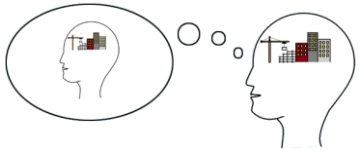
CPD
CENTER FOR PREVENTIVE
MEDICINE AND DIGITAL HEALTH



mattiheino.com | preparedness.fi

The Missing Middle

Understanding and Shaping Community Resilience

Matti T. J. Heino
Center for Preventive Medicine and Digital Health · Medical Faculty Mannheim, Heidelberg University
matti@mattiheino.com
EPH 2026, Bilbao

UMM
UNIVERSITÄTSMEDIZIN
MANNHEIM

mattiheino.com/missing-middle

Medizinische Fakultät Mannheim
der Universität Heidelberg

Universitätsklinikum Mannheim

Multiscale preparedness

mattiheino.com | preparedness.fi

”The Missing Middle”

Multiscale preparedness

A person

Multiscale preparedness

A household – many people

Multiscale preparedness

A neighbourhood – many households

Maps: Statistics Finland (CC BY 4.0) · © OpenStreetMap contributors · Natural Earth

mattiheino.com | preparedness.fi

UMM UNIVERSITÄTSMEDIZIN MANNHEIM

mattiheino.com/missing-middle

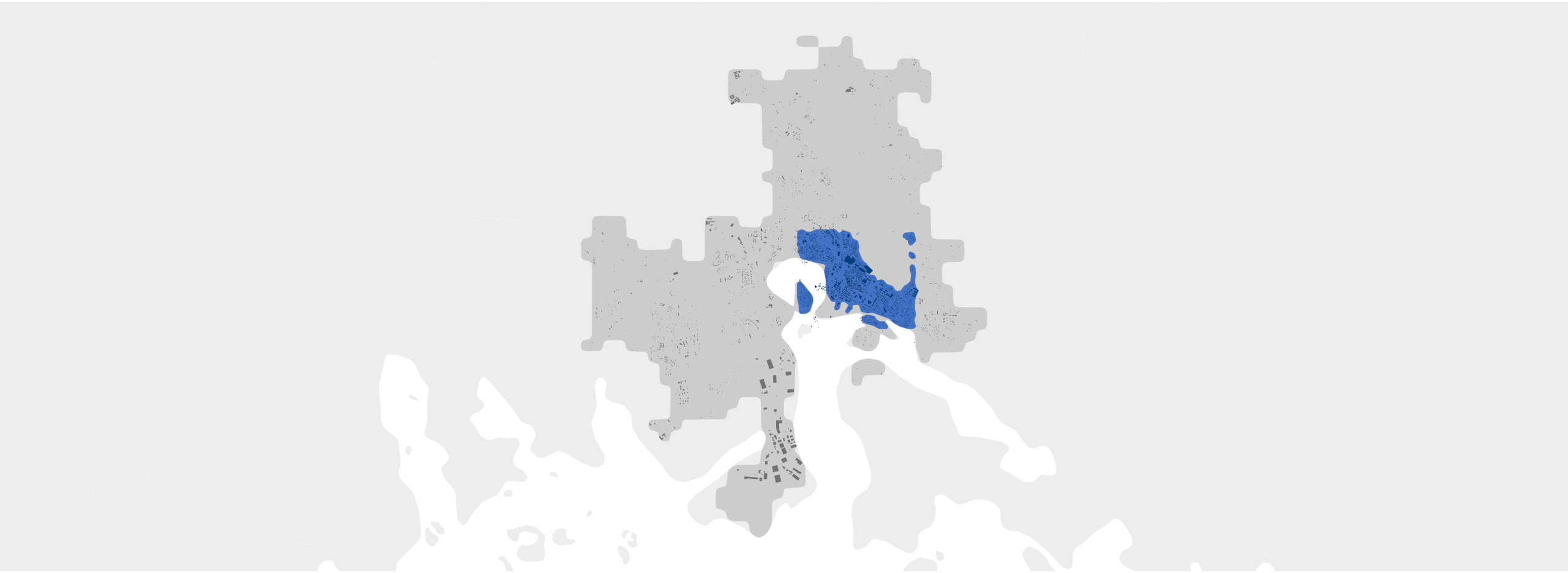
Medizinische Fakultät Mannheim der Universität Heidelberg

Universitätsklinikum Mannheim

CPD CENTER FOR PREVENTIVE MEDICINE AND DIGITAL HEALTH

Multiscale preparedness

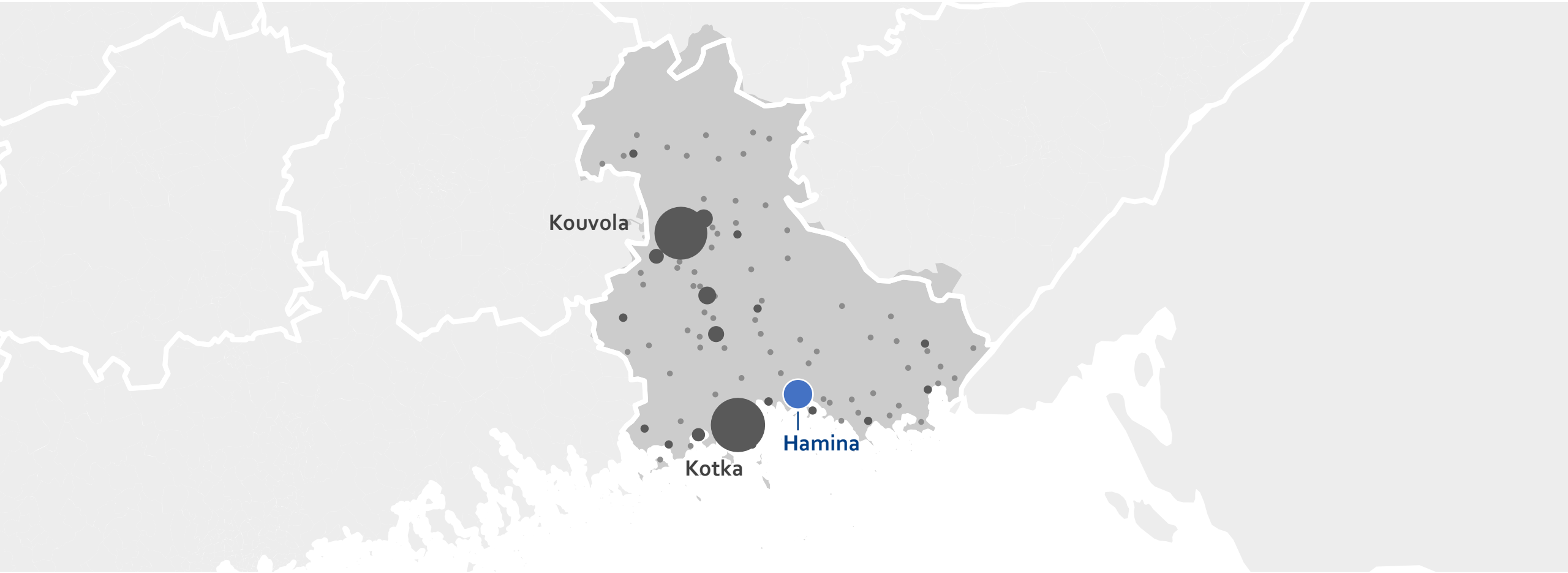
A village/town/city – many neighbourhoods



