arc suppression coil Dobšiná
  - Finished August 2022
- T2.3.2 MSVSD 2023 Installation of 6 units (cumulative) of arc suppression coil Snina, Bardejov (2x), Stará Ľubovňa (2x)
  - 2x Stará Ľubovňa to be in operation in Q4 2023 as planned, official Handover protocol will be issued by the completion of the whole substation
  - 1x Snina planned for Q2 2024
  - 2x Bardejov planned for 2026
- T2.3.3 MSVSD 2024 Installation of 7 units (cumulative) of arc suppression coil Kráľovský Chlmec
  - 1x Kráľovský Chlmec planned for Q3 2024

#### WP4 Optical communication infrastructure

##### T4.1 Implementation of optical communication infrastructure (development on HV and MV level)

- T4.1.1 MSVSD 2022 - Realization of Optical fibre network according to time schedule (cumulative 28.8 km finished)
  - Finished Q4 2022 with cumulative 19,2 km
- T4.1.2 MS23 - 2023 Realization of Optical fibre network according to time schedule (cumulative 60 km finished) - 74,4 km
  - To be finished in Q4 2023 with cumulative 32,8 km

## WP5 MV Smart installation and devices

### T5.1 Development of smart and automated MV/LV stations

- T5.1.1 MS29 - 2022 Realization of smart or automated MV/LV stations according to time schedule (cumulative 9 pcs. Finished)
  - Finished Q4 2022 with cumulative 3 realizations and 8 project documentation finished
- T5.1.2 MS30 - 2023 Realization of smart or automated MV/LV stations according to time schedule (cumulative 29 pcs. finished)
  - To be finished in Q4 2023 with cumulative 7 realizations

## WP6 IT Smart Grids - digitalization of grid processes, cybersecurity, digital platform

### T6.1 Integration and implementation of information technology

- T6.1.3 MS37 - 2023 Realization of Privileged Account Management IT (PAM) / Kubernetes / Security VPNT
  - MS37
  - T6.1.3.PAM MS37 - 2023 Realization of Privileged Account Management IT (PAM) / Kubernetes / Security VPN
    - To be finished in Q4 2023 as planned
  - T6.1.3.KUB MSVSD 2023 Kubernetes orchestration
    - To be finished in Q4 2023 as planned
  - T6.1.3.VPN MSVSD 2023 Security VPN
    - To be finished in December 2023 as planned
- T6.1.12 MS36 - 2022 Realization of Voicebot/Chatbot activities
  - Finished December 2022
- T6.1.13 MSVSD 2024 Workforce management automation
  - In progress, with finish planned in 2Q 2024
- T6.2 Integration of operation technology
  - T6.2.1 MSVSD 2023 PAM OT
    - In progress, with finish planned in 2024
- T6.3 Installation of security measures
  - T6.3.1 MSVSD 2026 SIEM development
    - Redesign/upgrade of the SIEM will finish in December 2023
    - New functionalities delivery next years, as planned
  - T6.3.2 MSVSD 2023 SIEM HW
    - HW purchase planned in Q4 2023
  - T6.3.3 MSVSD 2024 SIEM licenses
    - Licenses purchase planned in Q4 2023