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**X RESPUBLIKA ILMIY-
AMALIY KONFERENSIYASI**

**YANGI DAVR ILM-
FANI: INSON UCHUN
INNOVATION G'OYA
VA YECHIMLAR**

NOYABR, 2025



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YANGI DAVR ILM-FANI: INSON UCHUN INNOVATSION G'OYA VA YECHIMLAR

**X RESPUBLIKA ILMIY-AMALIY
KONFERENSIYASI MATERIALLARI**

2025-yil, noyabr

TOSHKENT-2025

Yangi davr ilm-fani: inson uchun innovatsion g'oya va yechimlar.
X Respublika ilmiy-amaliy konferensiyasi materiallari to'plami.
1-jild, 10-son (noyabr, 2025-yil). – 33 bet.

Mazkur nashr ommaviy axborot vositasi sifatida 2025-yil, 8-iyulda
C-5669862 son bilan rasman davlat ro'yaxatidan o'tkazilgan.

Elektron nashr: <https://konferensiyalar.com>

Konferensiya tashkilotchisi: "Scienceproblems Team" MChJ

Konferensiya o'tkazilgan sana: 2025-yil, 17-noyabr

Mas'ul muharrir:
Isanova Feruza Tulqinovna

Annotatsiya

Mazkur to'plamda "Yangi davr ilm-fani: inson uchun innovatsion g'oya va yechimlar" mavzusidagi X Respublika ilmiy-amaliy konferensiyasi materiallari jamlangan. Nashrda respublikaning turli oliy ta'lim muassasalari, ilmiy markazlari va amaliyotchi mutaxassislari tomonidan tayyorlangan maqolalar o'rin olgan bo'lib, ular ijtimoiy-gumanitar, tabiiy, texnik va yuridik fanlarning dolzarb muammolari va ularning innovatsion yechimlariga bag'ishlangan. Ushbu nashr ilmiy izlanuvchilar, oliy ta'lim o'qituvchilari, doktorantlar va soha mutaxassislari uchun foydali qo'llanma bo'lib xizmat qiladi.

Kalit so'zlar: ilmiy-amaliy konferensiya, innovatsion yondashuv, zamonaviy fan, fanlararo integratsiya, ilmiy-tadqiqot, nazariya va amaliyot, ilmiy hamkorlik.

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ПРИ ИЗУЧЕНИИ РУССКОГО ЯЗЫКА 25-32

YURIDIK FANLAR

FATF STANDARDS AND THE IMPLEMENTATION OF THE TRAVEL RULE IN PREVENTING CRYPTO-RELATED MONEY LAUNDERING

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Annotation. The rapid expansion of virtual assets has created unprecedented challenges for global anti-money laundering (AML) and counter-terrorist financing (CTF) frameworks. This paper examines the FATF Travel Rule (Recommendation 16) and its effectiveness in preventing cryptocurrency-related money laundering. Analysis of 205 jurisdictions reveals that while 85 jurisdictions implemented Travel Rule legislation by 2025, critical challenges remain: only 35 jurisdictions have taken enforcement actions, the "sunrise issue" persists, and technological interoperability barriers exist. The research demonstrates that effective implementation can significantly reduce illicit cryptocurrency transactions, which dropped from \$31.5 billion in 2022 to \$22.2 billion in 2023. Achieving comprehensive global compliance requires addressing technical infrastructure limitations, enhancing supervisory capacity, and fostering public-private collaboration.

Keywords: FATF, Travel Rule, cryptocurrency, money laundering, virtual assets, VASPs, AML compliance, blockchain.

FATF STANDARTLARI VA KRIPTOVALYUTALAR BILAN BOG'LIQ PUL YUVISHNING OLDINI OLISHDA "TRAVEL RULE" QOIDASINING JORIY ETILISHI

