

PROYECTO I+D+i



Title of the project

Intelligent satellite vision system for the prevention of forest fires in electricity distribution and transport infrastructures

Acronym

ISAPREF

State of the Art

Electric power transmission relies primarily on the use of electrical towers to transport power from production stations to consumers. These towers need to traverse vegetated areas to reach end users. In order to reduce costs, these towers carry high voltage electricity. The uncontrolled growth of vegetation around the towers poses a significant risk of fire and severe damage that entails enormous economic and environmental costs.

General objectives

COMSA will develop and validate a comprehensive artificial vision system for the automatic and remote detection of vegetation around energy distribution and transport infrastructures through the analysis of satellite images and the use of Machine Learning algorithms

Work packages

- Desarrollo del sistema de visión artificial y validación del método de segmentación semántica de imágenes satelitales con redes neuronales convolucionales
- Desarrollo de la plataforma software de adquisición y preprocesado de imágenes satelitales
- Validación del método y sistema

Results and conclusions

The project is in execution period



BUSINESS AREAS

Technical Area and R&D

DURATION

2021-2024

BUDGET

Consortium: 199.125,95€

COMSA: 109.514,50€

KEYWORDS

Electrical towers, artificial vision, satellite images, fire prevention, Machine Learning

RESPONSIBLE COMSA

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