Maps: Statistics Finland, SYKE (CC BY 4.0) · © OpenStreetMap contributors · Natural Earth

Multiscale preparedness

A region – many villages/towns/cities

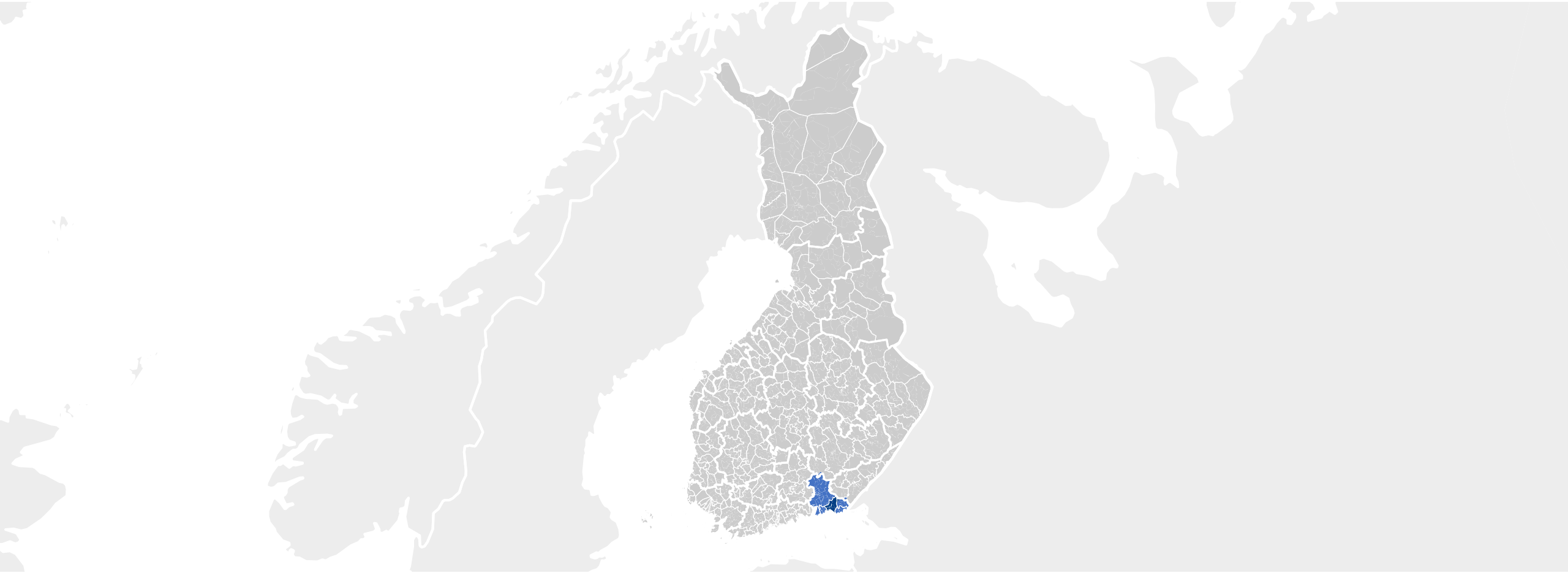


Maps: Statistics Finland, SYKE (CC BY 4.0) · © OpenStreetMap contributors · Natural Earth

mattiheino.com/missing-middle

Multiscale preparedness

A country – many regions



Maps: Statistics Finland (CC BY 4.0) · © OpenStreetMap contributors · Natural Earth

mattiheino.com/missing-middle

mattiheino.com | preparedness.fi

UMM UNIVERSITÄTSMEDIZIN MANNHEIM

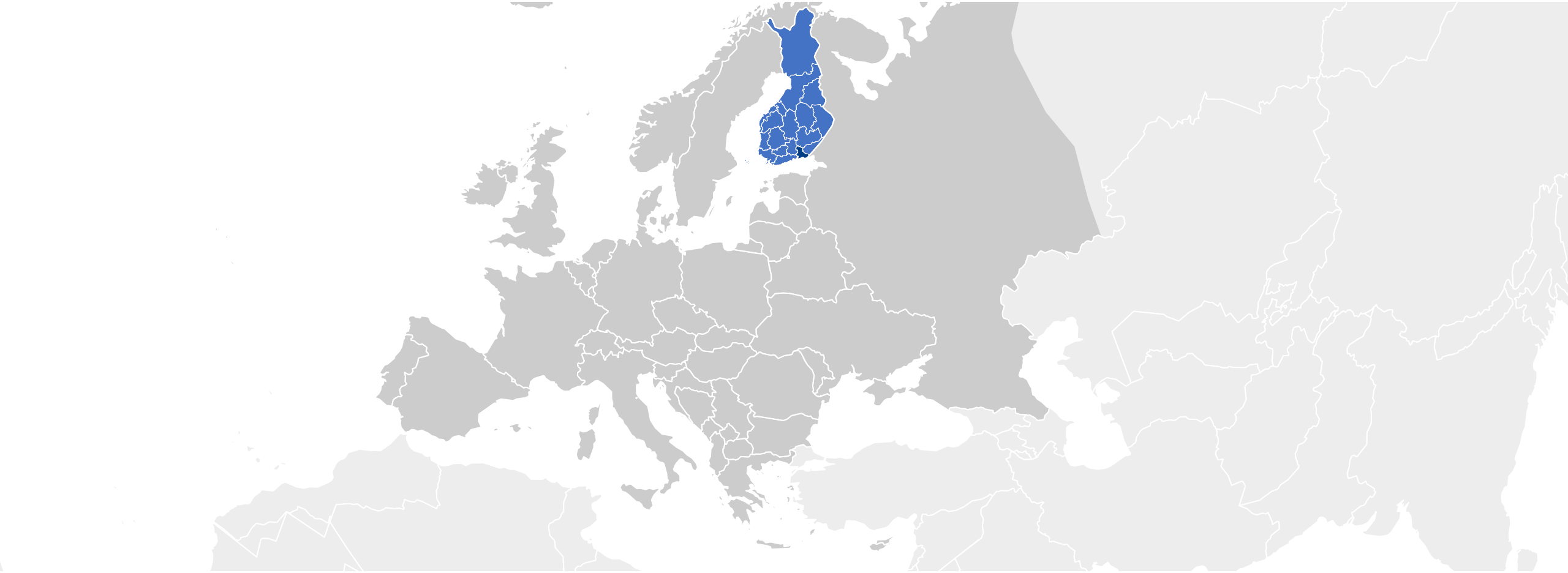
Medizinische Fakultät Mannheim der Universität Heidelberg

