neos

METAVERSE AS
UNIQUE AS ITS USERS

W H I T E P A P E R

Version 1.10

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Neos Master Plan

The initial Neos product you may know is NeosVR, a Unity based virtual reality p2p metaverse for creators, educators and communities that reinvents and generalizes the way immersive social experiences, applications, games and other various virtual creations are built, to allow for them to coexist in one shared dynamic interconnected virtual space.

Its unique flagship feature is that users can create, build, remix and publish almost anything imaginable right within NeosVR thanks to the innovative underlying game engine independent data format and markup language. It serves as a great creator platform and a trailblazing proof of its game engine independent data format for advanced metaverse use.

NeosVR additional features such as instant world switching, parallel physical simulations, wide format conversion capabilities, multitasking, independent hosting capabilities and incredible range of PCVR accessory compatibilities make it a powerful yet niche prosumer product with high hardware and connectivity requirements.

Our goal is to open our game engine independent data format and markup language to everyone who wants to develop a metaverse resulting over time in a whole family of interconnected compatible Neos Metaverse clients and supporting infrastructure. Enabling creators and communities including educators and businesses to reach several orders of magnitude larger audiences across the whole Neos ecosystem and providing developers the freedom they need and desire. Turning Solirax the company into Neos Metaverse Foundation. An organization promoting a more varied development through opening up our cloud services and providing rewards to support independent developers.

For a variety of interconnected products on multiple hardware platforms including standalone, PCVR, console and possibly remotely-rendered ones suiting individual platform requirements to emerge. Network solutions ranging from purely p2p to decentralized network supported and centralized cloud based ones. Clearly branded PEGI 12 and separate PEGI 18 alternatives. Choice of free open source metaverse all the way to commercial solutions. Payment services with the native decentralized currency Neos Credits [NCR] on one side of the spectrum and institutional centralized payment providers supporting payment cards and other various geography specific payment methods on

the other with all of their ups and downs. Based on Unity, Unreal Engine, CryEngine, O3DE, Godot, Panda3D, another one or totally engine independent. Yet all part of one data format compatible family, with shared jointly developed open codebase and libraries.

As we continue to develop and expand the Neos family ecosystem, we remain committed to prioritizing openness, security and privacy. We believe that metaverses built on open principles will create a more diverse experience that benefits everyone and has the potential to truly revolutionize the way we communicate, interact, learn and create. We envision a future where not all metaverses are controlled by a few dominant parties but instead at least some form a vibrant ecosystem of free virtual worlds and communities able to act and use them on their own terms and within the framework of their free beliefs.

So, in short, our secret master plan is:

1. Build powerful prosumer metaverse to trailblaze engine independent data format for advanced metaverse use
2. Open source its data model, markup language, related codebase libraries and updog
3. Support groups that take on developing a variety of compatible metaverse software for a variety of platforms and audiences
4. A flourishing interconnected ecosystem emerges, a viable alternative to purely closed centralized "big tech" metaverses

Neos In-world Economy

In any space where people interact and coexist, physical or metaverse, the need for economy emerges. It's an opportunity to specialize, exchange various goods and services, form businesses and make a living. The market of a metaverse focuses primarily on needs higher up in Maslow's pyramid of [psychological] needs, like self-fulfillment through social interactions, relationships, entertainment and self-actualization through creative activities, art, education, and science.

Total supply:	50,000,000 NCR
Total mint:	40,400,000 NCR
Staking rewards:	7,600,000 NCR
Community Fund:	2,000,000 NCR
Decimal places:	18
Blockchain:	ERC20 Ethereum
Initial minting price:	0.06 USD
Initial minting cap:	3 million USD
Number of batches:	500
Batch size 1-415:	100,000 NCR
Batch size 416-500:	5,000 NCR
Value each batch:	+1.25%
Final minting price:	≈ 29.53 USD*
	*hypothetical if/when minting reaches total mint
Final minting cap:	≈ 1.47 billion USD*

Neos Credits - NCR

Neos Credits cryptocurrency token allows for both an independent in-verse economy and value transfer to and from other cryptocurrency markets interconnected with the base world economy, practical for the fulfillment of basic [physiological and physical] needs.

Logo	Character sign:
ℕ	ℕ Double-Struck Capital N (Unicode +2115)

Contract address:

This is Neos Credits genesis contract address. See **website** for mint.

