Risk Accounting Standards Board's Response

to the Consultation Paper on

"Draft Regulatory Technical Standards on the calculation and aggregation of crypto exposure values under Article 501d(5) of the CRR"

(EBA/CP/2025/01/January 8th, 2025)

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Executive Summary

This document presents a risk accounting-based response to the European Banking Authority (EBA) Consultation Paper EBA/CP/2025/01 concerning the draft Regulatory Technical Standards (RTS) under Article 501d(5) of the Capital Requirements Regulation (CRR).

These standards pertain to the calculation and aggregation of crypto-asset exposures during a transitional prudential regime. Drawing on principles developed by the Risk Accounting Standards Board (RASB) and inspired by the work of Peter Hughes, this response integrates forward-looking, standardized, and risk-adjusted accounting perspectives into the regulatory dialogue.

The response supports the EBA's regulatory objectives while emphasizing the urgent need to integrate **Residual Risk Units (RUs)** to quantify and disclose risks that are accepted but not otherwise captured in current accounting and risk frameworks.

This is particularly critical for the technological, operational, and systemic uncertainties inherent in crypto assets. Although the proposed 250% risk weight (RW) serves as a prudent interim safeguard, a complementary risk accounting-based layer is necessary to quantify **expected non-financial losses** across asset types.

Specific concerns are raised regarding premature use of internal models, the adequacy of existing prudent valuation standards, and the institutional capacity to perform nuanced exposure differentiation.

In all cases, this document advocates for deferring or augmenting existing frameworks until a robust, auditable, and risk-sensitive model - such as risk accounting - is adopted.

Understanding Risk Accounting

Risk accounting is a structured methodology for quantifying non-financial risks—such as operational, cyber, conduct, fraud, and model risks - by assigning them standardized, auditable values expressed in a specific unit of measure, the Risk Unit (RU).

Developed by Peter Hughes and initially applied in Chase Manhattan Bank in the 90s, the method was further researched and improved within the UK academia and institutionalized by the Risk Accounting Standards Board (RASB). It primarily addresses longstanding limitations in financial accounting, which typically fails to capture the financial impact of non-financial risk exposures.

Central to the methodology is the **Risk Unit (RU)** - a standardized metric that represents inherent and residual exposure after mitigating controls are applied. RUs support:

- Objective measurement of non-financial risks using a control-effectiveness matrix

- Conversion of qualitative and latent risk into quantitative values for aggregation and reporting

- Integration into financial performance frameworks and decision-making processes

- Potential tokenization for capital transfer or hedging applications via blockchain

Key Features

- **Risk-to-Control Mapping**: Links identified risks to internal controls to quantify residual exposure

- **Expected Loss Estimation**: Calculates potential financial impact under normal and stressed conditions

- **Aggregation Capability**: RUs can be rolled up across organizational units, geographies, and risk categories

- **Risk Transparency**: Enables dynamic risk monitoring aligned with risk appetite thresholds and supports supervisory visibility through comparability among regulated entities

For crypto-asset exposures, risk accounting delivers the necessary framework to quantify latent and systemic risks not captured under traditional capital or valuation regimes, especially in a transitional regulatory context.

Evaluating Regulatory Proposals Through a Risk Accounting Lens

Each response is structured under four headings:

- **Response**: A direct answer to the question

- **Challenges**: Implementation difficulties, in our view not easily addressed by existing frameworks

- **Impact on the Industry**: Potential negative consequences if the proposed approach is adopted without adjustment

- **How Risk Accounting Can Help**: The specific contribution of risk accounting in resolving the identified issues

Q1: Fair-Valued Crypto-Assets and Prudent Valuation Rules

Response: Yes, crypto assets within MiCAR should be included under prudent valuation rules.

Challenges: Crypto assets often lack observable market inputs. Where liquidity is thin or pricing mechanisms are unclear, fair value becomes speculative, increasing model risk.

