Senvion upgrade: on-demand activation of the aviation lights at night (BNK)

Public acceptance of wind energy is an important topic. To improve public acceptance in Germany, the new Energy Collection Act (EnSaG) will soon require on-demand activation of the aviation lights system when an aircraft approaches wind turbines at night (known as BNK). This new law affects both new and existing wind turbines. As things stand, existing wind turbines with a tip height above 100 metres, must be equipped with the “on-demand night-time lighting” BNK solution by 30th June 2021.

Senvion offers a new product “Smart Aviation Light”, an upgrade solution compliant with the German AVV law requirements. Senvion Smart Aviation Light supports all existing technologies for the detection of aircraft (primary radar, passive radar or transponder). Each of these technologies shall ensure that the aviation lights of the wind turbines are only activated at night when an aircraft is within 4 kilometres air space of each turbine.
Robust, fully integrated design

The signals from primary radar, passive radar or transponder system will be provided by signal providers and will be processed by the aviation lights. The Senvion Smart Aviation Light includes a hardware upgrade, an interface for signal processing, infrared lights which are legally required, and a battery backup system (UPS) with a supply duration of at least 16 hours.

With the Senvion Smart Aviation Light, depending on the wind farm equipment and the contract with the signal provider, the signal can either be integrated centrally via the existing network of the wind farm or decentrally via a direct interface. The Senvion Smart Aviation Light is compatible with the existing hardware such as the turbine controller and well-known signal providers.

Benefits of Senvion Smart Aviation Light:

- Compatible with existing service contracts
- Compatible with all turbine systems
- Compatible with well-known signal providers
- Compatible with neighbouring wind farms
- Installation, activation and commissioning by Senvion
- Equipment covered by the existing service contract (Senvion ISP contract)

Should you need further information about the Senvion Smart Aviation Light or the signal providers contacts, please contact us. We will be happy to support you in the BNK approach for your wind farm and provide you with a customised offer for the Senvion Smart Aviation Light, adapted to your wind farm.

Contact: service.sales@senvion.com