

# Cosmos Hub - Confio Funding Proposal

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## Summary

This is a signaling proposal. If it passes, it indicates the community's willingness to raise a community pool spend proposal to support the Confio team in their stewardship of CosmWasm, CosmJS with the ATOM equivalent of \$2.5M dispersed in two payments, in accordance with the process outlined below.

## Purpose

Strengthening the ATOM Economic Zone through support and Public Goods.

Confio is the team responsible for the stewardship and development of a huge number of libraries fundamental to many developers in the Cosmos. The best known are the CosmJS & CosmWasm libraries, two key components of the Cosmos software stack, but you can review the [list of dozens of repositories](#) Confio maintains. These libraries are highly valued by developers and chains across the Cosmos ecosystem. In addition, they focus on expanding IBC protocols by developing IBC-enabled contracts and training others how to do so as well.

Confio is also prepared to offer some services and support for the success of Cosmos Hub secured consumer chains in exchange for such funding support. This will be defined more below, but it should be clear that there are also tangible benefits for the Cosmos Hub through this proposal.

## Why should the Hub fund Confio?

### **Hard vs. Soft Power**

In the coming months, a software upgrade proposal to adopt Gaia v.9.0.0 will be raised to the Cosmos Hub. This proposal will include replicated security, which will allow other blockchains to "lease" the security of the Cosmos Hub, making it as difficult to perform an economic attack on a consumer chain as it would be to perform the same attack on the Hub itself. We can think of this as the Hub granting its "economic security" to the consumer chain. This can be thought of as a form of hard power.

In politics, hard power is the use of economic or military means to influence behavior. In our particular cryptographic environment, we can easily extend the metaphor to the use of economic security as an incentive to attract developers. In the Interchain ecosystem, we will see a marketplace of consumer chains seeking this economic security as a service.

However, this is a narrow view of the environment that consumer chains will be navigating. They will not only seek economic security, but are also likely to seek healthy governance precedent, adequate tooling, financial support, and access to human resources like talent, ideas, and users.

It should be clear from the above paragraph that hard power is only one means of exerting influence. In order to further strengthen the Hub's position as a Hub in the interchain, soft-power is another key component.

In politics soft power is defined as the use of economic or cultural influence to influence behavior. In our cryptographic environment it can be thought of as the intangible areas that consumer chains will need beyond economic security.

It is worth noting that a complex interplay of relationships across chains in the Interchain is one of the central components of the Cosmos ethos, and the Cosmos Hub's primary value proposition is to provide a firm foundation for navigating these relationships. By serving as this foundation, the Cosmos Hub and its stakeholders will accrue token fees of the chains that use its services. Thus, the Cosmos Hub is incentivized to provide the highest quality experience (in terms of both hard and soft power) for all those that choose to form a relationship with or around it. By doing so, it will attract the highest-quality talent and cement its role as an irreplaceable Hub.

### **Funding Public Goods**

With the view of soft power in mind, it is clear that funding the maintenance and stewardship of two key components of the Cosmos software stack is valuable to the Cosmos Hub. Developers highly value both CosmWasm and CosmJS, and consumer chains of the Cosmos Hub are highly likely to utilize these libraries in the emergent value they create for the ecosystem.

By funding Confio, the Cosmos Hub asserts its willingness and ability to support the highest quality tooling in the Cosmos network, and thus support the chains that wish to use these tools. Supporting the Confio team is a valuable step in providing the intangible human resources that developers will look for when they are seeking a home for their next great idea.

### **Support For Consumer Chains**

Additionally, Confio can provide tooling and support to help promote the success of various CosmWasm-enabled consumer chains. The exact scope of such support should be refined, but as a guide, some ideas we had are:

- Providing reasonable technical support to CosmWasm-based Hub consumer chains (eg wasmd integration, extensions, etc)
- Prioritize the needs of the Cosmos Hub (and consumers) in our backlog and roadmap
- Providing off-chain developer tooling supporting the Hub and its consumer chains
- Contribute as needed to development of ICS technology
- Integrating advanced IBC protocols in Hub consumer chains

We are open to feedback to refine this list, but we want to make sure this is a two-way street, and the Cosmos Hub also benefits directly from the support they are considering to grant Confio.

