



# WP 6

## “Red Phone”

Alex Bernardová, Marie Šabacká, Josef Elster  
University of South Bohemia in České Budějovice  
Czech Arctic Research Infrastructure  
[alex.bernardova@gmail.com](mailto:alex.bernardova@gmail.com)

# Main Objectives

help protect Arctic and global residents from the hazards of potential future environmental emergencies

- Defining methods
  - establish a process starting with alerting research station staff to possible environmental emergencies via a one-stop-shop
- Sampling, sample processing
  - providing protocols on how to make infrastructure-wide observations and/or sampling
  - identifying laboratories to analyse resulting data and/or samples
  - identifying the pathways to ensure data reach appropriate environmental agencies and government departments that can respond to emergencies based on geographically comprehensive sampling
  - determining how samples should be transported
- Sustainability
  - How the developed system can be sustained in the long term?

# Identifying problems

**Events** natural, man made, measurable, observable

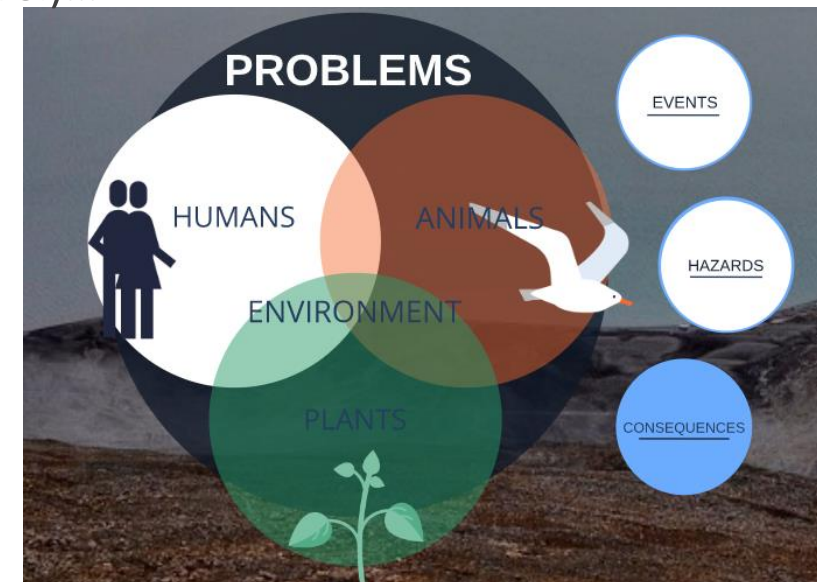
- Infections : Human diseases, Animal diseases..
- Environmental indicators of climate change: temperature, precipitation, wind, duration of snow cover, mass balance of glaciers, climate gases...
- Pollution: air pollution (NO<sub>x</sub>, SO<sub>x</sub>, NH<sub>3</sub>...), mercury, radionuclides, other chemical contaminants (eg. after military activity), POP's...

**Hazards** non-predictable, incidental, human-made

- volcanic ash eruptions, earthquake, tsunami, floods, oil spill, snow avalanches, slush avalanches, mud slides, tundra wildfire, permafrost thawing, glacier retreat (increased water level)...

## Consequences

- biodiversity loss (species decrease/extinction, species expansion)
- habitat destruction/damage
- hunting & grazing ground lost/damage/decrease
- human settlement damage
- loss of life
- economic loss



# Test

Select a particular type of potential (fictitious) hazardous event and perform a trial run of the red phone process to determine its efficacy and then refine the process as required

- Determine the hazardous event - soon!
- Field trial - season 2018
- Does it work?

# Outreach

InterAct website

- the types of hazardous extreme events likely in the North
- their potential impacts
- summary of how to act in popular science language