Universitätsklinikum Mannheim

CPD CENTER FOR PREVENTIVE MEDICINE AND DIGITAL HEALTH

Multiscale preparedness

A continent – many countries



Maps: Statistics Finland (CC BY 4.0) · © OpenStreetMap contributors · Natural Earth

Multiscale preparedness

The planet – many continents

Maps: Statistics Finland (CC BY 4.0) · © OpenStreetMap contributors · Natural Earth

mattiheino.com | preparedness.fi

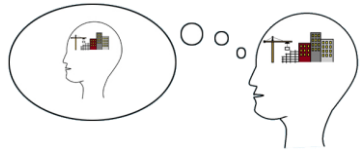
UMM UNIVERSITÄTSMEDIZIN MANNHEIM

Medizinische Fakultät Mannheim der Universität Heidelberg

Universitätsklinikum Mannheim

CPD CENTER FOR PREVENTIVE MEDICINE AND DIGITAL HEALTH

Multiscale preparedness



mattiheino.com | preparedness.fi

Multiscale preparedness

mattiheino.com | preparedness.fi

Key actions of the EU Preparedness Union Strategy (2025)

The missing middle?

72h supplies

Preparedness Day

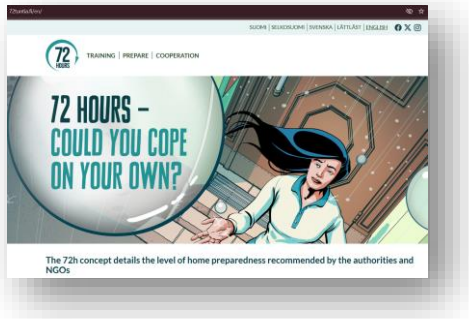
Preparedness Day

Preparedness Day

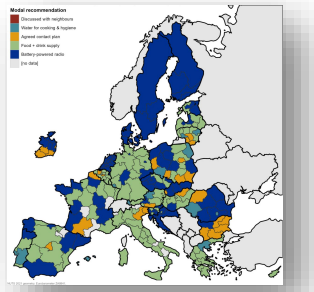
Guidelines, requirements

Stockpiles, crisis hub

Partnerships, aid



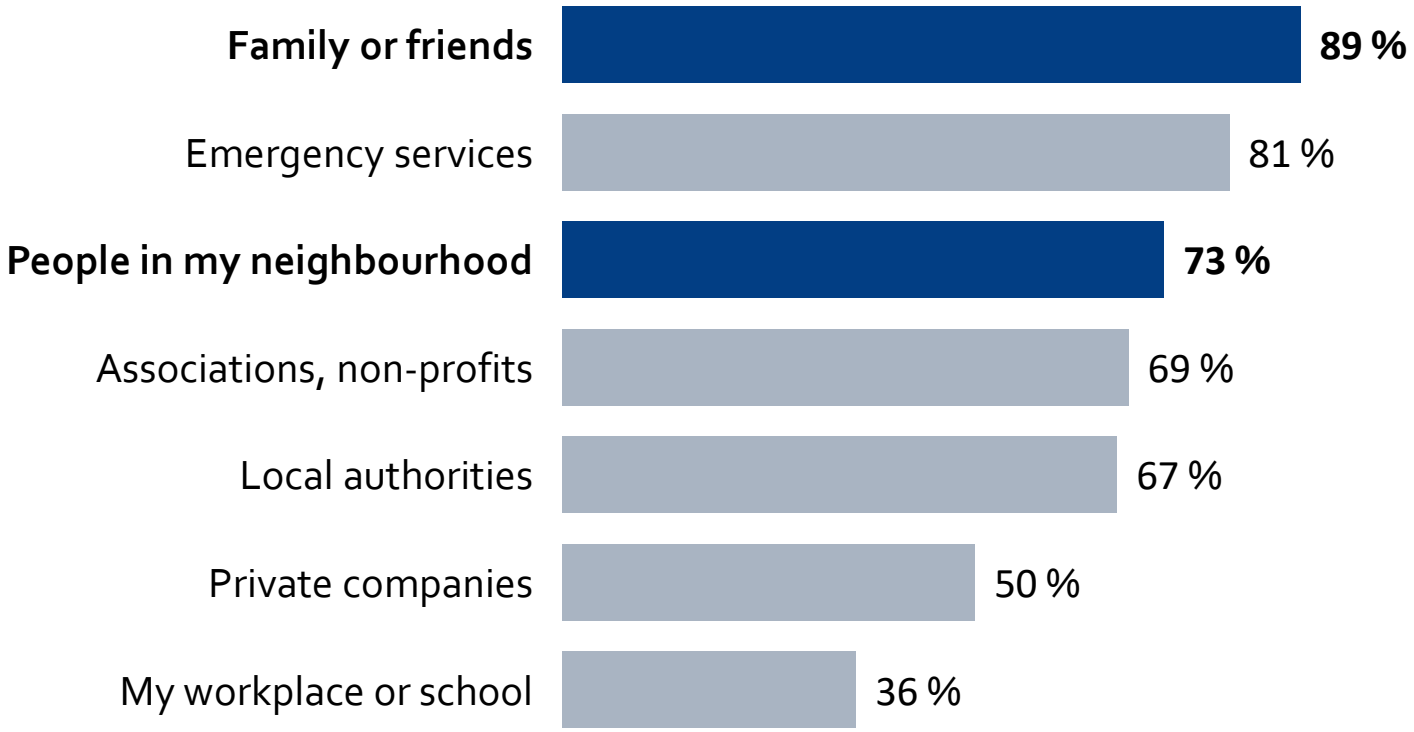
KYLÄVARA



mattiheino.com/missing-middle

Why care about communities?