0xdb5c3c46e28b53a39c255aa39a411dd64e5fed9c

DO NOT SEND ETH OR NCR TO THIS ADDRESS

- 1 Neos Credit (NCR, also known as a Federation Credit)

= 1,000 Neos Units (Yondu Udonta likes to place bounties with these)

= 1,000,000,000,000,000,000 noi (base unit, nobody likes these)

Minting Process

The minting process is designed to initially distribute Neos Credits (NCR) to supporters and early adopters so that they can take part in the in-verse economy and benefit from the eventual economic success of Neos.

Rewarding those who help to develop advanced iterations of the Neos metaverse is our top priority.

Neos Credits can be obtained:
By being a Patreon supporter

(offered as one of multiple rewards)

patreon.com/neosvr

The value of NCR obtained this way corresponds to minting value only indirectly and should normally be approximately 50-70% of the corresponding pledge. NCR Patreon rewards will be adjusted accordingly as regular NCR mint value increases.

Patreon supporters receive Neos Credits as an incoming transaction towards their in-verse Neos Account managed wallet. Each month a Patreon reward aggregate transaction, representing all Patreon rewards, is made to an internal Neos address. Patrons can individually request blockchain withdrawals in their Neos Account managed wallets.

Ethereum minting yield will be used exclusively to **fund the development of Neos' metaverse** through the expansion of the Neos team, developer and content creator grants & awards, as well as other activities directly improving the value and enjoyment of time spent in Neos.

Such an investment should, over time, further increase the user base, time spent, volume of metaverse economy overall, demand for Neos Credits and their value.

Staking Process

Neos Credits staking is a process of rewarding NCR holders for their long term support of Neos and being active in the Neos Metaverse - thus helping Neos grow.

Reward ranges from 4% to 20% per annum calculated at the end of each month UTC depending on the Stardust Rank at the time for all NCR that remained in the Neos Account wallet for the whole month.

Stardust

Stardust is a Neos-wide, mild gamification element. Through mining random meteor strikes, users can earn a higher Stardust Rank. Initially meteor strikes will be happening only in selected worlds. Always with the option to opt-out.

The mild nature of the gamification is in not limiting users that don't take part in it in any way and not intruding on anyone's core metaverse experience.

Stardust Ranks are inspired by the magnitude of impact by objects, bodies and structures on our cosmos corresponding to the user's impact on Neos Metaverse.

All of the 7,600,000 NCR allocated will be distributed gradually to Neos Account managed wallet NCR holders over time.

#	Name	% pa	Badge	#	Name	% pa	Badge	#	Name	% pa	Badge
1	Meteoroid	4,0		17	Jupiter Brain	9,4		33	Stellar Black Hole	14,9	
2	Asteroid	4,3		18	Brown Dwarf	9,8		34	Star Cluster	15,2	
3	Moon	4,7		19	White Dwarf	10,1		35	Megaring	15,6	
4	Skyhook	5,0		20	Dyson Swarm	10,5		36	Quasar	15,9	
5	Protoplanet	5,4		21	Red Dwarf	10,8		37	Supermassive Black Hole	16,3	
6	Bernal Sphere	5,7		22	Sun	11,1		38	Active Galactic Nucleus	16,6	
7	Dwarf Planet	6,0		23	Dyson Sphere	11,5		39	Globular Cluster	16,9	
8	Desert Planet	6,4		24	Red Giant	11,8		40	Dwarf Galaxy	17,3	
9	O'Neill Cylinder	6,7		25	Blue Giant	12,2		41	Milky Way	17,6	
10	Ocean Planet	7,1		26	Matrioshka Brain	12,5		42	Shell Galaxy	18,0	
11	Ringworld	7,4		27	Magnetic Star	12,9		43	Tipler Cylinder	18,3	
12	Earth	7,7		28	Supergiant	13,2		44	Galaxy Cluster	18,6	
13	Super Earth	8,1		29	Neutron Star	13,5		45	Supercluster	19,0	
14	McKendree Cylinder	8,4		30	Pulsar	13,9		46	Stapledon Tesseract	19,3	
15	Ice Giant	8,8		31	Supernova	14,2		47	Universe	19,7	
16	Gas Giant	9,1		32	Hypernova	14,6		48	Multiverse	20,0	

Trading and Marketplaces

The prerequisite for trading is knowing what belongs to whom and on what terms.
As of writing this white paper, The **Neos License Information Component** (LIC, **GitHub**) is in the late stages of development and is soon to be pushed into the metaverse. The LIC tracks licensing and ownership deals in a smart way, which includes:

• contracts,

• group ownership,

• versioning

• And sub-component tracking.

