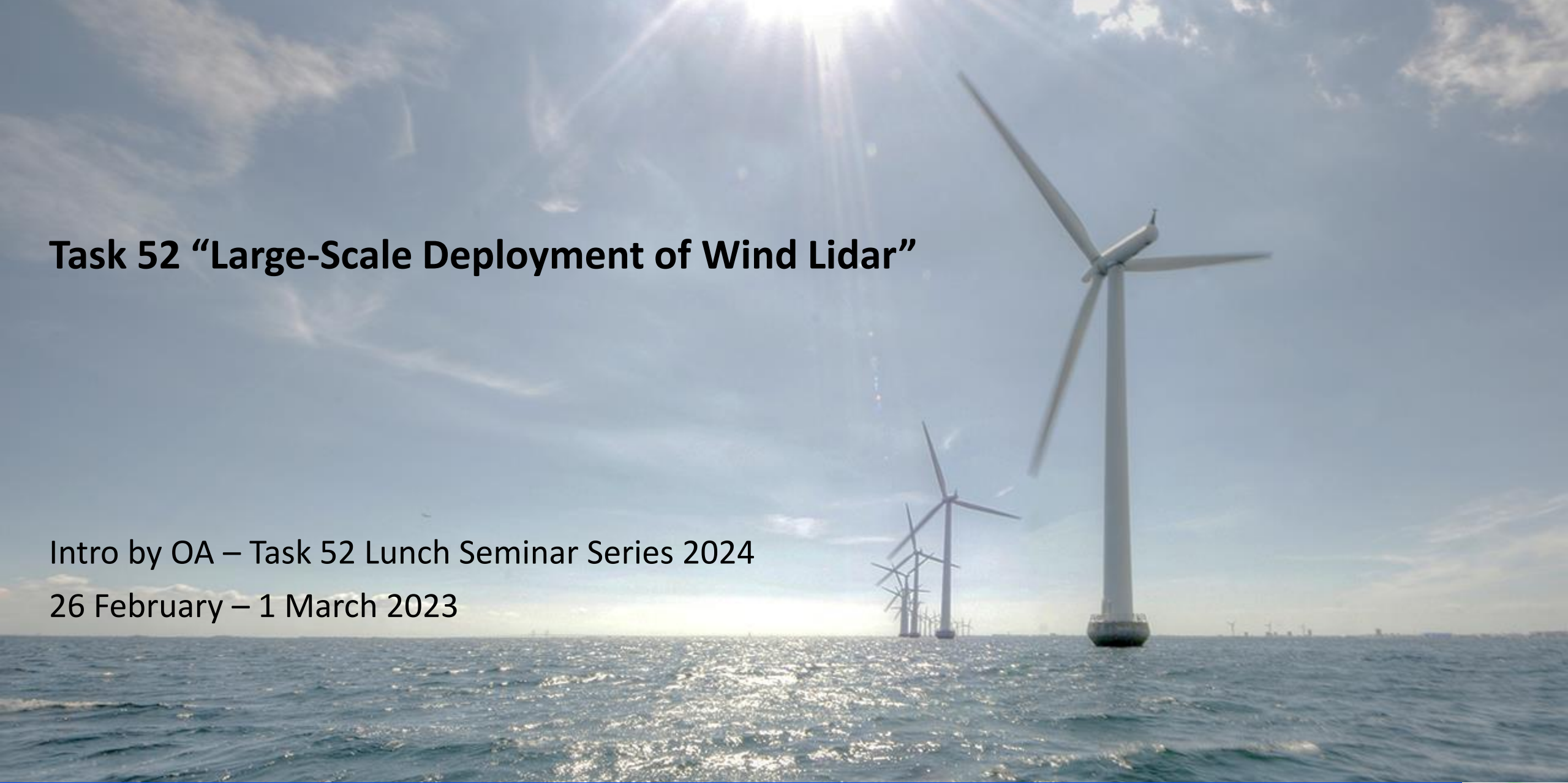


# Task 52 “Large-Scale Deployment of Wind Lidar”

Intro by OA – Task 52 Lunch Seminar Series 2024

26 February – 1 March 2023



<https://iea-wind.org/task52/>

Technology Collaboration Programme  
by IEA



[IEA Wind Home](#)

[Task 52](#)

[Participation](#)

[Work Plan and Deliverables](#)

[Events](#)

# IEA Wind TCP Task 52

Large-Scale Deployment of Wind Lidar



# Strategy → Objectives of IEA Wind Task 52 ('Lidar Task')

## Mission

Our members work together on research to **make wind lidar the best and preferred wind measurement tool for wind energy applications.**

## Vision

Using wind lidar will be easy. It will bring advantages and opportunities that **enable the (large-scale) deployment of wind energy.**

## Values

Innovation, inclusion, diversity, cooperation, and openness.

