



Sensing & Remote Monitoring in Marine Renewable Energy facilities

(S&RM in MRE)

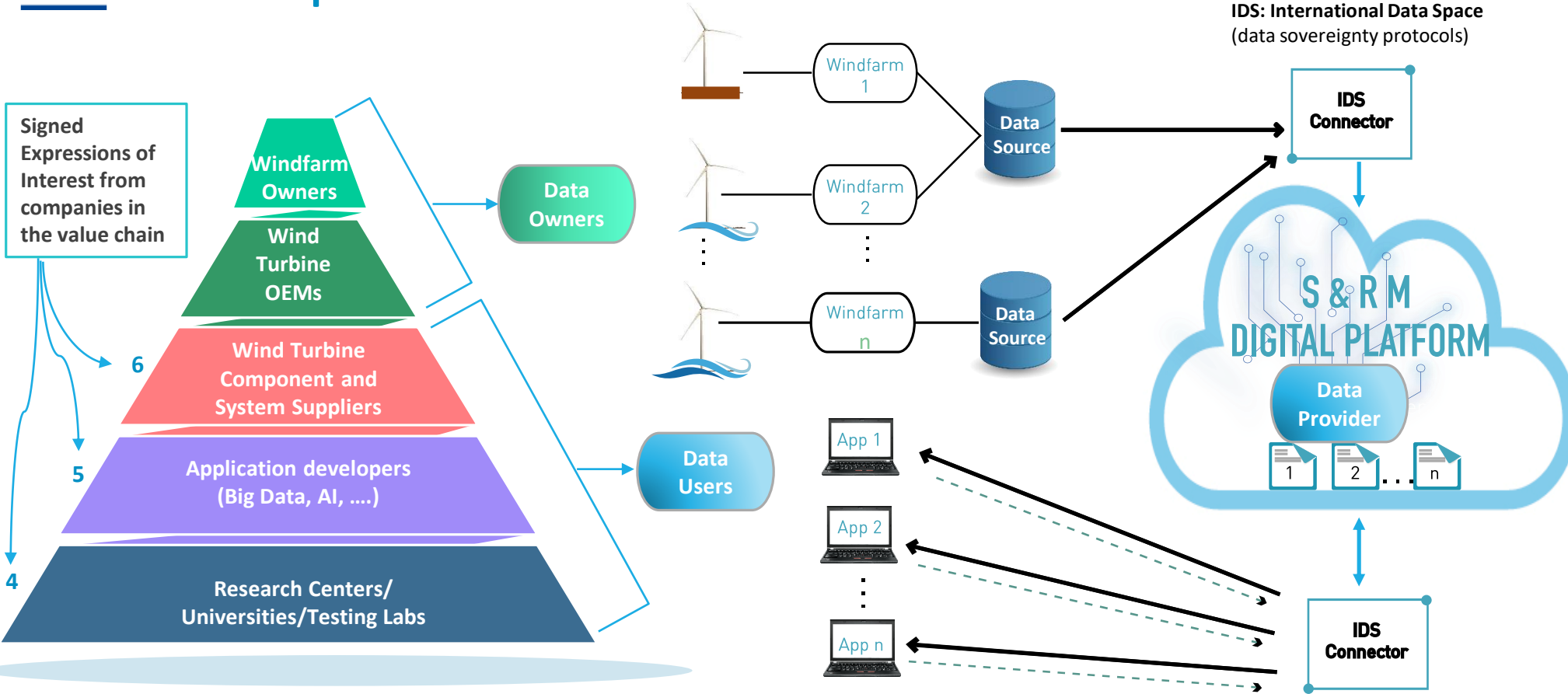
S3P Energy “Marine Renewable Energy” (MRE) partnership
Pilot Action on Interregional Innovation Projects

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Sensing and Remote Monitoring (S&RM) in Marine Renewable Energy (MRE): Development of the “S&RM DIGITAL PLATFORM”



Challenge: Only *Windfarm Owners* and *Wind Turbine OEMs* have access to the data collected from the wind energy turbines in operation and therefore value extracted out of data is only at the “top of the value chain”. S&RM business case aims to **facilitate access to data produced in critical components of offshore wind turbines under real operating conditions**, in order to generate value for companies at all levels of the value chain, with a special focus on the *Wind Turbine Component and System Suppliers*.

Investment project: digital platform (*data provider*) which will allow sharing of offshore windfarms data among *data owners* and *data users* creating benefits for companies all along the value chain. Companies in the MRE value chain (*data users*) will be able to use the data and services accessible through the platform and provide unique and innovative solutions to the *data owners*, through monitoring and data analytics applications.

S&RM Business case: Business model and lessons learnt

BUSINESS MODEL

- ❖ **Investment cost:** 1 M€ during 2020-2021 (to be further detailed by 31/12/2019)
- ❖ **Funding of investment:**
 - 600.000€ equity
 - 200.000€ regional funding
 - 200.000€ EU funding
- ❖ **Data Provider:** Start-up with selected shareholders: Research entities, venture capital, entrepreneur, (+ICT SME?, to be confirmed)
- ❖ **Revenue streams** (starting late 2021):
 - Payments to *data owners* that upload their data in the platform
 - Invoicing to *data users* for data Access: per Tbyte, per time of usage, per “kind” of data, . . .
 - Income for *data brokerage services*: taxonomy, data “packing”, data quality certification,
 - Income for *data analytics services*: basic algorithms, AI applications (further stages of the platform development, 2022-2023)

LESSONS LEARNT

- ❖ **European regions** lack the interest, expertise and resources to mobilize relevant collaborative interregional investments in technological domains without boosting and co-investment from the EC.
- ❖ S&RM Digital platform has been very welcome by **European SMEs and research entities** that need the access to real operational data from windfarms in order to generate value for their customers.
- ❖ The **business model** is feasible and sustainable if data owners are open to share data. Key aspects to achieve their involvement: clear identification of benefits (payment for data, services) and secure and trustworthy data governance.
- ❖ **Big lead firms** (Windfarm Owners and Wind Turbine OEMs) are reluctant to participate in collaborative initiatives with suppliers and/or competitors if there is not a relevant political impulse or clear short-term economical benefit.
- ❖ IDS concepts and methodology for **data sovereignty and governance** provide the right framework to generate trust in companies by implementing technical and legal solutions for data sharing initiatives.



THANK YOU

