



Use of various tools for reforms in (not only) Wildfire Management (Case study: Czech Republic)

Workshop on Civil Protection capacity building tools and EU funding opportunities

24-26 March 2025, Warszawa

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Background & Rationale

- **Increasing wildfire risks** due to climate change
- **Policy and institutional challenges** in implementing effective wildfire risk reduction measures
- **Growing need for modernized wildfire management strategies** to enhance prevention, preparedness, and response
- **Lessons learned** from recent large-scale wildfires highlight gaps in coordination, early detection, and resource allocation
- **Integration of various tools and best practices** from international wildfire management frameworks
- **Limited use of advanced technologies** (e.g., AI-based detection, satellite monitoring) in the Czech Republic compared to other EU countries
- Alignment with **EU Wildfire Prevention Action Plan**
- Addressing **European disaster resilience goals**



National Park Bohemian Switzerland – forest fire VII-VIII/2022

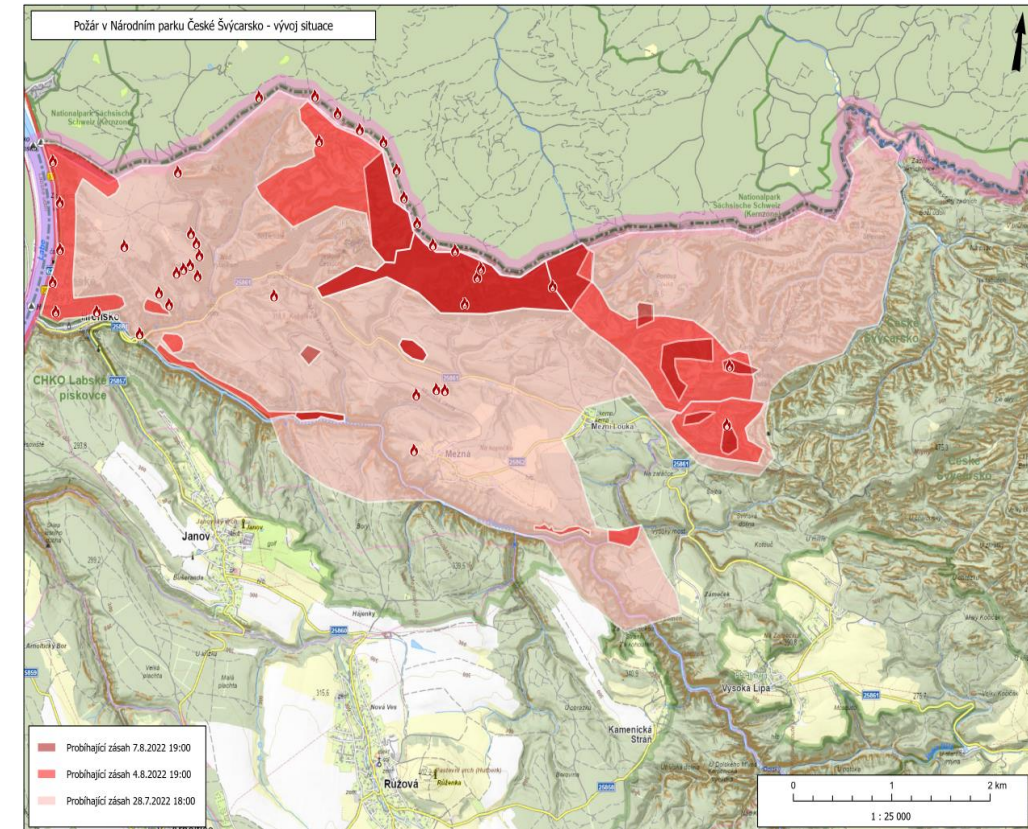


National Park Bohemian Switzerland – Fire Extent

- Period of the fire - 24 July to 12 August 2022
- Total area affected by the fire - over **1 100 ha**
- **3 houses destroyed by fire**
- Total number of **evacuated citizens** - **532**
- A total of **117 firefighters** were treated for injuries
- Deployment of Fire Units from across the country
 - over **6 400 firefighters** and over **400 vehicles**
- Deployment of 6 helicopters + 3 small planes (state + private)
- Deployment of FRS CR, Police and Army drones for monitoring
- Request for international assistance via **EU Civil Protection**

