



ANYCaRE: ANYWHERE Crisis and Risk Experiment

A role-playing game for crisis decision-making and communication in weather-related hazards

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1. Objectives of the game

ANYCaRE role-playing game primarily aims at testing the value of new multi-hazard forecasting products in the improvement of forecasters' and emergency managers' ability to proceed to relevant actions towards the protection of public and property in the area of their responsibility. Participants are invited to play specific characters of the decision-making chain in an interactive and collaborative storytelling related to a weather hazard in a European context.

The game simulates an Emergency Operations Center (EOC) where players act as representatives of crisis management services (e.g. forecasters, road services, civil protection, municipalities, electricity providers) gathered under the leadership of one public official (the EOC leader) to take collective decisions in order to:

- Insure citizens' safety and prevent loss of life from weather-related hazards and cascading effects,
- Prevent disturbances in social life, which make people unhappy and reduce wellness,
- Maintain a budget (minimize expenses for preventive measures compared to the actual needs).

During the game, the group has to collectively **take emergency decisions and propose communication actions** based on multi-hazard and impact-based forecasts and information by filling out a **decision form** for each trial of the 3 rounds of the game.

The game exists in **two versions ANYCaRE_Floods**, simulating a flood hazards scenario, and **ANYCaRE_Strong_Wind** simulating a wind storm in Finland. For further description of the game, you can access an online version of a scientific paper submitted to NHESS journal: <https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2018-244/>

