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(European Regional Development Fund and  
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Instrument)

# Cross-border fire risks database

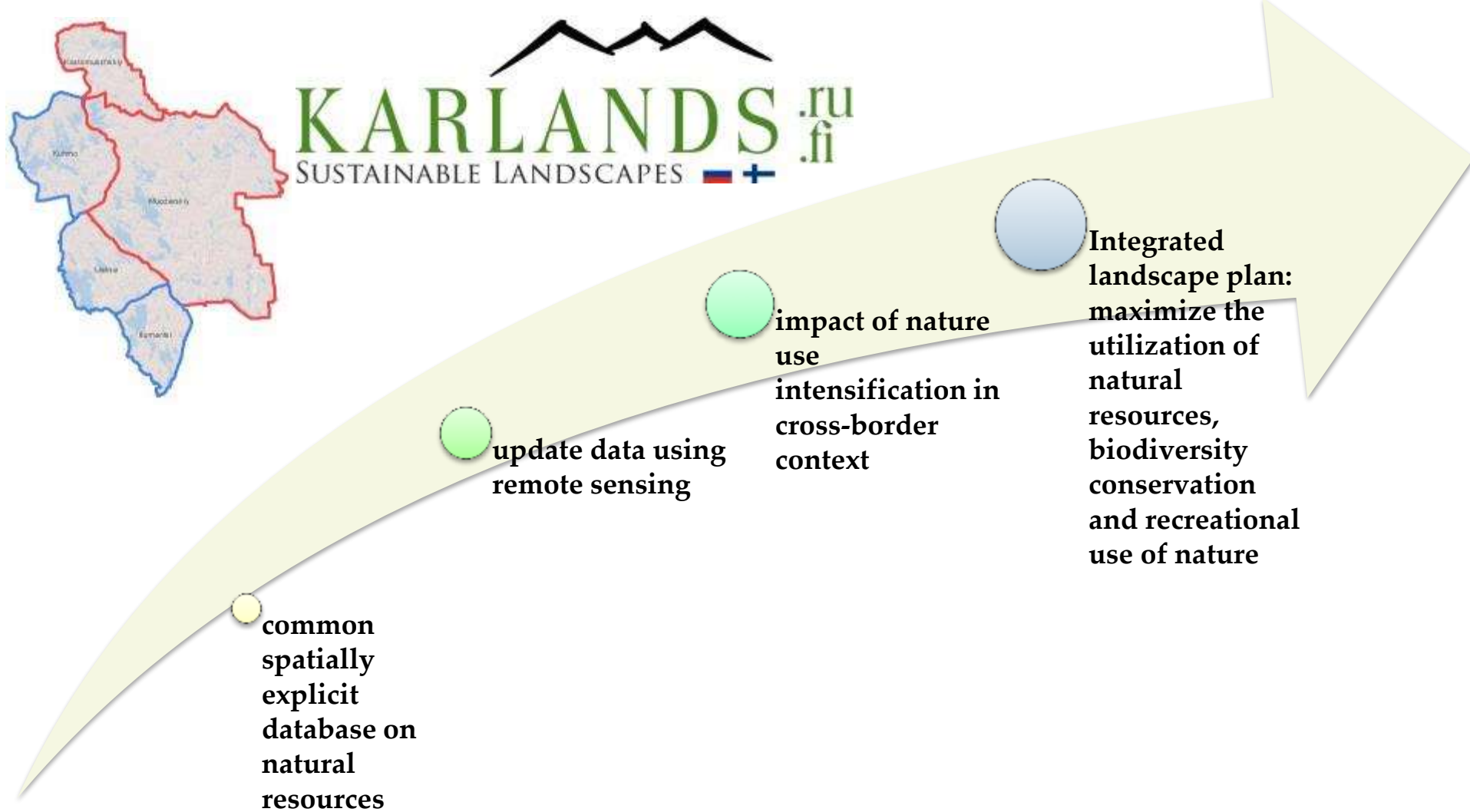
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Presentation at the seminar: FOREST FIRES AND THEIR PREVENTION IN  
NORTH KARELIA AND REPUBLIC OF KARELIA, 26–27 SEPTEMBER,  
MEKRIJÄRVI, ILOMANTSI



