

Paper 963

Improved ADMS with an operator friendly interface

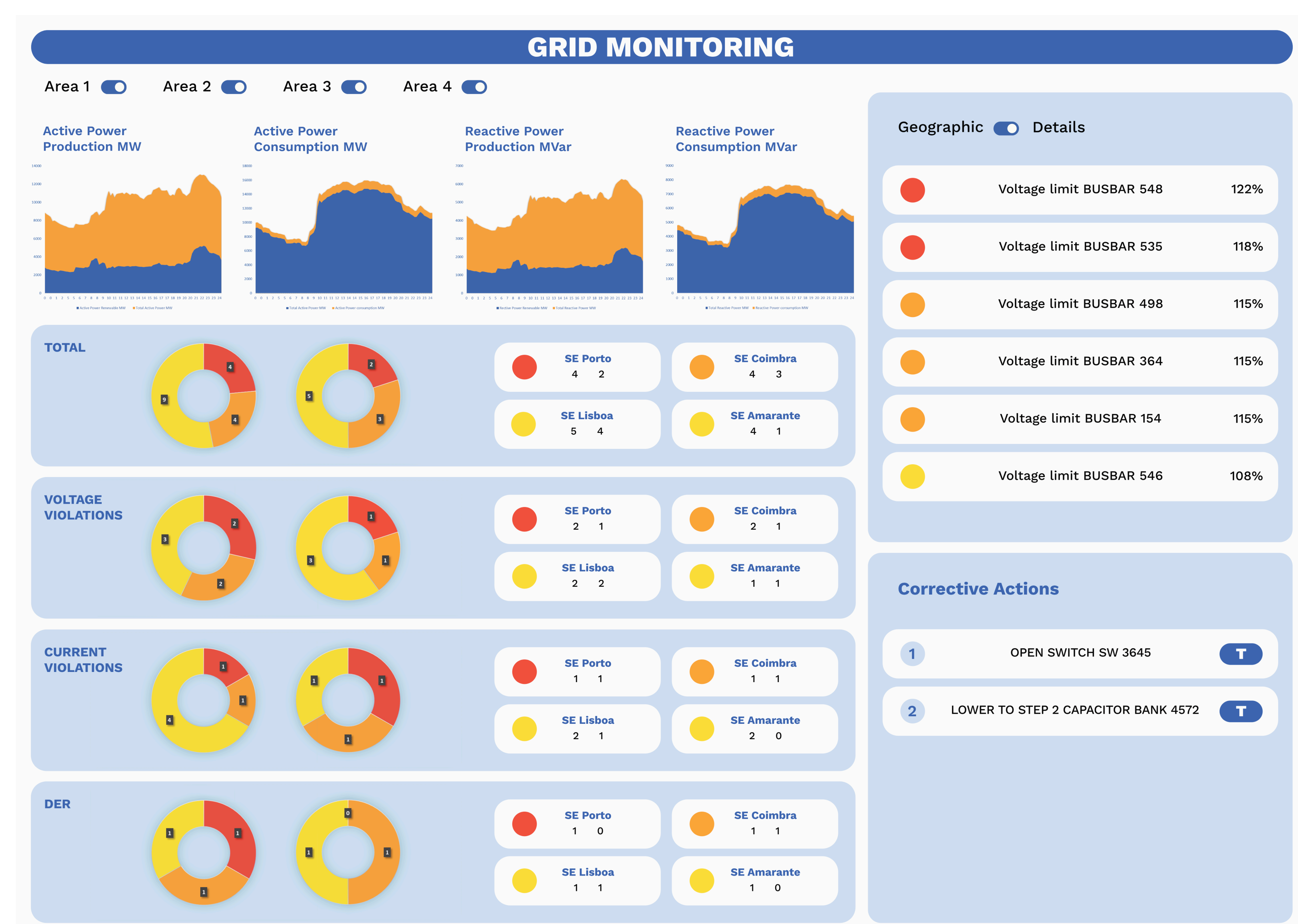
// Jorge Pereira, Clara Gouveia, Renan Portelinha **INESC TEC, Porto, Portugal** // Jorge Pereira **Faculty of Economics – University of Porto, Porto, Portugal** // Paulo Viegas, José Simões, Pedro Silva, Susana Dias **EFACEC, Porto, Portugal** // Alexandre Rodrigues, Ana Pereira **CEVE – Cooperativa Elétrica Vale d’Este, Famalicão, Portugal** // Joana Faria **ENEIDA.IO, Coimbra, Portugal** // Gabriel Pino **GML Transmission, Mirandela, Portugal**

New generation ADMS

// This paper presents a new generation of ADMS implementing a predictive operation strategy on top of an open architecture to enhance real-time operator responsiveness and answer to the challenges posed by the increasing penetration of DER.

Grid monitoring and control

// The ongoing challenges faced by the new generation of ADMS highlight the need to rethink how tools are presented to operators.



