CED-2026 · KHARKIV · 29 OCTOBER 2026

Economic Development and the Legacy of Simon Kuznets · Roundtable “A Rebooting World”

Generative War Damage Accounting

GWDA as a subsystem of Intelligent Accounting

Anzhelika Krutova

Simon Kuznets Kharkiv National University of Economics

Oksana Nesterenko

V.N. Karazin Kharkiv National University

EXTERNAL DATA · HISTORICAL CASE

Kuwait, 1991–2022: fifteen cents on the dollar

2.7 m

claims filed with the UN Compensation Commission

$352.5 bn

compensation claimed

$52.4 bn

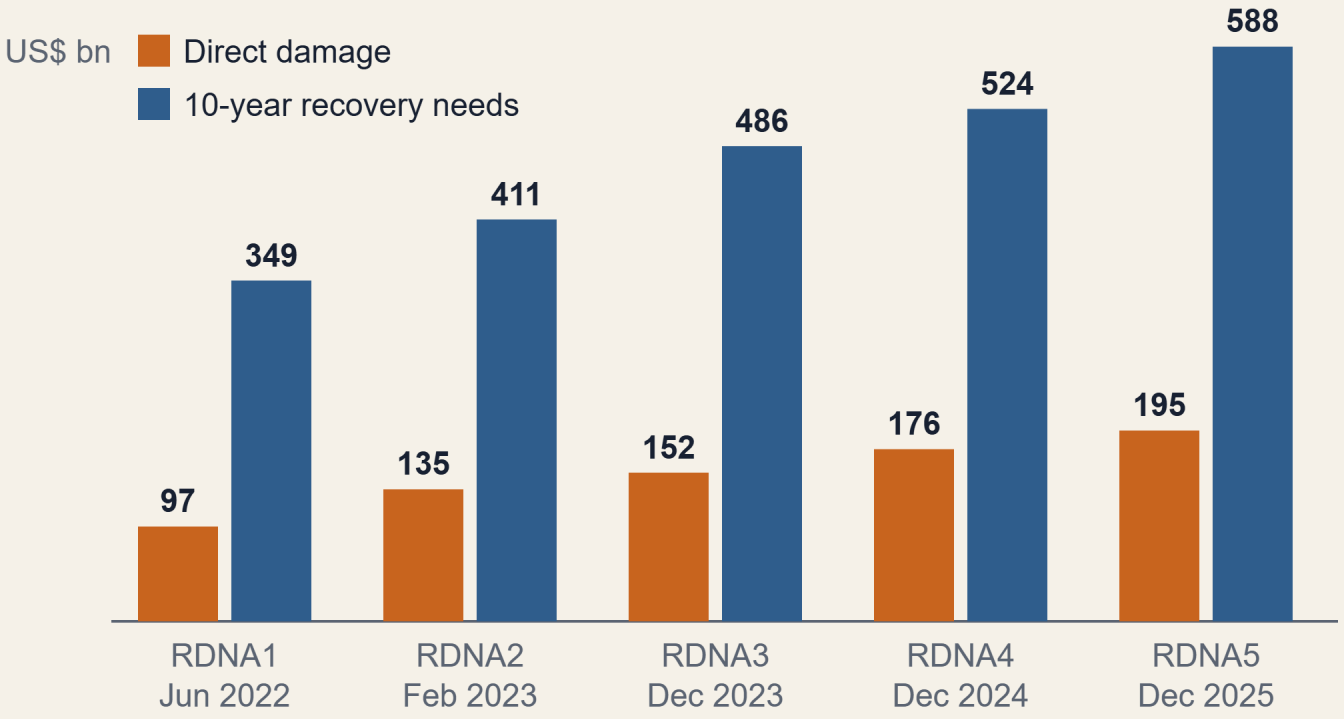
awarded ≈ 15% of the amount claimed; last payment January 2022

When losses are finally judged, what decides the outcome — the scale of destruction, or the quality of evidence?

Source: UNCC, “UNCC at a glance”; UN Geneva press release PR/2022/2, 9 Feb 2022 · 2 / 10

