RED ELÉCTRICA
DE ESPAÑA

Video Script

‘Minimising the risk of collision’

MINIMISING THE RISK OF COLLISION

Undoubtedly electricity transmission facilities have some kind of impact on the natural environment in which they are located. In Red Eléctrica we work to minimise these impacts, particularly the risk of birds colliding with the grounding cables of electricity lines.

The grounding cable, which protects the lines from electrical discharges that occur during storms, is smaller in diameter than the electricity conductors, and therefore is less visible to birds, especially at dusk or during adverse weather conditions with poor visibility.

In order to increase the visibility of these grounding cables we use bird-flight diverters, which alert the birds to the presence of the cables. In order to install these, Red Eléctrica designs nationwide line-marking plans, which incorporate data regarding the routes and flight paths of birds which are most prone to collision, identifying areas where birdlife is potentially at risk.

There are two types of bird-flight diverters installed: a spiral model and a rotating sphere or swinging plate model. The latter incorporates reflective elements and, as they are attached to a free-spinning element, they reflect light and therefore are more visible in minimal or very poor light conditions.

Both models are installed on any type of overhead electricity line and have been proven effective for any type of bird species. Similarly, it has been confirmed that cross-blade devices increase their effectiveness when dealing with birds that are active during dusk periods and whose movements occur in areas with low or poor visibility.

Approximately 3,000 km of line of the transmission grid line has these devices and more and more kilometres will be added each year. Their effectiveness will continue to be assessed going forward while maintaining a firm commitment to minimise impacts on biodiversity in areas with presence of electricity transmission lines.