# **WORKSHOP ONLINE**

# "Enabling electricity exchanges and trading in the Mediterranean"

Achieving a common technical and regulatory framework to increase electricity exchanges and trading between the two Mediterranean shores.

## Organized by





With the support of the European Union



Union for the Mediterranean Union pour la Méditerranée الاتحاد من أجل المتوسط 2022

9.30 - 12.45 CET

FEB



# **Objectives of the workshop**

Integrating and exchanging large quantities of renewable energy sources at a regional level, while ensuring security of supply at affordable costs, requires harmonized technical and regulatory frameworks, as this is the *sine qua non* condition for exchanging electricity.

Issues start when discussing the following questions: 1) How to get there? 2) Is a legally binding framework required for attracting investments in power generation and grids, if yes at which stage of development of the interconnected grid?

This workshop aims to lay the ground to achieve a framework that enables electricity exchanges and trading between the two Mediterranean shores. It will deal with the required framework for attracting power generation and grids investments. It will also discuss the stage of development of the interconnected grid needed to obtain them.

The workshop will be structured in two parts. The first part is aimed at exchanging experiences and best practices on power systems integration from the neighbouring regions.

The second part of the workshop intends to bring together all the relevant stakeholders to discuss the necessary actions that are currently missing and the steps to activate the right process.

Finally, Med-TSO will present and launch a survey which aims to collect stakeholders' views on existing barriers and concrete actions to be implemented.

#### Meet the organizers

<u>Med-TSO</u> has been working for several years on the set up of a harmonized technical framework in the Mediterranean, to be considered as a kind of necessary *software* for enabling the efficient and secure use of the interconnected grids. At a national level, grid codes are the technical and commercial requirements issued by the local authorities for grid users (production and consumption units as well as distribution companies with all their users) to connect them to the HV transmission network and operate the system according to the relevant standards.

On the other hand, <u>MEDREG</u> has been working in the last years to assess the national priorities in Mediterranean countries and their potential for being a part of the integrated sub-regional and regional electricity markets. In this context, regional cooperation appears to be a privileged option for mutual strengthening of national systems. Cross-border integration offers opportunities for building upon complementarities of systems and providing broader outlets to RES generation. However, challenges are important, and transmission system operators and regulators have a crucial role to play.

## **Details for registration and connection**

Please register by clicking here or by mailing Med-TSO Secretariat at info@med-tso.com

# Program of the workshop

# 9 February 2022, 9:30 – 12:45 CET (Rome Time)

SUBJECT and SPEAKER	TIME
Welcome and introduction to the workshop: Angelo Ferrante, Med-TSO - Hasan Ozkoc, MEDREG	9:30 - 9:40
Keynote speech - The role of grid codes in enabling interconnections with neighbouring regions: Florian Ermacora, DG Energy	9:40 - 9:50
Keynote speech - <i>The growing role of System Operators in the interconnections development</i> : Hervé Laffaye, Med-TSO - ENTSO-E	9:50 – 10:00
<b>PANEL 1</b> - "How to achieve a common technical & regulatory framework in the MENA region?" Experiences and best practices from neighbouring regions.	10:00 - 11:00
Moderator and topic introduction: Simone Biondi, Med-TSO Panellists:  Andre Estermann, ENTSO-E  Stephen Dihwa, South African Power Pool  Moayad Al-Kadhem, GCCIA Jasmina Trhulj, Energy Community  Yahya Mrabti, MEDREG (ANRE)	
Q&A	11:00 - 11:10
<ul> <li>PANEL 2 - "Electricity trading in/with the MENA region: what are the missing links/requirements?"</li> <li>Moderator and topic introduction: Benoit Esnault, MEDREG</li> <li>Panellists: <ul> <li>Roberto Vigotti, RES4AFRICA</li> <li>J. M. Rodriguez, Med-TSO</li> <li>Tarik Hamane, MASEN</li> <li>Moez Cherif, World Bank</li> <li>Gabriel de Lastours, EBRD</li> </ul> </li> </ul>	11:10 – 12:10
Q&A	12:10 - 12:20
Launch of Med-TSO survey: "Identify key areas for harmonization of a future Mediterranean grid code" Olivier Antoine, ENGIE IMPACT	12:20 - 12:35
Closing Remarks	12:35 - 12:45



#### Angelo Ferrante Med-TSO



Hasan Ozkoc MEDREG



Florian Ermacora DG Energy



### **Meet the Speakers**

Angelo Ferrante is Secretary General of Med-TSO, the Association of the Mediterranean TSOs for electricity and Head of European Affairs at Terna S.p.A., the Italian Transmission System Operator for electricity.

