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Postal Revenue Collection in the Digital Age

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Abstract In recent years postal revenue collection underwent a major transformation due to widespread transition to digital methods of communication. This transition directly affected not only telecommunications which form an integral part of the postal revenue collection but also, and in a much more profound way, postage evidencing. Traditional postage evidencing remained unchanged for several dozens years until the introduction of digital printing which drastically changed all its security related aspects and considerations. This paper defines conceptual foundations of the postal revenue collection system (which is simultaneously a payment system for mailers), fundamental requirements imposed by the nature of hardcopy-based communication and suggests what the authors believe to be an optimal solution for public key-based postage evidencing founded on elliptic-curve cryptography.