EXTERNAL DATA · UKRAINE

War damage is a flow, not a stock



$195.1 bn

direct damage, Feb 2022 – 31 Dec 2025: **doubled** since RDNA1

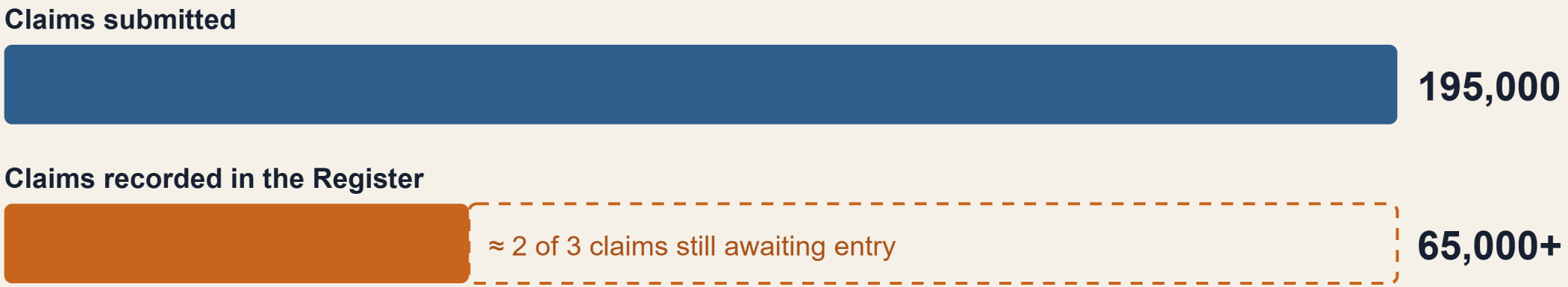
$587.7 bn

recovery needs 2026–2035 ≈ **3×** Ukraine's 2025 GDP

Source: World Bank, Government of Ukraine, European Commission, UN — RDNA5 (23 Feb 2026), with RDNA1–RDNA4 figures as cited in RDNA5 · 3 / 10

EXTERNAL DATA · COMPENSATION MECHANISM

The bottleneck is documentation



43
claim categories open since 30 Sep 2026, incl. 11 for legal entities

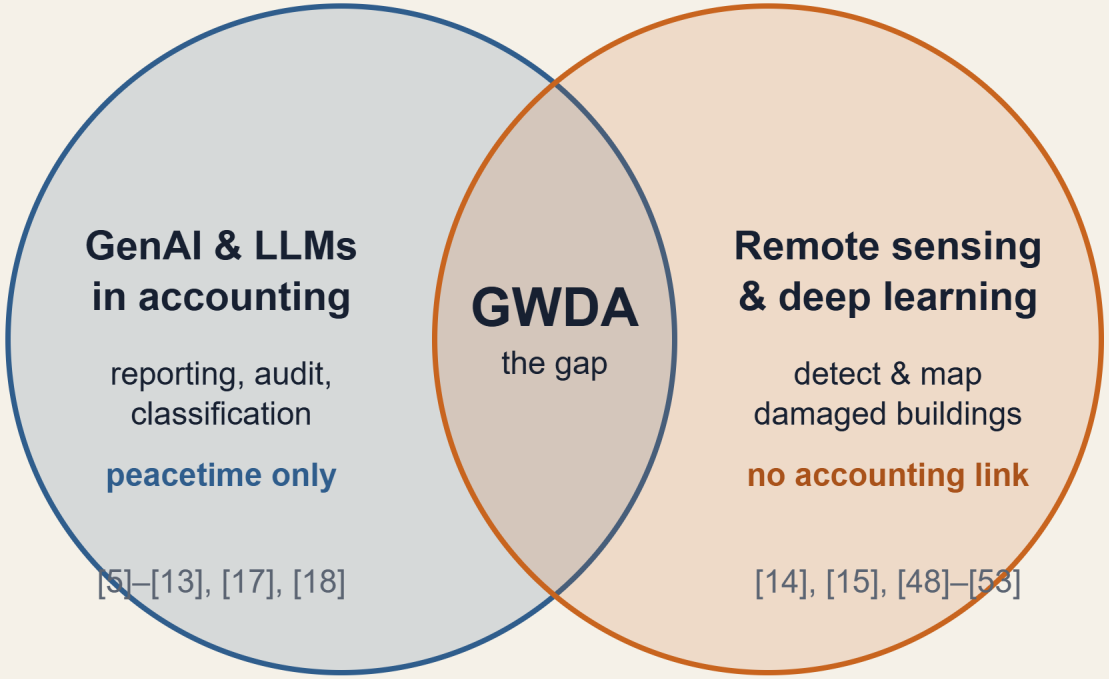
Dec 2025
convention on an International Claims Commission signed

On site?
physical inspection of assets is often impossible or unsafe [47]

Source: Cabinet of Ministers of Ukraine, 30 Sep 2026; Council of Europe / RD4U; President of Ukraine, 29 Apr 2026 · [47] Dutchak (2026) · 4 / 10

FROM THE ARTICLE · LITERATURE REVIEW

Two strong research streams that do not meet



CASE · ETH ZURICH, 2025

An open-source tool turns free Sentinel-1 radar imagery into probabilistic damage estimates for individual buildings across Ukraine.

We can see the destruction from space. We cannot yet book it.

Source: article, Section 2; case: Dietrich et al., Communications Earth & Environment 6, 215 (2025) — ref. [48] · 5 / 10

FROM THE ARTICLE · CONTRIBUTIONS 1 AND 2

Intelligent Accounting: a definition and an architecture

GENERALISED DEFINITION

A model of organising accounting that integrates **AI, machine learning, big data, RPA, cloud technologies** and **accounting information systems** to automate the accounting process, support decisions and improve the quality of accounting information.