Impact on the Industry: Institutions may misrepresent exposures or manipulate valuation estimates, leading to distorted capital positions and loss of market confidence.

How Risk Accounting Can Help: Risk Accounting enhances prudent valuation by introducing risk-adjusted quantification into valuation practices, addressing the deficiencies of fair value in volatile or opaque markets. It does this by:

- Applying Residual Risk Units (RUs) to measure the expected loss associated with holding a crypto asset, derived from the underlying weaknesses in legal clarity, control environments, redemption rights, and custodial arrangements.

- Embedding valuation within a governance-aware control framework, where the accuracy and trustworthiness of valuation inputs are linked to internal risk assessments.

- Enabling institutions to systematically calibrate valuation haircuts based on residual risk concentrations, rather than solely market pricing or model uncertainty.

In doing so, Risk Accounting converts qualitative concerns into auditable, standardized metrics that enrich fair value with a forward-looking layer of risk transparency.

Q2: Application of Article 105 CRR and RTS 2016/101 to Crypto-Assets

Response: It is our belief that these frameworks are inadequate for crypto assets as currently structured.

Challenges: They do not address non-financial risks unique to digital assets, such as code vulnerability, cyber risk, and governance opacity.

Impact on the Industry: Misalignment between valuation rules and risk profiles may lead to systemic blind spots and inconsistent application across institutions.

How Risk Accounting Can Help: Risk Accounting addresses the core limitations of Article 105 and Delegated Regulation 2016/101 by:

- Quantifying non-financial and systemic risks (e.g. technology failure, cyber threats, operational opacity) as residual risk exposures using RUs, which current valuation regimes are not designed to capture.

- Integrating risk data with accounting processes to allow exposure values to reflect operational control conditions, governance deficiencies, and real-time risk accumulation.

- Enabling dynamic reassessment of risk levels through periodic RU recalibration, ensuring that crypto-related risks are continuously monitored as technologies, issuers, and infrastructures evolve.

By embedding this level of granularity into valuation practices, Risk Accounting transforms static, backward-looking models into a forward-integrated measurement regime.

Q3: 250% RW (Alternative A) vs. Counterparty RW (Alternative B) for CCR Transactions

Response: Support for the 250% RW should only be considered as a temporary measure.

Challenges: Reliance on counterparty RW assumes the existence of validated models and consistent risk attribution, which are limited in the current crypto context.

Impact on the Industry: Inconsistent treatment could incentivize regulatory arbitrage or understate exposure.

How Risk Accounting Can Help: Risk Accounting provides a superior alternative to both blunt RW assignment and reliance on counterparty credit ratings by:

- Measuring residual risk exposure on a per-transaction basis, incorporating both counterparty risk and the inherent uncertainty of the underlying crypto instrument.

- Allowing risk-weighted capital requirements to be calibrated against actual measured exposures, rather than broad assumptions or legacy credit frameworks.

- Providing a granular, real-time risk profile that reflects changes in market structure, control environments, and issuer behavior, avoiding both under- and over-capitalization.

This dynamic capability would allow the 250% RW to function as a temporary floor, with institutions transitioning to risk-sensitive capital models as RU-based systems would mature and prove reliable.

Q4: Internal Models for Crypto Exposure During Transitional Period

Response: Internal models should not be permitted at this stage.

Challenges: Crypto assets lack robust historical data and validated risk factor models. Early internal models would be untested and highly vulnerable to input bias.

Impact on the Industry: Could lead to undercapitalization, model manipulation, and uneven application of capital rules.

How Risk Accounting Can Help: Risk Accounting acts as an essential foundation for any future internal model use by:

- Replacing qualitative assessments with a standardized, regulator-auditable risk quantification system, enabling supervisory bodies to trust internal models built upon RU-based metrics.

- Reducing model risk and subjectivity by tying risk drivers to control failures, governance lapses, or issuer dependencies—all of which are difficult to model in traditional frameworks.

