Hyperledger Authorized Node Server Protocol Reply and Node Arrangement Trial Standard 1.0

超级账本授权节点服务器协议回函及节点布置试行标准 1.0

1. Supplementary information about authorized mirror nodes

关于授权镜像节点相关补充信息

1.1 Authorized binding IP: The authorization of the mirror node will generate the Hyperledger authentication IP, which will be synchronously bound to the corresponding master node IP, which will be used as a Hyperledger to verify the rights, participate in the synchronization of the governance end and the beneficiary end, and create a transitional environment for the smooth migration of slave nodes. During the secondary distribution, the online and service status of the Hyperledger will be collected. That is, when the secondary distribution of super nodes triggers 10,000 AUC, if the bound IP is not collected, the system will not be able to retrieve the specified wallet address of the super ledger for calculation, and will not be able to passively participate in the GAS distribution.

授权绑定 IP：镜像节点的授权将生成超级账本认证 IP，同步绑定对应主节点 IP，作为超级账本校对确权，参与治理端和受益端同步，为平稳迁移从节点做过渡环境。二次分配时，将采集超级账本的在线和服务状态。即当超级节点二次分配触发 10000 枚 AUC 时，若未能采集绑定 IP，系统将无法调取超级账本指定钱包地址进行计算，则将不能够被动参与到 GAS 分配行列。

1.2 Authorization cycle: the first stage: June 10th (GMT+8)-June 20th (GMT+8) is the centralized authorization period; the second stage: not yet scheduled. (Estimated current GAS fee accumulation cycle data: The average value in May is 6000 AUC. Therefore, it is expected that the distribution line will be reached in 1.5 months, and the completion of authorization before the secondary distribution line will not affect the GAS revenue acquisition.)

授权周期：一阶段：6 月 10 日-6 月 20 日为集中授权期；二阶段：暂未安排。（预估目前 GAS 费累积周期数据：5 月均值为 6000 枚 AUC。因此，预计将在 1.5 个月后触及分配线，在触及二次分配线之前完成授权将不影响 GAS 收益获取。）

2. The contract allocation period is limited: Contract allocation is a decentralized chain judgment execution. If the hyperledger deployment of nodes is not completed within the authorization period, the technical end will

manually add the ledger address to the contract identification database for correction before triggering the allocation, which may cause the verification time delay and accumulate the quota. Exceed the distribution line, that is, when the distribution value is ≥10000 or the value deviates. Secondly, the full-process intervention service that requires technology will automatically deduct the 20% GAS fee receivable from the unbound IP ledger and accumulate to 40% of the Hyperledger collection address.

契约分配周期限定：契约分配是去中心化的链上判定执行，未在授权周期内完成节点布置的超级账本，触发分配前将由技术端手动添加账本地址至合约识别库修正，将可能导致验证时效延迟，从而累计额度超过分配线，即分配值≥10000 时或数值产生偏差。其次，需要技术的全程介入服务，将自动扣除非绑定 IP 账本应收的 20%GAS 费用，累计至 40%超级账本归集地址。

3. Hyperledger authorization: After the first GAS fee distribution of the hyperledger is completed, the authorization of the hyperledger will be initiated. The Hyperledger will be allocated with a server that represents the IP of the Hyperledger itself under the main chain.As a benchmark for the management of Hyperledger's participation in governance and the F.VOB - Technical Outreach Coordination Committee, Hyperledger holds 1/4 of the core control rights of slave nodes in the main network deployment environment.

超级账本授权：超级账本首次 GAS 费分配完成后，将启动超级账本的授权事宜。超级账本将获配主链下代表超级账本本身 IP 的服务器布置，作为超级账本参与治理和 F.VOB 技术外联事务委员会共同管理的基准，超级账本持有主网布置环境下的 1/4 从节点核心控制权。

4. Nature of Hyperledger Authorization Server: The first stage is the production and storage of mirroring environment data that carry non-main chain information interaction, that is, the mirror node. The second stage takes into account the renewal cycle and the complete separation of the main block generation node after cutting, that is, the slave node in the formal production environment.