// We propose a single dashboard presenting not only a comprehensive overview of the network but also real-time and predictive insights into potential issues, along with a set of proposed solutions to address them. // **Top Section:** Contains graphics detailing produced power, consumed power, and losses. // **Left Section:** Presents a list of graphical alerts, identified by severity and organized by type and network area. // **Right Section:** Presents the solutions proposed by the algorithms to address the identified issues.

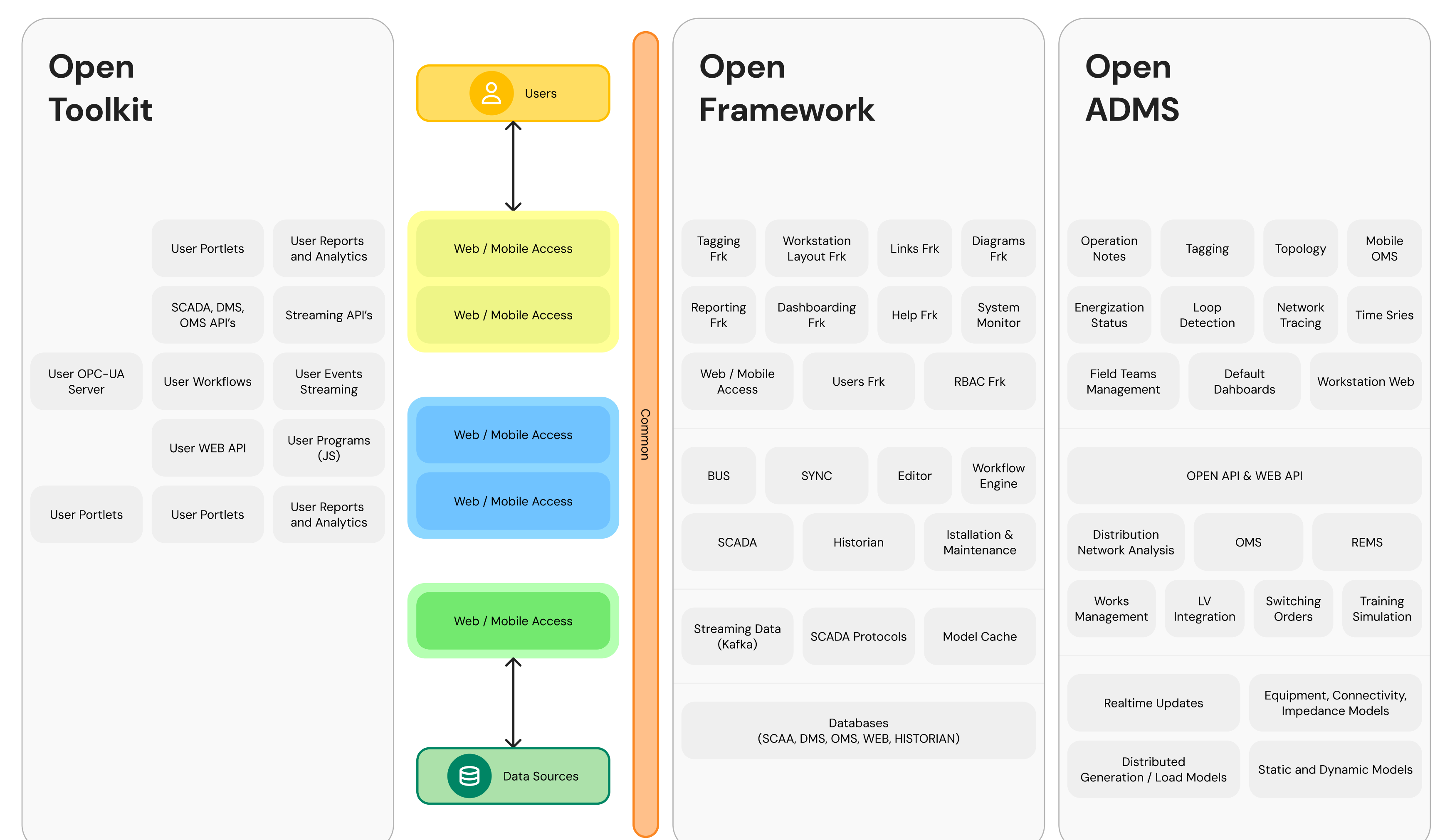
Methodology

// Major obstacles to deploy an ADMS

- Complexity of integrating the various systems of the utility.
- Complexity of adapting the ADMS to the business processes of the utility.

Open Architecture

// Architecture to facilitate seamless integration is the key.



- Core of ADMS with well-defined API.
- Built on top of an open framework.
- Full stack environment enabling the development of new components.
- A framework providing basic functions: users management, tagging, RBAC, WEB and mobile access, etc.

Conclusions

// A new generation of ADMS, with its predictive operation strategy and open architecture, offers innovative solutions to the challenges posed by the increasing integration of RES and DER.