## Security and Maintenance

The main point of this grant is to provide Confio [funding to resume their Public Goods work](#). Key among this is ensuring the security and stability of the entire software stack they maintain. Keeping all repositories updated with the latest dependencies (like upcoming Cosmos SDK and Wasmer releases) and actively monitoring potential security issues requires significant resources. Engaging with the community, adding minor features and bugfixes as needed, and reviewing incoming PRs, requires even more resources.

Confio now maintains at [least 20 significant open-source repositories](#) critical for the functionality and security of many blockchains. The increasing work to support all of these as a desired level of security and stability is often unseen or brushed under other milestones, but this in fact was the largest source of concern when we announced we would halt Public Goods work – that many blockchains are potentially at risk of attack due to unmaintained software dependencies

Maintenance is a continuous process that covers the following items:

- Watch all dependencies for important updates
- Monitoring multiple channels for security alerts
- Reviewing, triaging, and resolving bug reports from users
- Reviewing and possibly implementing feature requests from users
- Monitoring chat platforms for issues and needs of users
- Responsible notification of involved parties on any known security bug
- Improving test coverage
- Improving code-level documentation

Simply keeping this all working well and preemptively patching bugs before they damage any chains requires several senior engineers.

# Rough Roadmap

In addition to ongoing maintenance and support for CosmWasm consumer chains, Confio would like to improve these tools, and especially expand support for IBC development in 2023. The following is a semi-optimistic roadmap of new functionality that Confio would like to develop. It is likely we won't accomplish everything on the list, but with adequate funding, we should accomplish many items, and likely others not on the list.

This is not a promise of deliverables, but a general guide to what you can expect if Confio is funded:

## Q2

Much energy will be spent grooming frozen repos, cleaning up issues and PRs, and charting upcoming milestones, as well as preparing for features to be finished in Q3. The following should be completed:

- Full wasmd support for Cosmos SDK 0.47.0, including participation in testnets and help debugging.
- Ensure full CosmJS support and compatibility for Cosmos SDK 0.47
- Ensure wasmd (junod/osmosisd/neutroind) *client* builds and runs on Windows machine (no-cgo)
- Implement enhanced ics20 as a CosmWasm contract
  - Full ics20 token transfers, [contract callbacks](#), and sending/receiving [Osmosis memo-field extension](#)
- Prepare ts-relayer for better usage in CI
- Integrate CosmJS with Cosmology tools to greatly reduce build size and optimize performance
- CosmWasm Academy: Prepare videos on multi-contract development and testing

## Q3

- Safely enable floating-point operations in CosmWasm contracts (lots of prep in Q2)
- Ensure ts-relayer works between major testnets
- Extend multi-test to model IBC contract workflows (high level APIs inspired by ts-relayer based tests)
- Implement general purpose DeFi-enabling protocol enabling composition of token transfers and contract calls in simple, atomic manner, including:
  - ICS20 token transfer
  - Interchain Accounts (ICS27) functionality (over one shared channel)
  - Interchain Queries functionality (over same channel)
  - Fee handling similar to ICS-29
  - Multi-hop token routing (sending tokens Juno -> Osmosis -> Hub with one message on original sender)

- Successful AwesomWasm conference and Hackathon (July 12-16) - Q2 is full of organizing work
- Academy: Prepare videos on IBC contract development and testing
- Improve major pain points in [Sylvia framework](#), bringing it to beta

#### Q4

- Release wasmd 1.0!
- Wasmd server running on Windows machine (for local testing)
- TS-Relayer is more robust for real-world usage
- TS-Relayer support for enhanced fee/gas/ordering calculations and filtering
- Support for gRPC in CosmJS (if gRPC supports all needs)
- CosmJS support in React Native
- Release Sylvia 1.0
- Prepare videos on Sylvia contract development and testing

## Use of Funds

Confio currently has a burn rate of circa 200k Euro/month with 90% or more going to salaries. All funds from this proposal will go to pay salaries of employees. Principally developers, but also marketing/community building work (for the conference) and internal support (HR / accounting) needed to keep the company running.

Our headcount has been reducing and as of the end of February, we will have 20 employees, including 10 developers and 1 product owner (one more if Ethan gets to code again and stop fundraising). One year ago, we had 26 employees with 14 developers and 2 product owners. With proper funding, we would like to return to that size, which will allow us to achieve this roadmap while performing a proper level of security and maintenance work.

