Enhancing Regulatory Oversight through Residual Risk Quantification

Explanatory document, complementing the RASB response to the Consultation on Regulatory Technical Standards on the threshold of activity at which Central Securities Depositories (CSDs) providing 'banking-type ancillary services' (EBA/CP/2025/05/March 14th, 2025)

I. Purpose

To support the EBA's consultation with a forward-looking framework that complements the proposed RTS under Article 54(5) of the CSDR by introducing a risk accounting-based methodology capable of measuring and monitoring systemic risk in near real-time.

II. Executive Summary

We welcome the European Banking Authority's initiative to further define and operationalize the threshold for designating credit institutions as settlement agents under Article 54(5) of the CSDR. Enhancing the resilience and oversight of institutions whose settlement activity holds systemic importance is essential to safeguarding financial market infrastructure stability.

While the proposed RTS introduces a useful framework based on volume and value metrics, we believe its effectiveness can be significantly strengthened by incorporating a standardized and forward-looking methodology for residual risk quantification. This vision document presents Risk Accounting as a complementary mechanism that allows supervisors to dynamically assess, monitor, and respond to emerging non-financial risks across transaction-level operations.

Risk Accounting, developed through cross-disciplinary collaboration and overseen by the Risk Accounting Standards Board (RASB), offers a proven way to quantify operational exposures in real time. Through the use of Risk Units (RUs), it enables a consistent and comparable measure of residual risk across institutions and over time.

Integrating this approach into the RTS framework would provide regulators with a clearer, more proactive view of systemic exposure, support better tiering decisions, and improve the alignment between prudential controls and actual risk. It is not proposed as a replacement to existing measures, but as a forward-compatible enhancement capable of addressing the evolving complexity of financial settlement environments.

III. Regulatory Context

Article 54(5) of Regulation (EU) No 909/2014 (CSDR) empowers competent authorities to designate credit institutions as settlement agents where their activity is deemed to be of substantial importance to the functioning of a securities settlement system. This provision reflects a core regulatory objective: to identify and apply proportionate prudential oversight to institutions whose operational role may pose systemic risk.

The draft RTS under consultation seeks to define the technical parameters — in particular, thresholds based on settlement activity volume and value — for operationalizing this designation. This is consistent with a broader supervisory effort across the EU to reinforce the transparency and resilience of financial market infrastructures.

More broadly, there is increasing recognition among supervisory bodies that institutions must be capable of delivering not just formal compliance, but also timely, quantitative visibility into their risk exposures — particularly where these exposures arise from complex, cross-border, or intraday operational dependencies.

Residual risk quantification, as enabled by Risk Accounting, directly supports these objectives by offering regulators a credible means to assess systemic importance

based on real-time operational exposure, not just historical activity levels. Integrating this approach would strengthen the alignment between supervisory oversight and actual systemic relevance, in keeping with the aims of the CSDR.

IV. Limitations of Current Approaches

The current RTS proposal, while useful in establishing an activity-based threshold framework, remains largely retrospective and structurally focused. There are three principal limitations:

- **Post-factum thresholds and lag in designation**: The use of trailing 12-month settlement volume and value metrics means that institutions are only identified as systemically relevant after significant risk accumulation may already have occurred. This delay weakens the ability to intervene preemptively.
- **Structural controls without risk quantification**: Basic and advanced prudential requirements emphasize governance structures and internal control frameworks. While these are essential, their presence does not guarantee effectiveness unless validated against measurable residual risk. Without quantification, institutions may appear compliant while unknowingly accumulating exposure.
- **Lack of dynamic, transaction-level risk insight**: Systemic risk can emerge from high-complexity, low-volume transactions or from operational clusters that fall below the visibility threshold of current monitoring methods. A transaction-level, real-time view is required to detect these signals — one that is currently absent from the proposed framework.

Together, these limitations point to the need for a complementary approach that adds granularity, forward-looking visibility, and objective measurement to the supervisory toolkit.

V. Introduction to Risk Accounting and Residual Risk Quantification

- Risk Accounting is a structured methodology developed to quantify and monitor non-financial risk across operational environments. It enables institutions and regulators to measure residual risk in a standardized, objective format using a unit of account called the Risk Unit (RU).
- The approach was pioneered by Peter J. Hughes, drawing on both academic and industry expertise to close a long-standing gap between operational controls and real-time risk visibility.
- Risk Accounting rests on a double-entry model analogous to financial accounting. Each transaction or control activity is evaluated for its risk contribution or mitigation impact, producing a net residual exposure.
- The methodology has undergone iterative development in collaboration with academic institutions and practitioners and is maintained and promoted by the Risk Accounting Standards Board (RASB).
- Selection of published academic research on risk accounting:
  - "Risk Accounting: An Accounting Based Approach to Measuring Enterprise Risk and Risk Appetite" (Published in 2012)

- "Risk Accounting - Part 1&2: The risk data aggregation and risk reporting (BCBS 239) foundation of enterprise risk management (ERM) and risk governance" (as published in 2016 by the Journal of Risk Management in Financial Institutions)
- "A test of the feasibility of a common risk accounting metric for enterprise risks" (as published in 2018 by the Journal of Risk Management in Financial Institutions)
- "A test of the inherent predictiveness of the RU, a new metric to express all forms of operational risk in banks" (as published in 2021 by the Journal of Risk Management in Financial Institutions)
- "Time for a paradigm change: Problems with the financial industry's approach to operational risk" (an independent review of the risk accounting method by Prof. Tom Butler of University College Cork, published in 2023 - pursuant to its publication, we invited Prof. Butler to join the RASB)

- The RASB serves as a standards-setting and advocacy body, providing guidance, calibration methods, and implementation support for organizations adopting the risk accounting framework.

