

NEW WORK ITEM PROPOSAL (NP)

PROPOSER: Germany	DATE OF PROPOSAL: 2021-01-14
DATE OF CIRCULATION: 2021-02-05	CLOSING DATE FOR VOTING: 2021-04-30

IEC TC 88 : WIND ENERGY GENERATION SYSTEMS

SECRETARIAT: Denmark	SECRETARY: Mrs Christine Weibøl Bertelsen
NEED FOR IEC COORDINATION:	PROPOSED HORIZONTAL STANDARD ☐ Other TC/SCs are requested to indicate their interest, if any, in this NP to the TC/SC secretary
FUNCTIONS CONCERNED: ☐ EMC ☒ ENVIRONMENT ☐ QUALITY ASSURANCE ☒ SAFETY	

TITLE OF PROPOSAL:

Decommissioning and preparation for recycling
☐ STANDARD ☒ TECHNICAL SPECIFICATION

PROPOSED PROJECT NUMBER: 61400-28-2

SCOPE

(AS DEFINED IN ISO/IEC DIRECTIVES, PART 2, 14):

In the scope of IEC CD 61400-28 Technical Specification Wind energy generation systems – Through life management and life extension of wind power assets, limited information on dismantling is given.

Annex I.1 mentions merely:

Through-life management requires the following inputs

- [...]
- Decommissioning and disposal procedures, weight and nature of the different materials included in each major component.

This proposal is to cover the scope of decommissioning and preparation for recycling.

The intent is to describe the tasks and considerations of each of the steps of the process.

Existing standards will be considered.

With regard to what happens to the materials after dismantling and loading on transport means: the proposed scope is limited to preparing the materials for shipment from site to be re-used in any way or form, providing information about sizes and composition, however excluding the actual re-use or recycling methods as that is an industry on its own and is driven by its own legal, environmental and economic forces.

This is best achieved by renaming the existing PT 61400-28 to PT 61400-28-1 and to have this new initiative called 61400-28-2 TS because:

- this will not interfere with the process of releasing 61400-28-1
- equally well not to wait until the 61400-28-1 is up for decision on its further course after feedback.

PURPOSE AND JUSTIFICATION

INCLUDING THE MARKET RELEVANCE AND WHETHER IT IS PROPOSED TO BE A HORIZONTAL STANDARD.

MARKET RELEVANCE SHOULD BE ADDRESSED BY INDICATING THE NEED FOR THE CORRESPONDING STANDARDS WORK AND ITS GLOBAL RELEVANCE (SEE ISO/IEC DIRECTIVES, PART 1 ANNEX C)

IF PROPOSED AS A HORIZONTAL STANDARD, IDENTIFY AS POSSIBLE, THE CORRESPONDING APPLICABLE GUIDE(S) AND ASSOCIATED ADVISORY COMMITTEE(S) (SEE GUIDE 108).

With more and more turbines build around the year 2000 reaching end of life, the activity to deal with these turbines is increasing to a volume that warrants to provide a Technical Standard. The usual market approach is to stretch the life of the turbines as currently covered by 61400-28 Edition 1, so turbines continue to provide value. This usually is the economically most attractive option.

When it then comes to dismantling the turbines, an initial wave of rudimentary demolition methods have been applied that raised concern about environment, health and safety.

In Germany and France, initiatives are started to prepare the minds to no longer leave it to forces in the market as how to do the dismantling and recycling.

This proposal has care for the environment as one of the aims and therefor Guide 109 is of relevance.

PLEASE SELECT ANY UN SUSTAINABLE DEVELOPMENT GOALS (SDGs) THAT THIS DOCUMENT WILL SUPPORT. FOR MORE INFORMATION ON SDGs, PLEASE VISIT OUR WEBSITE AT [HTTPS://WWW.IEC.CH/SDG/](https://www.iec.ch/sdg/)

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|--|---|
| ☐ GOAL 1: No Poverty | ☐ GOAL 10: Reduced Inequalities |
| ☐ GOAL 2: Zero Hunger | ☐ GOAL 11: Sustainable Cities and Communities |
| ☐ GOAL 3: Good Health and Well-being | ☒ GOAL 12: Responsible Consumption and Production |
| ☐ GOAL 4: Quality Education | ☒ GOAL 13: Climate Action |
| ☐ GOAL 5: Gender Equality | ☐ GOAL 14: Life Below Water |
| ☐ GOAL 6: Clean Water and Sanitation | ☐ GOAL 15: Life on Land |
| ☒ GOAL 7: Affordable and Clean Energy | ☐ GOAL 16: Peace, Justice and Strong Institutions |
| ☐ GOAL 8: Decent Work and Economic Growth | ☐ GOAL 17: Partnerships for the Goals |
| ☐ GOAL 9: Industry, Innovation and Infrastructure | |

