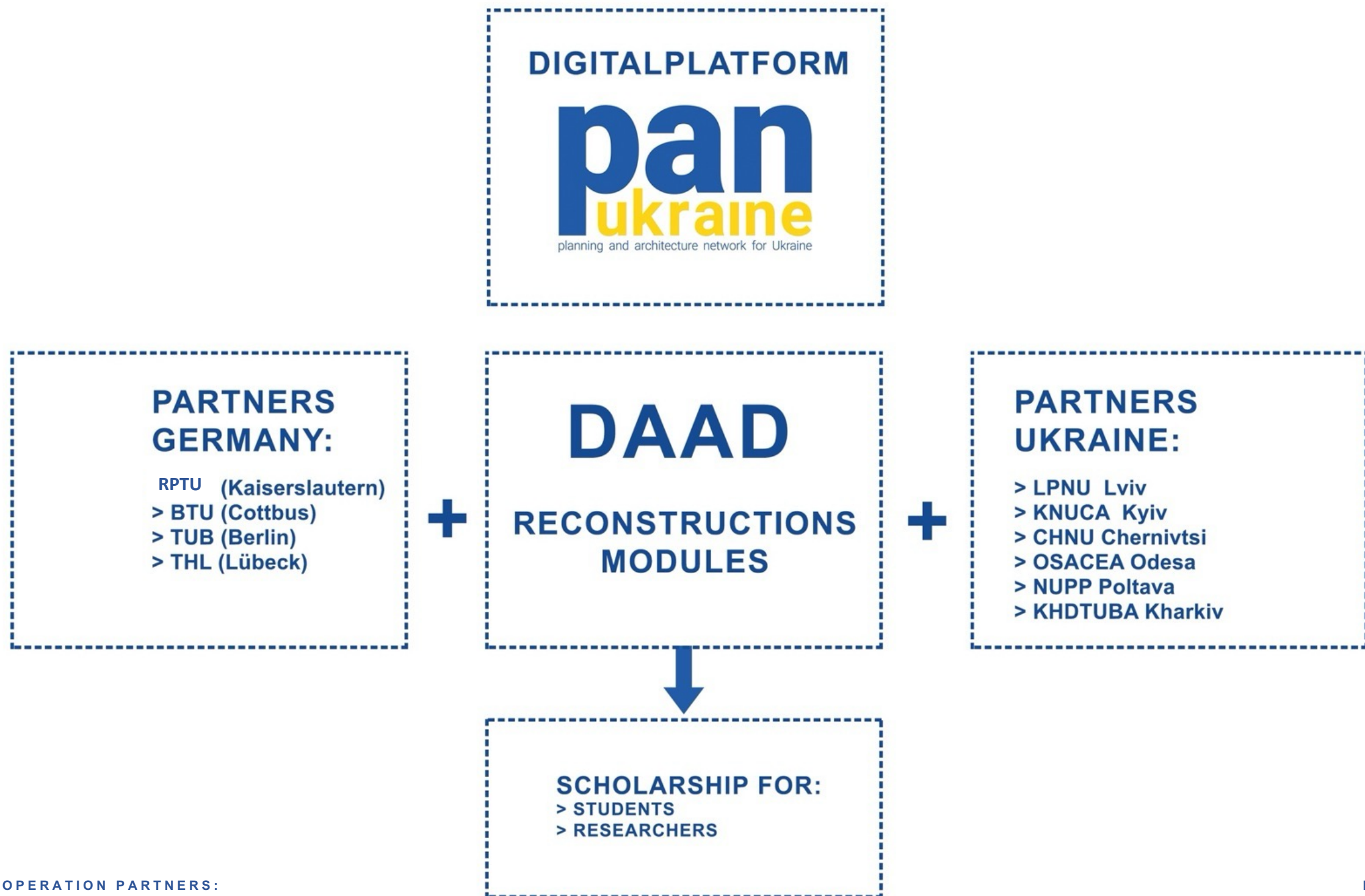




Prof. Dr. Detlef Kurth

Urban Resilience – new challenges for reconstruction

Partners of DAAD project Ukraine digital



COOPERATION PARTNERS:

RPTU Rheinland-Pfälzische
Technische Universität
Kaiserslautern
Landau

 **TECHNISCHE
HOCHSCHULE
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University of Technology
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 Federal Ministry
of Education
and Research

DAAD Deutscher Akademischer Austauschdienst
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FUNDED BY:

RESILIENT NEIGHBORHOODS - DESIGNING RECONSTRUCTION IN UKRAINIAN CITIES

LECTURE SERIES 2024 INTEGRATED URBAN DEVELOPMENT IV

09.04. INTRODUCTION/ RE-OPENED IDENTITY - DESIGN ELEMENTS FOR AN INDEPENDENT ARCHITECTURE IN UKRAINE IN SOVIET TIME

Detlef Kurth, RPTU Kaiserslautern
Liza Evseeva, Stoneemroidery Lviv
[Mod: Anna Kuzyshyn]

23.04. MEMORIES OF WAR - WAR DAMAGE AS PART OF THE RECONSTRUCTION CONCEPT, CASE STUDIES WARSAW AND ALEPPO

Mikolaj Gomolka, Warsaw University
Christoph Wessling, BTU Cottbus
[Mod: Christoph Wessling]

07.05. STRATEGIES FOR RECONSTRUCTION - RECONSTRUCTION CONCEPT FOR THE CITY OF MYKOLAIV

Andreas Kipar, LAND Milano
Oleksandr Sienkevych, Major of Mykolaiv
[Mod: Detlef Kurth]

21.05. RESILIENT HOMES - CREATING SAFE AND LIVEABLE NEIGHBORHOODS

Mindaugas Pakalnis, Chief Architect Vilnius
[Mod: Christoph Wessling]