- Offering a transparent, stress-testable baseline that internal models can build upon, aligning the institution's internal view of risk with supervisory expectations.

By embedding this capability, Risk Accounting provides the infrastructure and credibility needed to reintroduce internal models in a prudent and data-grounded way.

Q5: Issuer Default Risk Beyond 250% RW

Response: Yes, issuer default risk must be explicitly modeled.

Challenges: However, a blanket RW does not differentiate among issuer types, structures, or asset backing. This impedes risk-sensitive supervision.

Impact on the Industry: Potential for mispriced risk and failure to account for issuer concentration in portfolios.

How Risk Accounting Can Help: Risk Accounting offers a precise way to isolate and quantify issuer-specific default risk through:

- Assigning issuer-linked RUs that capture the concentration and volatility of risks specific to individual token issuers, including governance instability, over-leverage, or redemption failure.

- Enabling systemic issuer risk mapping across portfolios, allowing both firms and regulators to understand where exposure is clustered and where contagion could originate.

- Supporting issuer-linked pricing adjustments and internal controls by assigning cost-to-risk metrics that incentivize de-risking or rebalancing of crypto-asset portfolios.

This targeted mechanism allows supervisors to go beyond blunt capital buffers and enforce issuer-specific mitigation strategies, supported by transparent and auditable accounting logic.

Q6: Differentiation for Article 501d(2)(c) Crypto-Asset Exposures

Response: Differentiation is premature. Institutions are not currently equipped to assess these exposures consistently.

Challenges: Data gaps, legal uncertainties, and control fragmentation make current assessments unreliable.

Impact on the Industry: Could lead to misclassification, arbitrage, and loss of credibility in regulatory enforcement.

How Risk Accounting Can Help: Risk Accounting enables institutions to systematically quantify residual non-financial risks through a standardized metric (the Risk Unit), which directly supports the type of objective, criteria-based assessments envisioned in Article 501d(2)(c). Specifically, it provides:

- A consistent framework to evaluate risks related to governance, legal structure, redemption mechanisms, and technological dependencies — areas critical to determining prudential treatment.

- A digitally auditable trail of accepted risks, enabling institutions to demonstrate that they have met differentiation criteria without relying on subjective or ad hoc judgments.

- Comparability across institutions by ensuring that all exposures are measured and reported using the same quantification method, allowing supervisors to validate differentiation decisions with confidence.

By embedding quantification into the internal control environment, Risk Accounting ensures that institutions are not simply guessing at crypto-asset risk distinctions — they are measuring and proving them.

Q7: Issuer Default Risk in Market Risk for ARTs

Response: Issuer default risk should be reflected in market risk assessments for ARTs.

Challenges: Traditional market risk metrics fail to capture de-pegging events, redemption risk, or opaque issuer obligations.

Impact on the Industry: Undercapitalization of high-risk ART exposures could create systemic interdependencies.

How Risk Accounting Can Help: Risk Accounting directly addresses the issuer-specific vulnerabilities associated with Asset-Referenced Tokens (ARTs) by:

- Assigning issuer-level residual risk values using the Risk Unit methodology, which captures weaknesses in backing assets, transparency, legal claims, and redemption structures.

- Enabling the creation of granular exposure maps that link each ART to its issuer's risk profile, allowing banks to monitor risk accumulation and concentration in near real-time.

- Supporting scenario analysis and stress simulations that incorporate not just market factors, but also operational, legal, and systemic stress triggers that could lead to issuer default.

- Allowing regulators to compare ART exposure quality across institutions using standardized, regulator-verified data.

These capabilities elevate the analysis from a blunt capital charge to a dynamic and auditable assessment of issuer-specific risk, filling a gap in current RTS proposals.

The Tokenized Risk Unit (TRU): Enabling a Virtuous Cycle of Market Integrity and Risk Transfer

One of the most forward-looking and innovative concepts introduced by the Risk Accounting Standards Board (RASB) is the **Tokenized Risk Unit (TRU)**.

