



Dear Readers,

Due to the decarbonisation and digitalisation initiatives, energy systems around the world are undergoing fundamental changes. This *transformation* has a huge impact on the technology development. At the same time, we are witnessing a strong turnaround of the industry.

The spinoffs of **Hitachi ABB Power Grids** and **Siemens Energy** occurred, as well as the privatisation of **Efacec** and **Crompton Greaves**, i.e., **Ganz** in Hungary. In the US, the **Executive order** has been carried out to secure America's Bulk Power System from foreign adversaries' impact, with a huge Influence on the transformers market as well. In Israel, **Von Roll Transformers** factory was closed. There are rumours about some factories in China that are soon to be shut down. All of these are very significant changes that have taken place in only a few months.

What can we expect in such changed circumstances? On the basis of what **Eduardo Terzi** said in his interview, for example, due to the renewable power generation, we can expect a growth of demand for windmill and photovoltaic transformers, distribution transformers with tap-changers, but also HVDC and phase-shifting transformers. This enables advanced manufacturers to shift the portfolio toward premium products, which in turn can open more space on the mainstream market for other manufacturers. However, relying only on the current technology can be a trap because falling behind in the technology can become fatal mid- and long-term. Therefore, innovation is vital probably more than ever before, as well as the visibility on the

market. As the intensity and the pace of changes is so high, there is not enough time to wait for your product getting recognised in traditional ways. Therefore, there is no alternative for using available and efficient means to get the global visibility of your products and solutions. 'Innovate and communicate' captures the essence of *transformational* approach.

Stefan van der Kolk, a transformer designer and now lead engineer in **TenneT**, depicts the challenges that utilities face due to the previously mentioned changes.

Our columnists, **Ufuk Kivrak**, **Marius Grisar**, **P. Ramachandran** and **Vitaly Gurin**, bring precious materials on supplier relations management, transformer maintenance, transformer standards and transformer books, respectively.

Bhaba Das, **John Wanjiku**, and **Emilio Morales** discuss three digitalisation topics. **Marek Szrot** et al. discuss condition assessment, while **Barry Menzies** talks about safety.

Other articles provide insight into intelligent field devices, transformers in the light of the UN Sustainability goals, circularity in transformers industry, transformer losses, underground substations, reliability and maintenance, oil processing technology, on-site leak repair, and phenolic pressboard.

I hope you will enjoy reading this content-diverse and rich edition.

Mladen Banovic, Editor-in-Chief

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