**Cosmos (ATOM) Protocol**

**What is Cosmos:** Cosmos is the internet of blockchains, an ecosystem of apps and services that exchange digital assets and data using IBC (Inter-Blockchain Communication) protocol. Cosmos can be staked meaning it can earn 6-9% annually on interest, just by holding it.

**What is ATOM Token:** The ATOM is the Cosmos Hub’s primary token and secures the Hub’s valuable interchain services. If you hold ATOM, you can temporarily lock them up to contribute to the security of the Cosmos Hub using a mechanism called Staking. In exchange for locking your ATOM, you receive rewards in newly minted ATOM and a share of the transaction fees that are collected by the blockchain. However, staking is not risk free. By staking ATOM, you are able to vote in Cosmos Hub governance decisions.

**Staking Cosmos:** is the process of locking up a digital asset (ATOM in the case of Cosmos Hub) to provide economic security for a public blockchain

**Cosmos (ATOM): Quick Facts & Features**

**- Market Cap, $8.1 Billion**

**- Price $28.55**

**- Slashing, 5% doe double signing, 0.01% for downtime**

**-Total ATOM supply 291.2M**

**- low fees $0.01**

**- 7 second transaction**

**- Stargate Upgrade:** Enabled higher transaction throughput, cross-chain transactions, accelerate UI development, which brought **IBC**

**-IBC,** Ability to exchange transactions of value and data across multiple chains

**- Inflation 7%**

**- Unbonding is 21 days,**

**- Compounding, new delegation required**

**- PoS, 99% lower carbon footprint, blockchain tech that truly scales**

**- Interchain accounts:** can fill the role of application-layer interoperability while the betowrk layer maintains the IBC standards, allowing once blockchain to securely control an account on another blockchain, using IBC. This upgrade will allow sovereign chains to implement the ability to be a controller chain or a host chain.

**- Cosmos SDK:** is state-of-the-art blockchain framework that power the Cosmos Hub and its rapidly expanding orbit of sovereign chains

-**Gravity DEX testnet has 21,775 traders, $900m total swap volume,** gravity incentivized testnet competition, racked up more than 715,030 transaction and a total locked value of 190 million as TLV in pool investments!

- **Apps built with Cosmos & Tendermint:** Binance DEX, Oasis Labs, Terra, IRISnet, Regen Network

-**Staking on ATOM, ATOM are effective locked up for indefinite period of time.**

**-While delegated ATOM cannot be transferred by protocol itself, takes 21 days for ATOM to be transferrable again**

- **9% commission fee**

**- Typical APY 9.7% of staked ATOM (annually)**

**- 263+ Apps & Services**

**- $152B+ digital assets under management**

**- Rewards can be claimed at any time, by a staker by sending a transaction**

**- ATOM holders have access to range of information available in Keplr interchain wallet or Cosmos block explorers like Mintscan**

**Cosmos Hub:** Serving as the economic center of Cosmo, the Cosmos Hub is a blockchain that provides vital services to the Interchain

**Marketplace:** Set to operate a next-gen decentralized exchange, swapping digital assets from across the Interchain, with very low fees and instant transaction confirmation

**Security Provider:** With the upcoming interchain Security feature, ATOM will soon be securing many chains, in exchange for additional staking rewards

**Custodian:** Located at the crossroads of the interchain, the Hub is extremely secure, the best place to hold digital assets and manage accounts across many chains

**Router:** Core mission of the Hub- to connect chains by establishing IBC connections with compatible chains and operating decentralized bridges with chains like Ethereum and Bitcoin

**Cosmos SDK:** Is a state-of-the-art blockchain framework that powers the Cosmos Hub and its rapidly expanding orbit of sovereign chains. Developers acan use the SDK to build innovative applications that create value through exchange with the Cosmos Hub.