# The project is aimed for fostering good governance in Karelian landscapes



# Project partners



UNIVERSITY OF  
EASTERN FINLAND



Elinkeino-, liikenne- ja ympäristökeskus  
Centre for Economic Development, Transport and the Environment



Petrozavodsk State University



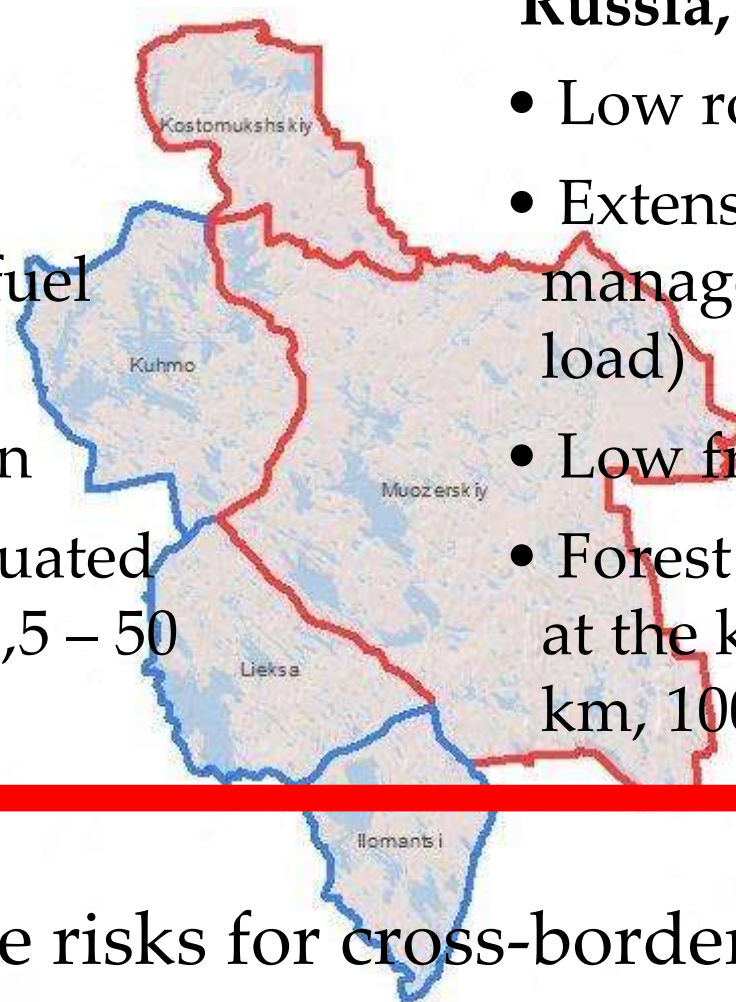
Kostomukshskiy Strict Nature Reserve

- Directorate of Regional Protected Areas of Republic Karelia, Russia
- Lesnoe Buro "Partner Ltd., Russia

# Forest fire risks

## Finland

- High road density
- Intensive forest management (low fuel load)
- High fragmentation
- Forest fire risk evaluated at the stand level (0,5 – 50 ha)



## Russia, Republic of Karelia

- Low road density
- Extensive forest management (high fuel load)
- Low fragmentation
- Forest fire risk evaluated at the kvartal level (2x4 km, 1000 ha)

What are the risks for cross-border fires?

# Common classification for the forest fire risk assessment is needed

The aim of the study was analyze cross-border forest fire risks and to test the possibilities for the data dissemination.