Eurobarometer: In the first days of a disaster, I would rely on …



Eurobarometer 2024 on disaster risk awareness and preparedness
27 EU member states / n = 26 405 · "a great deal" or "somewhat"

Mutual aid groups form on their own in emergencies

e.g. Ahr valley 2021, Valencia 2024

Meta-analysis: social norms as the strongest social correlate of preparedness

Skipor & Bergquist (2026): 167 samples, 30 countries, n = 110 683

Preparedness is shared (and the selfish case for community preparedness)

7 days 0 days 0 days 0 days 0 days 0 days 0 days

a shock

Common fate

A shared "we"

Support e.g. Drury (2018), Drury et al. (2019)

1 day **1 day** **1 day** **1 day** **1 day** **1 day** **1 day**

Eurobarometer:

6,8 %

have discussed common protective measures in their neighbourhood

mattiheino.com/missing-middle

mattiheino.com | preparedness.fi

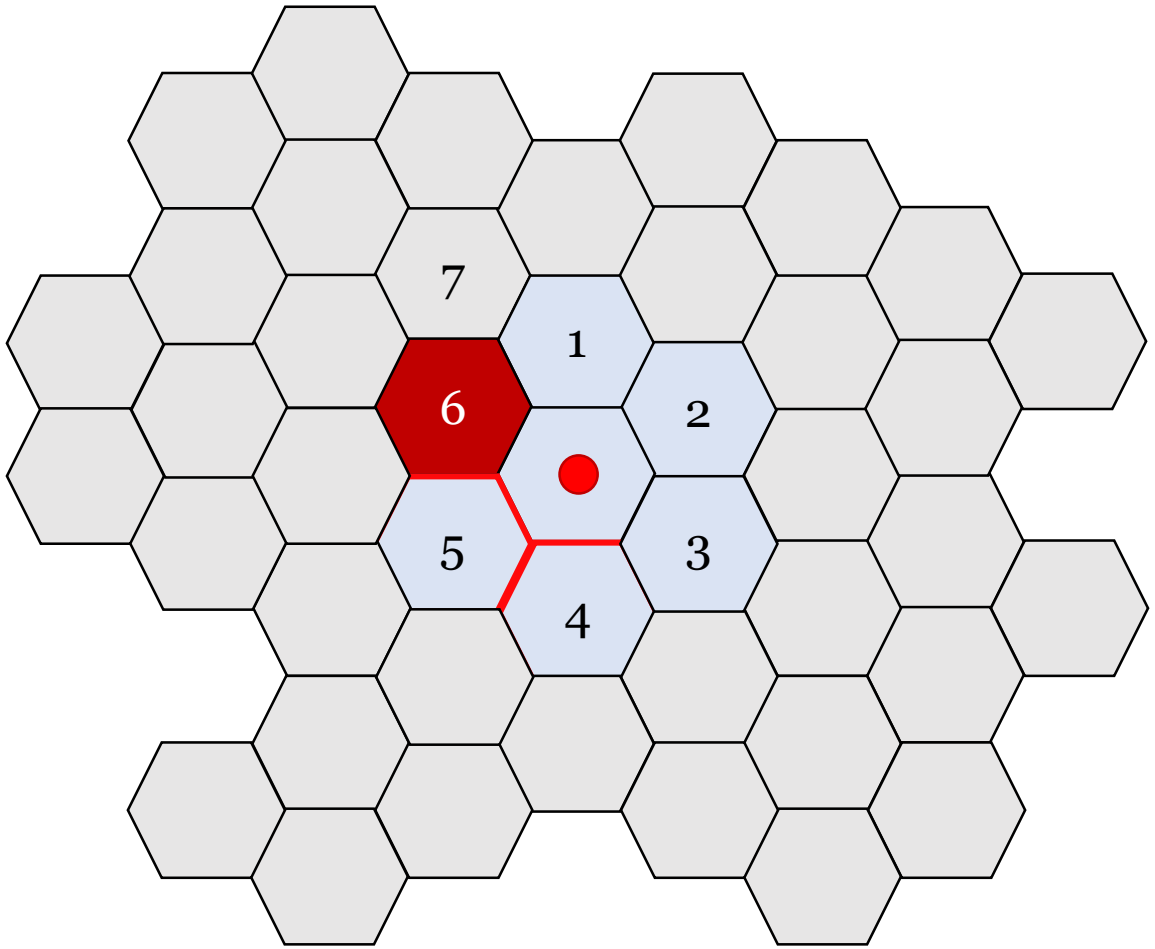
UMM UNIVERSITÄTSMEDIZIN MANNHEIM

Medizinische Fakultät Mannheim der Universität Heidelberg

Universitätsklinikum Mannheim

CPD CENTER FOR PREVENTIVE MEDICINE AND DIGITAL HEALTH

Evolutionary Potential of the Present



Heino et al. (2024): From a false sense of safety to resilience under uncertainty.