超级账本授权服务器性质：首阶段为承载非主链信息交互的镜像环境数据的生产和存储即镜像节点，二阶段兼顾续费周期和主体出块节点切割后完整分离，即正式生产环境下的从节点。

5. Hyperledger authorization fee: the first-stage mirror node plus timing bandwidth traffic, estimated: 1000RMB per month, 12000RMB total for a year; the second-stage deployment will upgrade the mirror node to the block-producing slave node, and move the account from the node to the superbook management. Estimated cost: 6130RMB/month (not involved in upgrading to meet the current configuration situation).

超级账本授权费用：一阶段镜像节点加计时带宽流量，预计：每月 1000RMB，一年总计 12000RMB；二阶段部署将镜像节点升级为出块从节点，从节点将平移迁户至超级账本管理。此费用预估：6130RMB/每月（未涉及升级满足当下配置的情况）。

6. FDRPC protocol: The FDRPC protocol is a unified and mature platform supported by distributed custody services and technical modules of a Hyperledger created by Osasion, which takes into account the advantages of decentralization and centralization.It is directly managed by the he F.VOB - Technical Outreach Coordination Committee and supervised by the operation of the Community United Foundation. Interpretation: Taking into account the advantages of scale brought by centralized platform hosting, you can get 6-7.5 discounts for large customers, reduce costs, and avoid the risk of single choice. (For example: a completely decentralized construction: each Hyperledger matches an all-round technical team plus operation and maintenance, both in terms of threshold and cost, will be 5-10 times the current value, and the risk of evil in the Hyperledger will be reduced.)

FDRPC 协议：FDRPC 协议即专属 Osasion 打造的兼顾去中心化和中心化优势的超级账本的分布式托管服务和技术模块支持的统一性和成熟性平台，由技术外联事务协调委员会直接管理，由社区联合基金会运作监督。释义：又兼顾中心化平台式托管带来的规模优势，可获配 6-7.5 大客户折扣，降低成本，同时也规避了单一性选择带来的风险。（例如：完全去中心化的构建：每一个超级账本匹配一支全方面的技术团队加运维，无论是门槛还是成本，将是目前 5-10 倍，超级账本作恶的风险性降低。）

7. Publicity and management of expenses: At present, the core and sensitive information related to the progress of the project is disclosed. The detailed information of the operation will be kept confidential, and will be kept on the chain according to the smart contract accounting method. After the follow-up policy end and the Community United Foundation lead the intervention, it will be the Community United Foundation decides the method and degree of external disclosure of information, and when it presents a completely decentralized distribution, it manages independently.

费用的公示和管理：目前涉及项目进展的核心和敏感信息的披露，运作的详细信息将对外保密，且按照智能合约记账的方式上链，后续政策端和社区联合基金会主导介入后，由社区联合基金会决定对外披露信息的方式和程度，当呈现完全去中心化分布后，自主管理。

8. Expenses belong to the scope: The node arrangement of mirroring belongs to the node authorization standard system, which is bound to the hyperledger governance environment plan, and the hyperledger is independently

responsible for expenses and management. The slave node does not belong to the scope of deployment, but a safe migration in a formal environment, which is part of the contracted server cost. After the completion of the slave node deployment (when the contract is planned to be renewed), the cost of one slave node deployment will be deducted as the actual renewal target, that is, the e-mail prompts that the renewal amount is the actual renewal standard.

费用分属范围：关于镜像的节点布置，属于节点授权标制，绑定在超级账本治理环境计划中，费用和管理由超级账本自主负责。从节点不属于布置范围内，而是正式环境下的安全迁移，属于签约服务器费用中的一部分。从节点布置完成后（计划续约缴费时），将扣除一台从节点布置的费用后作为实际续费标的，即邮件提示续费额度为实际续费标准。

9. Adjustment of contract renewal fees: At present, the first batch of contracted hyperledgers meets the reliability and renewal periodicity of advance accounts. Taking into account the actual revenue ratio and the rigid increase in project development configuration, adjustments to the existing contracted accounts are not considered for the time being. , But the contracted account book fee may be adjusted in the middle and later stages, that is, the fluctuation of the super account book fee is not as a fixed design commitment.