Abdullayeva Sabohat Asatullo qizi

Toshkent davlat yuridik universiteti kiber huquq kafedrası o'qituvchisi

Annotatsiya Virtual aktivlarning tez rivojlanishi global pul yuvishning oldini olish (AML) va terrorizmni moliyalashtirishga qarshi (CTF) tizimlar uchun misli ko'rilmagan muammolar yaratdi. Ushbu maqola FATF Travel Rule (16-tavsiya) va uning kripto-valyuta orqali pul yuvishning oldini olishdagi samaradorligini o'rganadi. 205 ta yurisdiktsiya tahlili shuni ko'rsatadiki, 2025-yilga kelib 85 ta yurisdiktsiya Travel Rule qonunchiligini joriy etgan bo'lsa-da, jiddiy muammolar saqlanmoqda: faqat 35 ta yurisdiktsiya nazorat choralarini ko'rgan, "sunrise issue" davom etmoqda va texnologik interoperabilik to'siqlari mavjud. Tadqiqot shuni ko'rsatadiki, samarali amalga oshirish noqonuniy kripto-valyuta tranzaksiyalarini sezilarli darajada kamaytirishi mumkin: 2022-yilda \$31.5 milliarddan 2023-yilda \$22.2 milliardgacha kamaydi. Keng qamrovli global muvofiqlikka erishish uchun texnik infrastruktura cheklovlarini hal qilish, nazorat qilish qobiliyatini oshirish va davlat-xususiy hamkorlikni rivojlantirish zarur.

Kalit so'zlar: FATF, Travel Rule (Sayohat qoidasi), kripto-valyuta, pul yuvish, virtual aktivlar, VASPlar (virtual aktivlar xizmat provayderlari), AML muvofiqlik (pul yuvishning oldini olish muvofiqlik), blokcheyn.

DOI: <https://doi.org/10.47390/ydif-y2025v1i10/n04>

1. Introduction

The emergence of cryptocurrencies and virtual assets has fundamentally transformed the global financial landscape, creating both opportunities for financial innovation and vulnerabilities for illicit finance. With an estimated 560 million cryptocurrency users globally and a market that constitutes approximately 98% of virtual asset activity concentrated in 67

materially important jurisdictions, the potential for misuse in money laundering and terrorist financing has become a critical concern for international regulators [1]. Global money laundering is estimated at \$2 trillion annually, representing 2-5% of global GDP, with cryptocurrency-facilitated laundering reaching \$22.2 billion in 2023, down from \$31.5 billion in 2022 [2].

The Financial Action Task Force (FATF), established in 1989 as an intergovernmental body to combat money laundering and terrorist financing, recognized the emerging risks associated with virtual assets and took decisive action in June 2019 by updating its Recommendation 15 to explicitly apply AML/CFT measures to virtual assets and virtual asset service providers (VASPs) [3]. Central to this regulatory framework is the Travel Rule, derived from Recommendation 16, which mandates that VASPs and financial institutions collect and transmit specific originator and beneficiary information immediately and securely before or during virtual asset transfers [4].

The Travel Rule represents an extension of payment transparency requirements that have governed traditional financial institutions since 1996, now adapted to address the unique characteristics of blockchain-based transactions [5]. The rule requires VASPs to obtain, hold, and transmit information including the originator's name, account number or virtual asset wallet address, physical address or national identity number, and date/place of birth, along with the beneficiary's name and account number [6]. The FATF recommends a de minimis threshold of \$1,000/€1,000, though individual jurisdictions may set different thresholds or apply the rule to all transactions regardless of value [7].

Despite the clear regulatory framework established by FATF, the global implementation of the Travel Rule faces substantial challenges that undermine its effectiveness in preventing cryptocurrency-related money laundering. As of 2025, while 73% of responding jurisdictions (85 of 117 that permit VASPs) have passed Travel Rule legislation, the enforcement landscape remains fragmented, with only 35 jurisdictions having issued supervisory findings or taken enforcement actions specifically focused on Travel Rule compliance [8]. This enforcement gap, where approximately 60% of jurisdictions with Travel Rule laws have yet to take formal action, creates significant vulnerabilities in the global AML/CFT system.

Moreover, the staggered implementation timeline has created what is known as the "sunrise issue"—a period during which some jurisdictions have implemented the Travel Rule while others have not, resulting in a patchwork of compliance standards that complicate cross-border virtual asset transactions [9]. This fragmentation is exacerbated by technical challenges, including the absence of standardized technological solutions for information exchange, interoperability issues between different Travel Rule compliance platforms, and difficulties in identifying counterparty VASPs from virtual asset addresses [10].

The implications of inadequate Travel Rule implementation are substantial. In 2024, \$51 billion flowed into illicit crypto wallets, with \$40 billion laundered and \$2.17 billion stolen, while fraud and scam activity reached \$51 billion [11]. State-sponsored actors, such as the North Korean Lazarus Group, have demonstrated sophisticated money laundering techniques, laundering \$160 million with 68% of funds processed within a week by exploiting gaps in compliance systems [12].

