

Partnering Opportunity

Profile Status: Published

Research & Development Request

LC-SC3-RES-1-2019-2020: Virtual Test Bench of Wind Drive Trains - Consortium looking for partners for Social Acceptance and manufacturers of wind drive train components

Summary

A research institute of a German university currently sets up a proposal for the call "LC-SC3-RES-1-2019-2020 - Developing the next generation of renewable energy technologies". The project will develop an experimentally validated virtual test bench for wind drive trains. The organization is looking for research partners (from academia and industry) to address issues related to social acceptance or resistance to wind energy and manufacturers of wind drive train components.

Creation Date	27 November 2019
Last Update	28 November 2019
Expiration Date	03 January 2020
Reference	RDDE20191127001
Public Link	https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/ad760b39-adc4-46ed-b5b9-d54028b709b8

Details

Description

A research institute of a German university, which is active in the area of drive systems and power electronics is looking for partners for the above mentioned call.

The aim of the proposal is to develop an experimentally validated virtual test bench for wind drive trains using analytical and data-based methods considering uncertainties.

The consortium already comprises of several European wind drive train institutes as well as companies.

The tasks of the potential partners are:

- Addressing issues related to social acceptance or resistance to wind energy
- Cooperation with manufacturers of wind drive train components (esp. power electronics and

Ref: RDDE20191127001

generators)

- Participation of wind industry to supply the project with statistical data concerning failures and outage.

The deadline of the call is 21 April 2020, the client will consider EOIs until 3 January 2020. However, early EOIs are preferred.

Advantages and Innovations

Modeling the drive train model (virtual model) considering components interactions.

Experimental verification using two full wind drive train test benches.

Considering the uncertainty in physical modelling.

Developing comprehensive life time estimation methods based on the experimentally verified models and uncertainty

Interdisciplinary cooperation including generator, power electronics, gearing, shaft.

Keywords

Technology

04002005	Generators, electric engines and power converters
04002009	Turbines
04005008	Wind energy
11001	Socio-economic models, economic aspects

Market

06003003	Wind energy
----------	-------------

NACE

M.72.1.9	Other research and experimental development on natural sciences and engineering
----------	---------------------------------------------------------------------------------

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

Contact Person

Pawel Zebrowski

Phone Number

+48 91 449 43 64

Email

pzebrowski@zut.edu.pl

Open for EOI : **Yes**

Dissemination

Relevant Sector Groups

Intelligent Energy

Client

Type and Size of Organisation Behind the Profile

University

Year Established

0

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English
German

Client Country

Germany

Partner Sought

Type and Role of Partner Sought

Partners are sought from industry and academia to perform the following tasks within the project:

- addressing issues related to social acceptance of/ resistance to wind energy and related socioeconomic aspects and linking the technical developments of the project with aspects of social acceptance and environmental impact - if possible a partner from social sciences and humanities (SSH).

Cooperation with

- wind industry key players

-->Preparation of test data (statistical data on failures)

- power electronics/ wind inverter (manufacturer or design company) --> Supporting the development of a life time calculation tool for wind inverters

- generator (manufacturer or design company) --> Participation in the development of a reliable calculation tool for the bearing current

Type and Size of Partner Sought

SME 11-50, University, R&D Institution, >500 MNE, 251-500, SME 51-250, >500

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

Societal challenges

Call title and identifier

LC-SC3-RES-1-2019-2020: Developing the next generation of renewable energy technologies

Submission and evaluation scheme

single stage

Coordinator Required

No

Deadline for EOI

03 Jan 2020

Deadline of the Call

21 Apr 2020

Project Duration

1872 week(s)

Weblink to the Call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-1-2019-2020;freeTextSearchKeyword=LC-SC3-RES-1-2019-2020;>