续约费用的调整：目前，首批签约超级账本满足先行账本的可靠性和续费周期性，在考虑实际收益比和项目发展配置硬性提升的情况下，暂不考虑关于现有签约账本的费用调整，但中后期签约账本费用可能会做出调整，即超级账本费用的波动未作为固定设计承诺。

10. Hyperledger cycle configuration and expenses (configuration of a Hyperledger):

超级账本周期配置和费用情况（一个超级账本的配置）：

At present, the details of expenses in Greater China are disclosed. The disclosure costs of AWA/AZure/GCP for overseas structures account for 70% of the individual costs in Greater China.

目前披露大中华区的费用明细，海外架构 AWA/AZure/GCP 的披露成本占大中化区单个成本 70%。

Server nature 服务器性质	Layout 布置情况	Configuration (current stage) 配置（现阶段）	Cost (non-negotiated price) month 费用（非协议价）月	Agreement price (custodial) month 协议价（托管）月
Master node server 主节点服务器	Yes	ecs.hfg7ecs-632 core 128G	8564RMB	6423RMB

Slave node 从节点	Yes	ecs.hfr6 series V16 core 128GB	4090.28RMB	3067.71RMB
Slave node (authorized node FECS) 从节点（授权节点 FECS）	Yes	ecs.hfr6 series V16 core 128GB	4090.28RMB	3067.71RMB
High defense server 高防服务器	Yes	Ubuntu Server 16.04 LTS 64-bit 8/16/60/15	4199RMB	4199RMB
Physical machine IDC 物理机 IDC	/	/	/	/
Relational database RDS 关系型数据库 RDS	Yes	/	5494RMB	4120RMB
Limit row bandwidth and data backup 限制行带宽和数据备份	Yes	/	3490RMB	3490RMB
Technical support and operation and maintenance apportionment 技术支持和运维分摊	/	/	/	/
The current Hyperledger block launching architecture (layout environment): 1 master node + 1 slave node + 1 database RDS enhanced cloud database + 1 high defense server. **目前超级账本出块启动架构（布置环境）：**1 台主节点+1 台从节点+1 台数据库 RDS 强化云数据库+1 台高防服务器。 **The current Hyperledger backup mirroring environment (slave node (authorization)):** The mirroring and RDS backup in the formal production environment have both block accounting and external IP that mounts non-chain				

data. After authorization, the block accounting will be temporarily closed The authority reduces the configuration, and returns to the mirror node function. When the second-phase open migration of authorization is completed, after confirming the stability and security of the deployment environment, the block production and accounting restrictions will be unlocked, and then the current configuration will be restored or matched and returned to the slave node server.

目前超级账本备份镜像环境（从节点（授权））：正式生产环境下的镜像和 RDS 备份兼具出块记账且挂载非链数据的外部 IP，授权后将暂时封闭其出块记账的权限降低配置，回归镜像节点功能。当授权二阶段开放迁移完成后，确认部署环境稳定性和安全性后将解锁出块和记账限制，届时将恢复或匹配当前配置，重归从节点服务器。

The current fee of the Hyperledger: 47100USDT; the average value from September to the entire renewal period is 1USDT=6.41RMB

超级账本目前费用：47100USDT；按 9 月至整个续费周期的均值 1USDT=6.41RMB

1 Hyperledger=47100×6.41=301911RMB

1 超级账本=47100×6.41=301911RMB

The current cost and main chain development does not involve IDC computer room layout. Hyperledger uses the service provider PaaS to meet the status quo. It has not yet followed the progress of the project to match the basic expenses of the public chain performance improvement configuration, and does not involve layout costs and back-end operation and maintenance expenses. At present, the operation and maintenance expenditure is dominated by community donations raised by the Community United Foundation, and subsequent expenditures will be converted into the revenue of the 4 architecture nodes of the Hyperledger Genesis End as the expenditure operation and maintenance costs.

