# Treasury Withdrawal - Scalus - DApps Development Platform

## **Title**

Withdraw ₳657,692 for Scalus - DApps Development Platform

## **Abstract**

This treasury withdrawal funds **Scalus - DApps Development Platform** which will provide the following services:

Developing DApps on Cardano shouldn't require juggling multiple languages, libraries and frameworks.

Scalus changes this by bringing the power of Scala 3 to the Cardano ecosystem, letting you write smart contracts, build transactions, and application layers — all with the same language and familiar tools.

It supports the complete development flow - setup, development, testing, debugging and deployment, backed by an industry-grade toolset and professional development experience.

Key benefits that make Scalus + Scala 3 stand out:

- Productivity boost at scale with Scala 3

- Reduced time-to-market - from prototyping to production in less time

- Deep pool of Scala/Java/Kotlin talent available on the market

Scalus is a Cardano DApps development platform made for professionals and businesses who want to get things done.

This Treasury Withdrawal is submitted by Intersect on behalf of the vendor. The following sections; Abstract, Motivation, Rationale and Vendor Profile have been sourced from the approved proposal submitted by the Vendor as part of the Intersect budget process.

This treasury withdrawal funds one of 39 proposals to give effect to the approved budget info action for ₳275,269,340, administered by Intersect via gov\_action1u9x73kwufaxa70lfy59g4ynwyrcsaxdcd0gxzzmh67s9fxq4j8hqqk2phgh. The information provided herein is intended to fulfill the spirit of the constitutional requirement for a treasury withdrawal info action by also providing the details of the proposed solution, alignment to the budget, and amount to be withdrawn from the Cardano Treasury.

## **Motivation**

This proposal aims to solve the following problem:

Building DApps on Cardano remains harder than it should be. New developers need to invest a substantial amount of time to become productive. It makes Cardano less attractive to build on, and limits the ability to innovate and produce value to end users.

New developers face multiple obstacles:

1. Steep technical learning curve

2. Fragmented technology stack (on-chain/off-chain, front-end/back-end)

3. Limited development tooling and standard libraries

4. Scattered educational resources

In anticipation of the wider adoption of Cardano technology by traditional organisations (e.g., in finance and fintech, where Java and Scala are dominant), it should be simpler for their web2 developers to start building on Cardano. Companies need a smooth path for their existing teams — without the need to learn new programming languages or hire specialists just to get started.

## **Rationale**

### Project Solution

(1) Benefits for professionals

Scalus meets developers where they are. It bridges Web2 engineers from traditional firms with progressive onboarding and built-in safety, while giving seasoned Cardano builders advanced control and optimisations.

Web 2 developers:

* Familiar dev experience & tooling using Scala
* Elegant syntax with gentle learning curve of blockchain specifics
* Built-in safety controls to reduce common mistakes and risks

Cardano builders / R&D Labs:

* Low-level optimisations (memory, cost, advanced patterns)
* Expressiveness beyond limited DSL
* Advanced features (macros, meta-programming)
* Rich Scala ecosystem for complex protocols and mission-critical solutions

(2) Benefits for businesses

Scalus, paired with Scala 3, helps businesses build on Cardano without the usual headaches. It’s a practical way to deliver value quickly and reliably.

Benefits:

* Productivity boost at scale with Scala 3
* Reduced time-to-market - from prototyping to production in less time
* Deep pool of Scala/Java/Kotlin talent available on the market
* Code quality and safety are first-class citizens
* Reduced training investments to transition Scala/Java/Kotlin teams to blockchain

### Vendor Profile

Oleksandr Nemish is a seasoned software engineer with a specialised focus on functional programming, type theory, meta-programming, compilers, and blockchains. His expertise is underscored by his proficiency in languages such as Scala, Haskell and Rust.

Oleksandr has a robust professional background, having worked for prominent financial organisations like Deutsche Bank and UBS.

Oleksandr Nemish is a former engineer at IOG, the engineering company behind the Cardano blockchain. He worked on the design and implementation of Marlowe – a new financial smart contracts programming language for Cardano.

### Contract Management

A written off-chain Legal Contract will be created between the Vendor and the Cardano Development Holdings (CDH), as mandated by the constitution, and will be administered by Intersect. This will include details of the project delivery schedule and dispute resolution.

### Project Delivery

All milestones, acceptance criteria, payment amounts and expected delivery dates will be agreed between the Vendor and Intersect, acting on behalf of the CDH. The vendor will deliver according to the agreed-upon project schedule within the Legal Contract, of which the necessary information will be made public via the budget management platform via transaction metadata.

Defined by the milestones within a Legal Contract, the vendor will submit and attest milestone acceptance to the community, Intersect or 3rd Party Assurer.

Project progress will be monitored via Intersect’s delivery assurance function which will be communicated to the community.

Acceptance of the above work is expected to be supported by a 3rd Party Assurer, who will be responsible for reviewing and signing off the work completed at each project milestone against the corresponding milestone deliverables detailed within the Legal Contract. This work is funded from a portion of this treasury withdrawal.