VI. Benefits of a Risk Accounting Overlay

The integration of Risk Accounting into the CSDR framework offers several material benefits that reinforce both supervisory effectiveness and institutional accountability:

- **Early Detection of Systemic Risk**: By providing a real-time, transaction-level measure of residual risk, Risk Accounting allows for early identification of risk accumulations before they trigger threshold breaches or manifest as operational failures. This enables a shift from reactive to proactive supervision.
- **Proportional Tiering Based on Actual Exposure**: Rather than relying solely on historical settlement volumes and values, institutions can be tiered and subject to requirements based on their actual, current exposure. This enhances the fairness and accuracy of prudential classifications, especially in rapidly evolving markets.
- **Enhanced Comparability and Transparency**: Using standardized Risk Units (RUs) across institutions supports a common risk language and enables meaningful benchmarking. Supervisors gain consistent, quantitative visibility across diverse operational models, making cross-institutional comparisons feasible and actionable.
- **Support for Stress Testing and Recovery Planning**: Residual risk quantification can be integrated into stress testing models to simulate control failures, operational outages, or market volatility. Institutions can better anticipate the resilience of their risk management structures, while supervisors can assess recovery preparedness on an empirical basis.
- **Improved Supervisory Dialogue**: Institutions equipped with real-time residual risk profiles can engage more constructively with supervisors, focusing on emerging issues and targeted mitigation efforts rather than retrospective reviews of control documentation.

- **Risk-aware Culture and Operational Discipline**: Beyond compliance, the visibility provided by residual risk quantification encourages a culture of accountability. Operational teams are empowered to understand and manage their risk contributions in a continuous and structured manner.

VII. Implementation Scenario Proposal

To effectively integrate residual risk quantification into the CSDR supervisory framework, we propose a phased and proportionate implementation strategy that enhances — rather than replaces — the current RTS structure.

1. Integration Pathway

Risk Accounting can be introduced as a complementary overlay to existing activity-based thresholds. Institutions identified as just above or well above the threshold could be required to report risk metrics alongside settlement volumes and values. These metrics would provide additional transparency regarding the intensity and distribution of operational exposure.

2. Phased Rollout

- **Phase 1**: Voluntary adoption or pilot programs involving selected institutions. This would focus on calibrating RU models across settlement types and evaluating reporting standards.
- **Phase 2**: Mandatory RU-based reporting for institutions above a certain tier, with requirements tailored to size and complexity.
- **Phase 3**: Full integration into the RTS, where RU-based indicators support both threshold designation and the scope of prudential requirements applied.

3. Supervisory Reporting

Institutions would periodically submit RU-based risk profiles via existing regulatory reporting infrastructure, integrated with ICAAP and risk management disclosures. These profiles would allow supervisors to compare institutions' residual risk against peer benchmarks and monitor emerging systemic concentrations.

4. Industry Standards and Support

The Risk Accounting Standards Board (RASB) can provide methodological guidance, implementation templates, and calibration protocols to ensure harmonized adoption. This would promote consistency across jurisdictions and minimize interpretative divergence.

5. Calibration and Auditability

The risk quantification process should remain auditable and transparent. Calibration mechanisms — such as control effectiveness scoring and risk attribution logic — would be open to supervisory review, with scope for tailoring to the specific risk profile of each institution.

VIII. Conclusion

The evolving complexity and systemic interdependence of financial settlement operations require a regulatory approach that is both structurally sound and dynamically responsive. The proposed RTS represents a necessary and thoughtful step toward identifying and managing settlement agents whose activities pose systemic importance.

To further strengthen this framework, we recommend the integration of residual risk quantification through Risk Accounting. By incorporating real-time, transaction-level exposure metrics, supervisors can gain actionable insights, institutions can adopt more risk-aware operational behavior, and the designation process under Article 54(5) can become both more accurate and more preventive.

We encourage the EBA to consider launching a pilot initiative or formal dialogue to explore the practical implementation of this framework. Risk Accounting, supported by the RASB and grounded in transparent, auditable standards, offers a forward-compatible enhancement that is well-aligned with the supervisory objectives of the CSDR.

We reiterate that this proposal is intended not to replace the existing prudential and risk management measures, but to complement and strengthen them by addressing the measurement gap that persists in current approaches to systemic risk oversight.