



### Introduction

This booklet was written by the staff of LIFE Elia-RTE (2011-2017), a project financed by the LIFE programme of the European Union, by the Walloon government, by Elia and RTE, the latter two electricity Transmission System Operators (TSO) in Belgium and France, respectively.

The main goal of the project is the transformation of the forest easements of high-voltage transmission line routes into ecological corridors in Belgium and France. Restoration activities aim at implementing innovative practices for management of vegetation of these green corridors in the forest, and raising awareness of various audiences about the importance of biodiversity in these linear habitats.

This booklet presents the various ways of approaching meetings with owners and managers of land located directly beneath the electrical grid. Indeed, since TSOs most often are not the owners of the electricity easements, it is necessary to obtain the consent of owners and managers for the network's safety, as well as for implementing actions carried out by the LIFE project.



# Management of vegetation under electricity power lines

## 2.1. Vegetation and electrical safety

Controlling vegetation under the high-voltage lines in forest environments is one of the conditions that allows the TSO to ensure continuous supply of the electrical grid.

This management of vegetation is based on pragmatic practices: when a tree grows too high, it is either pruned, felled or mulched. In a forest context, after this operation, mulching is normally preferred for the entire corridor (on either side of the line), since it is considered safe and easy to implement.

The effect of mulching on natural environments is considerable. The disturbances actually create better conditions (soil and light) for tree seeds to re-germinate quickly in the freshly opened corridor. Forest species taking advantage of full sunlight (heliophiles) grow rapidly and recreate a newly unsafe situation. Natural vegetation struggles to be established between these repeated interventions.

## 2.2. Alternative management set up as part of LIFF Flia-RTF

It is with this background that the LIFE Elia-RTE project has set up 7 actions aiming at alternative management of electricity corridors on Belgian and French sites (see booklets 3, 4, 5 and 6). The actions implemented are intended to maximise consideration for biodiversity in day-to-day management of infrastructure.

## 2.3. LIFE Elia-RTE's working method

Establishment of developments in the field go through several prior steps:

- → Initial mapping: this operation aims at assessing the risks that neighbouring stands could represent for the line and to estimate the potential for setting up actions for alternative management.
- → Detailed mapping: this phase consists of mapping more precisely the sectors of interest for differentiated management by incorporating various technical and practical concepts (see booklet 1).



Consultation on the proposals for management methods

- Development of proposals for actions: based on the mapping, the avenues for differentiated management are proposed to the TSO and reviewed if necessary.
- Contact and negotiations with owners and managers: after agreement by the TSO on the proposals made, the owners and/or managers are met. This meeting permits explaining the project's philosophy and also taking into account the owner/manager's expectations, whether about implementation of actions or long-term management.
- Agreement: formalising the implementation of developments requires signing a bi- or tri-partite agreement which binds the TSO and the owner, as well as the manager when it is not the owner.
- Drafting of specifications, calls for tender and selection of contractors: signing the agreement with the owner opens the avenue to the work.
  Beforehand, a specification sets the rules for successful accomplishment of the projects. It will detail the contract conditions and especially set out the obligations of the successful bidder.
  Selection of the contractor must not be done solely on the basis of the "lowest bidder". The suitability of the equipment proposed and the contractor's experience on similar projects should be prioritised.
- Field work and site monitoring: before beginning work, a site visit is carried out with the service provider to ensure that all technical details of the specification have been fully understood. Monitoring then acceptance of the site will enable assessment of the proper performance of the work.
- Drafting management plans: by scheduling future management operations, the management plan must ensure the sustainability of actions implemented while keeping the electrical grid safe. These documents must be validated by the various parties.
- Monitoring of biological indicators (see <u>booklet 7</u>): the actions discussed above have various beneficial effects (cost rationalisation, better landscape integration,...) but the impact on biodiversity is the most obvious. The effects on biodiversity of implementation of ecological developments under the lines can be assessed by studying different groups of fauna and flora.

