

**FIRST STAKEHOLDER
ONLINE WORKSHOP**

**COST EFFECTIVE
TECHNOLOGICAL
DEVELOPMENTS TO
ACCELERATE CLEAN
ENERGY TRANSITION**

ORGANISED BY TALENT

17 DECEMBER 2020

10.00-12.30

Agenda

**10:00-10:10 Introduction – The TALENT project:
Cost-effective technological
developments to accelerate clean
energy transition**

Speaker: Sergio Saludes, CARTIF

Description: Presentation of the objectives of the workshop as well as the TALENT concept, main goals, specific objectives, etc. The project video could also be screened to introduce the presentation

**10:10-10:40 Keynote speech – Flexibility in
transmission and distribution grids:
Regulation in the Electricity Market
Design**

Speaker: Manuel Sánchez Jiménez, DG Energy

Description: The speaker will provide insights on why grid flexibility is necessary to accelerate the clean energy transition in the EU (including aspects such as EU decarbonisation targets, the variability of renewable energy supply, and the different energy needs of EU industry and citizens).



T A L E N T

10:40-11:10 MODULE 1

Presentation 1 - New scalable architectures for power electronics in TALENT

Speakers: Pablo Moreno-Torres, Siemens Gamesa & Javier Pedraza, Siemens Gamesa

Description: A TALENT partner will provide an overview of the new scalable architecture for power electronics developed within the project.

Presentation 2 - Actual cost of the batteries: More than €/kWh

Speaker: Igor Cantero, CEGASA

Description: CEGASA, as industrial partner, will provide insights on the batteries associated costs. Late improvements have led to increasingly smart batteries that have more functionalities, and related costs are increasing as well. TALENT project aims to provide cost-effective solutions based on new technological developments.

Q&A Session



T A L E N T

11:10-11:15 COFFEE BREAK

11:15-11:45 MODULE 2

Presentation 1 - Modular battery system adaptable to different voltage levels in TALENT

Speaker: Pablo García, UNIOVI

Description: A TALENT partner will provide an overview of TALENT's work in developing a modular battery system adaptable to different voltages.

Presentation 2 – MV battery systems for the future EU grid

Speaker: Jérémy Martin, CEA

Description: A TALENT partner will discuss what are the current needs in terms of battery systems in order to enhance grid flexibility and facilitate the integration of stationary batteries into the energy system.

Q&A Session

11:45-12:15 **MODULE 3**

Presentation 1 - Interoperable software to manage hybrid and decentralised energy systems in TALENT

Speakers: Darja Skrt, cyberGRID & David Baraja, SGRE

Description: A TALENT partner will provide an overview of the interoperable software that is developed within the project.

Presentation 2 – Interoperability: The key to achieving a fully flexible grid?

Speaker: Jesús García, EU Energy Solutions & Innovation

Description: An industry representative will elaborate on why interoperability is crucial to ensure cost-effective integration of distributed renewable energy sources into the grid and how it can be achieved.

Q&A Session



12:15-12:20 Key conclusions from the different modules

12:20-12:30 Closing remarks and TALENT next steps

Speaker: Marian Gallego, CARTIF

Description: Presentation of the next TALENT steps, including stakeholder activities and invitation to register to stakeholder groups.

OUR PARTNERS



Sergio Saludes Rodil



Dr. Sergio Saludes Rodil, MSc Physics 1998, PhD 2007 University of Valladolid. He joined Cartif in 1998. Since 2018, he has been in charge of the Smart Grid Area inside Cartif's Energy Division. His research activity focuses on applications of machine learning to energy demand flexibility management. He has led several regional and national applied research projects and coordinated two projects funded by the European Commission. He has authored several research papers, contributions to national and international conferences and patents.

Manuel Sánchez Jiménez



Manuel Sánchez Jiménez is Team Leader for Smart Grids at the European Commission's DG ENER since April 2009. He launched the European Technology Platform 'Smart Grids' in 2006 and the European task force for 'Smart Grids' in 2009. He contributes to key policy and regulatory issues related to the digitalisation of the energy sector and to the Market Design Initiative under the Clean Energy legislative package. Prior to working at the European Commission, he served as the Director of the Plataforma Solar de Almería in the Spanish Ministry of Industry and Energy.