*Cosmo’s Apps and services connect using IBC (Inter-blockchain community protocol) This enables you to freely exchange assets and data across sovereign, decentralized blockchains*

**Staking and Earn rewards-** Select one or more validators of the Cosmos Hub and start earning crypto assets. When the staking transaction is complete, rewards will start to be generated immediately. At anytime, stakers can send a transaction to claim their accumulated rewards, using a wallet

**Secure the chain-** With ATOM, you have the superpower to contribute to the security and governance of the Cosmos Hub

**Vote for the future-** Staking ATOM grants the right to vote on proposals and make decisions on the future of the network

**Select Your Validator:** In your wallet, choose validator to delegate your ATOM, can spread your risk by delegating your ATOM to multiple validators in good standing

* **Cosmos, Staking Safely:**
  + Staked ATOM can be unlocked via your wallet by sending a transaction (often called “Unstake” or “Undelegate”) and waiting 21 days
  + Staking ATOM is not risk-free. If a validator has downtime or underperforms, a percentage of ATOM delegated to them may be forfeited. To mitigate these risks, it is recommended that ATOM holders delegate to multiple validators
  + Staking ATOM earns significant rewards but is not risk-free
  + ATOM delegated to a validator can be partially slashed if the validator misbehaves
  + Slashing means the delegated ATOM are forfeited (burned) without the possibility of recovery
  + On the Cosmos Hub, two attributable faults can lead to slashing events for the delegated ATOM:
    - Slashing by 0.01% can occur if the validator is offline for too long. Uptime is achieved when the validator signs at least 500 out of the last 10.000 blocks. If a validator does not sign minimum 500 blocks out of the last 10.000, a downtime slash occurs
    - Slashing by 5% can occur if the validator signs two different blocks at the same height (double-signing). This fault is harder to anticipate, resulting from bad operation practices or outright malicious intent from the validator operator
  + When delegating your ATOM to your validator, select a trusted validator to prevent slashing from these faults
* **Cosmos Rewards**
  + Staking rewards are generated and distributed to staked ATOM holders in two ways:
    - **1. Transaction Fees:** Transaction fees collected on the Cosmos Hib are distributed to staked ATOM holders
    - **2. New created ATOM/ATOM INFLATION:** The total supply of ATOM is inflated to reward stakers. ATOM holders that do not stake do not receive rewards, meaning their ATOM get diluted over time. The yearly inflation rate of ATOM is available on most explorers.The total supplu of ATOM is inflated in each block to reward delegators. The Inflation rate is a global calculation based on the percentage of ATOM Staked
    - *While staking rewards are automatically collected, the rewards must be actively with drawn by delegators. Delegators use a* ***Wallet*** *to send a transaction to make the staking rewards available.* ***Validator commission fees*** *are deducted before staking rewards are distributed.*
* **Cosmos Staking Profitability:**
  + If you stake 1,000 ATOM, you rewards are 89.18 ATOM, with a 10.28%
  + Typical PAY 9.7% annually of staked ATOM
  + Baseline inflation rate fluctuates based on the total amount of staked ATOM in the network