目前费用和主链进展，暂未涉及 IDC 机房布置，超级账本借助服务商 PaaS 满足现状暂未跟随项目进展进行同等匹配公链性能提升配置的基础开支，且未涉及布置费用和后端运维支出，目前运维支出由社区联合基金会募集的社区捐赠为主，后续支出将转化为超级账本创世端 4 个架构节点收益作为支出运维费用。

The total cost involved in the current stage of setting up a Hyperledger:

Agreement price: 24367.42×12=292409.04RMB

Non-negotiated price: 29927.56×12=359130.72RMB

布置一个超级账本目前阶段所涉及的总费用：

协议价：24367.42×12=292409.04RMB

非协议价：29927.56×12=359130.72RMB

11. Factors related to the cost of setting up the Hyperledger:

超级账本布置费用相关因素：

Majority Direction **主要方向**	**Involving Factors** **涉及因素**	**Fee Adjustment Method** **费用调整方式**	**Load ratio** **承载比率**
Upgrade of fixed configuration such as master node/slave node/database under project progress 项目进展下主节点/从节点/数据库等固定配置的升级	Server configuration/service provider platform price/bandwidth provider price/price adjustment caused by policy and regional instability 服务器配置/服务商平台价格/带宽提供商价格/政策和区域不稳定带来的调价	Configuration upgrades are adjusted periodically according to actual prices and project progress 配置升级按实际价格和项目进展周期性调整	99%
Cost sharing between public physical computer rooms and distributed storage 公共物理机房和分布式存储的成本分摊	Landing method: self-built/mixed/custodial/rental Osasion plan: self-built + hosting 落地方式：自建/混合/托管/租赁 Osasion 方案：自建+托管	The plan has not yet been announced 计划暂未公布	99%
Technical operation and maintenance public expenditure sharing 技术运维公共开支分摊	Hyperledger distribution/project GAS profit indicator/post allocation of the foundation under project progress 超级账本分布/项目 GAS 盈利指标/项目进展下基金会的岗位配置	Genesis Hyperledger MLL GAS income + Community United Foundation to raise donations + Hyperledger apportionment 创世超级账本 MLL 的 GAS	100%

		收益+社区联合基金会募集捐款+超级账本分摊	
Allocation of special expenses for core technology research and development 核心技术研发专项费用分摊	The performance improvement of the chain main body introduced in different technical stages and the development of the ecological layer DAPP smart contract protocol end 不同技术阶段引入的链主体性能提升和生态层 DAPP 智能合约协议端开发	Following the progress of the project, the contracted private placement and donation were initiated by the Community United Foundation 跟随项目进展后，由社区联合金基会发起契约私募和捐赠完成	100%
Carrying ratio: that is, the adjusted price is estimated to meet the project's load capacity within 99% before the next renewal cycle. This is the main reference indicator for formulating the renewal fee, and comprehensively apportioning the reserved contingency expenses, the ratio is not less than 0.3% of the actual payment. 承载比例：即预估调整后的价格得满足项目在下一个续费周期到来前，其负荷能力在 99%范围内。这是制定续费的主要参考指标，并综合分摊预留应急费用，比率不低于实缴费用的 0.3%。			

12. Hyperledger server main architecture design: 1+2+3 structure, that is, 1 high-profile master node server and 2 slave node servers, plus 1 high-defense server, 1 physical machine layout environment, and 1 data RDS enhanced cloud database. Hyperledger will hold one slave node of the Osasion public chain main network server, which will be managed in parallel with the F.VOB - Technical Outreach Coordination Committee. Accept the public supervision and coordination arrangements of the Community United Foundation, and further improve the open and decentralized distribution under the platform-style custody.

超级账本服务器主架构设计：1+2+3 结构，即 1 台高配主节点服务器和 2 台从节点服务器，外加 1 台高防服务器和 1 个物理机布置环境以及 1 台数据 RDS 强化云数据库。超级账本将持有 Osasion 欧赛公链主网服务器从节点 1 台，与技术外联事务协调委员会并行管理，接受社区联合基金会的公开监督和协调安排，进一步完善平台式托管下的公开化和去中心化的分布。

13. Hyperledger layout environment: According to the operating requirements of the main chain in the first year, the server partner provides the highest configuration of full capital expenditure in the framework provided by the server partner according to the benchmark configuration. It needs to configure 1 master node + 1 slave node + 1 database RDS Strengthen the cloud database +1 high defense server.