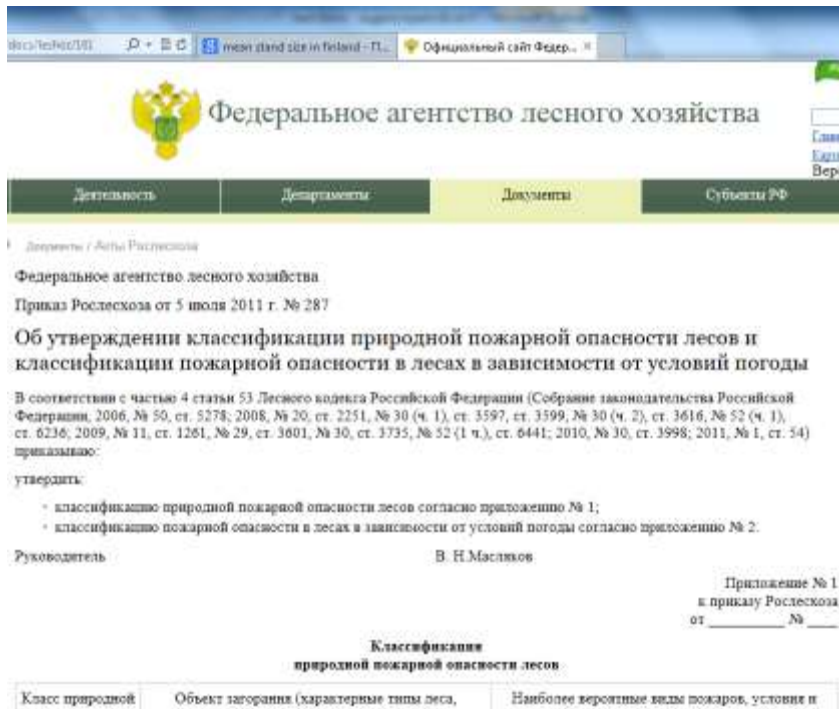
- Finland

- The variables are the same as those of the Americans; they have collected lots of data:

<http://www.landfire.gov/>

- Russia:

- Officially approved method for forest fires risk assessment, Rosleshoz, 2011
- The method is very broad and was criticized by scientists
- Classification at the kvartal level





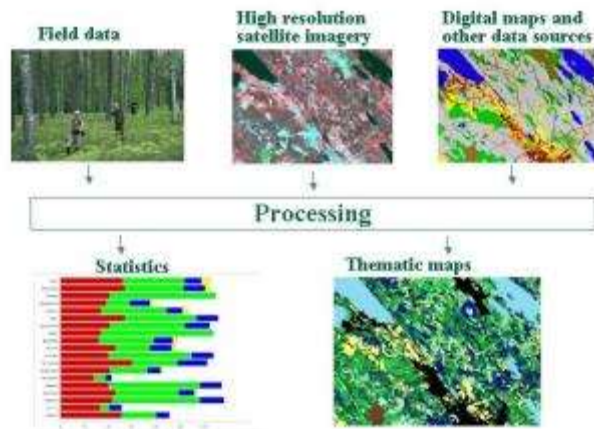
# Application of the Russian classification system for cross-border forest fire risk assessment

## Changes in the approach:

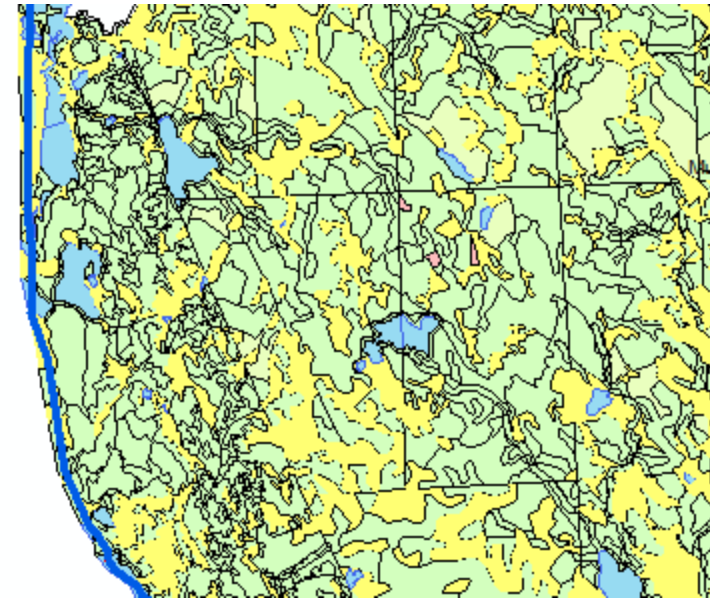
- Apply to the stand level
- Reformulate the criteria in attributes available from GIS data

