

AirMailer Proposal, March 2023

Period: N/A

Amount: 12,000.00 USDC

Destination: 0x89AfFD157d81Fc1F584dbd636fC7982aDe035d95 ([elementalblockchain.eth 2](https://elementalblockchain.eth.link))

Note: The destination is a multisig wallet owned by Elemental Blockchain, LLC.

Proposal Parameters:

- Team: Elemental Blockchain, LLC
- Target Contract Address: [0xA0b86991c6218b36c1d19D4a2e9Eb0cE3606eB48](https://elementalblockchain.eth.link) (USDC)
- Target Contract Signature: transfer(address,uint256)
- Parameters: ["[elementalblockchain.eth 2](https://elementalblockchain.eth.link)", "12000000000"]

Summary:

This proposal seeks funding for the development of an Airnode adapter and associated smart contracts to function as a Web3-to-Web2 email gateway.

Abstract:

Airnodes serve as an efficient bridge between the Web3 and Web2 worlds. Current development has primarily focused on oracle updates, but we believe Airnode infrastructure has potential far beyond that. Starting with the AirMailer gateway, we aim to explore additional, innovative services that leverage this powerful technology.

Motivation:

As Web2-based services like email continue to coexist with Web3, there is potential for Airnode to create synergy between the two. Currently, customers typically receive follow-up emails for day-to-day debits and credits in their bank accounts. As transactions increasingly take place on-chain, we expect businesses will require these communications forwarded to an inbox, similar to current common practices. At present, organizations must maintain local infrastructure and develop custom solutions to handle Web3-related tasks due to the lack of a standardized framework. Such an email gateway could provide notifications for Netflix subscriptions withdrawn from Ethereum wallets, payroll transactions processed by employers, and various other accounts-payable functions.

Specification:

We envision this product functioning similarly to the current Airnode RRP, with the IOS configuration replaced with an SMTP configuration. It will include a call resembling `makeFullRequest()` that is designed to relay content to email. When triggered, this call would be recognized by Airnode upon waking up during the next interval. Subsequently, the SMTP

configuration or email API configuration would be checked, and Airnode would submit the data to the email server or API. Security features, such as encrypting recipient addresses using the Airnode public key, will be considered. Additionally, an option such as an HTTP gateway based webform or API for a user to link an Ethereum address to an email address in an off-chain manner will also be explored.

Deliverables:

1. AirMailer adapter
2. ERP (Email Response Protocol) smart contract
3. QA testing

Timeline:

Two months requested

Funds:

Lead Development by the Elemental Blockchain Dev Team