Source: article, Section 3.2 — definition synthesised from [33]–[42]; multi-level architecture proposed by the authors · 6 / 10

FROM THE ARTICLE · SECTION 3.3

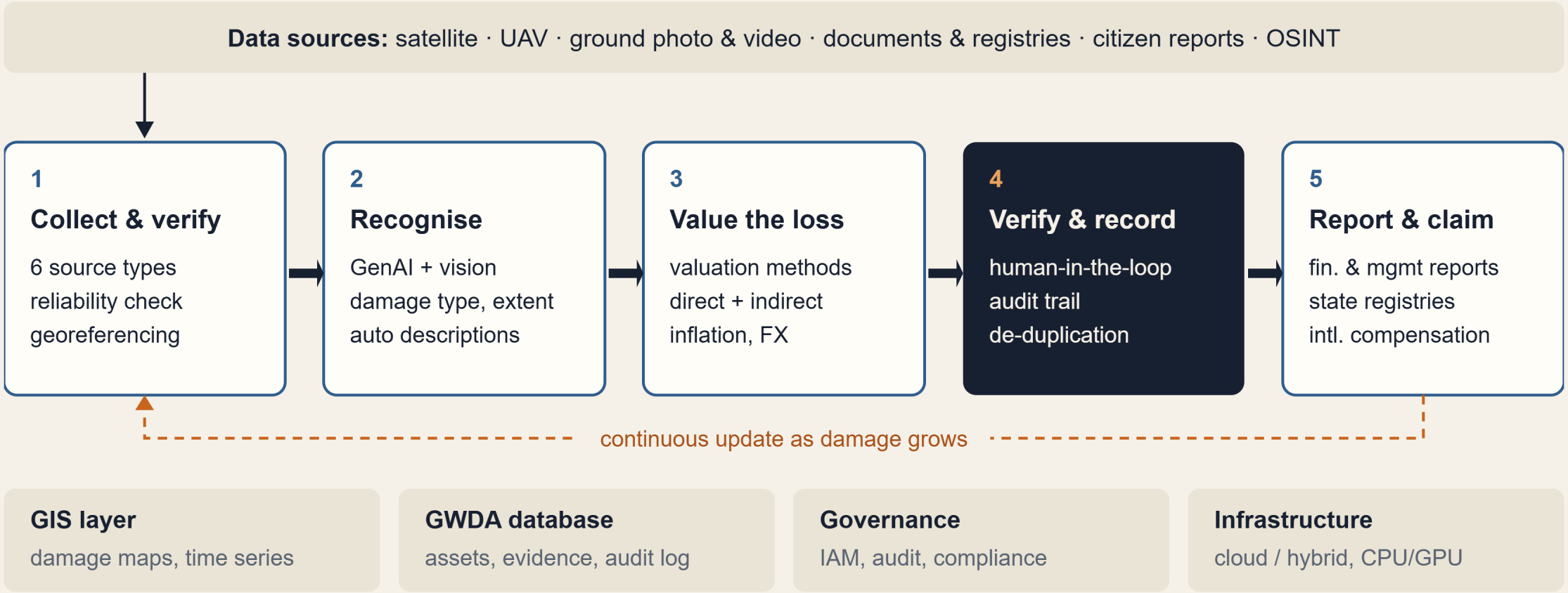
Under martial law, the accountant becomes a custodian of evidence

	Before the war	Under martial law
Information sources	source documents, ERP	+ satellite imagery, damage photos, geolocation, state registries, humanitarian-aid data
Nature of information	financial	no longer exclusively financial
Documentation	OCR, electronic archive	+ e-signature checks, war-loss classification, digital-evidence preservation
AI functions	document processing, forecasting	military risk, asset-loss likelihood, reserves, aid monitoring, sanctions risk
Accountant's role	processor of transactions	AI operator, data-quality controller, digital-evidence expert

Source: article, Section 3.3, drawing on [43]–[47], [54] · 7 / 10

FROM THE ARTICLE · CONTRIBUTION 3 (FIG. 1)

GWDA: from a damaged pixel to an auditable claim



Source: article, Section 3.4 and Fig. 1 (authors' architecture) · 8 / 10

ARTICLE + EXTERNAL DATA

Who gains: a verifiable loss file instead of a folder of photos

Enterprises
timely, documented losses for compensation claims

Public authorities
comparable data for registries and reconstruction planning

Auditors
a traceable audit trail behind every figure

CASE · ЄВІДНОВЛЕННЯ

206,447 families

compensated for housing, UAH 103.9 bn in total (as of 10 Jun 2026)

CASE · EU SUPPORT LOAN

€90 bn, 2026–27

to be repaid by Ukraine only after Russia pays reparations

Limits: a conceptual model — effects still to be validated in a pilot; depends on data access, cybersecurity and trained staff.

Source: article, Abstract & Section 4; Ministry for Development of Communities and Territories, 10 Jun 2026; Kyiv Post, 2026 · 9 / 10

CONCLUSION

For reparations, a loss that is not recorded does not exist.

1 · Definition

of Intelligent Accounting, synthesising international and Ukrainian research

2 · Architecture

multi-level model with AI at the processing core

3 · GWDA

turns observed destruction into recorded, valued, auditable loss

Thank you · krutova2022@gmail.com · o.nesterenko@karazin.ua