## Data:

Finland: NFI, Metla, 2012



Russia:  
Forest management  
inventory, 1998

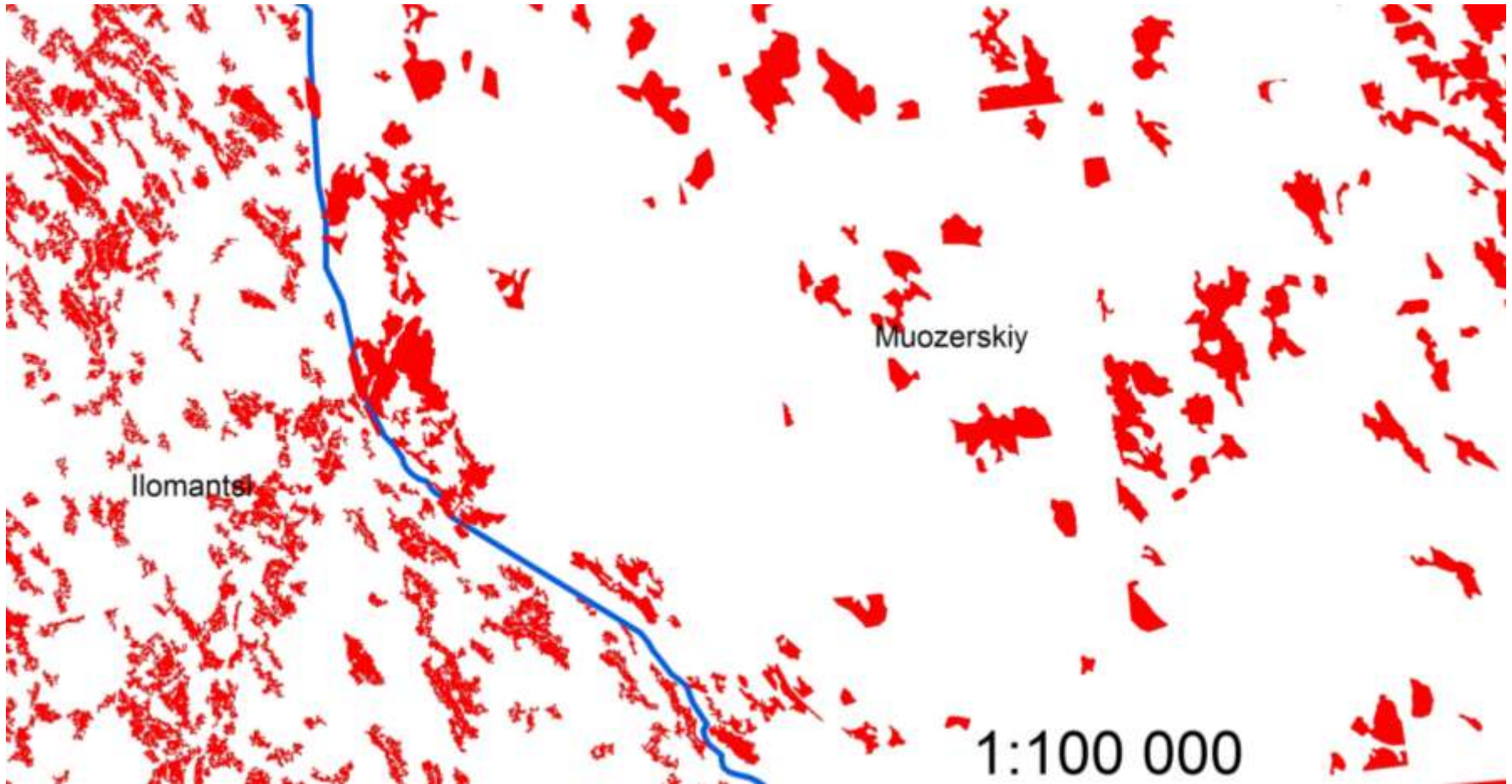


Ilomantsi

From Finnish side only stands more than 3 ha were selected to get comparable data with Russian side