### 2.4. Negotiation and contracting, an essential step

In most cases, electricity TSOs are not the owners of the land crossed by overhead electricity transmission lines. Management of safety in the corridors is done via terms specific to each TSO, the most common being establishment of a more or less restrictive agreement for the owner and compensation for any economic losses incurred.

In the past, alternative management measures were sometimes already incorporated in this agreement, most often at the request of the owner or manager.

In the future, formalisation of implementation of such developments as well as the main lines of the management terms could usefully be systematically incorporated.



# Identification of owners and managers, and negotiation

## 3.1. Identifying owners and managers

Identification of owners and managers is the first step to be carried out to reach a contractual agreement with them. In many countries, a precise land registry of lots is centralised by the tax administration. Since this information is private, the TSO can only have access to it against payment to the competent authority.

Since property is not static (sale, death, sharing,...), the speed for updating this database is an important factor for saving time for the operators.

A local anchor (via partners, stakeholders, ...) and good understanding of the local customs and habits can also be valuable allies (especially for saving time) in the search for owners and managers. This point is important because in some cases the fragmentation of properties leads to the presence of a large number of owners on a small length of power line, especially when the registered lots are oriented perpendicular to the line.

Searching for and making contact with these owners can be very time consuming!

## 3.2. Understanding the very varied expectations of owners and managers

To be able to tackle integrated management of forest corridors, it is necessary to be aware of the diversity of forest owners. Besides public owners of various types there is a multitude of private owners, whose surface area owned can range from a few ares to hundreds or thousands of hectares.

Forest owners are generally attached to their heritage, often family, and manage it according to their priorities. Some favour the productive function, others have a hunting vocation, and some will strive to promote a multifunctional forest. It is by taking into account the aspirations of each that it is possible to establish sustainable partnerships for development and management under electricity power transmission lines. It should also be noted that some owners of small lots sometimes do not know that they are owners or do not show any interest in forest management or in the future of these lots. In such cases, proposals made to them may simply not interest them or on the contrary, make them unreliable partners for long-term management.

Management of public forests is usually the responsibility of a forest administration, while management of private property is either taken over by the owner himself or entrusted to managers.

The expectations of these public and private managers must also be fully taken into account in the proposals for developments and agreements to be submitted to them.

## 3.3. Meeting owners' expectations: justification

Once owners' and managers' expectations are well understood, how are they to be responded to? What arguments are to be put forward to convince them that electrical safety and biodiversity are in the interests of the owner and manager?

Before taking any action, it is best to be able to identify potential responses. In the forest environment, they generally revolve around the following main points: enhancing silvicultural value, hunting activity, preservation of biodiversity/landscape/community services.

Depending on the stakeholders, these points can be put forward separately or grouped together. In the public forest, the multi-purpose function of the forest and its societal function is generally more pronounced.

We propose listing (non-exhaustively!) and briefly explaining the responses that the proposed developments can bring to the owners' and/or managers' expectations.

#### From a silvicultural point of view

- → Ensuring the stability of forest stands. Creating of stepped shrub edges promotes stability of the stand by breaking wind that could engulf it and cause windfalls.
- Mitigating the "edge effect" which decreases the value of logs alongside the electricity corridor after growth of large limbs that cause large knots in the trunks.
- Meeting the requirements of a PEFC or FSC type forest certification. These certifications are the pledge of a sustainably managed forest. The presence of an electricity corridor can constitute a forest and environmental gain to be valued with this certification.
- > Promoting enhanced biodiversity within neighbouring forest stands.
- Producing firewood from mature edges.
- > Producing small high-quality logs of rare woods (apple, wild pear)
- → Limiting pressure and damage to the soil and root system by reducing the passage of heavy machinery (e.g., mulcher)

#### From a hunting point of view

- → Improving the capacity for wildlife by providing woody or grassy feeding areas under the line
- → Providing game with shelter along well-structured edges
- > Creating lines or areas cleared for shooting under the line for hunting chases or lookouts

#### From a biodiversity/landscape/community services point of view

- Ontributing to compliance with the legal or incentive framework: Natura 2000, Wallonia Forest Code, biodiversity circular, Main Ecological Structure, Water Law, Green and Blue Framework in France...
- Reducing the visual impact of the electrical corridor in the landscape
- → Sensitising the general public about biodiversity, especially in the public forest, via interpretive signs located at the intersections of electricity power lines and walkways, and also through the possibility of conducting "nature" visits for local schools
- → Offering farmers potential areas for developing their activity (grazing/mowing)
- Offering farmers financial support through agro-environmental measures, Natura 2000 contracts, etc.