04.06. INCLUSIVE CITY - SUSTAINABLE MOBILITY AND BARRIER-FREE PUBLIC SPACE

Sofia Brem, Big City Lab Kyjiv
Burkhard Horn, traffic planner Berlin (tbc.)
[Mod: Silke Weidner]

18.06. DIGITAL CITY - DIGITAL DATA FOR RESILIENT RECONSTRUCTION AND CITIZEN PARTICIPATION

Joerg Noennig and Maria Moleiro Dale, HCU Hamburg, Digital City Science
[Mod: Frank Schwartze]

02.07. RESILIENT NEIGHBORHOODS - STRATEGIES FOR SUSTAINABLE URBAN DEVELOPMENT

Kees Christiaanse, KCAP Rotterdam
Erik Schweikhardt and Iryna Milash, GIZ Ukraine
[Mod: Detlef Kurth]

16.07. STRATEGIES FROM YOUNG GENERATION RESILIENT NEIGHBORHOODS

DAAD scholars from Planning schools in Ukraine

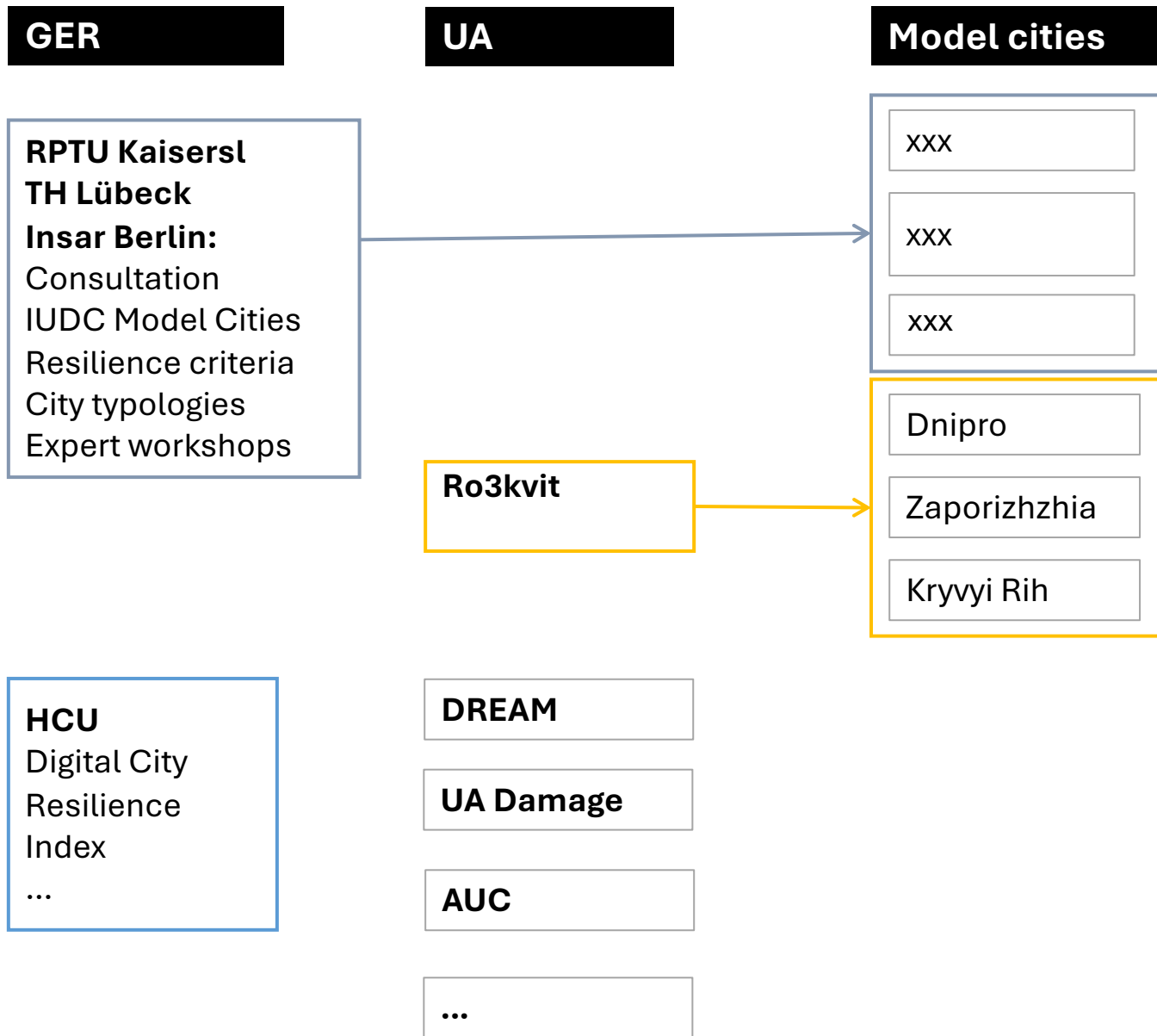
every second Tuesday 5 - 6.30 pm (CET), 6 - 7.30 pm (EEST)

join here: <https://b-tu.webex.com/b-tu-en/j.php?MTID=mc3924fb419e1fe4de2cdcbafbb618d7e>
All lectures will be recorded and subsequently provided on the panforukraine platform.

Building upon the success of our previous lecture series, we would like to delve deep into the realm of resilient neighborhoods and the designing reconstruction in Ukrainian Cities. Experts from academia and practice will enrich the discourse with their invaluable perspectives gathered from global projects, as well as the Ukrainian and German context.

Join us as we continue fostering a meaningful dialogue around the pressing challenges and future prospects for the Ukrainian cities. See www.panforukraine.de for more information and access to the previous modules. For questions please contact info@panforukraine.de.

