## **Proposed Solution**

| Date         | 15 October 2022           |
|--------------|---------------------------|
| Team ID      | PNT2022TMID29525          |
| Project Name | Emerging Methods for      |
|              | Early Detection of Forest |
|              | Fires                     |

## **Proposed Solution Template:**

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

| S/no | Parameter              | Description                   |
|------|------------------------|-------------------------------|
| 1    | Problem Statement      | A forest fire risk prediction |
|      | (Problem to be solved) | algorithm, based on support   |
|      |                        | vector machines, is           |
|      |                        | presented. The algorithm      |
|      |                        | depends on previous           |
|      |                        | weather conditions in order   |
|      |                        | to predict the fire hazard    |
|      |                        | level of a day.               |
| 2    | Idea / Solution        | Use Artifical Intelligence    |
|      | description            | methods for recognition and   |
|      |                        | detection of smoke or fire,   |
|      |                        | based on the still images or  |
|      |                        | the video input from the      |
|      |                        | drone cameras.                |

| 3 | Novelty / Uniqueness              | Real time computer program detect forest fire in earliest before it spread to larger area.                    |
|---|-----------------------------------|---|
| 4 | Impact on society                 | Affects the atmosphere oxygen content. And also some medicinal plants are also destroyed.                     |
| 5 | Business Model<br>(Revenue Model) | The proposed method was implemented using the Python programming language.                                    |
| 6 | Scalability of the Solution       | Computer vision models enable land cover classification and smoke detection from satellite and ground cameras |