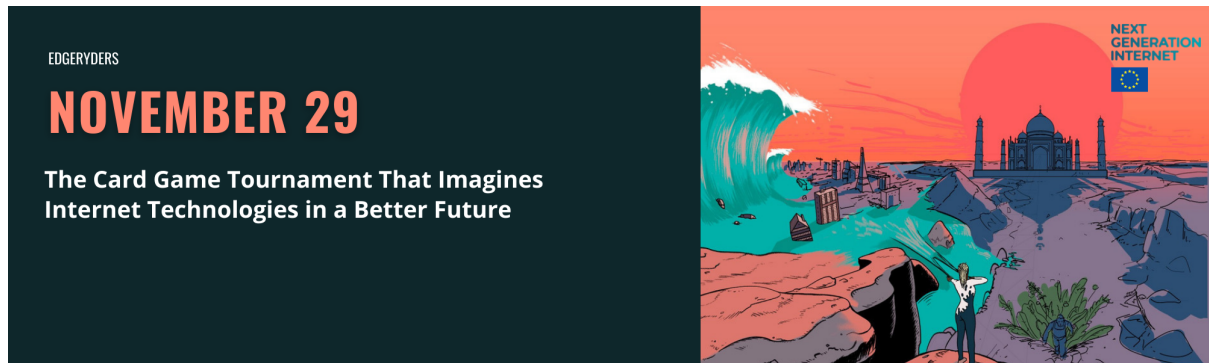


Game Guide



This game was developed as part of the NGI Impact Conference by EDGERYDERS. The event has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 825652 from 2019-2021.

Introduction

Witness is a collection of artificial islands floating on the ocean of a climate-ravaged Earth, but more than that, it is a collection of possible futures for humankind. While deeply interconnected, each of Witness's habitats, or "distrikts" is guided by its own unique philosophy and outlook. You might think some of these distrikts are paradise, and you might think others are a dystopia. But on some level they must all find a way to survive the challenges of an uncertain world.

This is a game that allows players to test the various policies of the Witness distrikts against realistic world crises. As they play, players will see how different policies measure against a range of random-selected problems.

They will also be able to compare against other players running different policies; at the end of the game, each player takes a moment to tell the others about why they picked the policies they did, and how they feel about their performance against the crises.

Which future will *you* choose?

About this game

As a player you take charge of one or more of the distrikts of Witness, using your society's policies and solutions to navigate it through every kind of crisis in a longer period of time.

At the end of the game, you reflect on what you have learned about your own professional and personal role in the future. You get one question to answer through discussion with the other players.

We encourage you to close the game by sending us an audio message with your thoughts via telegram/signal/whatsapp!

This will help the game organisers to write a good report gathering the main ideas, insights and burning questions from everyone who participated.

As a thank you - we will send you an Original Art poster from Witness.

The objective of all this is that you leave having discovered and answered some key questions for yourself about your own life and work in a low carbon future.

For the team behind the event, the objective is to gain insights into how the next generation of internet technologies can help us live good lives in a low carbon future.

Everyone who participates in the event will get a copy of the event report. And will be invited to our future activities.

Welcome onboard. Let the games begin!

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How to Play the Witness Game

Before you begin

You need these things to play the game

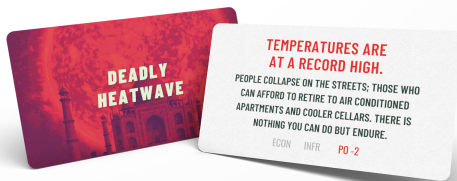


Tokens: These represent the points that you win or lose each time you make a move in the game.

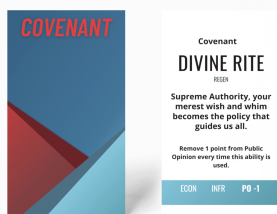
You need 3 different colours.

You need 5 tokens of each color. They can be coins, or even pieces of paper in different colours.

Pencil or Pen to take notes!