Partner structure GIZ SUR



Working group:

- Anna Kuzyhsyn, RPTU
- Poliksen Qorri-Dragaj, RPTU
- Yana Masymchuk, Insar
- Christoph Wessling, Insar

COOPERATION PARTNERS:



FUNDED BY:



„Leipzig Charter“ of European Union 2007/2020

Targets of urban development policy:

- Limitation of urban sprawl
- Compact and dense urban structures, mixed functions
- Strengthen common good, public infrastructure
- Green and climate adaptive city
- Less car traffic, accessible public space

Integrated approach:

- Multi-level governance, strong municipalities
- Integrated urban development concepts (IUDC)
- Planning as a process, not top-down
- Integrating the objectives of sustainable development

>>> Basis for EU EFRE fundings



Background: White book (Weissbuch) Ukraine/ Glossar GIZ 2017

Starke Städte. Starke Ukraine.

Weißbuch zur Reform von Verwaltung
und Recht für die Stadtentwicklung
in der Ukraine

Ausgabe 1

15. Mai 2017



Виконавець:

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



Друга робоча редакція

Словник фахових термінів
з інтегрованого міського розвитку

Glossar zu Fachbegriffen für
Integrierte Stadtentwicklung

Zweiter Arbeitsentwurf



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Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Different kinds of threats: stress and shocks

Shocks/ Catastrophes

- Natural catastrophes
- Terror attacks
- Pandemics
- INVASIONS/ WARS

Stress/ Crisis

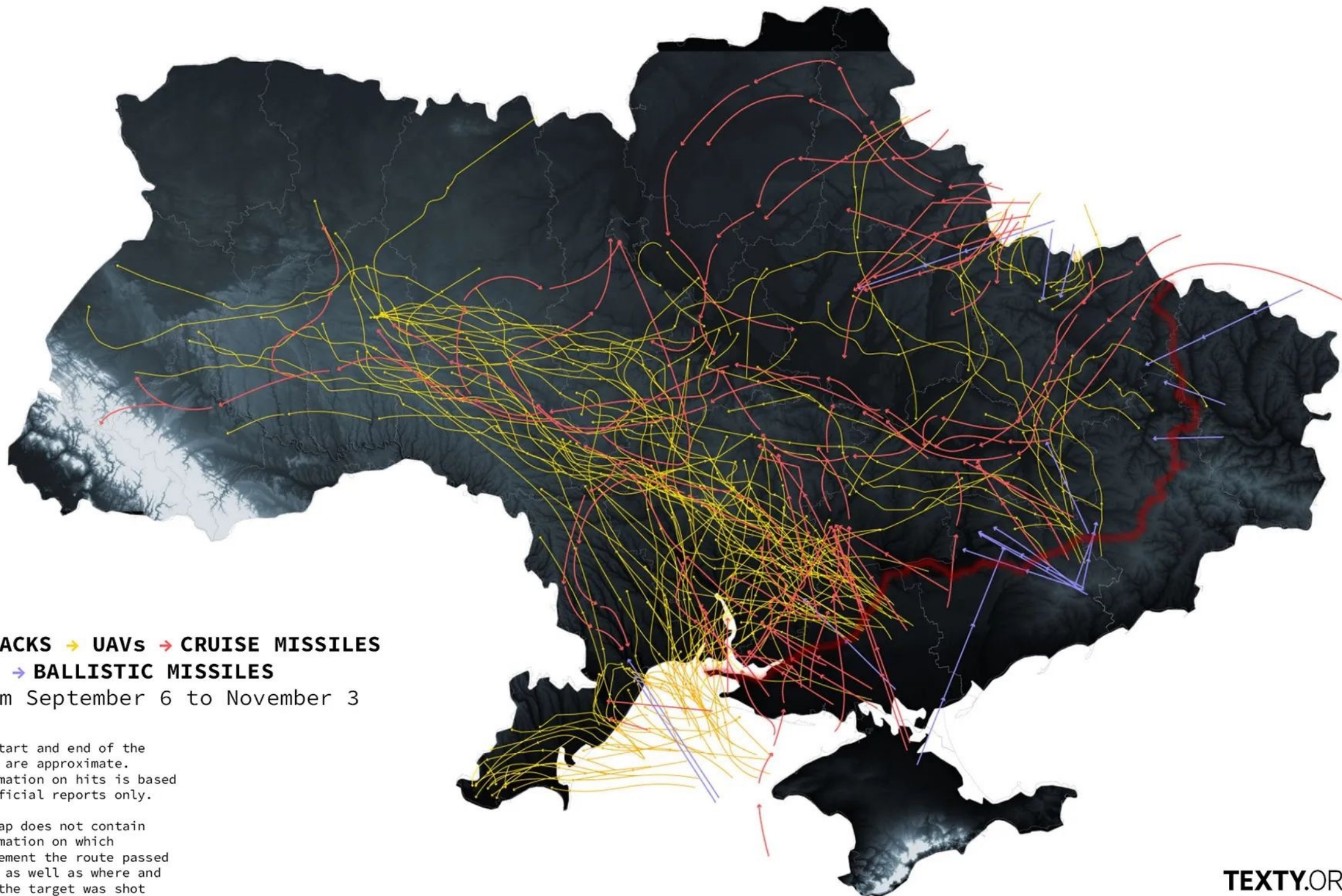
- Environmental crisis
 - Economic/ financial crisis
 - Political crisis, bad governance
 - Demographical crisis, aging society
 - Failing critical infrastructure
-

Russian war crime air attacks

**ATTACKS → UAVs → CRUISE MISSILES
AND → BALLISTIC MISSILES**
from September 6 to November 3

The start and end of the route are approximate.
Information on hits is based on official reports only.

The map does not contain information on which settlement the route passed over, as well as where and what the target was shot down with.



TEXTY.ORG.UA

Data provided by war_monitor Telegram channel

Definition of „Urban Resilience“

Definition **UN-Habitat 2021**: “Urban Resilience is the measurable ability of any urban system, with its inhabitants, to **maintain** continuity through all shocks and stresses, while positively **adapting** and **transforming** toward sustainability“.