mattiheino.com/missing-middle

mattiheino.com | preparedness.fi

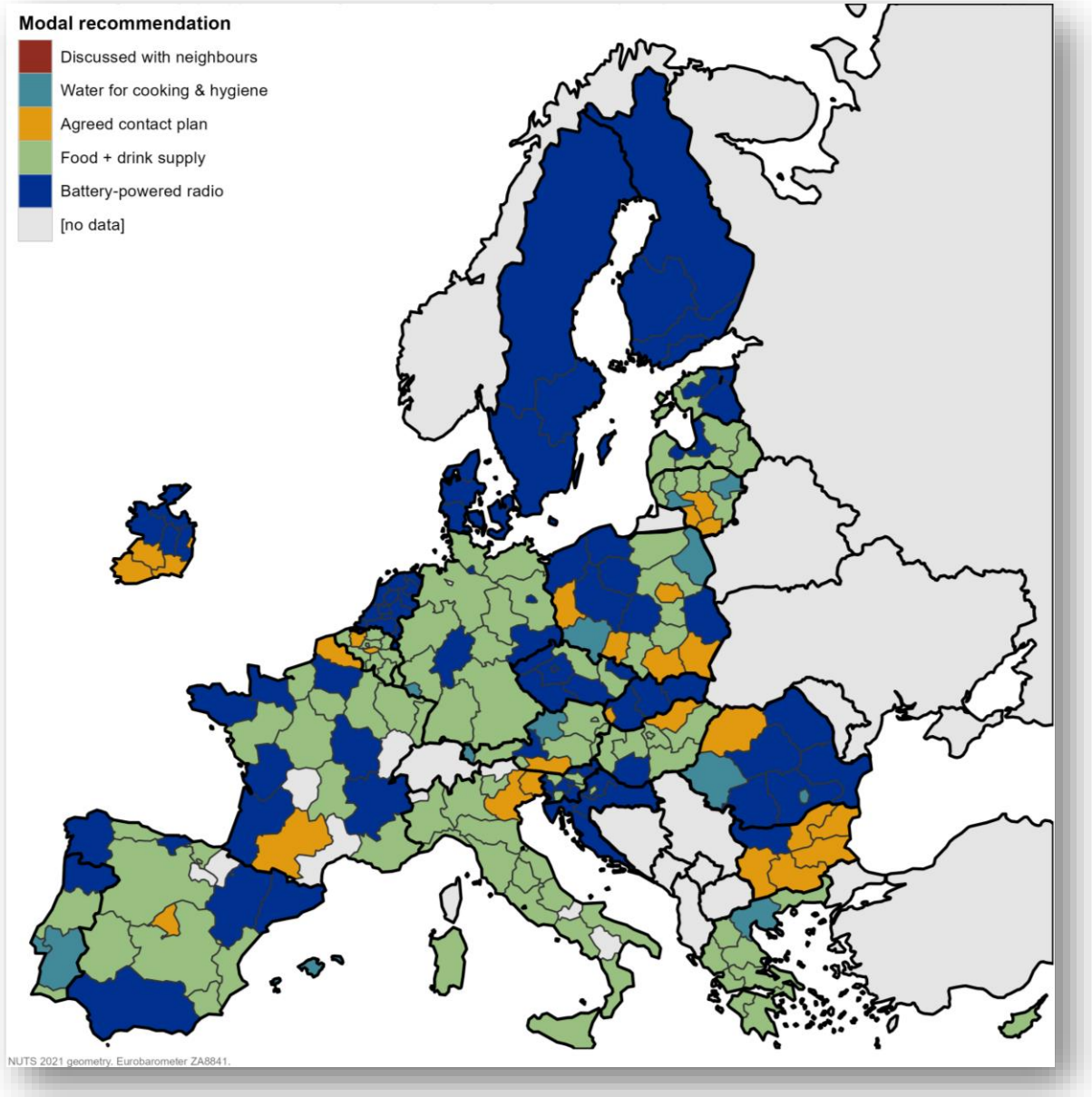
UMM UNIVERSITÄTSMEDIZIN MANNHEIM

Medizinische Fakultät Mannheim der Universität Heidelberg

Universitätsklinikum Mannheim

CPD CENTER FOR PREVENTIVE MEDICINE AND DIGITAL HEALTH

Most common "adjacent possible" for each region

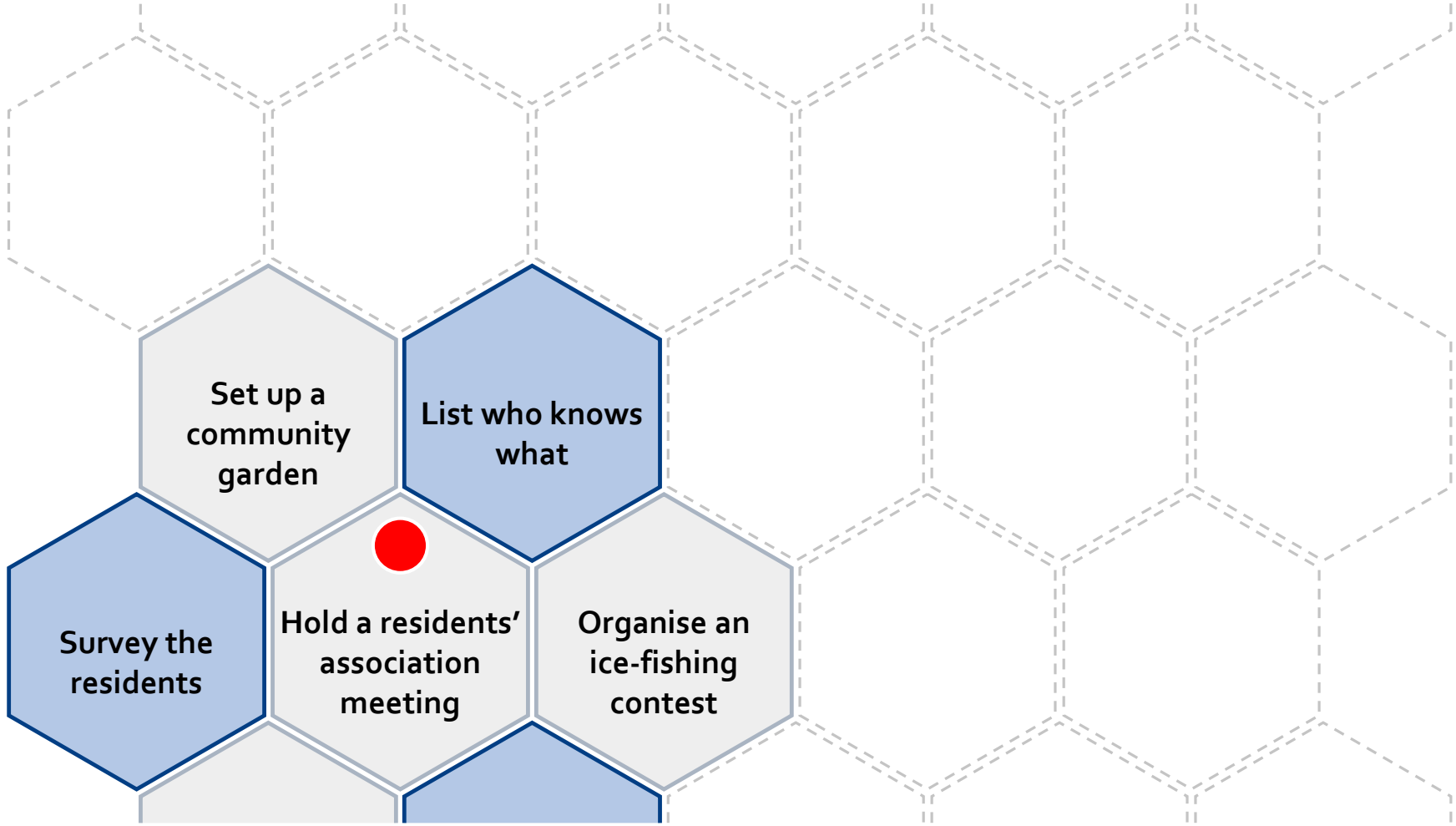


mattiheino.com | preparedness.fi

Portfolios owned by communities