Mechanism

- Helicopters – Poland (1x), Slovakia – (2x)
- Aircraft – Italy (2x Canadair, rescEU), Sweden (2x Air Tractor, rescEU)
- Cooperation with helicopters from Germany



Lessons Learnt and Challenges for the Future

- **CHALLENGES**

- Necessary fundamental change in the concept of fire safety in national parks and forests in general (access, fire breaks, extinguishing water, early detection)
- Need for complex changes of the fire protection in National Parks (in general, in large forest areas)
- Insufficient availability of water sources for firefighting
- Strengthening of the cross-border cooperation
- Old and outdated equipment of some fire units for wildfires
- Better preparedness of firefighters for GFFF (vehicles, technical means, procedures, personnel)
- Change in the aerial firefighting service system in the Czech Republic – **need for aerial means capable of extinguishing volumes of at least 3 000 litres of water**
- Insufficient public awareness



Addressing the challenges

- Interministerial Strategic Committee established by the National Security Council in December 2022
 - Ministry of Interior (DG of the Fire and Rescue Service of the Czech Republic)
 - Ministry of Agriculture
 - Ministry of Environment
 - Ministry of Regional Development
- Concept for Enhancing Fire Protection in Forests with a Focus on Fire Prevention and Capacity Building for Wildfire Suppression
 - approved by the National Security Council in November 2023



TSI project on wildfire prevention and risk assessment (Slovenia, Czech Republic, Saxony (Germany))

- Funding program (SG REFORM)
 - Technical Support Instrument, project TSI-RoC-20683 CapFire
- Goals
 - Foster collaborative landscape planning, reduce fire risk and create fire-resilient communities for sustainable, long-term impact. This should contribute to enhancing the fire management systems, which will, in turn, lead to a better protection of the populations and properties of involved regions from severe wildland fires
- Methodology
 - Wildfire Peer Review Assessment Framework (WPRAF)
- Main stakeholders
 - Ministry of Interior - DG of the Fire and Rescue Service of the Czech Republic
 - Ministry of Agriculture
 - Ministry of Environment
 - Ministry of Regional Development



Wildfire Advisory Mission to the Czech Republic - III/2024

- EU Civil Protection Team Advisory Mission organized by ERCC (DG ECHO)
 - Team of 9 experts from 5 different countries
- Expertise
 - Policy and institutional aspects of wildfire risk management
 - Wildfire risk preparedness measures
 - Wildfire emergency response coordination
 - Information management
- **Methodology**
 - **Wildfire Peer Review Assessment Framework (WPRAF)** was used as a guiding document
- Main stakeholders
 - Ministry of Interior - DG of the Fire and Rescue Service of the Czech Republic
 - Ministry of Agriculture
 - Ministry of Environment
 - Ministry of Regional Development



Wildfire Advisory Mission – Findings/Recommendations

- Continue and consolidate the strategic approach taken and implement the existing guidelines adopted by the inter-ministerial strategic committee
- Define and select risk and vulnerability indicators
- Enhance the interaction between various stakeholders at sub-national level
- Make wildfire prevention measures mandatory for large forest owners with a financing model
- Enhance efficient use of EU funds (rescEU, INTERREG, TSI)
- Adapt legislative framework and process
- Enhance response capacities (AFFF SoPs, GFFF-V module, etc.)
- Develop Awareness and risk communication
- Adapt contingency planning
- Enhance Early Warning System and Alert System
- Develop a hybrid surveillance and detection system
- Foster training, exercises and international exchanges (e.g. pre-positioning program, advanced training for GFFF-V)
- Foster cooperation and collaboration
- Enhance Civil-Military Cooperation
- Develop tactical and operational fire capabilities
- Introduce LACES Safety Protocol (Lookouts, Awareness, Communications, Escape routes and Safety zones)
- Establish SOPs for Wildland Urban Interface (WUI)
- Establish Fire Behaviour Analysts
- GFFF-V as a role model for future units
- Investing in PPE and operational devices
- Expand the use of aerial means



