BUHO System, Overhead Power Inspection Lines

The BUHO System is an aerial solution for the maintenance and statutory inspection of overhead power lines (medium- and high-voltage) involving the use of gyrostabilized platforms and geolocation data and a range of other techniques including visual inspection (HD photo and video camera); thermographic inspection; ultraviolet inspection and LiDAR distance measurement and 3D modelling. This system is targeted at verifying the integrity of operational power lines through a combination of the above-mentioned inspection techniques. It is a fully customisable service that can be easily adapted to fit any client inspection plan. This service incorporates a review of existing inspection plans with a view to proposing new scopes and improvements.

The Applus+ solution

The BUHO System enables us to make a rapid yet detailed analysis of transmission and distribution power lines and their fixtures, so we can meet our clients´ needs while reducing costs. We perform all kinds of individual or combined inspections depending on our clients´ needs.

We have our own post-processing laboratory which enables us to speed up the inspection process and thus offer a better response rate. We also have state-of-the-art stations to analyse and record possible anomalies. The types of inspections we carry out include visual inspections; thermographic inspections; ultraviolet inspections; and distance inspections using LiDAR. Applus+ professionals are known for being highly qualified and experienced who respond to the most demanding market requirements.

Target customers
This service is aimed at any companies operating high- and medium-voltage lines,
specifically TSOs (transmission system operators) and T&D (transmission and distribution) power utilities.

Key customer benefits

The BUHO System offers the following advantages to clients:

- Full charting of inspections
- Reduced inspection times as compared with ground patrols
- Consistency of approach, with the same team carrying out the inspection in all areas of the electricity company
- Cost savings as a result of grouping several kinds of inspection in a single flight (thermographic, visual, LIDAR distances, UV, etc.)