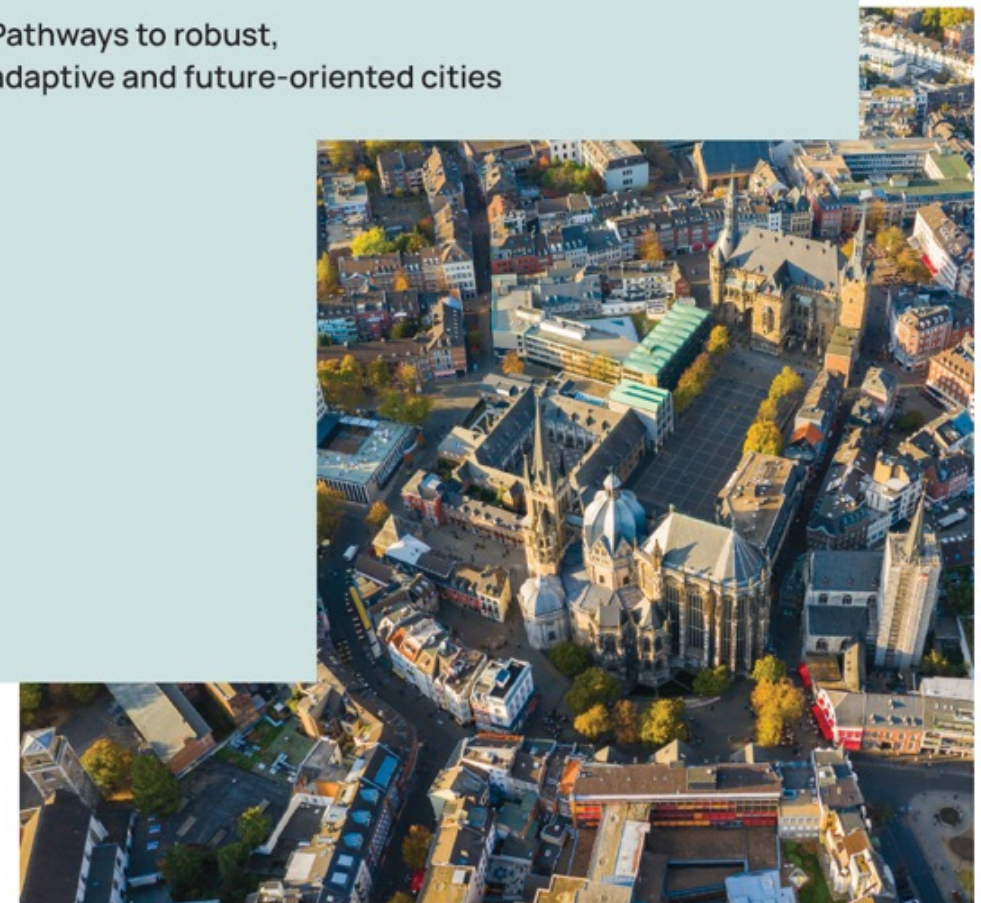
Three dimensions:

- Robust/ persistent
- Adaptive (preventive)
- Future-oriented transformation

“Building back better”- approach

Memorandum Urban Resilience

Pathways to robust,
adaptive and future-oriented cities



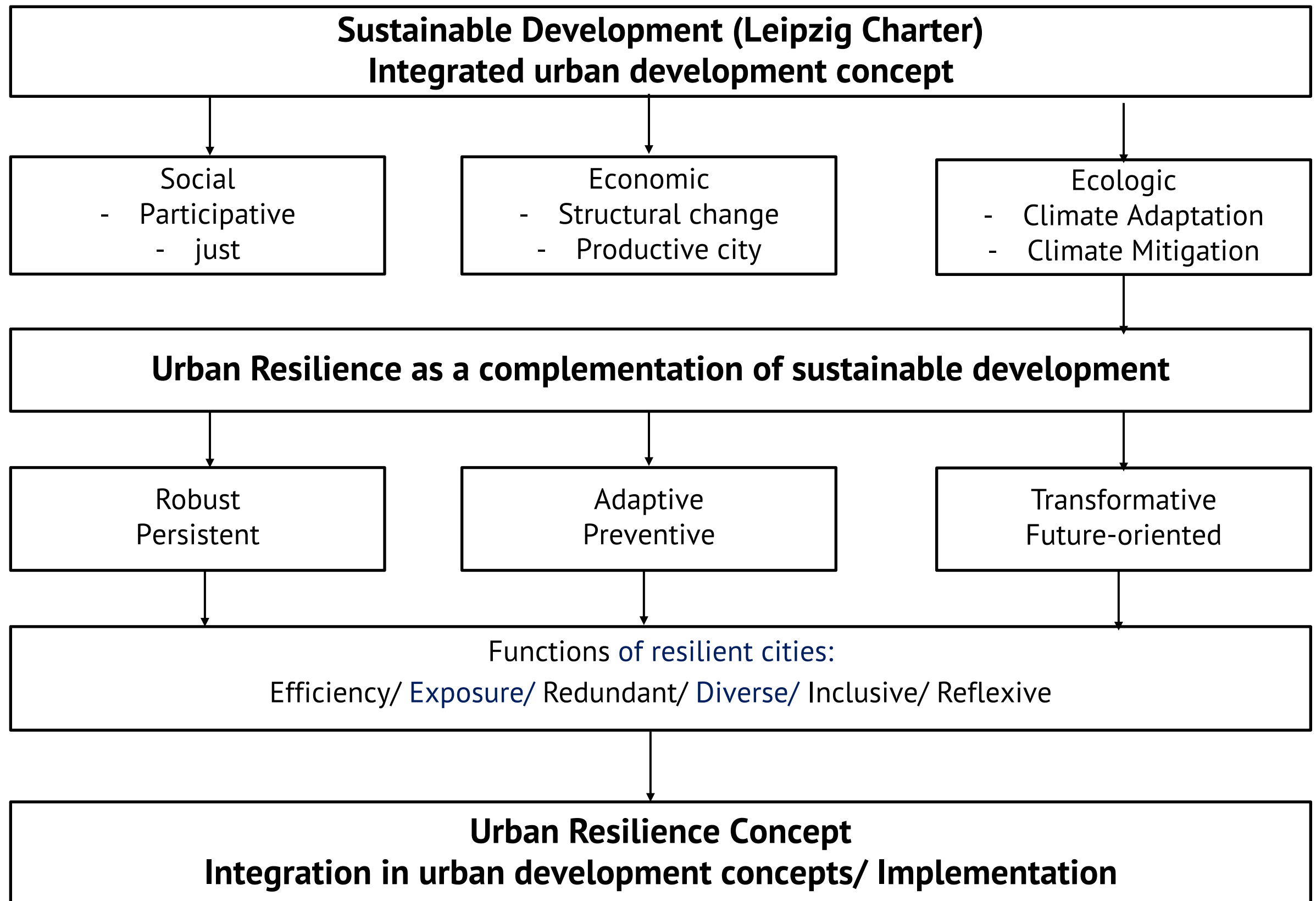
Functions of „Urban Resilience“

Functions of resilient cities:

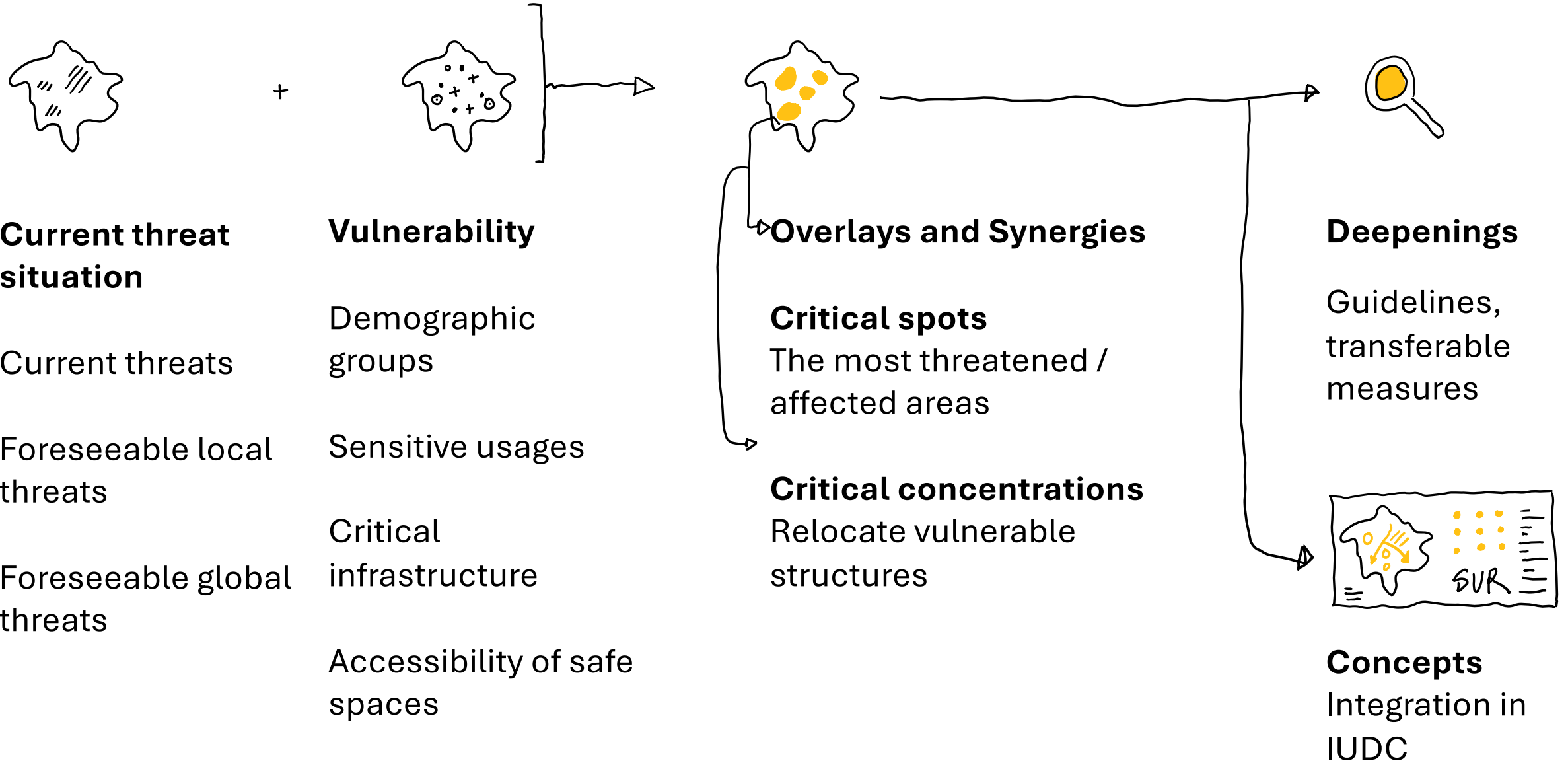
- Efficiency – dense, mixed
- Exposure - less fragmentated
- Redundant – decentral organized
- Diverse – flexible structures
- Inclusive - participative
- Reflexive
- ...



„Urban Resilience“ as part of sustainable development



Process for an urban resilience concept connected with IUDC



Example: Climate adaptation planning concept in Saarbrücken/ Germany

Threats:

- Extreme weather
- Heat islands
- Floods
- ...