TARGET DATE(S)

FOR FIRST CD:

2022-02-28

FOR TS:

2023-06-30

ESTIMATED NUMBER OF MEETINGS:

6

FREQUENCY OF MEETINGS:

3 per year

DATE OF FIRST MEETING:

2021-04-01

PLACE OF FIRST MEETING:

Virtual (Precise date to be decided)

RELEVANT DOCUMENTS TO BE CONSIDERED:

For guidance of the TS:

1. IEC Guide 109:2012 Environmental aspects – Inclusion in electrotechnical product standards

Documents to be used as potential outlines and/or drafts for the TS:

1. WindEurope & VDMA: TaskForce Dismantling and Decommissioning, Decommissioning of Wind Turbines – Industry Guidance Document. This document was specifically created as a draft proposal for this IEC 61400-28 scope extension. Attached as annex.
2. DIN SPEC 4866 Sustainable dismantling, disassembly, recycling and recovery of wind turbines; Text in German and English, Free downloadable.
3. Bundesamt Umwelt, Germany. Entwicklung eines Konzepts und Maßnahmen für einen ressourcensicheren Rückbau von Windenergieanlage, July 2019. In German with English abstract.
4. Ministère de la transition écologique et solidaire. France. Programmmations pluriannuelles de l'énergie (PPE), Public consultation ended February 2020. Documents are available in French as well as English.

Documents for info to the development of the TS:

1. IEC TS 61400-28 Through Life Management and Life Extension of Wind Farms (suggested to become 61400-28-1) See CD document circulated with deadline 2021-04-23 (88/798/CD)
2. Positionspapiers zum Thema "Produktverantwortung für WEA-Hersteller" (Position paper on topic: Product responsibility for Wind Turbine OEMs), May 2020.
3. European Commission, Environment. Topical website with information about policy and legislation w.r.t. waste.
4. German Ministry of Environment, topical website to wind turbine decommissioning, in German.
5. ETIP Wind How wind is going circular - blade recycling, September 2019.

RELATIONSHIP OF PROJECT TO ACTIVITIES OF OTHER INTERNATIONAL BODIES:

The work of the IEC 61400-28-2 will start immediately, not interfering with the IEC 61400-28-1 that is in development currently.

LIAISONS WITH INTERNATIONAL BODIES:

DIN TECHNICAL SPECIFICATION 4866

NEED FOR ISO COORDINATION:

DOCUMENT MATURITY:

☐ A DRAFT IS ATTACHED FOR COMMENT*☒ AN OUTLINE IS ATTACHED

* Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

CONCERNS KNOWN PATENTED ITEMS (SEE ISO/IEC DIRECTIVES, PART 1)

☐ Yes☒ No

PATENT DESCRIPTION:

WE NOMINATE A PROJECT LEADER IN ACCORDANCE WITH ISO/IEC DIRECTIVES, PART 1

LAST NAME:

FIRST NAME:

E-MAIL:

COUNTRY:

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COMMENTS AND RECOMMENDATIONS FROM TC/SC OFFICERS:

WORK ALLOCATION:

☒ NEW PROJECT TEAM☐ NEW WORKING GROUP☐ EXISTING WORKING GROUP:

IF APPROVED, THE NEXT STAGE SHOULD BE:

☒ CD☐ DTS

REMARKS FROM TC/SC OFFICERS:

The proposed 61400-28-2 Decommissioning and preparation for recycling work is an extension of the work going on in PT 61400-28.

PT 61400-28 and the TS 61400-28 which is under development will therefore be renamed to PT 61400-28-1 and TS 61400-28-1.

APPROVAL CRITERIA

- Approval of the new work item proposal by a 2/3 majority of the P-members voting;
- At least 4 P-members in the case of a committee with 16 or fewer P-members, or at least 5 P-members in the case of committees with more than 17 P-members, have nominated or confirmed the name of an expert and approved the new work item proposal.