**Cosmos Network Features & Staking:**

* The Cosmos Hub pioneered a new era in the blockchain space by being the first public Proof-of-Stake blockchain built on top of a Byzantine Fault Tolerant consensus engine
* Two years after launch, the Cosmos Hub is set to play a leading role in the interchain by offering a wide array of vial services
* **Staking:** Built on top of the **Tendermint BFT consensus engine**, the hub’s staking module is one of the most efficient proof-of-stake implementations in the world. It enables ATO token holders to secure the chain by locking their ATOM, in exchange for transaction fees
* **Voting:** Staking ATOM gives rights to participate in the open governance process, which governs the evolution of the network.
* **Interchain Accounts:** Interchain accounts are the accounts of the IBC-enabled world. Essentially, they allow blockchains to securely control accounts on other chains over IBC. With this feature, users will be able to access the entire Interchain through their single Cosmos Hub account. One account for all the chains.
* **Gravity-** An Ethereum-Cosmos beidge designed for Cosmos Hub, evolution of Althea Peggy, leaving the ‘pegzone’ concept behind, backed by billions of dollars of atoms staked on the Cosmos Hub, the Gravity Bridge will be the most secure, efficient, and decentralized cross chain bridge to Ethereum
* **Gravity DEX:** The cosmos Hub’s Gravity DEX will enable users to seamlessly swap digital assets coming from all over the interchain. This service improves on existing designs by coming AMM features (like that of Uniswap) with an order-book based model, providing a richer and more efficient trading experience. **Gravity DEX protocols,** bringing DeFi to cosmos, the first cross-chain protocol on the Cosmos Hub is now live
* **Gravity Dex:** The most secure cross-chain exchange protocol. Secured by over $billion of digital asses, the Gravity DEX protocol enables DeFi across multiple chains. Swaps and pools of digital assets between any connected blockchains are now possible on the cosmos hub.
  + **Gravity DEX, Token Swaps:** Access to early-stage Innovation: Get immediate access to all tokens from connected hains, many of which are not available on centralized exchanges. Discover new and innovate Cosmos projects, like swap tokens, and provide liquidity.
    - **Gravity DEX, Leveling the DeFi playing Field:** With High transaction fees on existing DEXs, DeFi is increasingly pricing out smaller traders. **The gravity DEX protocol** will level the DeFi playing field, making cross-chain DeFi accessible to all types of traders using batched transaction to dramatically lower the fees – typicall between $0.01-$0.10, Average Fees **$0.08 +0.3% swap fee**
    - **Gravity DEX, Superior efficiency to other AMMs,** The gravity DEX protocol uses an Equivalent Swap Price Model (ESPM) to improve price consistency and reduce opportunities for arbitrage. **Batch order execution further removes the possibility of front-running**, making trading fairer, and **traders even have the capability to build order book trading UIs to get instant marketing price information**
    - **Gravity Bridge to Ethereum and beyond:** Upcoming Gravity Bridge to Ethereum and Other EVM-compatible chains will enable substantial liquidity and value to flow into the Cosmos Hub. Using batched transaction, Gravity Bridge can perform cheaper ERC20 sends that slash Ethereum gas fees and open up a wealth of DeFi opportunities.
    - **Gravity DEX Testnet: 21,775 Traders**, Gravity incentivized testnet competition, racked up more than 715,030 transaction and a total locked value of 190 million as TLV in pool investments!
  + **Emeris (Beta**) – Enter the portal to cross-chain DeFi. Swap, transfer, and pool assets with Emeris. Manage assets across multiple chains all in one place, evelating your DeFi experience your DeFi experience to next level.
    - **Emeris Beta-** Experience the power of cross-chain DeFi. Emeris is a one-stop portal for all crypto apps, no matter what blockchain they on. Emeris beta connects you to the best cross-chain DeFi protocols, starting with Gravity DEX protocols, starting with Gravity DEX. **Transfer and trade assets** between 14 different chains for the first time. **Access a decentralized exchange** with a trust, stable and audited DEX protocol. **Earn competitive yield** by participating in liquidity pools
    - **Average Tranaction Fee,** +0.3% swap fee**, average swap speed** 00:07 seconds.
    - **Emeric Beta** allows you to swap coins with substantially lower fees than typical DeFi exchanges by connecting you to the best cross-chain DeFi protocols, startin with **Gravity DEX**.
    - **Early Access to innovative blockchains:** Access cutting-edge decentralized exchanges, allowing you to obtain experimental or alternative coins that may be difficult or impossible to get via traditional centralized exchanges.
    - **A picture containing text, black, electronics

