# Deliverable Summary Report: D3.2

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*Work Package:*        *WP3: Exploitation and Commercialization'*
*Deliverable name:*    *D3.2 – 'Vegetation layers from Copernicus Global Land Service distributed '*
*Deliverable status:*  *Completed*

## Deliverable description

The purpose of this deliverable is to make vegetation layers from the Copernicus global land service available to the wind modelling community in general – and to the users of windPRO and WAsP in particular.

## Activities and tasks completed

EMD has been downloading and processing of the vegetation layers from the global land service of the Copernicus system. However, as more datasets are being continuously released into the global land service, this is an ongoing task. At this time of writing (2019-03-27), the following roughness datasets have been released to the online-service of EMD's windPRO tool (in a data format also usable for WAsP): Corine 2012, CGLS-LC100m (Africa demonstration dataset). Corine 2018 data will be released/added as soon as they are available for redistribution. In addition to the direct vegetation layers used, then technology developed in the InnoWind project has been used to speed-up integration and distribution of other datasets. This include general maps such as satellite imagery, topography-maps and local orthophotos. Furthermore, elevation data and bathymetry data have been added to the data-service by aid of InnoWind derived methods and tools. A full list of data delivered either directly from - or by aid of methods from the 'fast-track' are available here:

http://help.emd.dk/mediawiki/index.php?title=Category%3AInnoWind

In addition to the above data available for users of windPRO and WAsP, then the CGLS-LC100m data was used on a commercial task to map wind resources in Sudan. Best quality data sources of roughness and elevations (CGLS_LC100m and ALOS-AW3D30) was used in mesoscale and microscale modelling for the Republic of Sudan. The map is available from this URL: http://sudan.windprospecting.com

## Deliverables and outcomes

Outcome from this deliverable include:
- Tools for efficient data-processing, handling and distribution of general spatial data
- Corine 2012 data as roughness dataset
- Copernicus global land cover (100m, Africa demonstration) as roughness dataset
- Commercial use of CGLS-LC100m data for wind resource assessment in Sudan