- **Support the large-scale deployment of wind lidar** ... by addressing key themes and achieving relevant deliverables
- **Integrating both industry and academia** for most innovative solutions and application-oriented training of young researchers
- **Strong collaboration with other Tasks** to share our knowledge with other applications within the industry

# Introduction of Task 52 work programme

Four themes → (currently) seven working groups .. working on one deliverable each

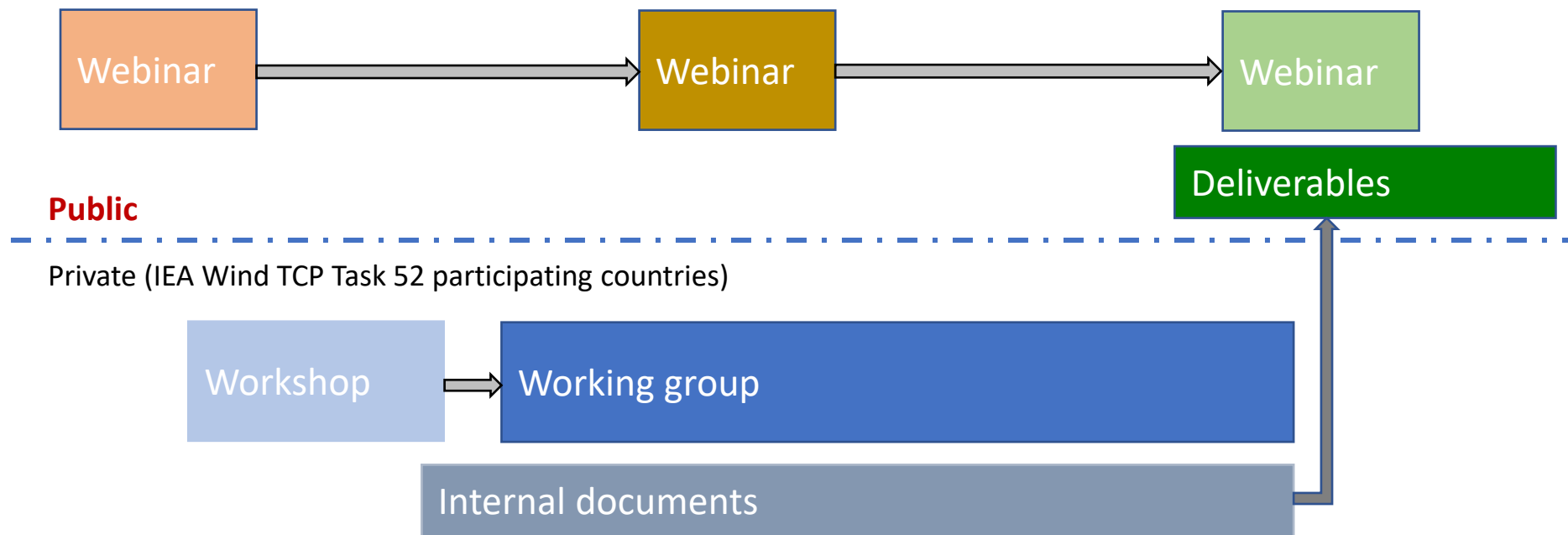
	Theme	Working groups (active)
# 1	<b>Universal inflow characterisation</b>	(#1) Turbulence Intensity (TI) by Lidar (#2) Lidar Assisted Control (LAC)
# 2	<b>Replacing met masts</b>	(#3/8) Lidar in Complex Terrain – ground/nacelle based (#4) Lidar in Cold Climate
# 3	<b>Connecting wind lidar</b>	(#5) Digitalization (#7) Lidar Ontology
# 4	<b>Accelerating offshore wind deployment</b>	(#6) Scanning Lidar Offshore

Check our website <https://iea-wind.org/task52/> to find out how to join the individual working groups.

