PROPOSAL FOR THE CREATION OF A NEW WORKING GROUP

CIRED WG 2024-1	**Name of Convenor: Pedro Terras Marques (Portugal)** **E-mail address**: pedro.terrasmarques@e-redes.pt

Title of the Group: Non-Technical Losses on the Eletrical Distribution Network

Scope, deliverables and proposed time schedule of the Group:

Background:

Non-technical losses (NTL) are a complex key issue for any DSO, even tough there isn´t a common practice of sharing specific information, whether it is overall performance, operational procedures or organizational approach (governance).

Due to the undergoing process of metering technology transformation, most centered on operational efficiency, a set of opportunities arise regarding non-technnical losses mitigation, despite context differences, including regulation frameworks.

Increasing capacity on energy flows measurement across the network, aligned with smart meters event data collection, allows greater accuracy on determining its scale and promotes better conditions for concerted operational action, supported by an analytical platform.

Scope:

This working group (WG) will develop a benchmark focusing on best practices, use cases and trends involving governance, the detection throught data processing and on-field strategies to support the mitigation of non-technical losses.

The objectives of this WG are:

- to promote the characterization of NTL across different contexts, by encouraging to share information between DSO, to better understand how different companies and stakeholders address this complex issue,
- to determine a common set of representative indicators for NTL and
- review previous work (CIRED Working Group in 2017 “Reduction of Technical and Non Technical Losses in Distribution Networks”) and design an efficient NTL mitigation roadmap, from both analytical and on-field perspective, based on the increasing update of metering infrastructure, growth of processing capabilities (eg. through cloud computing) and new operational tools.

Deliverables:

Booklet with best practices, use cases and trends involving NTL on different distribution networks.

Time Schedule:

start: January 2024 - **Final report**: December 2024

Comments from the TC Chairman: The topic of the WG is interesting. I recommend a more substantial relationship with AI. The advancement concerning the previous WG should be better clarified. The roadmap should differentiate among different cases. EU is not the world, and CIRED looks to the world as a whole. I recommend a roadmap suitable for developed and emerging or developing economies.

Approval by CIRED Technical Committee Chairman:
Date: 11.12.2023