The launch of the LIC will be accompanied by a graphical user interface, allowing users to comfortably realize both one-time & automated **trustless NCR trades** on pre-agreed terms and to manage licenses and ownership deals where applicable, efficiently introducing a unified in-verse trading platform.

To further facilitate an in-verse economy, **Neos Store** and **Neos Jobs** (**GitHub**) marketplaces will be introduced to efficiently connect customers with product and provider listings. Listings include the interactive object, world or other assets offered, - or a representative part of it - and/or an in-verse example of a custom service process or possible results when applicable; previous customer satisfaction scores, reviews and other relevant information. Optional escrow customer protection services will be implemented as well.

Community Developer Fund

The Neos Community Developer Fund is designed to **reward the extraordinary efforts & contributions** of individuals and groups that help push Neos towards its grand vision through development, content creation, outreach efforts, event organizing and other activities.

Every **25th** minting batch (4% of all NCR, $11,039,364 USD at the time of mint) is reserved for **Community Developer Fund Token (CDFT)** holders, and is converted to NCR at the time of the previous batch's completion.

CDFTs are **non-transferable** tokens associated with a Neos Account, or Neos Group. CDFTs are distributed following an **individual application** review. Unallocated CDFTs are stored for later allocation. All NCR mint from previous CDF batches is minted at the time of allocation when applicable.

Neos Decentralized
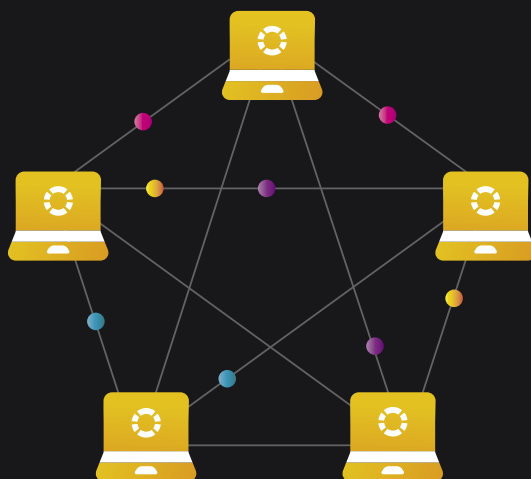
Neos is traditionally experienced and primarily **decentralized peer-to-peer** software. Any user can act as a host to as many peers as her or his broadband and computational capabilities allow. Neos works well on local/isolated networks. That said, a lot of the optional services that make Neos more comfortable to use are centralized as of writing this white paper.

We have implemented an active session lookup service, relay server service for when direct and NAT punch-through connection fails, cloud services and content publishing services in a scalable centralized fashion for now, in order to make Neos **practical and user friendly** as soon as possible.

The Neos development team will work to seamlessly transition all of these and all future services to their respective decentralized—but also harder to implement and test—alternatives.

With proper funding & development timescales we'll be taking progressively greater advantage of both traditional decentralized tech like global consensus blockchain (Ethereum), **distributed hash tables** (distributed trackers), **p2p sharing protocols** (BitTorrent) and upcoming decentralized tech when reaching their desired readiness stages; such as local consensus **autonomous data networks** (IPFS, Filecoin, SAFE Network) and various **distributed computing platforms** (Render Network, Akash Network, Golem Network).

Underlying Architecture

We have spent a significant amount of time engineering & implementing Neos' engine and networking architecture from the ground up to enable its complex **functionality & high flexibility** - offering an unparalleled level of creative control in a fully synchronized VR setting.

Our goal was to blend the networking with the engine architecture itself, creating a general **abstraction layer** that solves common problems and provides them as various programming and engine primitives, with well-defined behaviors and interactions, as well as implicit support for network replication & persistence.

The core of Neos is formed by **building blocks** that are equivalents of basic programming data structures, such as variables, references, arrays, lists, dictionaries, trees, or classes. The core engine functionality is built from these building blocks, as well as all other higher level behaviors, subsystems, tools and interfaces, making none of them "special".

This allows for quickly designing and implementing new subsystems, components, tools, or entity behaviors **without the need for any network programming** (or fixing any bugs introduced by it); offering automatic interoperability between each part of the system, such as access to all properties from the scene inspector, or connecting them via the visual scripting language.

NB: The language itself is built using the same building blocks.

Thanks to the very general and low level nature of the building blocks, the engine is mostly free from higher level idiosyncrasies that other creative platforms have, giving users the **maximum amount of control**, thus allowing a much richer variety of creations within a single universe, ranging from entertainment, and education, to professional visualization, engineering and science.