# Introduction of Task 52 work programme

## Task format

Forming → Storming → Norming → Performing .. of Task 52 Working groups:



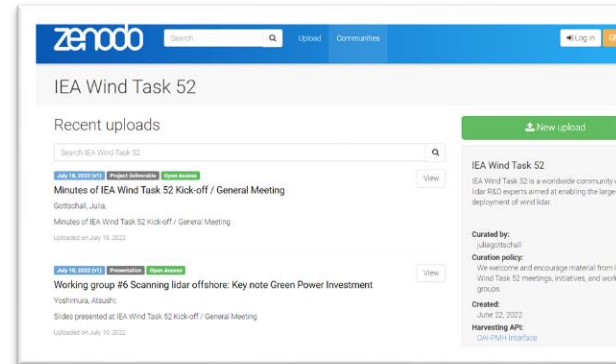


# Join our Task 52 community ...

## General Meeting 2024 (in-person)

→ 14-15 May 2024

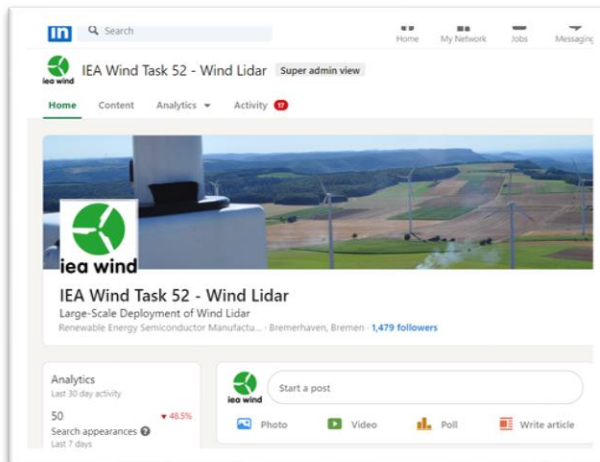
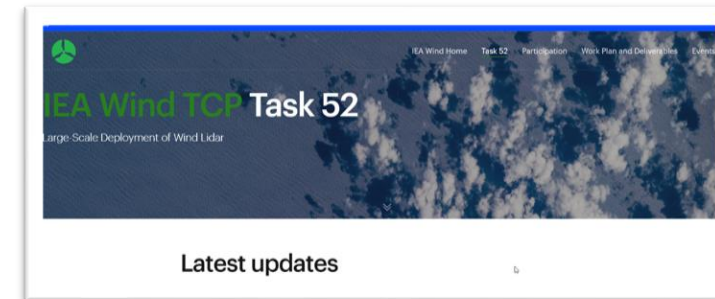
→ Fraunhofer ENIQ / EUREF  
Campus, Berlin



Zenodo community  
(<https://zenodo.org/communities/ieawindtask52/>)  
for published documents

Our website:

<https://iea-wind.org/task52/>



1,794 (Stand: Feb 2024)  
followers on LinkedIn  
(<https://www.linkedin.com/showcase/4037465/>)

Mailing list for regular newsletter (every six months) and event invitations – to be added (and for all further requests) send e-mail to [IEAWind.Task52@iwes.fraunhofer.de](mailto:IEAWind.Task52@iwes.fraunhofer.de)



# Agenda .. this week

## IEA Wind Task 52 Lunch Seminar Series (26 Feb – 1 March 2024, 13-14 CET)

### **Monday, 26 Feb 2024** – Topic: *Lidar Assisted Control* (led by David Schlipf)

- Shigang Yao (Goldwind) “Goldwind’s Experiences after 7 years of Lidar Assisted Control”
- Jenni Rinker (DTU) “LAC Research at DTU”

### **Tuesday, 27 Feb 2024** – Topic: *Standardisation of Lidar Measurements* (led by Richard Frühmann for Task 52 TI Working Group)

- Nikolai Hille (DNV) “New approaches to increase the acceptance of lidar measured TI in standardization”
- Peter Clive (Black & Veach) “From fixed masts to floating lidars - a journey through wind measurement standards”

### **Wednesday, 28 Feb 2024** – Topic: *Lidar in Cold Climate* (led by Sara Koller)

- Pekko Tuominen (Vaisala) “Vaisala CL61 and the potential of measuring depolarization in wind energy applications”
- Alexander Stoekl (Energiewerkstatt) “Comparative data availability of LiDAR measurements at Alpine sites”

### **Thursday, 29 Feb 2024** – Topic: *Connecting Wind Lidar*

- Yuriy Marykovskiy (OST) “Wind Energy Domain Semantics Overview”
- Francisco Costa (SWE) “Making lidar ontology concepts available and reusable”

### **Friday, 1 March 2024** – Topic: *Nacelle Lidar in Complex Terrain* (led by Andrew Black)

- Niels Troldborg (DTU) “How does complex terrain change the power curve of a wind turbine?”
- Steffen Raach (Sowento) “Nacelle-based lidar measurements in the induction zone for power curve analysis”