      Description automatically generated**
    - **A screenshot of a computer

      Description automatically generated with medium confidence**
    - **Emeris Roadmap, Emeris plans to:**
      * Integrated wallet and multi-wallet support
      * Access to multiple DeFi trading platforms
      * Staking on multiple chains
      * Mobile wallet app
* **Tendermint:** Building the most powerful tools for distributed networks, core contributor to the cosmos network.
* **Tendmint Products:**
  + **BFT Consensus:** Tindermint Core, the BFT consensus engine for you blockchain. **Byzantine-Fault Tolerant,** Tindermint Core tolerates up to 1/3 of your machines failing arbitrarily. This includes explicitly malicious behavior.
    - **Language Agnostic:** With the ABCL protocol, Tendermint Core supports state machines written in any programming language.
    - **State Machine Replication:** Use Tendermint BFT to replicate deterministic state machines onto computers around the world
    - **Fast Finality:** With Tendermint Core, transaction is immediately finalized once its included in a block. No need to wait for confirmations
* **Cosmos SDK:** The world’s most popular blockchain application framework. Over $6billion in assets are managed by public blockchains built with the Cosmos SDK.
  + **Modular:** Build and combine battle-tested SDK modules to customize your blockchain for specific user requirements
  + **BFT Consensus:** Of the SDK-based chains with over $6B managed assets, all are powered by the Tendermint BFT module.
  + **Staking & Slashing:** Use the staking and slashing modules in your blockchain to support an advanced bonded Proof-of-Stake system.
  + **Interoperability:** Inter-Blockchain Communication (IBC) of tokens and assets is just a module away for your blockchain application.
  + **Auth & Bank:** Use the Auth and Bank modules to create and authenticate new addresses on your blockchain and send tokens between them.
  + **Governance:** Your community can make impactful proposals and vote on blockchain upgrades with the powerful Governance module.
  + **Secure:** Cosmos **SDK** implements object-capabilities to sandbox each module, maximizing security on the application layer for your blockchain.
* **IBC Protocol:** The standard protocol for inter-blockchain communication: IBC is a reliable ordered, and authenticated protocol for relaying arbitrary messages between independent distributed ledgers.
  + **Versatile:** IBC can be implemented by any consensus algorithm that supports cheaply and verifiable finality with any state machine that supports vector commitments
  + **Composable:** IBC defines a set of low-level primitives for authentication transport, and ordering and a set of application-level standards for asset & data semantics. Ledgers which support compatible standards can be connected together without any special permissions.
  + **Layered:** IBC is built as a stack of components with explicit interfaces and security properties. Implementations of a component at a particular layer can vary as long as they provide the requisite properties. State machines need only understand compatible subsets of IBC to safely interact.
  + **Topologically agnostic:** IBC makes no assumptions, and relies upon no characteristics, of the topological structure of the network of blockchains in which it is operating. Security and correctness can be reasoned about at the level of a single connection and channel between two modules on two chains.
* **Liquidity Module on Cosmos Hub: Bharvest**
  + **Validation Service:** B-harvest provides validation services for multiple dPoS networks and is actively engaging in decentralized governance. Cosmos, Chainlink, e-money, IRISnet, Terra, Secret Network <https://bharvest.io/>
  + **Gravity Bridge:** Backed by billions of ATOM staked on the Cosmos Hub, the Gravity Bridge will be the most secure, efficient, and decentralized cross chain bridge to Ethereum. It will enable Cosmos assets to flow into the Ethereum ecosystem as ERC-20 tokens and conversely, native ERC-20 tokens to flow in the Cosmos ecosystem.

**How should ATOM holders Select Validators:**

* Validator Name
* Validator Description, description provided by the validator operator
* Validators website
* Initial commission rate: The commission rate on rewards to be delegated
* Commission Max Change Rate: the maximum daily increase of the validator’s commission. This parameter cannot be changed by the validator operator
* Minimum self-bond amount: Minimum amount of ATOM the validator candidate must have bonded at all times. If the validator’s self-bonded stake falls below this limit, their entire staking pool (all its delegators) unbonds. This parameter exists as a safeguard for delegators. When a validator misbehaves, part of their total stake gets slashed. This stake includes the validator’s self-delegated stake and their delegators stake. The minimum self-bond amount ensures that a validator with high amount of self-delegated ATOM has more skin-in-the-game than a validator with a low amount. The minimum self-bond amount parameter guarantees to delegators that a validator will never fall below a certain amount of self-bonded stake. This parameter can be increased only by the validator operator.

**Governance:** Governance is the ability for ATOM stakers to vote on proposals that affect the evolution of the network. Proposals can be submitted by ATOM holder, but only proposals that come with a sufficient deposit (current minimum deposit is 512 ATOM) are eligible to be voted on. Deposits can be crowdfunded and need not be entirely provided by the user submitting the proposal.

After a proposal gets a sufficient deposit, it enters a 14-day voting period. Most block explorers show the currently active proposals. ATOM stakers can vote on active proposals, with a voting power that Is proportional to their amount of staked ATOM. If the ATOM stakers do not vote, they inherit the vote from the validators they delegated to.

**Gravity** is an evolution of the Peggy Bridge, which cosmos has been working together with the interchain foundation for much of the past year. Gravity is designed specifically for the Cosmos Hub. Gravity is intended top pull as many transaction and as much value as possible into the orbit of the Hub by bridging it directly to Ethereum. **Gravity:** engineered to be very efficient. The Ethereum contract is highly optimized to use as little gas as possible, and transactions are batched. This results in very cheap and frictionless transactions from Ethereum to Cosmos and back. Important to pull as much value onto Cosmos as possible. Gravity will be able to bring **ER20** assets from Ethereum into Cosmos, but it will also be able to bring Cosmos assets to Ethereum $ATOM and every other asset in the Cosmos ecosystem can trade on Uniswap and other Ethereum AMMs, bringing huge amount of liquidity and value to assets