Building upon the core concept of the Residual Risk Unit (RU), the TRU represents a standardized, digitized form of quantified risk exposure that can be tokenized and potentially traded or transferred across entities in specialized markets and under specific conditions that ensure.

This approach aims to establish a market-based mechanism for **pricing, transferring, and ultimately mitigating accepted non-financial risks**.

How It Works

- Each TRU represents a quantified, residual non-financial risk after controls have been applied.

- TRUs are recorded on a distributed ledger, ensuring full traceability, auditability, and ownership.

- Institutions can choose to retain or transfer TRUs through regulated platforms, where they may be pooled, hedged, or diversified by third-party risk takers.

Introducing a Virtuous Cycle

By enabling transparency and accountability in how institutions recognize and manage risk, TRUs help align incentives across internal stakeholders, regulators, and market participants. The system fosters a **virtuous cycle**:

- Institutions are motivated to improve internal controls to reduce TRU creation, therefore enabling them to charge a higher premium on them.

- Efficient markets emerge for trading and absorbing TRUs, stimulating private-sector solutions to systemic risk.

- Supervisors gain real-time insights into sector-wide risk concentrations and behavioral trends, including in monetary value terms.

Benefits of TRUs

- **Market Discipline**: Exposes inefficiencies and encourages stronger governance.

- **Risk Transfer**: Facilitates offloading of retained risk in a standardized form.

- **Transparency**: Provides regulators with granular, real-time visibility into emerging threats.

- **Innovation**: Opens the door for new hedging instruments, ratings methodologies, and secondary risk markets.

Enhanced Functionalities and Potential Outlook

Key Functionalities and Design Features

- **Re-Purchase Automation**: TRUs can be issued with smart contract-enabled repurchase rights, enabling institutions to buy back risk at a certain term or when their control environments improve. This creates a feedback loop of improvement and accountability.

- **Price Discovery Mechanism**: As TRUs are traded, controlled, margin-based pricing will reflect available holding time periods, creating natural incentives for firms to manage risk more efficiently and transparently, but also allowing TRU holders to clear their positions while still preserving profits.

- **Risk Separation from Product**: TRUs decouple risk exposure from the financial product that originated it, allowing specialized entities to hold or hedge risks without owning the underlying asset.

- **Guaranteed Profit Margin Structure**: In regulated trading environments, TRUs could be structured to offer guaranteed margins for underwriters or capital providers who absorb residual risks, creating a viable business model for third-party risk takers.

- **Speculation Disincentives**: TRUs are designed as exposure transfers rather than investment assets; speculative trading would be discouraged by the controlled profit margin, automated through smart contracts.

- **Limited Issuance, Balanced Exposure**: Institutions would be limited in the volume of TRUs they may issue based on their risk capacity and capital adequacy. However, they could offset or balance their exposure by acquiring TRUs from others, introducing a risk market equilibrium.

Potential Outlook

If adopted at scale, TRUs could form the foundation of a **digitally enabled, risk-sensitive prudential ecosystem**. This would enhance resilience, foster accountability, and integrate financial and non-financial risk management in a single, interoperable framework. For crypto-asset exposures in particular—where legacy models falter—TRUs provide a unique opportunity to introduce measurable, transferrable accountability to a fast-evolving risk landscape.

Conclusion

The transitional framework proposed by the EBA is a necessary and prudent step. However, the complexity and opacity of crypto-asset risk demand the integration of a robust and standardized accounting framework for residual, non-financial risk exposure. Risk accounting offers a viable complement to existing prudential regulations by enabling consistent, transparent, and forward-looking assessments. As crypto-assets become more integrated into the financial system, the ability to identify and measure the risks they pose—beyond market price movements—will be essential for maintaining systemic resilience and regulatory credibility.