WISLINE Activities and progress plan

	Deliverable/Task	2015				2016				2017				2018			
WP1	**Improved predictions of atmospheric icing by upgrading the cloud microphysics scheme in MET Norway's operational AROME weather prediction system**																
WP1.1	AROME with modified microphysics scheme implemented																
WP1.2	AROME with Thompson scheme implemented																
WP1.3	An improved AROME cloud microphysics scheme, validated against the Thompson scheme and observations																
WP1.4	Paper 1: A comparison of the performance of (i) the current AROME microphysics scheme; (ii) the revised AROME microphysics scheme; (iii) the Thompson scheme; – all running in AROME - against validating observations of icing events																
WP2	**Establish high-resolution dataset for past, present and future weather and climate**																
WP2.1	First results from high-resolution hindcast at 2.5km forced by global reanalysis data																
WP2.2	Validation of results from alternative 2.5km forcing using new microphysics scheme																
WP2.3	First results from high-resolution surface modelling at 1km forced by data from hindcast 2.5km																
WP2.4	First results from scenario calculation at 2.5km and 1km grids																
WP2.5	Validation of procedure across time scales from historical climate to future scenario																
WP2.6	Establish data archive and interface with impact modelling in WP3 and WP4																
WP3.1	**Atmospheric icing**																
WP3.1.1	Implement current post processing routines for ice load calculations using AROME data.																
WP3.1.2	Validation with available observations (e.g. Ålvikfjellet in Hardanger) and historically used design values.																
WP3.1.3	Apply the improved AROME and run it for the years 2060-2070 based on output from CMIP5 21st century runs with NorESM, to obtain a future icing climatology for Norway, and compare with present climate data from WP2																
WP3.1.4	Develop recommendations on the use of AROME data in combination with other downscaling model tools for design ice load calculations.																
WP3.2	**Extreme wind in complex terrain**																
WP3.2.1	Carry out calculations of extreme wind from the hindcast runs and compare the result with data from selected observational sites																
WP3.2.2	Study different techniques for downscaling of extreme winds from the NWP calculations and their applicability in complex terrain																
WP3.2.3	Develop recommendations and methods to combine different downscaling methods suitable for different terrain																
WP3.2.4	Apply the recommendations to past and future climate simulations.																
WP4	**Forest damage from wind and snow**																
WP4.1	Data preparation forest																
WP4.2	Model forest damage and wind																
WP4.3	Maps																
WP4.4	Test case extreme event																
WP4.5	Publication: Modelling snow and wind damage risks on forests																
WP5.	**Data Services.**																
WP5.1	Open data access through a MET operational data portal																