**What is a Validator’s Commission:** In staking, rewards are generated proportional to the amount of ATOM staked. Of these rewards, a certain percentage goes tp the validator to which the ATOM are delegated, this percentage is called the commission, and is set by the validator themselves

- Validator Commission example: *ATOM holder delegates all their ATOM to as single validator with a commission of 10%, then 10% of this holder’s rewards will go to that validator. Commission is therefore an important parameter for ATOM holders to take into account in deciding which validator(s) to delegate to. Some validators may apply higher commission because they operate a more complex setup, meaning they incur higher operating costs. It is responsibility of the delegator to asses the commission of validators they delegate to wuth regards to the service they offer.*

**Cosmos, ATOM STAKED:** When you stake ATOM, the ATOM are effectively locked up for an indefinite period of time. While delegated, ATOM cannot be transferred as guaranteed by the protocol itself. However, you can trigger the process to unlock your staked ATOM by using the Wallet of your choice. This process is called "undelegating". The undelegate process take 21 days for ATOM to be transferrable again after the transaction to undelegate has been sent.

**Delegating:** Blockchains that use staking, such as the Cosmos Hub, are primarily operated by a set of actors called validators. The status of a validator (active or candidate), as well as its weight, is established based on its amount of voting power. Voting power is obtained when ATOM are locked in the staking process and must be granted to a validator or validator candidate. This process is called delegating.

In practice, delegating is automatic when ATOM holders start staking. A single staking transaction starts the process of locking up ATOM and delegating to one or more validators. Transactions are performed using a Wallet. The transaction requires you to specify the amount of ATOM to stake and the validator or validators you want to delegate to. The Wallet takes care of the rest by generating and sending the transaction.

Validators never obtain custody of the ATOM delegated to them. There is no risk for validators to "steal" their delegators ATOM. However, there is a risk for delegated ATOM to be slashed if the validator they are delegated to misbehaves. See What are the risks associated with Staking.

**Cosmos Competitor to Ethereum?** NO, **Gravity Bridge** embraces Ethereum allowing you to bridge and ERC20 tokens over to the Cosmos Hub and send Cosmos IBC tokens into the Ethereum ecosystem. Other Cosmos projects include Ethermint that brings the Ethereum Virtual Machine to Cosmos and Sommelier Finance (SOMM) that reduces Ethereum transaction costs for decentralized finance (DeFi) applications.

**What is Cosmos Hub?** Cosmos Hub is a blockchain that serves as the economic center of cosmos. The Hub provides valuable services to the blockchains connected to tit, including the largest interchain token exchange, shared security through interchain security, bridges to Ethereum (ETH) and Bitcoin (BTC), and secure custodianship of digital assets. The Cosmos Hub’s primary token is the **ATOM.**

**Cosmos Hub Provides:**

* Interchain token exchange
* Interchain security: IBC will enable Cosmos Hub validators to provide security for other chains. In practice, it means that ATOM will able secure both the Cosmos Hub and other chains. Validators will select the chains they validate, and their delegators will share the resulting risks and rewards.
* Bridges ETH and BTC
* Interchain token custondianship:Users can hold, send and receive totkens originating from other blockchains/ The number of available tokens will grow as more chains connect to the Cosmos Hub.

**Projects built on Cosmos:** Binance Chain, Terra (LUNA) Crypto.com Coin (CRO), Cosmos Hub (ATOM)

**What Problems does Cosmos Solve?** It solves 3 main problems in the blockchain: Sovereignty, scalability, and sustainability.

**1. Sovereignty:** Blockchains today encourage all economic activity to take place on a single chain. This mindset leads to centralization in governance, ongoing costs for smart contract developers who build on these chains, and high fees for users of congested chains. In contrast, the Cosmos SDK is free for developers and allows them to build sovereign blockchain apps without ongoing costs.

**2. Scalability:** No matter how many transactions per second a blockchain can claim, in Cosmos, developers can always improve throughput with horizontal scalability. Scalability can be achieved by (1) duplicating a blockchain to relieve congestion or (2) splitting up the apps on a blockchain into multiple application-specific blockchains. Interchain token transfers allow these multiple chains to continue as one network.

**3. Sustainability:** Cosmos blockchains use an efficient Proof-of-Stake (PoS) consensus algorithm for securing the network. This PoS algorithm reduces the Cosmos carbon footprint by more than 99% compared to Proof-of-Work blockchains like Bitcoin that has a carbon footprint roughly the size of Switzerland.