Start from where people are

Adjacent possibles are visible



KYLÄVARA

preparedness

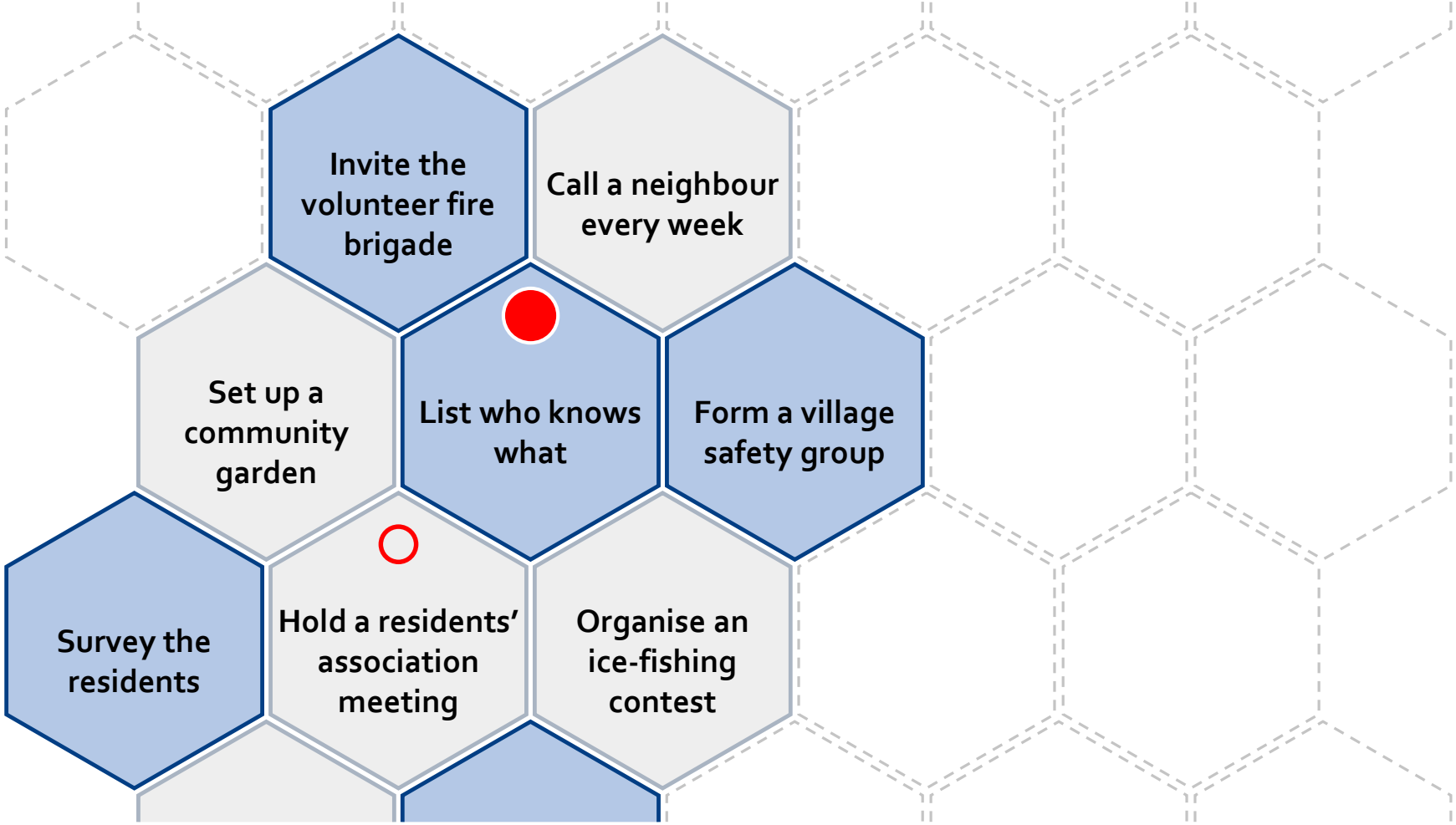
everyday life

not yet in view

Portfolios owned by communities

Every step brings new tiles into view

listing who knows what puts new steps within reach



KYLÄVARA

preparedness

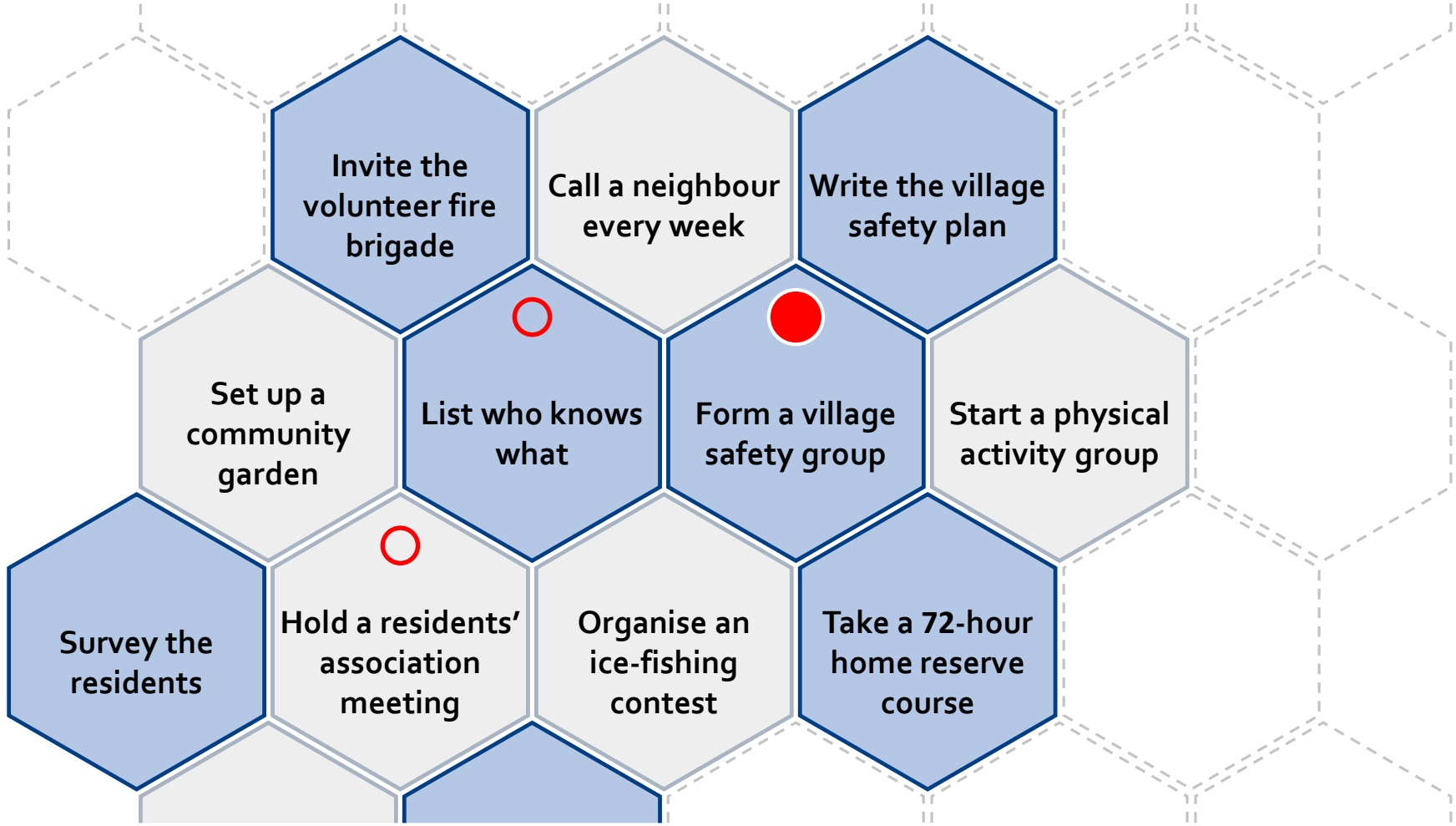
everyday life

not yet in view

Portfolios owned by communities

Every step brings new tiles into view

