

PROJECT SHEET 2020_PREPARATORY DOCUMENT

Date: 12-12-19

Proposal from	RFI SpA
Contact Person	f.iacobini@rfi.it , v.ranucci@rfi.it
Forum / Platform	EES Platform
Purpose of the project	Vegetation Management
Timescale	2 years
Project type	* Analysis - Mapping, * Exchange of best practices
PROJECT DESCRIPTION	
<p>1. Briefly describe the objectives of your proposed project</p> <p>Summary: Establishment of a common knowledge base and development of tools for defining the criteria for mapping the vegetation areas along the railway lines and to develop growing vegetation model, used to assist railway infrastructure management and staff in addressing the issue of vegetation control (including tree risk control) on the railway line.</p> <p>Aim of the Project</p> <ul style="list-style-type: none"> - Mapping the vegetation areas along the railway lines (for example by change detection on radar satellite images); - Recognize the wide variety of vegetation types (for example by spectral signatures analysis registered for each ground object); - Evaluate tree's height and the distance from railway lines (for example by LIDAR acquisition). - Development of growing vegetational model based on growing vegetation and tree data. <p>Safety and operational opportunities:</p> <ul style="list-style-type: none"> - increase sighting of ground signals; - prevent tree failure onto railway infrastructure. <p>Economic opportunities:</p> <ul style="list-style-type: none"> - reduction of maintenance costs. 	
<p>2. Why do we need this project and what are its benefits / added value?</p> <p>RFI needs to create a georeferenced tool to control the territory, with the intent of monitoring the vegetation along railway lines, in particular tree fall risk control, assisting infrastructure manager to plan properly and on time maintenance activities, maintain always the plants growth at the right level.</p> <p>DPR753/1980 Art.52</p> <p>"Along the railway line it is forbidden to grow plants or hedges and erect wall walls, fences generally less than six metres from the nearest rail, measuring in horizontal projection...Trees for which is expected a maximum height of more than four metres, cannot be planted at a distance from the nearest rail less than the maximum reachable height measure increased by two meters."</p>	
<p>3. What needs to be done and what are the risks if the project is not done?</p> <p>Waste of economic resources due to non-optimized maintenance.</p>	
<p>4. Is data already available upon which to base this proposal?</p> <p>No</p>	
<p>5. What are the planned deliverables?</p> <p>* Report - Guideline , * IT tool - Website</p>	