

# NoR Sponsorship request

SDA4Wetlands CCN



# SDA4Wetlands

- SDA4Wetlands (Satellite Detection Algorithm for Wetlands)
- Use of Remote Sensing, Satellite based methods for detection and monitoring of wetlands
- Partnership and cooperation with: EOLAS insight (Estonia) and Kappazeta (Scotland)




# Project Achievements

- Select algorithms suitable to detect and monitor wetlands
- Create a list of requirements for algorithms
- Test, validate and evaluate them
- TRL2-TRL3: Research and prove feasibility



## EO browser (Sentinel Hub)

- Cloud service
- Operates as a SaaS – Software-as-a-Service
- Provides instant access to satellite data (Base of our project)
- Handles data management and processing remotely



# Cloud services and tools

- **Streamlined data Access and Processing**
  - E.g. eliminated manual data management tasks, automatically handled complex operations
- **Enhanced Scalability**
  - E.g. Handled massive datasets efficiently, created comprehensive time-series analyses
- **Advanced visualization and Analysis Capabilities**
  - E.g. Used custom visualizations, eliminating the need for manual data processing
- **Improved Collaboration and Workflow Efficiency**
  - E.g. Enabled team members to work simultaneously with the same datasets
- **Flexible Data integration and Processing**
  - Implemented custom scripts for specialized analysis needs



# Why NoR Services Were Helpful

- **Streamlined Access to EO Data**
  - Continuous and reliable access to Sentinel-1 and Sentinel-2 archives
- **Cost Efficiency**
  - Lowered data storage and computing costs
  - Freed resources to focus on algorithm development and validation
- **Technical Support and Expertise**
  - Guidance for NoR-sponsored networks
- **International Collaboration**
  - Connected us with stakeholders in Estonia and Scotland, strengthening our knowledge



# Social Benefits

- **Better Wetland Management**
  - Tools for near real-time monitoring of wetlands
  - Early detection of harmful changes
- **Conservation & Biodiversity**
  - Insights into habits that support crucial bird, plant and insect species
  - Potential for improved local policies to protect threatened ecosystems
- **Awareness & Education**
  - Survey results shared with local agencies, boosting awareness about wetland surface
  - Supports broader outreach campaigns about water resource management