a safety group puts a physical activity group within reach



KYLÄVARA

preparedness

everyday life

not yet in view

Portfolios owned by communities

Every step brings new tiles into view

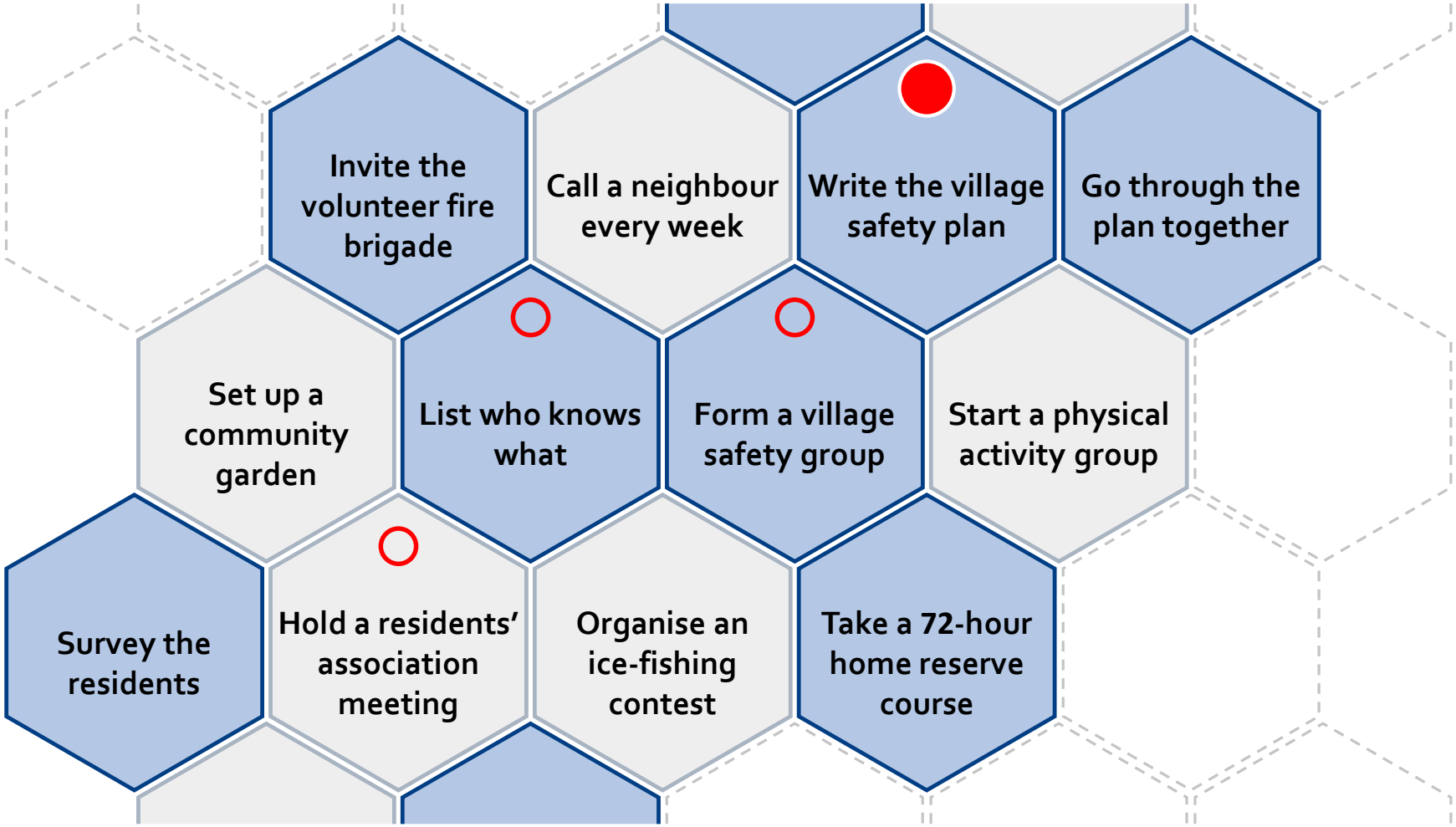
doing things together shapes the space of possibilities

KYLÄVARA

preparedness

everyday life

not yet in view



Two ways to find a community's next step

Participatory narrative inquiry

What happens here – in residents' own words?

