

IEA Wind TCP Task 52 (Wind Lidar)

Working group (7): Lidar Ontology

Objectives:

The work of the WG7 will concentrate on following main objectives:

- Develop a formal, clear and dedicated controlled vocabulary for lidar terms
- Convert lidar knowledge into FAIR (Findable, Accessible, Interoperable and Reusable) lidar knowledge
- Long term updates and maintenance of the ontology

Planned deliverables and timeline:

- Open access journal paper (MDPI - remote sensing) on the Lidar Ontology:
 - The article "*An Ontology for Describing Wind Lidar Concepts*" is currently undergoing the review process.
 - Overleaf template for tracking and feedback → <https://www.overleaf.com/5753524265pvzjgdwjmpft>

Group approach:

- The newest Lidar Ontology version is hosted [here](#)
- Ideally, the version is under **continuous** update. Due to the evolution of lidar applications and technology, frequent addition and edition of terms is needed. This requires regular meetings.
- The group holds regular meetings, approximately every second week.
- Possible alignment with other existing ontologies related to wind energy (e.g., Task 37,43). WG7 is in contact with Task 43, aiming to identify potential synergistic opportunities.
- Along with the publication, a Python-based tool has been developed to demonstrate the capabilities and advantages of the Lidar Ontology. A short webinar was given on March 1st within the Lunch Seminar Series held by IEA Task52 , 2024 and is publicly available [here](#).

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