2. Main Analysis

2.1 Global Implementation Status

The data reveals significant progress in Travel Rule adoption globally, yet substantial implementation gaps persist. As of June 2025, 73% of responding jurisdictions (85 of 117 that permit VASPs) have passed legislation implementing the Travel Rule, representing an increase from 69% (65 jurisdictions) in 2024 and 56% (53 jurisdictions) in 2023 [1]. An additional 14 jurisdictions reported actively working on implementation, bringing the total to 99 of 117 jurisdictions (85%) that have either implemented or are developing Travel Rule frameworks.

When examining materially important jurisdictions—those accounting for 98% of global virtual asset activity—the picture improves considerably. Of the 67 jurisdictions identified in the 2025 update, 57 (85%) have Travel Rule regulation in place or in progress [1]. Among the nine newly added material jurisdictions in 2025, three (Bahrain, Czech Republic, El Salvador) already have Travel Rule frameworks operational, four (Cambodia, Kenya, Pakistan, Saint Vincent and the Grenadines) are in the process of implementation, and two (Ethiopia and Morocco) have explicitly prohibited VASPs [1].

However, these legislative achievements mask a critical enforcement gap. Of the 85 jurisdictions with Travel Rule legislation, only 35 (41%) have issued supervisory findings, directives, or taken enforcement actions specifically focused on Travel Rule compliance[3]. This means that 50 jurisdictions—nearly 60%—have enacted Travel Rule requirements but have yet to demonstrate active supervisory oversight or enforcement. Furthermore, approximately one-third (33%, or 26 of 80 jurisdictions) are taking phased implementation approaches, such as setting higher thresholds, permitting manual processing with delays, or providing grace periods for compliance [13].

2.2 The Sunrise Issue and Cross-Border Challenges

The staggered implementation timeline has created persistent challenges for VASPs operating across multiple jurisdictions. The "sunrise issue" manifests in three primary operational difficulties: (1) difficulty sending Travel Rule data transfers when beneficiary VASPs in non-compliant jurisdictions are not equipped to receive information securely, (2) challenges receiving and verifying data from originator VASPs in jurisdictions with different implementation standards, and (3) uncertainty about whether to process transactions when complete information exchange is impossible [9].

VASPs in compliant jurisdictions face a fundamental dilemma: proceeding with transactions lacking complete Travel Rule information may violate local regulations, while refusing such transactions could limit service offerings and competitive positioning. Many VASPs have adopted risk-based approaches, conducting enhanced due diligence on transactions where full information exchange is not possible, though this introduces operational complexity and compliance risk [9]. The development of technological solutions has partially addressed these issues, but interoperability between different Travel Rule platforms remains problematic, with fragmented country-specific systems that may not support all virtual assets or require third-party approvals [7].

2.3 Technical and Operational Challenges

The implementation of the Travel Rule faces substantial technical obstacles that distinguish it from traditional financial system compliance. First, FATF does not mandate specific technological solutions, resulting in the development of multiple competing protocols and platforms with varying architectures—including alliance-based networks, peer-to-peer messaging systems, and blockchain-based communication hubs (IEEE, 2024). Each approach

has distinct advantages and limitations regarding security, scalability, cost, and interoperability.

Second, fundamental technical challenges exist in the cryptocurrency ecosystem that complicate Travel Rule compliance: (1) identifying the recipient VASP from only a virtual asset wallet address, as blockchain addresses do not inherently reveal which VASP, if any, controls them, (2) proving ownership and control of addresses to prevent false representation, and (3) establishing secure, reliable communication protocols between VASPs that may have no pre-existing relationship [8].

Third, data privacy and security considerations create tension between Travel Rule requirements and data protection regulations such as GDPR. VASPs must balance the need to collect and share detailed personal information with obligations to minimize data collection and protect user privacy [14].

Fourth, transactions involving unhosted (self-hosted) wallets present unique challenges. When a VASP transfers assets to or from an unhosted wallet—which may belong to an individual rather than another regulated entity—the ability to collect and verify beneficiary information is severely limited. FATF guidance requires VASPs to conduct risk assessments and apply enhanced due diligence to such transactions, but the practical mechanisms for information gathering remain contentious and technically challenging [13].

2.4 Effectiveness in Preventing Money Laundering

Despite implementation challenges, evidence suggests that enhanced AML/CTF frameworks, including Travel Rule compliance, are having measurable impacts on cryptocurrency-related money laundering. Illicit cryptocurrency transactions decreased significantly from \$31.5 billion in 2022 to \$22.2 billion in 2023, representing a 29.5% decline that outpaced the 14.9% reduction in overall cryptocurrency transaction volumes [2]. While multiple factors contributed to this decline—including market conditions, law enforcement actions, and regulatory pressure—the data suggests that increased compliance infrastructure is having a deterrent effect beyond general market trends.

