# International Brokerage Event Brussels, 26-27/10/2017



# Siemens Sanayi ve Ticaret A.Ş. Şafak Karahan

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### **Description of the Organization**



Ingenuity for life





Power utilities and TSOs



Municipalities and DSOs



Renewable generation



Heavy industries



Manufacturing



Infrastructure and facilities

Digitalization

Grid control – grid applications – planning and simulation – data analytics

**Automation** 

Smart communication – smart metering – grid protection – grid automation – power quality, measurement and monitoring

#### Electrification

High-voltage substations – flexible AC transmission systems (FACTS) – high-voltage direct current transmission systems (HVDC) – grid access solutions – power transmission lines – medium-voltage power supply solutions

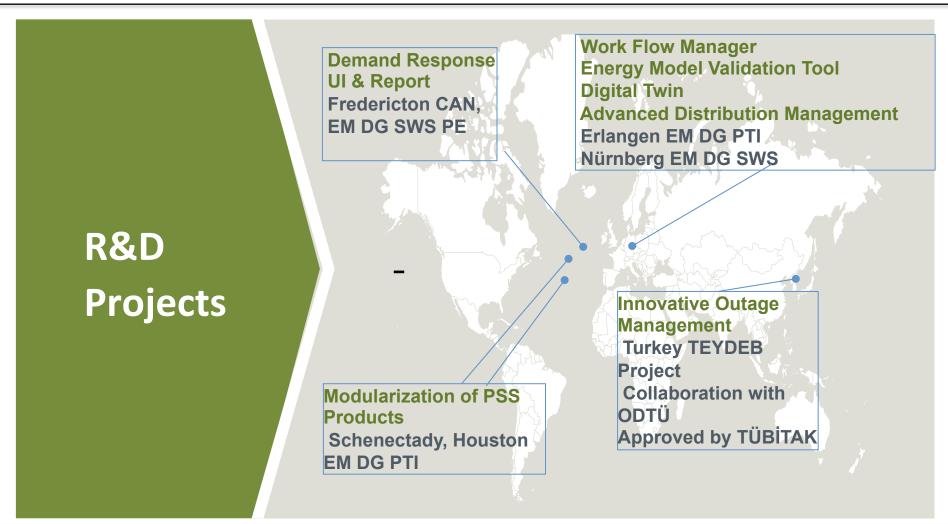
High-voltage switchgear and devices – medium-voltage switchgear and devices –

low-voltage switchboards and devices, busbar trunking systems – transformers

Service and support: Consulting and planning – Financing – Training – Conventional and digital services

### Description of the your research interest





### Description of the your research interest



#### **Energy Business Advisory**

#### **Power System Consulting**

#### **Software Solutions**

## Opening doors to future value creation

- Infrastructure development
- Business transformation
- Market advisory
- Transaction advisory
- Solution engineering
- Cyber Security Consulting

Complete set of analysis, design & optimization studies

- Steady-state system studies
- Load Flow, Short-Circuit Analaysis
- Dynamic system studies
- Transient system studies
- Protection & control system studies
- Power quality & earthing studies
- Planning of DSO's TSO's as well as Cities.

State-of-the-art system planning and data management

- Planning and simulation of power systems
- Planning and simulation of pipe networks
- Model and data management
- Dynamic and protection security assessments in operation

# LC-SC3-ES-5-2018-2020 Please add TITLE of the PROJECT IDEA ....



#### Objectives:

- Network operators procure balancing, congestion management and ancillary services from assets connected to the network both at transmission and at distribution level, based on cooperation among them.
- 80 This will enable more efficient and effective network management and optimisation, for the benefit of increased demand response and the ability to integrate increasing shares of renewables.
- TSOs and DSOs will use the same pool of resources: actions by both can
  mutually affect each other. In cooperation with market participants, they
  have to define the services they want to procure, and have to set up ways to
  procure them in a coordinated manner.

#### Expected results

- Solutions will contribute to a smart, secure and more resilient energy system through demonstrating cost-efficient model(s) for electricity network services that can be scaled up to include networks operated by other TSOs and DSOs.
- Siemens could develop new software or assist partners with Consulting in terms of Market Efficiency and Asset Management.

# LC-SC3-ES-6-2019 Please add TITLE of the PROJECT IDEA ....



#### Objectives:

 A number of tools and future technologies need to be developed, matured and tested to cover gaps and/or to prepare the energy system of 2030 and beyond.

#### Expected results

- Advance modelling and analysis tools will developed such as;
- the modelling of the future electricity market
- modelling and forecasting energy production from variable renewables
- the design and planning and operation of electricity grid
- Enhanced TSO / DSO collaboration and coordination tools

Siemens has their own R&D center located in Ankara, ODTU Teknokent and could assist project partners in terms of developing such tools.

# LC-SC3-SCC-1-2018-2019-2020 Smart Cities and Communities



#### Objectives:

 To achieve the necessary energy transition in cities, it is essential to increase energy systems integration and to push energy performance levels significantly beyond the levels of current EU building codes and to realize Europe wide deployment of Positive Energy Districts by 2050

### Expected results

- Self-Healing city parts could develop by Siemens. (Where the fault can isolated and cities could have sustainable energy)
- E-cars, energy storage systems, renewable energy sources in the city centers like roof top PV panels could be integrated via Siemens softwares and products to have resillience and stability on the entire city Networks.

## Consortium - profile of known partners (if any)



No	Partner Name	Type	Country	Role in the Project
01		RTD		
02		SME		
03		IND		
04				
05				
06				
07				
08				

## **Consortium - required partners**



No	Expertise	Type Country	Role in the project
01		RTD	
02		SME	
03		IND	
04			
05			
06			
07			
08			



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### Recommendations



- The presentation has to last up to 4 minutes (maximum)
- Do not overload your slides
- Provide weblinks to additional material
- Slides should be in English
- Do not use videos etc. they might be not supported by the Infoday IT system
- Send your presentations in PDF format to: <u>CoF@turkeyinh2020.eu until 23</u>
   <u>September 2016.</u>