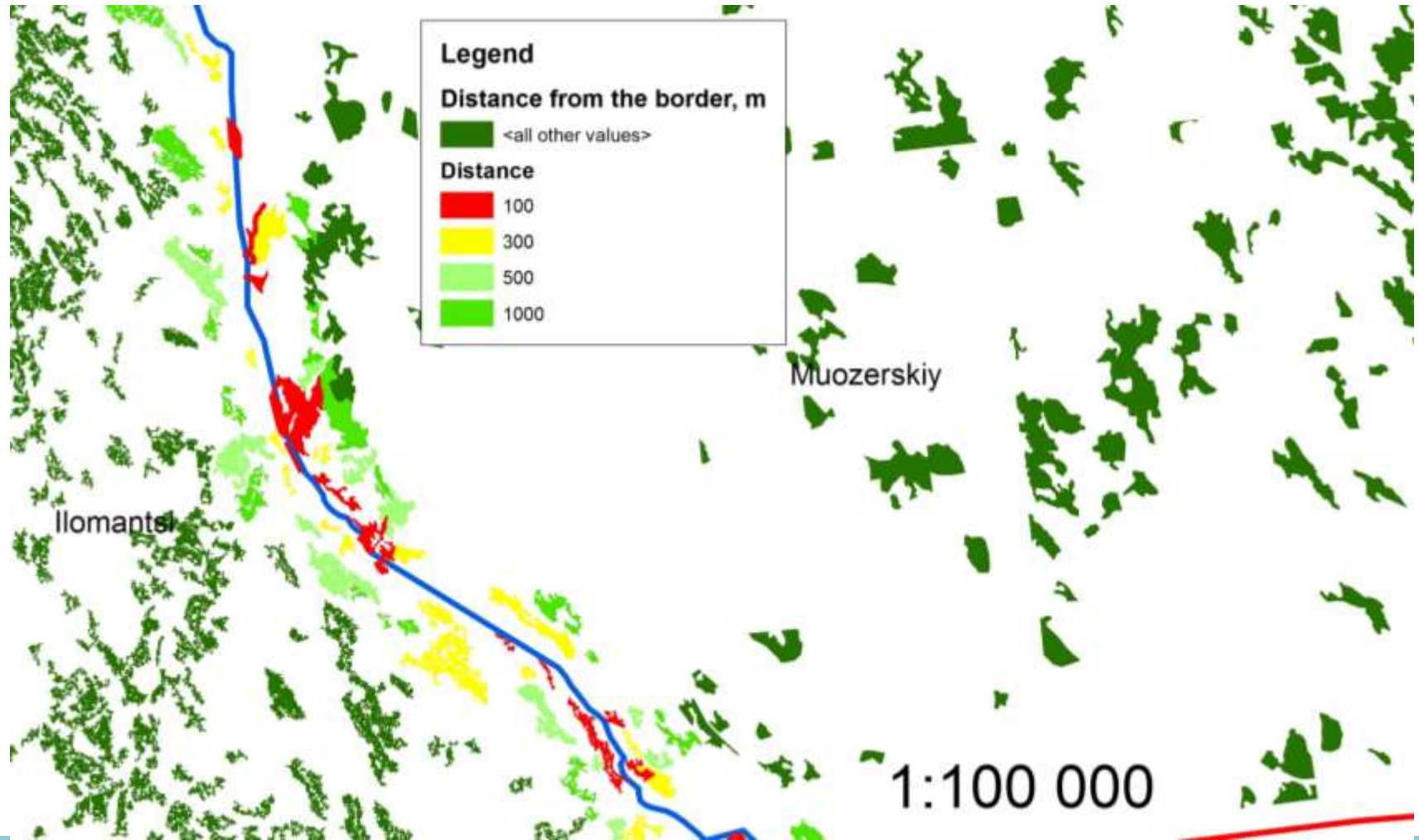


# Cross border forest fire risk areas in Ilomantsi



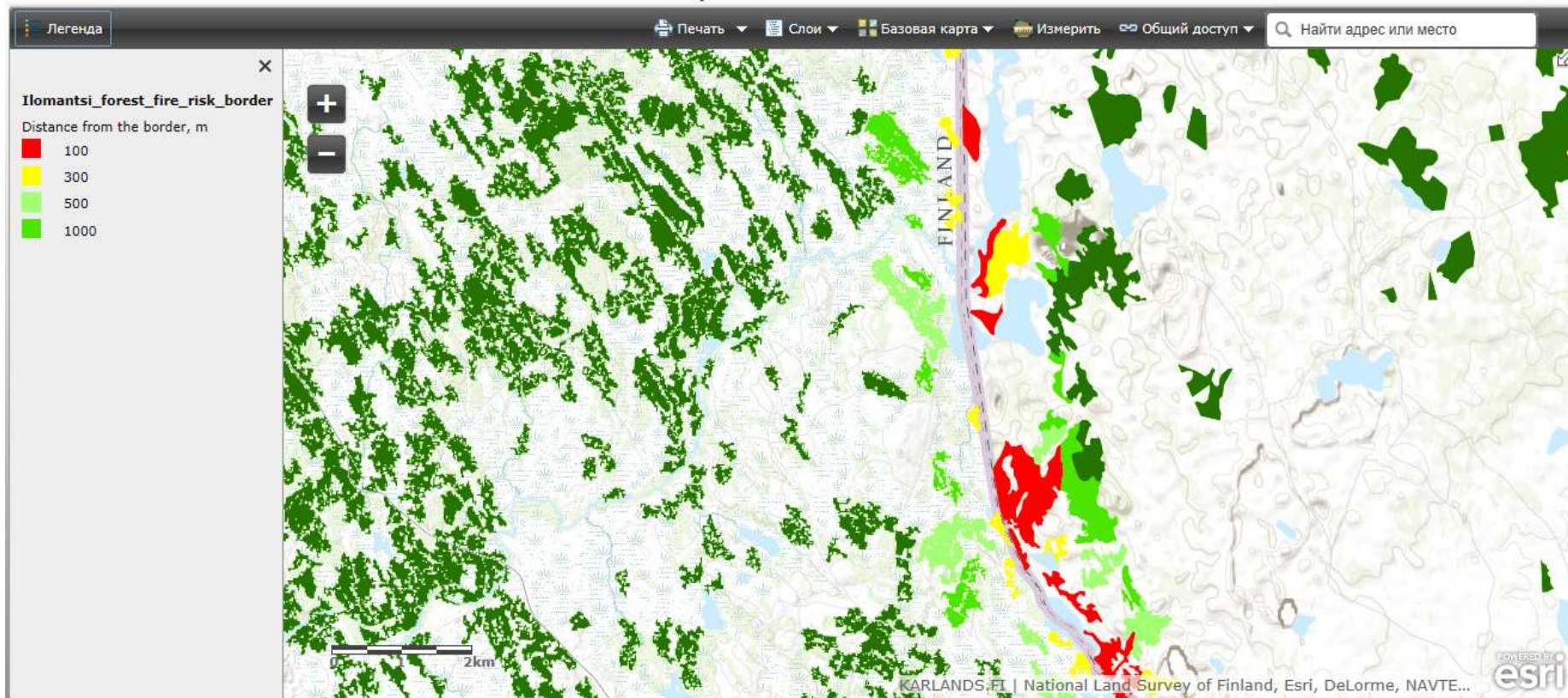


# Cross border forest fires risk as a function of distance from the border



# Possibilities for data dissemination and communication in cross border context

## Ilomantsi border areas forest fire risk map



<http://uef.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=8afab5525f53413696977293383b90bf>

<http://bit.ly/1ftSqrF>

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# Future outlook

- Joint Finnish-Russian forest fire risk classification
- KARLANDS project is able to offer cross border forest fire risk database
- The online cross border forest fire risk monitoring system



**More information:**

**[www.karlands.fi](http://www.karlands.fi)**

**Twitter: @ENPI\_KARLANDS**