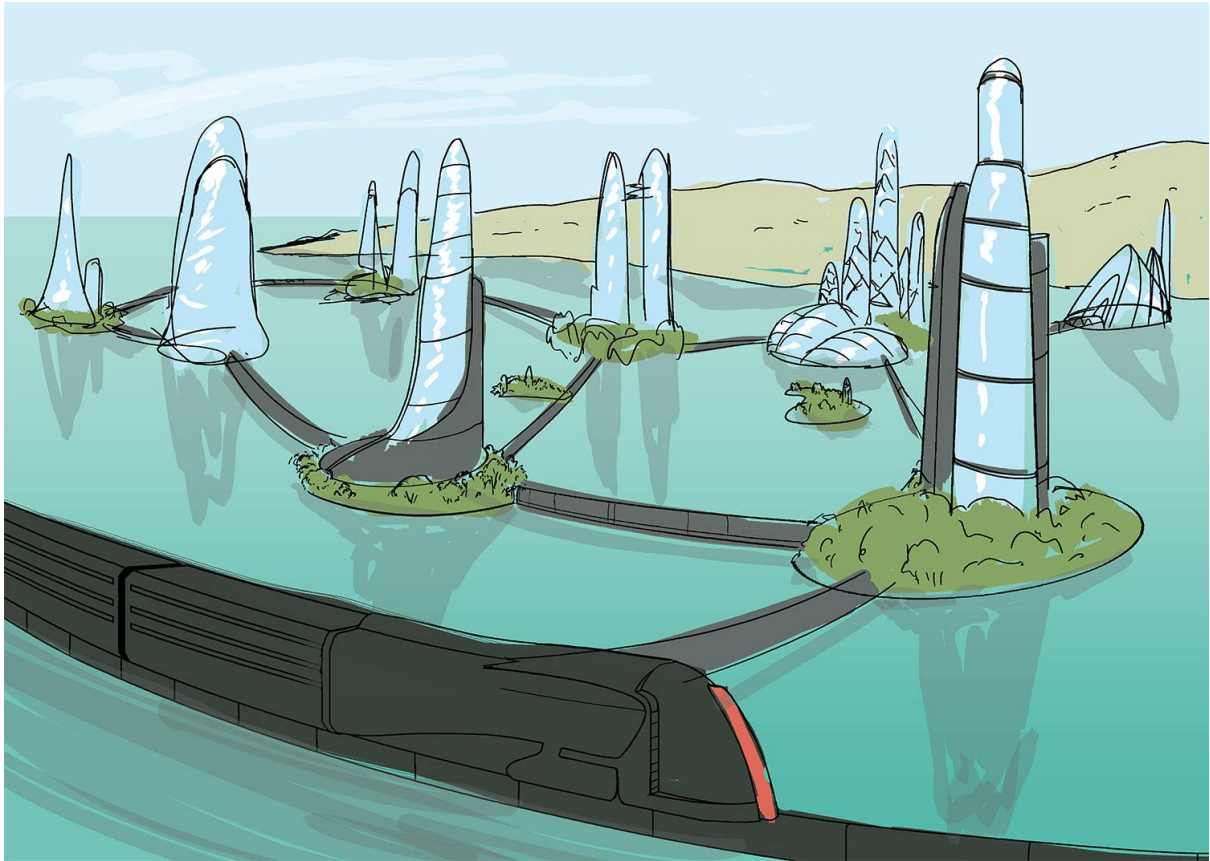
Event Cards: These cards represent events that can affect Witness, including natural disasters, crises, technological breakthroughs, and social trends.



Policy Cards: These cards represent each Distrikt's ideas on how to respond to events. Take a short [tour of the Distrikts](#) (See page 7 below).

How to Play in 6 simple steps

	Instruction
Step 1	Shuffle the Event Deck and place it face down on the table, then each player chooses your Distrikt and its Policy Deck. Familiarise yourself with your Policy Deck, choosing five cards.
Step 2	Using tokens, mark five strength points each to your stats Economy, Infrastructure and Public Opinion. These are your health indicators.
Step 3	Pick a card from the Event Deck. Look at the effects on your health indicators. Use the tokens to mark the change in Economy, Infrastructure and Public for your Distrikt. Look at the 5 cards you chose from your Policy Deck. Which is the best choice for the survival and wellbeing of your Distrikt in response to the Event?
Step 4	This is the policy phase, when each Distrikt can play a maximum of one Policy Card. One-Time Policy Cards are discarded when used, Static Policy Cards are placed face up on the table, and remain active on each following turn.
Step 5	After the turn is finished, pick another Event Card and repeat the cycle until ten Event Cards have been played or until one player reaches zero in one of the indicators and is unable to recover at the end of the turn. At this point the game ends.
Step 6	While playing the game, players may want to introduce the storytelling moment and the discussion on the possible effects that the events or policies have on their districts. In this case, the game master reveals the points after the discussion and keeps track of the effects evolving over time.
Step 7	Play more games with different deck combinations. Talk about how well different deck combinations work, and how you think that reflects the real world.



Take notes to get original art!

You get one question to discuss with your co-players. Use your phone to record a voice message with your thoughts.

Send the audio recording to Nadia: +32485079163.