Community-Driven Development

After years of tireless development, we are now experiencing a new paradigm in the form of an early beta version of the Neos metaverse which is already being populated by our awesome visionary community, to which we owe huge thanks!

Not only does it make getting up in the morning much more exciting and purposeful, but it also provides us with huge amounts of data and feedback which enables us to make effective, informed and data-driven development decisions as well as to efficiently prioritize an extensive amount of planned features (**GitHub**) according to our **community needs**.

Not all subsystems & features are immediately useful and easy to communicate, however, we strive to hit a balanced mix of practical iterative and immediate improvements, as well as ambitious longer-term development projects.

Most importantly, we pledge to always put our community's needs and opinions first.

Team Expansion

With mature and stabilized underlying architecture in place, we are now ready to effectively expand the Neos development team by creating partially independent developer groups, working on planned features in parallel.

Help us get there by supporting Neos on Patreon or by participating in the Neos Credits token sale.

The Mission

Our mission is to accelerate the transition to spatial computing interfaces and usage of advanced meta spaces as they gradually take over from contemporary two-dimensional computing interfaces, in the same way that they once took over from command-line text based interfaces. The main driver of this transition is the need to collaborate more efficiently; the need for interfaces to be generally more similar to our natural environment and interactions, as well as intuitive for new users and the strengthening worldwide frustration of being connected like never before, yet feeling alone as individuals.

Spatial computing users can naturally interact with each other, things, devices, environments and whole worlds. It delivers interactions analogous to real world ones, while not being restricted by the laws of physics. It is complemented by an optional smart layer which automates repetitive tasks, processing and handling of files, as well as taking advantage of various applications and services.
Generally, it progressively more intelligently achieves desired user action without bothering the user; freeing her or his time to focus on higher level tasks.

One of the grand goals is to shorten—and finally remove—the gap between imagination and implementation, making it easier to take an idea and share it with others in an effective form, essentially materializing the idea into something virtually tangible. Such advancement will greatly improve communication and collaboration between all kinds of people.
It should be mentioned here that the stereotype of exciting meta spaces and contrasting dystopian-based reality makes for thrilling books & movies (insert Ready Player One pun), but is rooted in reality about as much as the stereotypical electric car which must be slow and boring.

The opportunities that spatial computing interfaces and meta spaces bring are synergistic to activities like education, science, design, development, empathy training, remote assistance, remote machinery operation and many others which contribute to a more desirable reality for everyone.
It's safe to assume that regular users of future advanced meta spaces will generally place less emphasis on materialistic possessions and values - as those are abundant in such spaces - and place greater emphasis on scarce values such as social relationships, novel experiences, art, intellectual property and other, more general, related activities.

Experience with advanced spatial computing tools augments:

- job market value
- entrepreneurial options
- purchase power
- and time effectiveness

This could—in conjunction with the absence of a need to physically travel for work and shifted values—usher in a new class of citizens with a smaller ecological footprint and superior capability to do good for themselves and their communities.

A portion of the population in developing countries, also known as the rising billion, could choose to skip contemporary materialistic lifestyles altogether, the way they skipped landlines directly to cell phones.

Neos Metaverse Foundation

Neos Metaverse Foundation is dedicated to fostering the growth and development of Neos Metaverse and to support a decentralized Neos ecosystem.

The foundation's role includes facilitating the development and maintenance of the Neos platform and continuous promotion of the use of the platform in various sectors such as education, entertainment, and business.

Rather than directly controlling the development, the foundation works as a supportive entity, contributing resources to improve the platform while giving the developers autonomy and independence.

One of the primary ways the Neos Metaverse Foundation supports development is through funding. This can take various forms, including rewarding developers and contributors for their efforts in enhancing the platform. The up-to-date information about current Award Schemes can be found **Neos Metaverse Wiki**.

The foundation is also interested in encouraging open-source development. There are awards available for developers who make significant contributions to improving the Neos Metaverse user experience or will be undertaking positive Neos related open-source development efforts. Nurturing of a rich and diverse ecosystem of interconnected services and clients.

Legal Disclaimer

The information set forth above and below should not be considered exhaustive and does not imply any elements of a contractual relationship.
Its sole purpose is to provide relevant and reasonable information to potential token holders in order for them to determine whether to undertake a thorough analysis of the company with the intent of acquiring Neos Credits [NCR] cryptocurrency tokens.

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