超级账本布置环境：根据首年主链运行需求，按照基准配置满足服务器合作商提供框架内的现阶段全额资金支出的最高配置，需配置 1 台主节点+1 台从节点+1 台数据库 RDS 强化云数据库+1 台高防服务器。

Information about authorized nodes:

关于授权节点的信息：

Authorization: FECS mirror server (the mirror node in the official production environment of the slave node).

授权：FECS 镜像服务器（从节点正式生产环境下的镜像节点）。

The time for the official deployment of the slave node: After the mirror node has been operating stably for one quarter.

正式布置从节点时间：镜像节点稳定运营 1 个季度后。

Special arrangement: Due to the time difference and renewal of the first Hyperledger, the environmental change of the slave node will be based on two conditions. One is to meet the data production of the mirror node for one quarter, and complete the stable period of the configuration and management of the production environment. Secondly, it is the remaining months of the renewal cycle, and will try to meet the needs of independent management and renewal management in the second cycle. Specific coordination arrangements will be given priority to the beginning of the next renewal cycle.

特殊安排：因首次超级账本存在的时间差和续费的情况，从节点的环境变更将根据两个条件，一个是满足 1 个季度的镜像节点的数据生产，完成生产环境关于配置和管理的稳定期。其次，是续费周期剩余月数，将尽量满足二次周期内自主管理和续费管理的需求具体协调安排，优先考虑下一个续费周期开始。

FECS mirror server: backup the external IP of data mirroring generation and mounting non-chain data in the formal environment.

FECS 镜像服务器：备份正式环境下的数据镜像生成和挂载非链数据的外部 IP。

Slave node: After the FECS mirror server environment is stable, after the data is effectively superimposed, the configuration and permissions are upgraded, the block accounting and other slave nodes are restored, the migration

environment is generated, and the original environment is closed. The Hyperledger will fully control the slave node under its own IP Ownership, the real Hyperledger authorization and role locking are completed.

从节点：FECS 镜像服务器环境稳定期后形成数据有效叠加后，升级配置和权限，恢复出块记账等从节点相关，迁移环境生成，关闭原环境。超级账本将完全掌握自己 IP 下的从节点权属，真正意义上的超级账本授权和角色锁定完成。

14. Explanation of the authorization node brief description: The mirror node of the Hyperledger, the production environment of the mirror call of the data block packaging, will be based on the contract of the Hyperledger after a quarter, and the mirror node will be converted to a formal node operation when the contract is officially signed in the next quarter. Undertake 1/4 of the node business, this part of the cost will be removed from the total cost, and the super account book will freely manage the renewal.

释义授权节点简述：超级账本的镜像节点，数据区块打包的镜像调用的生产环境，一个季度后将根据超级账本的签约合同，在下个季度正式签约时，镜像节点将转换为正式节点运作，承担 1/4 的节点业务，这部分费用将从总费用里面剔除，由超级账本自由管理续费。

15. Interpret the detailed information of authorized nodes

释义授权节点详细信息

15.1 Configuration:

配置：

CPU	4 Nuclear
RAM	32768MB
System disk	40GB disk:cloud_essd
Data disk	3072GB disk:cloud_essd
Current bandwidth	100Mbps(according to usage flow)
Basic bandwidth	100Mbps(according to traffic)
Operating system	Ubuntu 18.04 64-bit

Configuration description: This is the mirror node requirement for data synchronization and one-way link. It stores and reacts to the mirroring parameters. If the node is dropped due to poor management and the Hyperledger

does evil, it will be limited to the controllable range and will not affect the main chain. Blocks are produced safely and smoothly.

配置说明：此为数据同步和单向链接的镜像节点需求，存储和反应镜像参数，如果产生管理不善引发的节点掉线和超级账本作恶等情况将限定在可控范围，将不影响主链的安全和平稳出块。

15.2 **Interpretation:** This node server is deployed as a formal environment and will be authorized to be managed independently by Hyperledger. Therefore, during the management autonomy period, there will be an autonomy adaptation transition period, which is the first contract period. After the first participation in the distribution, the mirror node arrangement of the ordinary node will be carried out, and the subsequent second contract period will be converted to the official node server. That is, for the first time, the deployment is: from the first-tier environment of the node's formal production environment to build a production node that mirrors the data.