Analysis: (climate function plan)

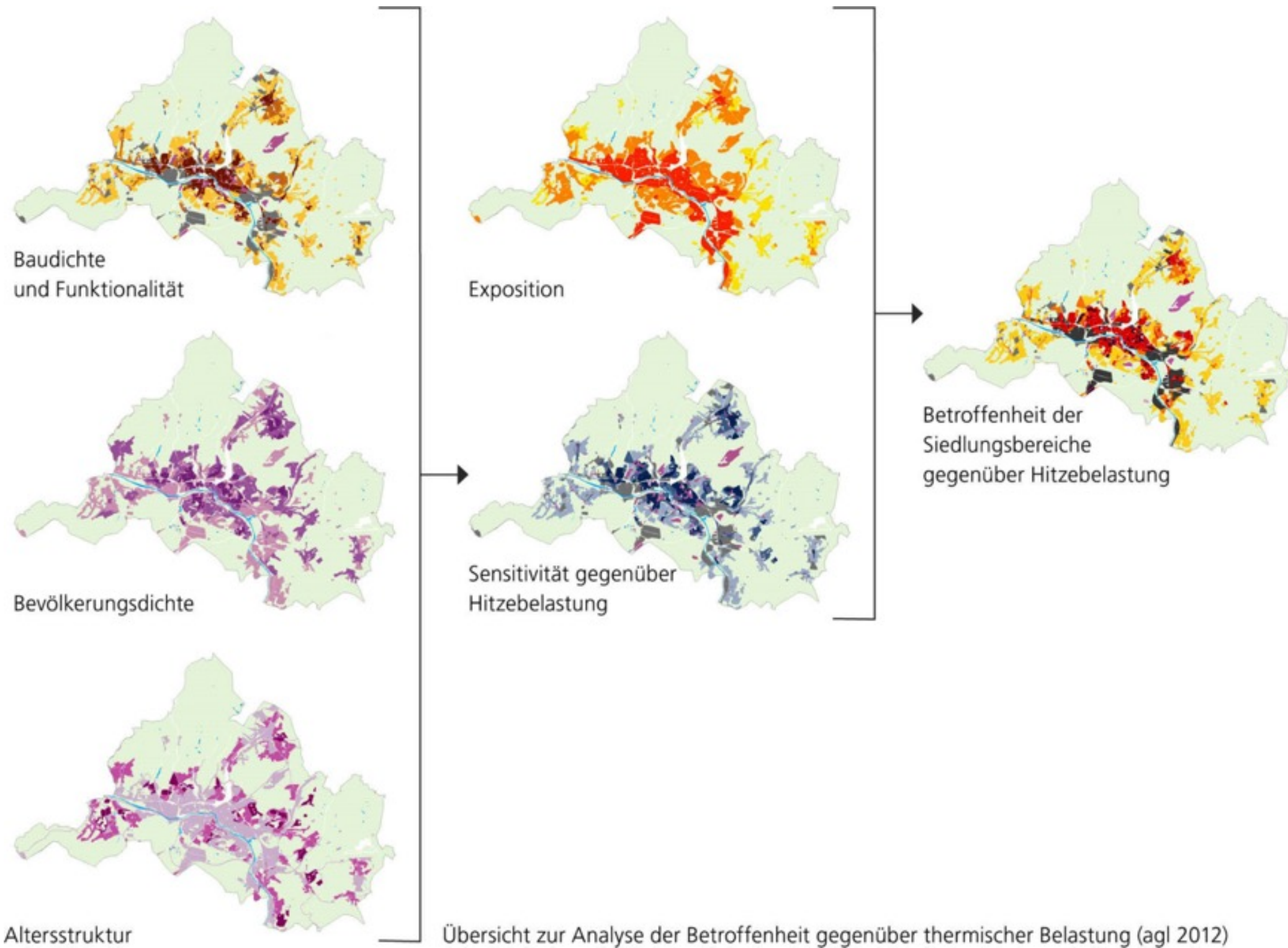
- Vulnerability analysis
- Risk analysis
- Morphologic situation
- Social-spatial concentrations

Concept:

- Protection
- Adaptation
- Transformation



Example: Climate adaptation planning concept in Saarbrücken/ Germany



Quelle: Klimaanpassungskonzept für die Stadt Saarbrücken, Büros geo-net und agl, Stadt Saarbrücken, 2012

Urban development concept public space Drohobych 2023/24



(Anna Kuzyshyn, Poliksen Qorri-Dragej, and others)

DAAD-seminar: Drohobych common spaces 2023



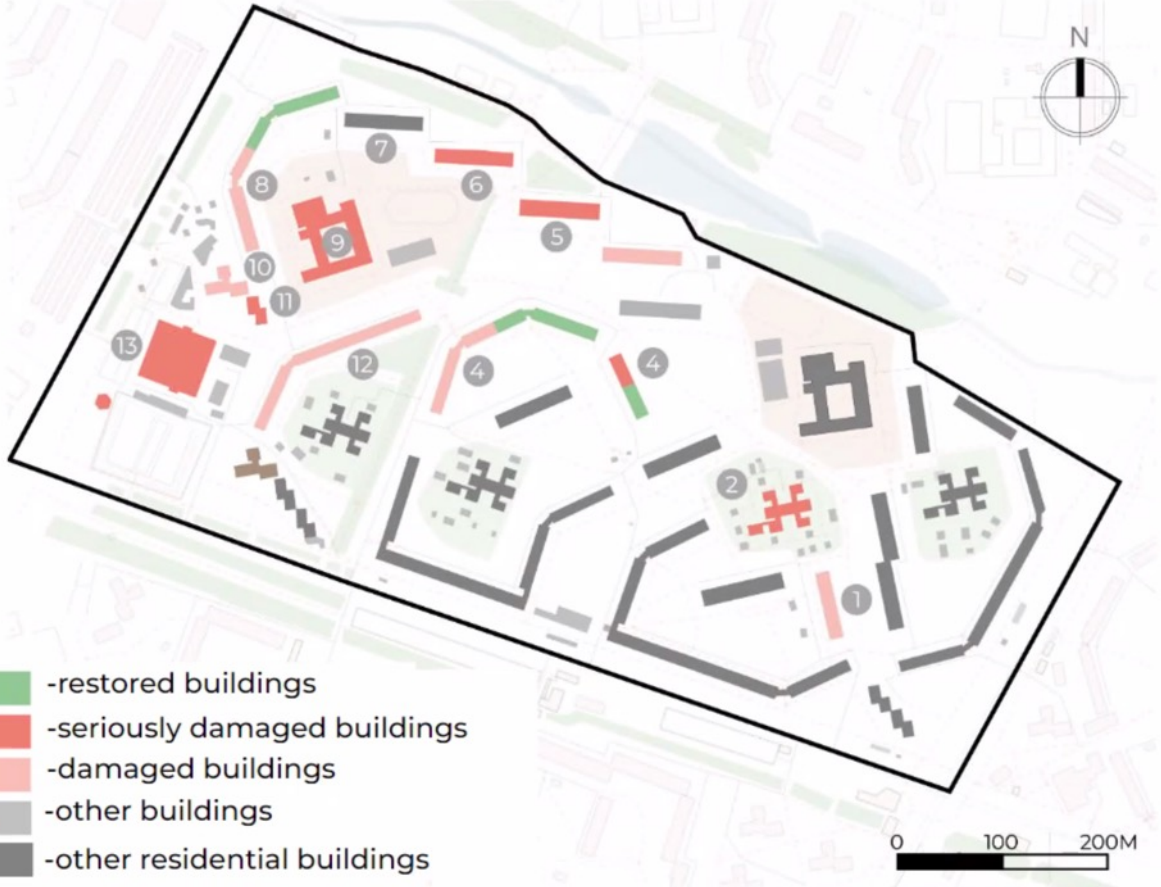
(Anna Kuzyshyn, Solomiia Konyk, and others)