2. ANYCaRE Floods

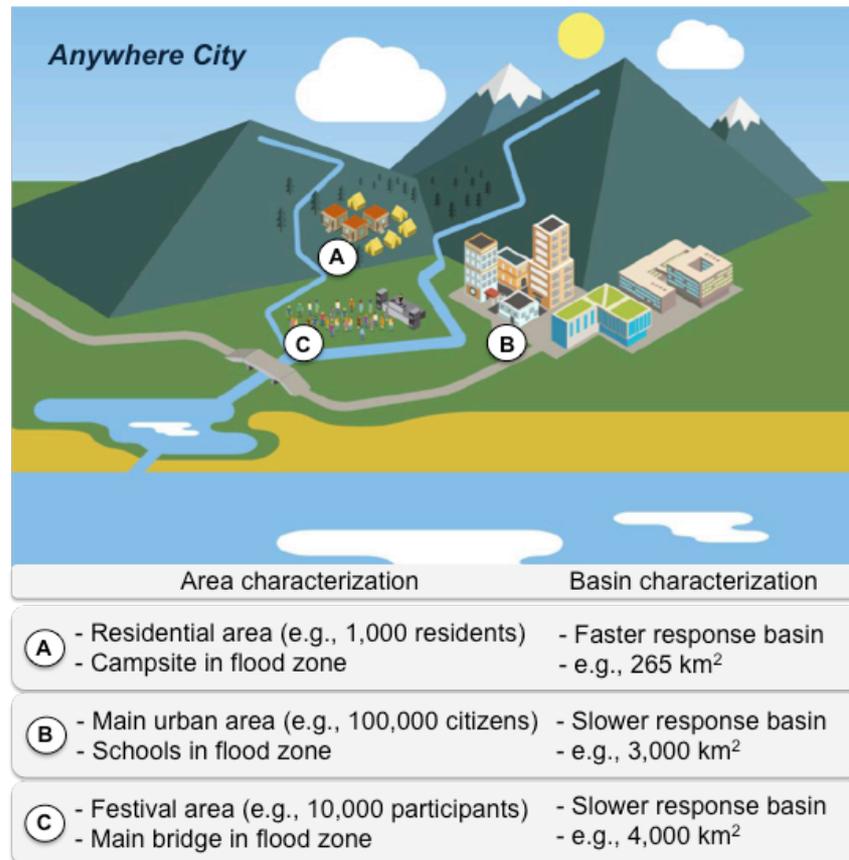


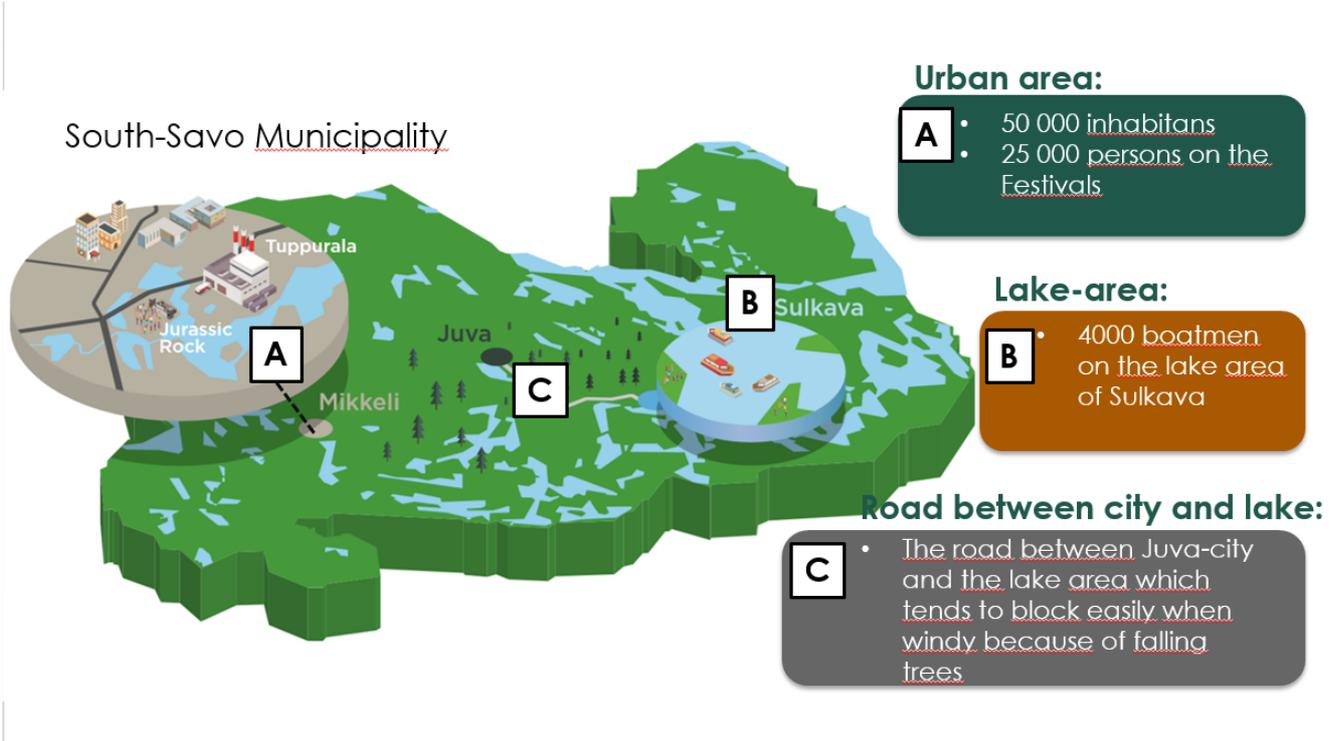
Illustration of Anywhere City, composed of 3 areas (A, B and C) exposed to different flooding dynamics.

Area A is characterized by relatively steep tree-covered slopes drained by a small basin (e.g. few hundreds km²) known for its fast response to precipitation. A village of about 1,000 residents and one school is settled on the slopes and one campsite (100 camping pitches) is located in the forest close to the riverbed (within the 10-year return period flood prone zone).

Area B is composed of both highlands and lowlands drained by a river basin of about 3,000 km². The densely populated (e.g., 100,000 citizens) urban area is located in the lower part of the basin. It includes the majority of schools, hospitals and other public services. 30% of the residential areas and public services are located in the 20-year return period flood prone zone.

Area C is typical lowland with a large floodplain located in the lower part of a larger river basin (up to 4,000 km²). There are no permanent settlements in C but the area surrounds the main bridge of Anywhere City, calibrated to resist a 100-year flood. The area is characterized by seasonal agricultural activity and a natural recreation area where the annual festival of Anywhere City named “AnyDay” is taking place on Saturday with 10,000 expected participants coming from all over the country.

3. ANYCaRE Strong Wind



South-Savo municipality has a special landscape which represents well the typical Finnish landscape with dense forest areas, powerlines above the ground that are vulnerable to strong winds and falling trees, lake areas attracting numerous boatmen during summer, and the urban areas of Mikkeli and Juva. In the storyline, we illustrate areas A, B and C to represent the variety of these different areas.

Area A represents the urban area of Mikkeli with a year-round-population of 50,000 persons. The game takes place in mid-July and starts on Friday, 24 hours prior the Jurassic Rock. The music festival is expected to attract additional 25,000 persons to Mikkeli. The urban area includes also many critical infrastructures like chemical factories, hospitals and shops that are dependent on continuous electricity supply.

Area B is the lake area where the Sulkavan Soutu Boat race takes place. About 4,000 boatmen are expected to attend the race on the lake of Sulkava.

Area C mainly contains the road leading from Juva to Sulkava, which is a crucial evacuation route for civil protection when facing emergencies at the lake areas. The road tends to get blocked by falling trees in storm situations.