15.2 **释义：**此节点服务器作为正式环境布置，将授权由超级账本后续自主管理，所以将在管理自治期，存在自治适应过渡期，即首个签约期。第一次参与分配后，将进行普通节点的镜像节点安排，后续二次签约周期开始将转换为正式节点服务器。即首次布置的为：从节点的正式生产环境的第一层环境搭建-镜像数据的生产节点。

16. Precautions for on-chain authorization binding: The staged layout of the sub-nodes belongs to the experimental and ecological area development adaptation period layout of the super-ledger participating in governance, and will be incorporated into the ledger management mechanism. Because the node IP is bound to the mining master node server, if the node (mirroring node/slave node) (not valid for renewal, node abnormality, downtime/power outage of the computer room, DDOS attack, and other reasons) goes offline, the master node will be on the chain It is determined that entering the prison abnormally will lose the mining and accounting authority of the entire ledger, and it will also reduce the on-chain computing power and bandwidth server support. Regardless of whether the fee is renewed or not, technical means will be used to repair and obtain the on-chain ledger synchronization, and it can be restored after obtaining the Blue Knight verification signature again, but the block that does not participate in the accounting during the period will not be included in the miner service cycle to participate in the GAS distribution. At the same time, penalties will be triggered according to the Hyperledger management mechanism.

链上授权绑定注意事项：从节点分阶段布置属于超级账本参与治理的实验性和生态区发展适应期布置，将

纳入账本管理机制。因节点 IP 与出矿主节点服务器绑定，若**节点（镜像节点/从节点）**（未有效续费、节点异常、所属机房宕机/停电、DDOS 攻击及其他原因）掉线导致主节点被链上判定异常进入监狱将丧失整个账本的出矿记账权限，也同时降低了链上算力和带宽服务器支持。无论是否续费都将通过技术手段介入修复获取链上账本同步，再次获取蓝骑士验证签名后方可恢复，但期间未参与记账区块将不能计入矿工服务周期参与 GAS 分配，同时将按照超级账本管理机制触发处罚。

17.FECS mirror server agreement:

FECS 镜像服务器约定：

17.1 After the mirror server is deployed, it will be bound with the Hyperledger wallet address, that is, the authorization rights and the identity of the miner on the chain will be bound.

部署镜像服务器后将与超级账本钱包地址进行绑定，即授权权益和链上出块矿工身份绑定。

17.2 Accept the setting of the management mechanism on the Hyperledger chain, which will be published in the node contract in the future, and pass the community and node certification.

接受超级账本链上管理机制设定，后续将发布在节点契约中，通过社区、节点认证。

17.3 Commitment to standardize the services provided by service providers and pay relevant fees within the legal framework.

承诺将规范按照服务商提供的服务，在法律框架内支付相关费用。

17.4 Promise not to deploy any applications and projects that have nothing to do with Osasion on the slave node server.

承诺不在从节点服务器上布置任何与 Osasion 欧赛无关的运用和项目。

17.5 We promise not to authorize any accounts and passwords of technical entities (cloud service providers, other technical projects or companies) that are not related to Osasion, so that they will be exclusive and dedicated.

承诺不授权任何非 Osasion 欧赛相关的技术主体（云服务商、其他技术类型项目或公司）账户和密码，做到专属专用。

17.6 Commit to keep confidential the relevant information of the slave node, including but not limited to the cloud service provider or other relevant subjects. Know the project scripts and information under the account.

承诺保密从节点相关信息，包括但不限定云服务商或者其他相关主体关系知晓账户下项目脚本和信息。

17.7 We promise to manage accounts reasonably, and will not mount or maliciously add viruses or crawlers and

other external links that wantonly destroy and steal data.

承诺将合理管理账户，不会挂载或恶意添加病毒或者爬虫等肆意毁坏和偷盗数据的外用链接的接入。

17.8 It is promised that the loss of the user caused by the sub-link caused by the major negligence on the chain caused by the node will face the permanent cancellation of the Hyperledger, and the termination of the contract and the authority to apply again.

承诺因从节点引发链上判定的重大过失导致的分链接带来用户的损失，将面临超级账本永久取消，并终止契约和再次申请的权限。