Wildfire Early Detection System in the Czech Republic (WEDS)

- Funding program (DG ECHO)
 - **UCPM-2024-TRACK1 – Technical Assistance for Disaster Risk Management**
- Background & Rationale
 - Increasing wildfire risks due to climate change
 - Current wildfire detection relies on human observations
 - No national / no regional early detection system for wildfires in place
 - Need for advanced technology integration
 - Alignment with EU Wildfire Prevention Action Plan



WEDS project objectives

- Conduct analysis of wildfire detection technologies
- Identify and assess applicable early detection systems
- Engage stakeholders
- Develop a national strategy
- Conduct pilot studies
- Provide policy recommendations

Expected outcomes & impact

- Improved understanding of wildfire risk
- Identification of feasible detection system options
- Strengthened collaboration among stakeholders
- Policy recommendations
- Contribution to climate adaptation & disaster management



WEDS project Stakeholders & Collaborations

- Coordinator / beneficiary
 - Directorate General of the Fire and Rescue Service of the Czech Republic
- Associated partners – key ministries
 - Ministry of Agriculture
 - Ministry of Environment
 - Ministry of Regional Development
- Associated partners - universities
 - Czech University of Life Sciences, Prague
 - VŠB – Technical University, Ostrava
- Other stakeholders
 - Research institutions, private sector partners, regional stakeholders
- Duration
 - 18 months (started on 1 January 2025)



Aerial Firefighting Service 2001 - 2022

- Aircraft used for aerial fire-fighting



Aerial Firefighting Service – ROAD MAP



Framework 4-year contract for the provision of the provider of the aerial forest firefighting module from 2024 to 2027 under the rescEU transition

- **2x UH-60 Black Hawk helicopters with BB7590 Bambi bucket with a capacity of 3 410 l of firefighting water**
- **Contract period 15 June - 15 September 2024 (3 months)**
- **Deployment of helicopters together with air rescuers of the Fire and Rescue Service of the Czech Republic**

Resilient Borders – Cross-Border Spatial Planning and Crisis Management Pilot Actions



- Joint action plan for strengthening cross-border cooperation in disaster risk management
- Beneficiaries
 - Ministry of Interior - Directorate General of the Fire and Rescue Service of the Czech Republic
 - Bavarian State Ministry of Interior
- Expected outcome
 - By addressing legal, operational, and practical barriers, it will enable rescue services and local authorities to act swiftly and effectively in emergencies and times of crisis
- Activities and objectives of the pilot action
 1. Risk Analysis and Identification of Bottlenecks → **Risk Map**
 2. Legal Environment Analysis and Stakeholder Definition → **Competence Map**
 3. Identifying Problem Areas and Creating an Action Plan
 4. Dissemination Conference for Stakeholders → **Joint Action Plan**
- Duration
 - February 2025 to September 2025 (8 months)



Sustainability

- Long-Term Sustainability consolidated by strengthened collaboration among stakeholders, training activities and integration into national policy, ongoing research and training

DOs / DON'Ts

- Do engage stakeholders early
- Be realistic about timelines, budgets and resource constraints
- Combine various funding tools
- Coordinate activities in projects to ensure complementarity and avoid duplications
- Don't hesitate to address questions
- Don't ignore lessons learnt (e.g. document what worked and what didn't)





**THANK YOU FOR YOUR
ATTENTION**

