Perceptions of impact-based warning information for ice-throw risk: A Norwegian survey

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Risk management for wind farms has become more standardized in terms of calculating acceptable risk criteria, but so far the communication of possible risks and their consequences for societal actors has not evolved into a validated set of best practices. The current state of knowledge about best practices for ice throw/fall risk communication is still in an exploratory phase, and empirical research on this is fragmented. The main attempt toward a consolidation of best practices in ice throw/fall risk communication has been part of the IEA Wind TCP Task 19 work. Its mandate is to provide international guidelines for ice risk assessment. A report that was published in 2018 (Krenn et al., 2018) is currently being updated. The work reported in this presentation is part of the project 'Wind Energy in Icing Climates', funded by the Norwegian Research Council and wind farm operators in Norway. The Norwegian Meteorological Institute has executed a national survey with the specific aim to develop recommendations for communication of the risk of ice throw from turbines in Norwegian wind farms. The survey aimed at getting insight into perceptions of the general public in Norway about ice-throw risk, and the perceived value of different communication tools and formats of ice-throw risk information for Norwegian wind farms. We discuss findings on a range of topics, including people's familiarity with wind turbine parks, their weather risk information seeking patterns, people's understanding of impact-based warnings for ice-throw risk, and their behavioural capacity to mitigate possible negative impacts emerging from ice throw risks. Based on the survey findings, we provide a systematic set of recommendations regarding communication and formatting of ice throw risk warning information.