He is an electrical engineer with more than 35-year professional experience in Power Sector, with special focus on International Cooperation, Project Financing, Regulation and relations with International Organizations.

In his carrier, Angelo Ferrante has been also deeply involved in R&D and Technical Assistance projects in many parts of the world.

Hasan Ozkoc has been appointed as the Director of the Mediterranean Energy Regulators (MEDREG) in June 2021 and he was Deputy Secretary General from March 2018 to June 2021. He represents MEDREG globally and is in charge of developing activities, tools, regulatory standards and good practices to promote a functioning, interoperated, compatible and sustainable regulatory framework in the Mediterranean region.

He also coordinates and contributes to the national and regional energy progress reports and activities as well as supports MEDREG institutional relations and guides training programmes on legislative and regulatory developments.

Dr. Florian Ermacora studied law at the Universities of Innsbruck and Paris and received his doctorate degree in Vienna. Since 1996, Dr. Ermacora has been working as an official for the European Commission (Directorate-General for Environment; Directorate-General for Internal Market; Directorate-General for Energy).

From January 2015 to January 2021, Dr. Ermacora was responsible for the Wholesale Electricity and Gas Division, as the Head of B.2 Unit. He is currently the head of Neighbourhood policies and international relations unit A.3.

Dr. Ermacora has published several books and articles in the areas of European environmental and business law.



Hervé Laffaye ENTSO-E - Med-TSO



Simone Biondi Med-TSO



Andre Estermann ENTSO-E



**Stephen Dihwa** South African Power Pool



Hervé Laffaye is the International Affairs Officer of RTE, and the current ENTSO-E President and Vice-President of Med-TSO.

His career started with R&D in the field of applied mathematics for electrical systems, followed by different operational management positions in distribution of gas and electricity, then as head of the National Control Center during the seven critical years (2000-2007) of the birth of RTE, and finally up to 2016 as COO covering from engineering to maintenance and operation the operational activities of RTE.

Hervé Laffaye has an engineering diploma from Ecole Centrale of Paris and has held several high-level functions in both EDF and RTE.

Simone Biondi has been appointed by Med-TSO in autumn 2021 as TEASIMED Project Manager. TEASIMED project "Towards an efficient, adequate, sustainable and interconnected Mediterranean electricity system" is the third Med-TSO project financed by the European Commission after Project I (2015-2018) and Project II (2018-2020).

Simone Biondi is an Energy Engineer with more than 10-year professional experience in the Power Sector. Before joining Med-TSO, he worked for ENTSO-E and TERNA. In 2019 he co-founded HelioSwitch S.R.L. - Spin-off Politecnico of Milan.

Dr. André Estermann has a background as an economist and is the Market Integration Working Group Convener at Entso-E. In this regard, he is responsible for all matters of CACM & FCA guideline. He has worked with Market Projects at 50Hertz since 2009, being 50Hertz representative at SDAC/SIDC/MCSC Steering Committees.

Stephen Diwha has over 30 years of experience in the power sector. Started with Zimbabwe Electricity Supply Authority (ZESA) in 1988 and rose through the ranks to Business Development Director of the Transmission subsidiary up to 2007. He worked as System Planning Advisor in EdM (Mozambique) in 2007 and as Senior Manager responsible for Planning and then Renewable Energy & System Integration in NamPower (Namibia) from 2008 to 2012. He worked from 2013 to 2016 as a consultant Power Engineer for African Development Bank in Zimbabwe. He was Principal Director in the Ministry of Energy and Power Development of Zimbabwe from 2016 to 2017. He joined SAPP in December 2017.



Moayad Al-Kadhem GCCIA



Jasmina Trhulj Energy Community



Yahya Mrabti MEDREG (ANRE)



Benoit Esnault MEDREG



Moayad Al Kadhem is working in System Planning & Studies Section in Gulf Cooperation Council Interconnection Authority (GCCIA) since Dec 2018, leading the technical and economic studies for the interconnector. This includes the planning of the interconnector and the adequacy of the interconnected power system based on GCC utilities' plans. Prior to GCCIA, Moayad worked in Saudi Electricity Company (SEC) for 11 years in transmission planning and R&D with focus on FACTS and HVDC projects. Moayad holds Bachelor of Science in Electrical Engineering from King Fahad University of Petroleum and Minerals and Professional Master's in Sustainable Electrical Energy from Georgia Institute of Technology.

Jasmina Trhulj is a Diploma Electrical Engineer for Power Systems employed as Head of Electricity Unit at the Energy Community Secretariat in Vienna. Her 22-year professional career is dedicated to the development of the electricity markets in line with the EU acquis. Currently, her responsibilities include activities on facilitating energy transition and electricity market developments in the Energy Community Contracting Parties and their integration at regional and pan-European level.

