



## Protection and rescue directorate

Vasko Karangeleski 10  
1000 Skopje, Republic of North Macedonia  
Mr.Xhevat Selami  
Director

To Whom It May Concern,

I am pleased to provide this reference for **SmokeD Sp. z o.o.**, who successfully completed a project for **Protection and rescue directorate** involving the **installation and maintenance of a forest fire detection system.**

### Project Overview:

SmokeD Sp. z o.o. successfully installed an advanced smoke detection system, including **8 PTZ (Pan-Tilt-Zoom) cameras** and **20 fixed cameras**, strategically placed to provide full coverage and enhance fire detection capabilities. This comprehensive system was set up in collaboration with our team to establish **2 dedicated monitoring centers**, equipped to operate 24/7 for effective monitoring and response.

### Scope of Work:

- 1. Installation of PTZ Cameras:** The system incorporated 8 high-quality PTZ cameras capable of dynamically adjusting to different areas of interest. Each of four towers were equipped with 2 PTZ cameras. These cameras allowed for precise real-time monitoring, zooming in on potential fire sources and providing high-definition video streams for analysis.
- 2. Installation of Fixed Cameras:** In addition to PTZ cameras, 20 strategically placed fixed cameras were installed. These cameras cover large, predetermined areas for consistent monitoring, ensuring no blind spots in fire-prone regions.
- 3. Monitoring Centers Setup:** SmokeD established 2 monitoring centers to ensure round-the-clock surveillance of the cameras. The centers were equipped with state-of-the-art technology for efficient fire detection, including automated alerts for abnormal smoke patterns, enabling rapid response by local authorities or onsite teams.

#### 4. Fire Detection and Effectiveness:

The SmokeD system's AI-powered fire detection algorithms provide significant improvements in fire identification. By analyzing video feeds from both PTZ and fixed cameras, the system is able to detect smoke and fire risks in their early stages. The real-time alerts allow for timely intervention, which is crucial in preventing the escalation of fires, especially in remote or hard-to-reach areas.

#### Project Impact and Benefits:

- **Enhanced Fire Detection:** The integration of PTZ and fixed cameras, along with AI-based detection, ensures that the system can effectively identify fires early, even in challenging environments.
- **Operational Efficiency:** The two monitoring centers work in tandem to ensure quick response times and effective resource deployment.
- **Cost-Effective:** Early detection of fires has significantly reduced damage control costs, preventing large-scale fire incidents and enhancing overall safety.

SmokeD's expertise in installation, system setup, and the integration of advanced fire detection technology has proven to be invaluable in ensuring timely fire detection and improving overall fire management practices.



Signature