DAAD seminar: Resilient large-scale settlements 2023/24

Morphological analysis of the neighborhood: Destruction

Photos of destroyed and damaged buildings

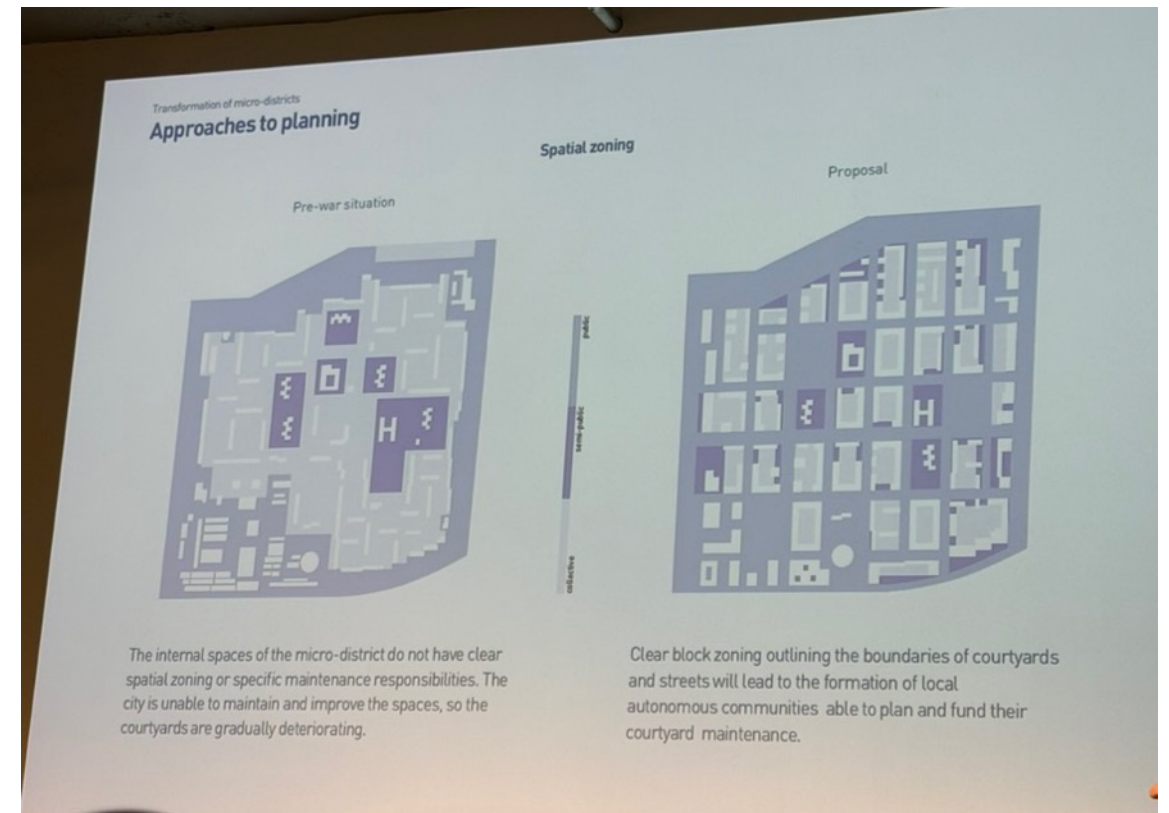
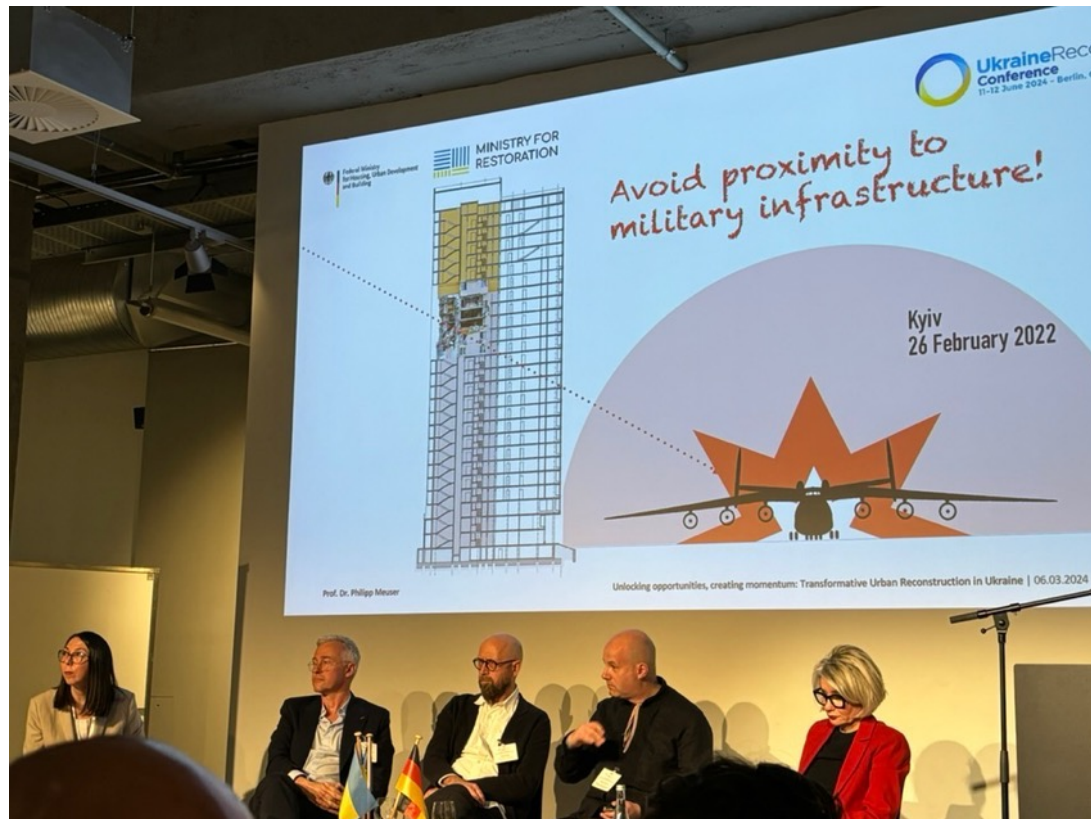
Scheme of destruction of buildings