The concentration of money laundering activity provides further insights. In 2023, while money laundering remained concentrated at certain services, it became less concentrated at the individual deposit address level. Only 1,425 deposit addresses received over \$1 million in illicit cryptocurrency (totaling \$6.7 billion, or 46% of all illicit value received by exchanges), compared to 542 such addresses in 2022 [2]. This broader dispersion suggests that enhanced AML controls at major exchanges are forcing illicit actors to fragment their laundering operations across more numerous smaller-value channels, increasing operational complexity and risk for criminals.

However, sophisticated actors continue to adapt their strategies to evade detection. The North Korean Lazarus Group exemplifies this adaptation, having refined high-velocity laundering techniques that moved \$160 million through illicit channels with approximately 68% laundered within one week of theft [12]. The group has increasingly utilized cross-chain bridges, newer mixer services like YoMix (following the shutdown of major mixers like Tornado Cash and Sinbad), and complex multi-hop transaction patterns to obfuscate fund flows.

2.5 Enforcement Actions and Supervisory Approaches

The 2025 data reveal growing but still insufficient enforcement activity. While only 21% of jurisdictions reported enforcement actions in 2023, this increased to 41% by 2025,

indicating that regulatory authorities are gradually operationalizing their supervisory frameworks. In 2025, cryptocurrency exchanges faced over \$1 billion in AML-related fines globally, with major penalties including OKX's \$500 million guilty plea, KuCoin's nearly \$300 million in fines and forfeiture, and BitMEX's \$100 million fine for AML/KYC program failures [16].

FATF's June 2025 publication "Best Practices on Travel Rule Supervision" identifies several effective supervisory approaches that jurisdictions have adopted [8]. Leading practices include:

Pre-licensing compliance verification: Jurisdictions such as Singapore, the Bahamas, and Kazakhstan require VASPs to demonstrate Travel Rule compliance capabilities as a prerequisite for licensing, rather than discovering deficiencies post-authorization [8]. The Bahamas conducts live demonstrations where applicants must show their operational capabilities and technological solutions.

Clear regulatory guidance: Hong Kong enhanced its AML/CFT requirements in June 2023 with detailed guidance addressing critical operational areas, including specific expectations on information requirements and due diligence processes for unhosted wallet transactions [8].

Private sector engagement: Singapore's Monetary Authority has facilitated industry initiatives including independent evaluations of Travel Rule solution providers against FATF standards and technology/cybersecurity requirements. This public-private collaboration approach has accelerated solution development and industry adoption.

Ongoing supervision: Effective jurisdictions conduct regular supervisory inspections focused on Travel Rule implementation, utilizing both on-site examinations and off-site reviews of policies, procedures, and transaction samples to verify practical compliance [8].

2.6 Technological Solutions and Emerging Risks

The private sector has developed various technological solutions to facilitate Travel Rule compliance, though challenges with standardization and interoperability persist. As of 2025, 69% of blockchain companies report using AI-driven AML systems, up from 52% in 2024, reflecting rapid adoption of advanced technologies to enhance detection capabilities [15]. Leading solutions incorporate transaction authorization platforms, blockchain analytics, identity verification and KYC systems, and standardized messaging protocols [16].

However, significant gaps remain in current technological solutions. FATF acknowledges that existing tools "often do not meet all requirements" and emphasizes the need for improved interoperability [6]. As the Travel Rule framework matures, new challenges are emerging including stablecoins, DeFi protocols, cross-chain bridges, artificial intelligence applications, and privacy-enhancing technologies.

3. Conclusion and Recommendations

This research demonstrates that while significant progress has been made in implementing FATF standards and the Travel Rule for virtual assets, substantial challenges remain in achieving comprehensive global compliance and maximizing effectiveness in preventing cryptocurrency-related money laundering. The legislative framework has expanded considerably, with 85 jurisdictions (73% of those permitting VASPs) having enacted Travel Rule requirements as of 2025. Among materially important jurisdictions accounting for 98% of

the virtual asset market, implementation rates reach 85%, indicating strong momentum in major markets.

However, a critical enforcement gap persists, with only 41% of jurisdictions with Travel Rule legislation having taken formal supervisory or enforcement actions. This implementation-enforcement disconnect undermines the deterrent effect and practical effectiveness of the regulatory framework, creating vulnerabilities that sophisticated criminal actors continue to exploit. The "sunrise issue"—the staggered implementation timeline across jurisdictions—compounds these challenges by creating operational difficulties for VASPs attempting to comply with inconsistent cross-border requirements.

