

Annex Checklist for the quality assurance of meteorological data

File reference:

Organisation/prepared by:

Date: YYYY-MM-DD

report title report no. date:

Test point	Assessment ^{a)}	Chapter and/or comment
The task		
general information listed		
project description presented		
objective of the meteorological measurements explained		
The site		
site inspection conducted and documented		
local map available, with obstacle heights		
terrain structure (orography) described		
usage structure described (with any special aspects)		
Meteorological measurement		
site description		
station's name and height above sea level		
station's coordinates		
panoramic photographs and photographs of the measuring facility (up-to-date)		
Type of measuring system		
cup anemometer with wind vane	<input type="checkbox"/>	
ultrasound anemometer, 2D	<input type="checkbox"/>	
ultrasound anemometer, 3D	<input type="checkbox"/>	
other: _____	<input type="checkbox"/>	
sensor height		
standard height 10 m above ground	<input type="checkbox"/>	
other height: _____ m above ground	<input type="checkbox"/>	
undisturbed inflow		
yes	<input type="checkbox"/>	
no	<input type="checkbox"/>	
Functional test before/after the measurement:		
yes	<input type="checkbox"/>	
no	<input type="checkbox"/>	
Test interval for measurement accuracy: manufacturer's instructions observed		
yes	<input type="checkbox"/>	
no	<input type="checkbox"/>	
conventional wind sensor: maximum 2 years		
yes	<input type="checkbox"/>	
no	<input type="checkbox"/>	

Test point	Assessment ^{a)}	Chapter and/or comment
measured parameter <ul style="list-style-type: none"> • wind direction <input type="checkbox"/> • wind velocity <input type="checkbox"/> • turbulence <input type="checkbox"/> Other meteorological parameters: <hr/>		
measurement period		
Spatial representativeness of the measurements for the particular application has been established (if not part of the immission forecast as per checklist in VDI 3783 Part 13).		
<ul style="list-style-type: none"> • topographic map; location of the measuring station (north arrow) and scale • embedding in the topography • effects of local wind systems (mountain/valley, land/sea breezes, cold air drainage) recorded 		
Data acquisition		
measurement interval $\leq 10 \text{ min}$ <input type="checkbox"/> averaging period $\leq 1 \text{ h}$ <input type="checkbox"/>		
Processing the measurements		
preparation of an AKTerm (3D sonic data; treatment of nocturnal turbulence)		
preparation of an AKS (2D measurement, e.g. cup anemometer/wind vane); other source of turbulence information		
data dropouts in %		
Analysis and display of the meteorological data		
frequency distribution of wind directions (wind rose) presented graphically		
preparation of an intensity wind rose (in TA Luft classes)		
preparation of an AK classes rose		
percentage of weak wind conditions as per TA Luft		
statement on temporal representativeness		
statement on spatial representativeness		
verbal description and interpretation of the results of the meteorological measurements		

Test point	Assessment ^{a)}	Chapter and/or comment
Verbal evaluation		
	requirements met <input type="checkbox"/> requirements not met <input type="checkbox"/>	

^{a)} Evaluation of the requirements according to the following criteria:

- X met
- P plausible
- E not applicable

Date: Signature: