

Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID48059
Project Name	Project -Emerging Methods For Early Detection of forest fires
Maximum Marks	2 Marks

Proposed Solution Template

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Forest and urban fires are still a serious problem for many countries in the world. The (UAVs), which constantly patrol over potentially threatened by fire areas. The UAVs also utilize the benefits from Artificial intelligence (AI) and are equipped with on board processing capabilities.
2.	Idea / Solution description	Recent advances in computer vision, machine learning, and remote sensing technologies offer new tools for detecting and monitoring forest fires, while the development of new materials and microelectronics have allowed sensors to be more efficient in identifying active forest fires.
3.	Novelty / Uniqueness	Permanent monitoring, data collection and processing. Terrestrial-based early detection systems consist of either individual sensors (fixed, PTZ, or 360° cameras) or networks of ground sensors.
4.	Social Impact / Customer Satisfaction	Growing public alarm at the problem of large-scale forest fires, is evident from an assessment of their past and present repercussions on the population in general.
5.	Business Model (Revenue Model)	Forest sector has strong importance for the economic, social and environmental issues. Portuguese forestry sector is of great importance for the added value creation, for the jobs creation.
6.	Scalability of the Solution	There are several factors that affect the evolution of a wild land fire. It is well known that wind is one of the key parameters to understand the forest fire propagation. Intuitively, the meteorological wind speed tends to drive the main direction of forest fire spread.