## Contracting



Signing an agreement

When the owners and managers give their consent to carrying out ecological developments under the line, the consent is then formalised by an agreement that binds the various parties concerned: owner, potential manager and TSO.

By this agreement, the owner undertakes not to interfere with the developments carried out for a variable period and if necessary to maintain them or entrust their management to a third party.

In many cases (but this can vary from one TSO to another), this agreement should rather be seen as a moral undertaking by the owner rather than a commitment with legal value which could have a repulsive effect. In the event of non-performance by a partner in the field, the search for a new manager will be all the easier as the TSO will have created a network of local links.

In addition to "framework agreements" such as those mentioned above, there are various possibilities for contracting in writing for management with a third party. A few cases are explained below.

#### Management on public land

It is not usually very complicated to convince a public owner (for example, a municipality) of the interest in setting up alternative management under the power line. When this management involves the participation of a third party (for example, a farmer for mowing and grazing), the elected representatives want to set up a democratic process for allocation of the available lot(s). They often want to include in this call for tenders a preference for a local farmer.

The usual process is to first obtain acceptance on the principle of alternative management, through a deliberation of the elected representatives.

Once this agreement has been obtained, a public call for candidates is made by the authorities. This step is sometimes passed over if candidates have made a spontaneous offer.

#### Farm type management



A farmer mowing the corridor

In some cases, farm type management (mowing or grazing) is envisaged under the line. Most often this management is not undertaken by the owner. To guard against any claims from the manager related, for example, to the farm lease, a specific agreement is signed by the owner and the manager. This stipulates that the owner assigns management of the lot at will and free of charge, and that the manager undertakes to reasonably maintain it for a limited period, automatically renewable.

#### Incentive tools

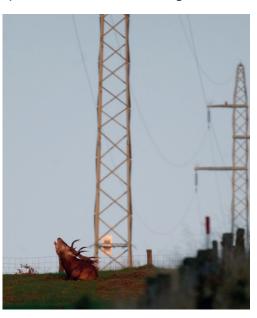


Management by grazing a farmer's sheep

in force in the country), open the door to subsidies. In Wallonia, for example, for implementation of environmentally friendly agricultural practices, farmers can apply for subsidies granted to players who engage on the basis of incentives. Granting of subsidies is often conditional on compliance with strict specifications. For the TSO, the fact of having sections of electrical power lines managed in this way is reassuring since it means active management of the corridor which is both ecological and sustainable since the contracts extend over several years.

Establishment of ecologically-oriented management can, in some cases (depending on the regulations

#### Specifications linked to the hunting lease



Deer bawling on a grassy feeding area under an electricity power line

Another way of sustaining management of a corridor by mowing can be management of it by a local hunter. Especially within large forest ranges, hunters will have an interest since the space under the line can then be used as a grassy feeding area by large herbivores (deer and roebuck).

Formalisation of taking on responsibility for mowing by the hunter can enable recording the technical conditions for this mowing (including the season when it has to take place) in the specifications related to the hunting rights lease.

To facilitate the work of each TSO's patrollers, it is advisable to be able to have various existing agreements available in digital format, directly viewable in the field and referenced at the outset from the geographical data processing system specific to each TSO. In this way, the patroller can immediately check the terms and conditions of an agreement and know which local player to approach in the event of non-compliance with the clauses or the need to renew a contract.

In the interests of adherence and effective collaboration, TSOs have an interest in maintaining regular contact with managers various federations, etc. A useful means may be by arranging awareness/training days.



#### LIFE Elia

Enhancement of the electricity transmission network's easements as active vectors for biodiversity

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Partners









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