The IEA Task 33 ‘Reliability Data – Standardization of Data Collection for Wind Turbine Reliability and Operation Maintenance Analyses’ is dealing with standardized, well-structured databases for optimizing reliability and maintenance procedures. The aim is to address the different developments of data collection and failure statistic and to agree on standards and overall structures.

The purpose is to bring together the present actors in the industry and research community to create synergies and agreements in the many R&D activities already on-going in the field of statistical failure analysis. The work in Task 33 started in October 2012. In total 22 different companies and institutes from 9 different countries were actively involved in the task.

IEA Wind Task 33 aims at supporting reliability improvement and optimizing operation and maintenance (O&M) procedures of wind turbines through analyses of reliability data. The Task 33 team has compiled a joint document, which will be published as the “Recommended Practices for Data Collection, reliability Assessment and O&M Optimization” in September 2016.

Often the initial question when start dealing with reliability is: Which data to collect? What standard to apply? To make use of these recommended practices it is important to firstly be aware of one owns role and the purpose of the individual task. Then, via identifying suitting analyses and evaluations the document tries to lead to necessary data and appropriate standards and guidelines. Descriptive use cases explain this approach in general and exemplary explain how to find an individual solution.

This approach was presented to and discussed with representatives from wind industry and the feedback was incorporated. Now, the Recommended Practices for Data Collection and Reliability Assessment for O&M Optimization present a proposal how to collect reliability data, which taxonomies to apply, and why to make use of a commonly driven database and library of reliability characteristics.

The Recommended Practices are published in a preliminary version during the WindEurope summit.