### Budget Management Tooling

To administrate treasury funds on-chain, Intersect will utilize the treasury management smart contract framework developed by Sundae Labs. The smart contracts have been [extensively tested](https://github.com/SundaeSwap-finance/treasury-contracts/tree/main/offchain/tests) including audits from TxPipe and MLabs. Examples of the usage of these contracts can be seen across mainnet described across Intersect authored [Blog 1](https://www.intersectmbo.org/news/smart-contract-mainnet-demo-a-step-toward-on-chain-treasury-withdrawals), [Blog 2](https://www.intersectmbo.org/news/smart-contract-mainnet-demo-day-two-update) and [Blog 3](https://www.intersectmbo.org/news/smart-contract-mainnet-demo-day-three-update).

Final mainnet validation test can be seen via the Disburse action within transaction: 0f591dc544ae14102dbb4a74d5311a6acffc1772b163d8b7a9656b9525950b17

With the confirmed treasury reserve contract address being: stake17xzc8pt7fgf0lc0x7eq6z7z6puhsxmzktna7dluahrj6g6ghh5qjr

#### Specifics

Intersect will utilize a single Treasury Reserve Smart Contract (TRSC), with many Project-Specific Smart Contracts (PSSC), managed by Intersect. Intersect’s management consists of three ‘admin’ and two Intersect ‘leadership’ roles. An Oversight Committee consisting of five external, independent third-party entities will provide checks and balances on Intersect, and safeguard against errors and unilateral control. The administration of both TRSC and PSSCs will be managed by Intersect, with external oversight on certain actions from the Oversight Committee.

The Oversight Committee consists of Sundae Labs, Cardano Foundation, Dquadrant, Xerberus and NMKR. Their role is to independently verify key administrative actions using on-chain logic, ensuring accuracy and consistency without exercising discretion over governance decisions.

For all details on Intersect’s configuration please see the [**Smart Contract Guide**](https://docs.intersectmbo.org/cardano-facilitation-services/cardano-budget/intersect-administration-services/smart-contracts-as-part-of-our-administration) on the knowledgebase.

The high level permissions are as follows:

* TRSC Fund and PSSC Modify
  + Two of the three Intersect admins, two of the five trusted entities and one of the two Intersect leadership sign-off must authorize
* TRSC Disperse
  + Two of three Intersect admins, three of five trusted entities and two of two Intersect leadership sign-off must authorize
* TRSC Pause and Resume
  + Two of three Intersect admins, and one of two Intersect leadership sign-off must authorize
* TRSC Sweep
  + One of three Intersect admins, and one of two Intersect leadership sign-off must authorize
* TRSC Reorganize
  + Two of three Intersect admins and three of five trusted entities must authorize

#### Processes

Upon enactment of this governance action, funding for this project will be directed into the TRSC’s stake account. All instances of TRSC and PSSC can not be staked with a SPO and will be delegated to the auto-abstain predefined DRep. From here funds will be withdrawn into a UTxO remaining at the TRSC.

When the Legal contract is prepared and the vendor is ready, funding for this project will be transferred using the Fund action to a PSSC. All milestones will be outlined within the metadata.

A dashboard will be available for the community to audit the TRSC or PSSC and track metrics related to this withdrawn ada as well as being immutably verifiable on chain.

The subsections; Contract Management, Project Delivery, and Budget Management Tooling described above cover the constitutional requirements specified in Article IV section 4 and 5.

## **References**

Scalus - Presentation Slides v.1.1 (PDF)

* ipfs://bafybeifg7ormly4v5ltigrcghrvbqjauwcwyknvcoc6fmp2qewp4vxojjm

Scalus - Budget breakdown + Milestones (PDF)

* ipfs://bafkreicpkgopfmo7trp27xslqoih3dadfjp7exsgq6a7g6lgi7zcgp56lq

Scalus - Website

* <https://scalus.org/>

Project Proposal In Ekklesia

* <https://2025budget.intersectmbo.org/ballots/680d1b63565577986442d123/proposals/680d1b63565577986442d1f6>

Approved Budget Info Action submitted by Intersect via GovTool

* https://gov.tools/outcomes/governance\_actions/e14de8d9dc4f4ddf3fe9250a8a926e20f10e99b86bd0610b77d7a054981591ee#0

Details of all successful proposals (CSV)

* ipfs://bafybeicwrop4q7xvnyjdd5drumbe56sqtm5lbe2ul3c262zt4hgguzdycm

Automating Accountability: Cardano’s Smart Contract Framework Blog

* ipfs://bafybeihqx4ae72z7suqfnxrpqpqithp43cai7o2uuewnqtezgaoyc3ptyq

Sundae Labs Budget Management Smart Contracts Github Repository

* https://github.com/SundaeSwap-finance/treasury-contracts

Budget Management Smart Contracts TxPipe Audit Report

* ipfs://bafybeiccnwejbgj43wo6hrlseckkkmprtoqc5cfuy2hesm6c6yealwho3e

Budget Management Smart Contracts MLabs Audit Report

* ipfs://bafybeiah5fnjhda5hemj3qvaehc4mre3qllqzw2l7mkdsguytn4ftgafw4

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