

Aviation Lights: The experience of upgrading the existing fleet in the German Market ensuring safety and reducing light pollution

May 2022

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The non-stop flashing of wind turbines is soon coming to an end



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Activations Area

- Activation area around the wind turbine: 4,000 m radius, 600 m above ground
- Automatic deactivation if there is no signal and no error message - at the earliest 10 minutes after the last signal
- Manual activations are automatically deactivated earliest after 240 minutes



Activations Area

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At the Wind Turbine

- Mandatory for Wind turbines with a total height of 100 m or more
- The visible lights should be of the type "hazard warning lights LEDmin MKII" ("Feuer W Rot (ES)")
- Additional infrared lights are required
- Wind turbines between 150 m and 315 m must also be marked halfway up
- Lights will be switched on less than 50 to 150 lux





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Solution

How to make it possible?





Customized Upgrade according to the turbine type

SMART AVIATION LIGHT

- 1. Light units upgrade or replacement using Siemens Gamesa standard interfaces
- 2. Original aviation control cabinet replaced with a combined control and UPS (Uninterruptible Power Supply) cabinet with the same mechanical and electrical interfaces as the originally installed
- 3. Interface to turbine controller is re-established for continued SCADA monitoring and intensity control
- 4. For network security communication will be separated on a dedicated VLAN





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Benefits

Why is this important?



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Thank you!

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