Despite these obstacles, evidence suggests that enhanced AML/CTF frameworks are having measurable impacts. Illicit cryptocurrency transactions decreased 29.5% from \$31.5 billion in 2022 to \$22.2 billion in 2023, a reduction that exceeded the 14.9% decline in overall transaction volumes, indicating effects beyond general market conditions. Money laundering activity has become less concentrated at individual deposit addresses, suggesting that compliance measures are forcing criminals to fragment operations across more numerous channels with increased operational complexity and risk.

The effectiveness of the Travel Rule framework ultimately depends on three critical factors: First, achieving near-universal implementation across jurisdictions to eliminate regulatory arbitrage opportunities and close the sunrise issue. Second, developing standardized, interoperable technological solutions that balance security, usability, cost-effectiveness, and privacy protection while enabling seamless cross-border compliance. Third, establishing robust supervisory frameworks with active enforcement to ensure that legislative requirements translate into operational compliance and behavioral change among market participants.

Recommendations

For Policymakers and Regulators:

1. Prioritize operationalization of Travel Rule frameworks through active supervision and enforcement, moving beyond legislative adoption to demonstrated compliance verification and corrective action where necessary
2. Accelerate implementation timelines in jurisdictions that have not yet enacted Travel Rule requirements, focusing particularly on major virtual asset markets to close remaining gaps in global coverage
3. Develop clear, actionable regulatory guidance addressing technical challenges such as unhosted wallet transactions, cross-chain operations, and DeFi interaction
4. Foster international cooperation through information-sharing mechanisms, harmonized standards, and mutual recognition agreements
5. Utilize FATF's Best Practices on Travel Rule Supervision as a framework for building effective oversight programs
6. Balance compliance requirements with practical technical feasibility, providing transitional periods and regulatory flexibility where necessary

For Virtual Asset Service Providers:

1. Implement robust Travel Rule compliance programs proactively, treating compliance as a strategic priority

2. Invest in advanced technological solutions including AI-powered transaction monitoring, blockchain analytics, and automated Travel Rule information exchange platforms
3. Conduct comprehensive risk assessments covering all transaction types, implementing enhanced due diligence where appropriate
4. Participate actively in industry associations and standard-setting initiatives to promote interoperability and share best practices
5. Maintain flexibility in compliance approaches to accommodate evolving regulatory requirements
6. Establish strong governance frameworks with board-level oversight of AML/CTF compliance

For Technology Providers:

1. Prioritize interoperability in solution design to enable seamless information exchange between different Travel Rule platforms
2. Develop solutions that balance regulatory compliance requirements with user privacy protections
3. Ensure scalability to handle high transaction volumes without creating operational bottlenecks
4. Provide comprehensive documentation and support to facilitate VASP adoption
5. Engage with regulators to provide technical expertise and practical feedback on regulatory proposals

For the International Community:

1. Support capacity building in lower-resource jurisdictions through technical assistance and training programs
2. Facilitate multi-stakeholder dialogue between regulators, industry, technology providers, and academic experts
3. Continue research on the effectiveness of AML/CTF measures and criminal adaptation strategies
4. Address broader financial crime ecosystem issues including alternative laundering channels

The path forward requires sustained commitment from all stakeholders to building a comprehensive, effective, and globally harmonized AML/CTF framework for virtual assets. While challenges remain significant, the combination of improving implementation rates, advancing technological solutions, and growing supervisory sophistication provides a foundation for continued progress. The ultimate success of the Travel Rule and broader FATF standards will be measured not just by compliance statistics, but by demonstrable reduction in the misuse of virtual assets for money laundering and terrorist financing, protection of the financial system's integrity, and preservation of legitimate innovation in blockchain technology.

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**YANGI DAVR ILM-FANI: INSON UCHUN
INNOVATSION G'OYA VA YECHIMLAR**
X RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI MATERIALLARI
2025-yil, noyabr

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Yangi davr ilm-fani: inson uchun innovatsion g'oya va yechimlar.
X Respublika ilmiy-amaliy konferensiyasi materiallari to'plami.
1-jild, 10-son (noyabr, 2025-yil). – 33 bet.

Mazkur nashr ommaviy axborot vositasi sifatida 2025-yil, 8-iyulda
C-5669862 son bilan rasman davlat ro'yaxatidan o'tkazilgan.

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Konferensiya tashkilotchisi: "Scienceproblems Team" MChJ

Konferensiya o'tkazilgan sana: 2025-yil, 17-noyabr

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