She is author of number of paper and articles published and presented in the national and international conferences.

Yahya Mrabti is Head of Transmission, Distribution and Interconnections Department at the National Electricity Regulatory Authority (ANRE). He's in charge of monitoring the transmission, distribution and interconnections of the national electricity sector. He holds a Master's degree in Power system engineering from Mohammadia School of Engineers.

Yahya managed to build a solid experience in the development, planning and operation of, not only the Moroccan but also the Mediterranean, power system through his membership at the MEDTSO's technical committees more precisely on the Arab scale as member of the Maghreb electricity committee to the Arab Electricity Union.

Benoit Esnault has 20 years of experience in energy regulation, and he holds a PhD in economics. He joined the National Regulatory Authority of France (CRE) in 2008 where he is currently head of the Interconnections and European Affairs Department, which is responsible for gas and electricity interconnections and the development and implementation of European regulations. Benoit Esnault has directly contributed to the development and application of the third legislative package and the TEN-E guidelines, and he has chaired several European task forces. He has been chairing the MEDREG Electricity WG since 2016. Currently, he teaches industrial organization and energy governance in French universities.



Roberto Vigotti RES4AFRICA



J. M. Rodriguez Med-TSO



Tarik Hamane MASEN



Moëz Cherif World Bank



www.med-tso.com www.medreg-regulators.org www.europa.eu Roberto Vigotti is the Secretary General of RES4Africa Foundation, a European think tank gathering 34 stakeholders from the clean energy value chain to accelerate Africa's RE transition, supporting wider participation of private players in delivering investments.

In 2012, he embarked on the RES4Africa adventure, to support a wider participation of private players in delivering investments in Africa. At RES4Africa, he coordinates a number of activities aimed at transforming Africa's energy sector through public-private dialogue, market- driven analysis, training and capacity building activities, and on-field projects.

Juan Ma. Rodríguez (Spain, 1964), since 1990 has been with Red Eléctrica de España (REE, the Spanish TSO) where he is currently Manager of Verification and Inspection Department.

He has a vast experience in the area of planning and operation of power systems, reactive power and voltage control, stability and the secure integration of renewable sources into the power system. Also, he participated in several international projects and he was the Technical Director of the Institution Building for the National Electric Power Company (NEPCO) in Jordan, a Twinning Project supported by the European Commission (2013-2015). He took part in the team which designed the European Network of TSOs for Electricity, today ENTSO-E. In Med-TSO, JuanMa is the Technical Committee "Regulation" chairperson.

Tarik Hamane is today the Executive Director Head of Development of Masen (Moroccan agency for sustainable energy).

He is in charge of developing Masen's projects and activities in Morocco and abroad, mainly in Africa, starting from the establishment of the strategy and the sourcing of renewable project opportunities to the launch of construction through all the development process. He has more than 19 years of managerial experience in leading the development of large-scale infrastructure and power generation projects for different technologies. He is one of the main energy experts in the areas of renewables (wind, solar), Green Hydrogen and thermal power generation in Morocco and Africa.

Moëz Cherif is a Lead Energy Economist at the World Bank in charge of coordinating sector engagement in the Maghreb countries. With over 20 years of experience in the energy and infrastructure sectors, he is currently focused on promoting green energy investments; improving the performance of energy utilities and integrating cross-border power markets.

Before that he worked as an infrastructure economist at the IFC then moved to the World Bank in 2008, where he first worked in sub-Saharan Africa on the development of hydropower and gas-to-power projects, and on rehabilitation and reform of power utilities.



Gabriel de Lastours EBRD



Olivier Antoine ENGIE IMPACT



Gabriel de Lastours is responsible for developing the EBRD's power and renewables portfolio across the southern and eastern Mediterranean region (SEMED). This includes structuring debt and equity investments as well as leading policy dialogue with governments in the region.

Gabriel has worked in the EBRD's energy team for 16 years, both on oil and gas and mining financing and power and renewable energy projects. Prior to joining the Bank, Gabriel worked with EY Transaction Advisory Services in Paris and Credit Agricole CIB in New York.

He is a graduate from ESSEC Business School in Paris.

Olivier Antoine received his M.Sc. in 2007 and Ph.D. in 2013 from the Universite Libre de Bruxelles, Belgium. From 2009 to 2013, he was a researcher at the University of Brussels. His research interests focus on the use of WAMS and PMUs for oscillation source identification using data mining.

Since 2019, he is with Engie Impact, acting now as senior expert and team leader for the power system analysis team. He is involved in a wide variety of projects which include the following: grid code review and compliance assessment, large power plant integration, power system planning and operation, technical assistance, integration of RES, ancillary services review, interconnection study.

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