Story tables

small groups tell and make sense of their own experiences

Online story collection

for those who would not speak in a group

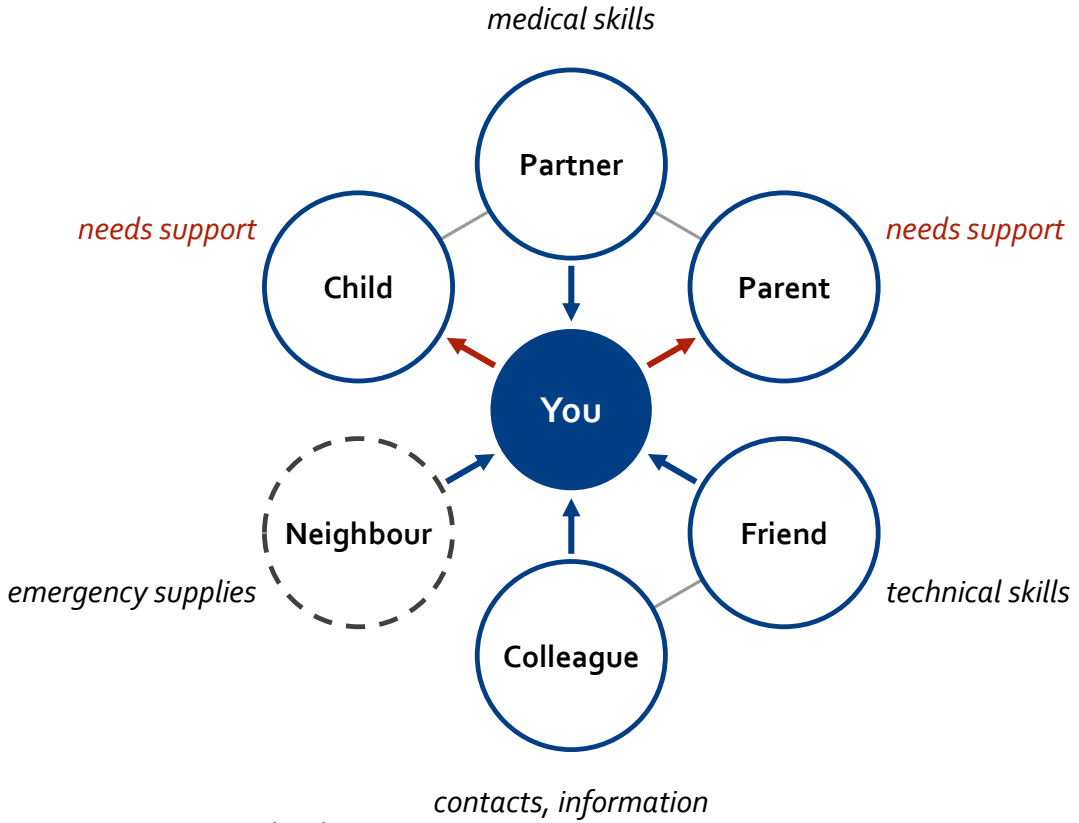
Sense-making session

the group works through the collected experiences and decides what to do

→ actions the community proposes itself

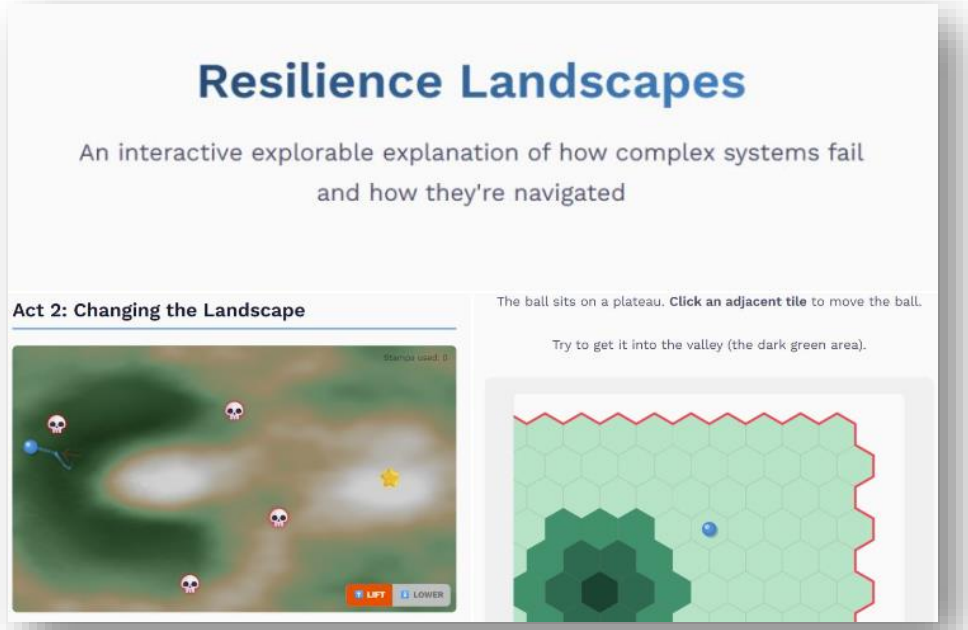
Ego network mapping

Who can I count on – and who counts on me?



Kurtz, C. F. (2026). *Working with Stories in Your Community or Organization: Participatory Narrative Inquiry* (4th ed.).

https://ncase.me/attractors/



https://attractors.preparedness.fi

mattiheino.com | preparedness.fi

mattiheino.com/missing-middle

Thank you!

Stay in touch:
news.mattiheino.com
matti@mattiheino.com

UMM UNIVERSITÄTSMEDIZIN MANNHEIM

Medizinische Fakultät Mannheim der Universität Heidelberg
Universitätsklinikum Mannheim

CPD CENTER FOR PREVENTIVE MEDICINE AND DIGITAL HEALTH