**Cosmos Upgrades:**

* Ignite ( formerly Tendermint) and B-Harvest collaborating to elevate DeFi to next elvel.
* Gravity bridge: neutral bridge between Ethereum and Cosmos eco system, Built using **Cosmos SDK,** it uses the validator set to sign transactions, instead of multi-sig or permissioned set of actors built to funnel Ethereeum ecosystem into the cosmos ecosystem through simple trustless and interoperable design
  + Within weeks of **IBC**, the Cosmos standard for interoperability, Gravity bridge entererd the top 15 cosmos chain on mapof zones with has 32 different channels open to different cosmos blockchains
  + Can now use ATOM with Ethereum DeFi

**Cosmos Hub v7-Theta Upgrade:**

* SDK v0.45.1- the new interchain account module, an upgraded gravity DEX, IBC v3.0,
* **Cosmos SDK v0.45.1**, exciting new interchain account module
* **Upgraded Gravity DEX, IBC, v3.0.0. and** many performance improvements
* Team is running public testnet where participating validators can test out their processes for upgrading to the v7-Theta release candidate, this upgrade simulates expected process on mainnet
* Modular design of Cosmos SDK, one of its most powerful features, new blog post series
* Osmosis and Juno Network are now powered by Akash
* Kava DAO has voged to allocate $750M to on-chain developer incentives, committing majority ownership of the network to the BUILDers
* Connext Network partnered with Kava
* Band Protocol continues to expand the supply of data on its platform which reinforces the data integrity
* BCIP-7, allows a request to incorporate more data sources
* Injective collaborating with Axelar to bring new EVm blockchains into the Injective ecosystem.
* Latest SCRT Labs updates covers 4 major recent scaling improvements, upcoming initiatives designed to dramatically improve the experience for users and validators on Secret.
* Adobe’s **Behance,** creative social media platform, adding support for NFTs minted on Polygon
* IRIS Hub 1.3 Upgrade proposal submitted
* Agoric now on Keply mobile
* Oasis is ready for DeFI with instant finality, low gas fees, and high throughput and privacy protection
* **April, Cosmos Hub v7-Theta upgrade** 
  + Release includes **Cosmos SDK v0.45.1,** 
    - the exciting new interchain account module
    - upgraded Gravity DEX
    - IBC v3.0.0
    - Many more improvements
  + vO.43 release later year, Authz, allows you to authorize an addres to perform a specific action on your behalf
  + Fee grand module, allows users to grant other people an allowance to be used to pay for gas fees, without actually transferring any tokens to other address, funds remin in control of the user who created allowance
  + **BCIP-7 (band protocol):** Increase data integrity via the number of external calls to data sources: Band Protocol continues to expand the supply of data on its platform which reinforces the data integrity
  + **Osmosis:** The Cosmos interchain AMM, Osmosis is the first IBC-native Cosmos interchain AMM
  + **BNB (Binance smart chain):** Ankr introduces Liquid staking, allowing BNB holders simultaneously to earn rewards from staking and participate in the DeFi ecosystem
  + **Juno Network:** Cosmos-baed blockchain, DOA voted to dramatically shrink the holdings of a whale passed, adding more nuance to power of a DAO

**Cosmos: Interchain Accounts:**

* **Q4 2021 Cosmos Hub Upgrade Vega:** brought upgrades to IBC and Tendermint
* **Theta Upgrade,** slated for Q1 2022 promises the introduction of interchain account module
* AS of now, only IBC functions available in Cosmos is token transfers, but this will change with Rho upgrades:
* Interchain accounts will allow users to enable an account on one blockchain to securely control an account on another chain
* **Cosmos SDK:** is a framework that allows new layer 1 protocols to launch application-specific chains with Cosmos SDK- a set of modules that have the same set of parameters, enabling chains to communicate using IBC
* **Cosmos Upgrade (theta)** is slated for Q1 2022, will expand to include groups and gov module in Q2 of 2022. Theta upgrade, Cosmos hub will implement interchain accounts. Interchain accounts will allow users to control addresses from one controller chain on other chains securely, interchain accounts will unlock functionality to increase its options across cosmos. Cosmos has proved resiliency as Operational incidents of large validators has resulted in downtime for Cosmos Hub.