Pablo Moreno-Torres



Pablo Moreno-Torres has a PhD in Electrical Engineering specialized in R&D, and specifically in product development. He has nine years of experience both in private companies and in public entities such as research centers and universities. His fields of expertise are power electronics, batteries, supercapacitors, electrical machines and electrical drives. He has worked in projects belonging to the fields of electric vehicles, renewable energies and energy storage systems. He also has experience teaching university courses and technical courses. He currently works for Gamesa Electric.

Javier Pedraza



Javier Pedraza is a Business Manager and Project Manager with Technical and Management experience in Renewables, Power Electronics and Aerospace sectors. He holds a MSc in Electronic and Automation Engineering, MBA from IEDE and UEM, different professional courses from MIT, Stanford, Indian Institute of Management Bangalore (IIMB) and Texas University. His main areas of expertise are renewable energy and power electronics management, industrialization, procurement and technology in the European, MENA and LATAM regions, including Design, Industrialization and Supply Chain planning for Renewable Energy Generation systems. Javier currently works for Gamesa Electric.

Igor Cantero



Igor Cantero has a Ph.D. in Chemistry (University of the Basque Country, UPV/EHU, 1999) and works as R&D Manager at Cegasa Energía. Cegasa Energía is the legacy of a long standing company, founded in 1934. Energy Storage has been its core business since then and its team has accumulated a great deal of expertise in this field in combination with R&D Institutes and Universities. With all this experience, it has become a technological company based on a great capacity to apply advanced technologies to develop the best solution to any specific application.

Pablo García



Pablo García is currently an Associate Professor with the Department of Electrical, Computer, and Systems Engineering, University of Oviedo. During many years he worked in alternating-current (ac) drives, sensor-less control, AC machines diagnostics, magnetic bearings and signal processing. He is the co-founder of the ENFASYS start-up, focused on the development of solutions for the integration of energy storage and collaborative self-consumption applications. Nowadays he is focused on power converters working as a connection interface of renewable energy and storage systems to the electrical grid.

Jérémy Martin



IDr. Jérémy Martin received his Ph.D. degree in Electrical Engineering from the INP Toulouse (2010). He was an R&D engineer at ALSTOM Transport for four years. Since 2010, he has been working at the department of solar technologies of the CEA where he is responsible for strategy in power converters activities. His areas of expertise are high/medium power converters topologies for railway traction and PV power plants. His current activities focus on characterization of Silicon Carbide (SiC) and Gallium Nitride (GaN) semiconductors for converters prototyping in solar applications.

Darja Skrt



Darja Skrt works as a Project Manager and Technical Coordinator at cyberGRID GmbH & Co KG. She specializes in the fields of demand response and electricity markets, with a focus on distributed flexibilities aggregation. In her capacity at cyberGRID, she plays an active role in the Research and Innovation Technology Department focusing on the topics of battery energy storage systems and virtual power plants. Darja holds a B.S. degree in Mathematics from University of Ljubljana, Slovenia.

David Baraja Campesino



David Baraja Campesino graduated University of Valladolid in 2014 as Automation and Industrial Electronics engineer. In 2013 he joined GMV Innovating Solutions and for two years he was designing and testing embedded electronics for trains. He joined Siemens Gamesa Renewable Energies in 2015. Since 2015 he has been in charge of the SGRE's Offgrid hybrid plant controller and La Plana Hybrid facility controller control algorithms.

Jesús García



Jesús García has 36 years of experience working in the energy sector. He has worked with practically all generation technologies and always on innovation issues with deep knowledge of the possible options. He has worked for 15 years in Brussels and has a deep knowledge of the European context and its functioning that involves not only the European Commission as the main managing body of EU activities, but also the internal functioning of the other two fundamental bodies, the EU Parliament and the European Council. He currently works for EU Energy Solutions and Innovation S.L.