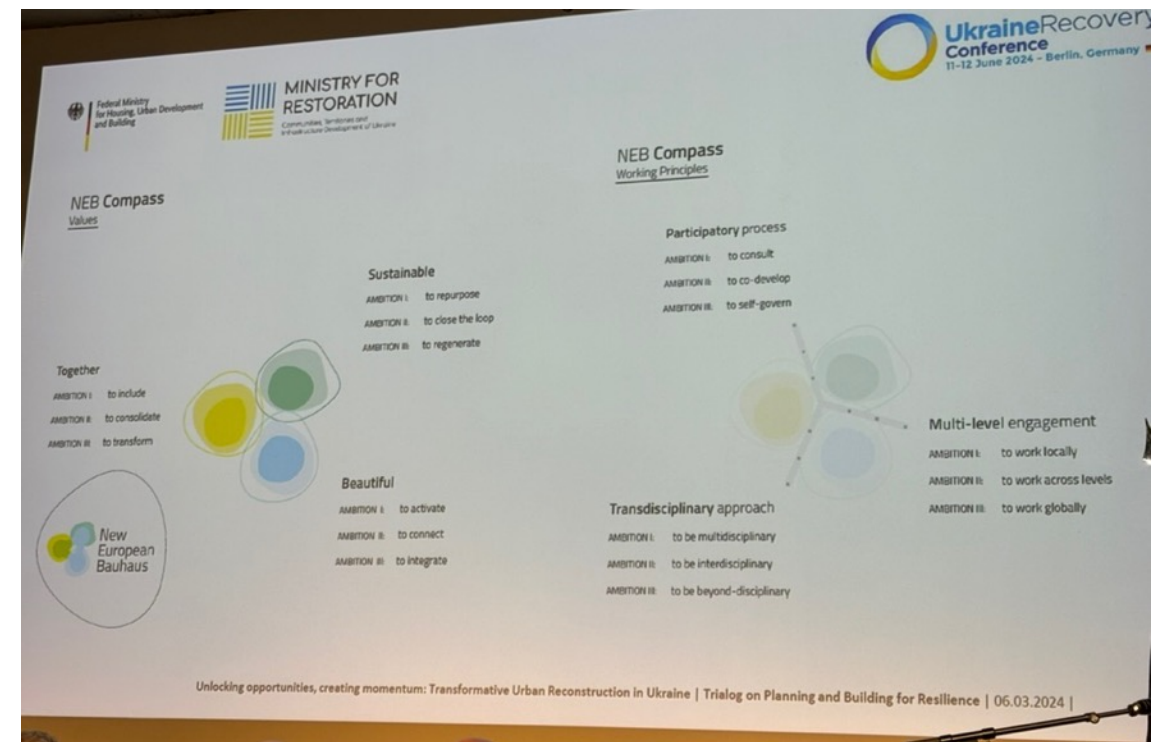
Destruction (Source : Developed by K.Voroshylov)

(Nadiia Antonenko, Tetiana Rumilets, and others)

Future of large scale housing estates



IBA UKRAINE INITIATIVE International Building Exhibition



First conclusions for Urban Resilience in Ukraine

- Urban resilience builds on the **principles** of Leipzig Charter, which include increased density, multiple uses, inner city development
- **Cities of future** need to have more robust, flexible and adaptable structures
- Differentiate **long-term and short-term** shocks and stresses
- **Implementing** resilience in all planning processes - IUDC and resilience strategy necessary for EU funding
- Need for **regular risk assessments**, which analyse and evaluate local hazards, exposures and vulnerabilities
- Learning from past events and improving recovery processes – **building back better**
- **Civil protection**: more focus on shelter, critical infrastructure, food supply, local cycles, renewable energy
- **Values** of democracy, civil society and accessible public space are important elements of a resilience
- Rebuild and strengthen **cultural and historical identity** against ongoing colonialism