## Execution Details

### Community Pool Spend

#### *Assumptions*

All of the following statements are made using the following assumptions:

- The ATOM price used in calculations is \$13.004, which is the 30 day moving average price of ATOM as of February 6th.
- Proposal 95 has passed, and those 588,000 ATOM have been dispensed

- The calculations used to determine the community pool budget can be found here: <https://docs.google.com/spreadsheets/d/1Bb6RZbL4YWe6LdWD7o1-TSuMMCIpbD6X0S1I4vAux4l/edit?usp=sharing>
- In the spreadsheet, the Hub funds Confio's entire yearly expense. A more optimal outcome would be interchain collaboration in which each chain funds a percentage of Confio's needs.

### *Pool Percentage*

- Funding Confio with the ATOM equivalent of \$2.5M from the Cosmos Hub equates to less than 1% of the USD value of the community pool on a monthly basis.
- Each tranche of community pool spend will consume for ~5.4% of the total ATOM in the community pool.

### **Payment Details**

The process for the community pool spend will be as follows:

### **Signaling vs. Community Pool Spend**

- Contingent upon the passing of the signaling proposal, the first pool spend proposal will be raised in early march, the second will be raised in August.
- The first payment proposal will be raised only if this proposal passes with a super-majority (>66%) of yes votes relative to no and no with veto votes.

### **ATOM Amounts & Sale Terms**

- Fund Confio with the ATOM equivalent of \$2.5M with two separate community pool spend proposals, each requesting the ATOM equivalent of \$1.25M.
- The actual ATOM request in each proposal will be based on (30? 90?) day rolling average price before the proposal goes on chain. Thus the ATOM request in the second tranche will be adjusted to be reasonable.
- The ATOM will be sent to a multisig and should be properly managed and slowly liquidated when the market can handle it.
  - Sale of ATOM should cause no more than 1% price impact in any given day? 4% on any given week?
  - ATOM should be sold over 1 month following the release of the funds to the multisig.

### **Fund Release**

- In order to provide a legally registered counterparty to fund Confio, the Neutron foundation will function as the standing recipient of the community pool spend

- The funds will be released to a multi-sig wallet owned by the Neutron Foundation with the following 3-5 signers:
  - TODO: confirm exact signers
- After the ATOM are liquidated into USD, they will be transferred from the Neutron Foundation to Confio
- Confio will release a statement declaring receipt of the funds and the resumption of public goods work
- A public report of work done will be issued in August, before the application of the second tranche. The purpose of this report is to solicit feedback from relevant stakeholders on the work Confio is doing and provide a chance for discussion of any adjustments in Hub-specific services.

### **Responsible Funding**

- It is in no one's interest that Confio is solely dependent on the Cosmos Hub in the long term.
- Confio will approach a number of other chains for similar community spend proposals.
- Having funding secured over a larger number of tokens reduces sell pressure on any one of them and allows more of the funds to be held and staked.
- While we would like to request the stated funds from the Hub regardless of success in other funding sources, success there would extend the duration that said funding could support. Confio is committed to working with the Hub within the scope of this proposal.

### **Signaling Proposal**

This proposal is explicitly written as a signaling proposal in order to gauge the sentiment of the community. It is a method of communicating across the shareholder base and allowing ATOM holders to express their opinions with the weight of their vote, optimally creating a non-contentious governance environment and opportunities for feedback.

### **Voting Outcomes**

- If this signaling proposal passes, a community pool spend proposal will be raised. NOTE: the current proposal does not trigger the release of any funds. If it passes, the community indicates that at the present moment, with the available information, they have a willingness to release funds and compensate Confio with the ATOM equivalent of \$2.5M, though the release of those funds is contingent upon the passing of the following community pool spend proposals.
- If this signaling proposal is rejected, the next steps depend on whether concerns are related to some details, or the proposal principle in general. If the rejection is based on a clear set of issues that could be resolved, we will work with stakeholders to adjust these issues and may come back with a revised community spend proposal. If the rejection is

based on the general purpose, no further action will be taken in regards to compensating Confio via a community pool spend proposal.

### **Voting Choices**

- If you vote yes you signal your desire to compensate Confio via the Cosmos Hub community pool.
- If you vote no you signal your dissent against compensating Confio via the Cosmos Hub community pool.
- If you veto this proposal you deem it harmful to the network and wish to burn the proposer's ATOM.
- If you abstain you signal your desire to contribute to quorum without a preference toward whether the proposal passes or fails.

### **Open Questions**

- What other areas of the proposal do you have feedback on?
- What services would you like to see Confio offer the Hub?