Or if you prefer....

- Use post - it notes.
- Write down your thoughts on post it - use as many as you need.
- In clear handwriting so we can read it - No doctors' scribbles please :)

Your question is:

Your thoughts:

WRITE YOUR THOUGHTS ON POST-IT NOTES.

USE AS MANY AS YOU NEED
(WE PREFER MANY POST-ITS WITH LITTLE TEXT ON EACH)

ADD YOUR POST IT NOTES HERE.

Your email address:



A Tour of Witness

*Your guide to the largest seasteading
Megacity on Earth*

Navigating Witness

There are many ways to begin your tour of Witness. To understand how this city came to be, and to dig into the political mosaic behind it, explore the [history of Witness](#).

Fancy a more physical tour? Hop on the Migrant Train and visit one of the Distrikts below to read about how they operate, how they came to be, and what they look and feel like to live in.

Name	Established	Population
Hygge (pg.10)	0.5 0D	?
The Covenant (pg.10)	7 0D	?
The Assembly (pg.10)	?	?

Whatever you find most intriguing - be it anarchist-communist societies with auto-decaying currencies, or a life of faith and community, or the ultimate libertarian paradise, you will find it here.

But this guide only knows so much! We will keep this place updated as new areas of Witness are discussed as a result of the game, come into being and are written about. Perhaps you yourself will discover many things that we do not know, and come back to tell the tale.

Enjoy your visit!

The History of Witness

Witness is the most populous seasteading megacity on record. Initially developed under Project Viking¹ (which gave birth to other noted cities such as Byzantium and Vivarium), Witness grew far beyond its original physical and legal bounds, and today is considered the cultural, financial and media capital of the post-Sundering² world. Doubly so since it both anchors itself to semi-stable landmasses and produces new ones of its own: it is therefore a navigational landmark in this post-climate-change reality.

Whereas most other Project Viking cities³ operate as a single territory overseen by a single government and State Machine, Witness operates as a collection of interdependent Distrikts that function de facto as city-states in their own right. Each city-state is an implementation of a particular set of economic, philosophical and moral social contracts, although some aethnographers have pointed out the phenomenon of boundary bleed (which is almost unseen in other cities)⁴. Between the Distrikts runs the Migrant Train, a zero-cost solution for citizens who wish to live under a different social contract. While the State Machine of Witness is de jure overseer of all territories, in reality it manages only portions of infrastructure, guides multi-distrikt disaster response, and policing in instances where inter-Distrik conflict seems imminent.

The Founding

"As with all great cities, much of the founding of Witness is lost. What remains are skeleton logs preserved in machine memory, wrapped in a cocoon of half-myths, apocrypha, and clashes between rival historians. Move three districts and the stories change. On such a tenous sea we are now adrift, and it is up to us to make sense of it." -- Andromache Kosovitch, *Aethnography: The New Histories of Our Times*, the Library of St. Benedict

The general consensus is that Witness began as an experimental habitat conceptualized during the Post-Plague Years by one Jonathan C. Denton, an official of some import at an Old-World entity known as the United Nations. Denton, by his own admission, was involved in a collaboration between a group of private technology corporations and a sub-branch known as UN-Habitat; the goals of this collaboration were to launch twelve floating cities that could weather climate change, support a substantial population, and serve as highly mobile support stations for areas ravaged by rising sea levels and erratic weather.

Often referred to in recovered public news archives as Project Viking, the collaboration led to both advances in design and the development of a number of modern technologies,

1

2

3

⁴ The theory that portions of the populace along the boundaries of adjacent states approach either temporary compatibility or conflict, and often oscillates between them depending on the relative sizes of the populations involved. See also: coasian bargaining.

including what we know as the State Machine and the Ramos Harvester.⁵ Initially criticized as "techno-futurist doomsday bunkers", Viking became a key point in the affairs of the Post-Plague Years.

Denton, however, became increasingly disenchanted with the utilitarian design of governance for these cities. His earliest writings explored the alternate theories of one T.M. Scalon, a philosopher who proposed a way of living based on mutual recognition of wrongness⁶. Along with the architect Minette de Silva, the economist Rohan Kapoor and ten others⁷, Denton marshalled resources and participants for a thirteenth city, designed in a far more modular fashion: the city of Witness⁸.

"There's a way forward and they're too blind to see it. Will need to show them."

and the etymological link between "see", "show", "witness" and the 42nd Entry:

"From Google:

have knowledge of (a development) from observation or experience.
be the place, period, or setting in which (an event or development) takes place.
be a sign or proof of (something); serve as evidence."

The entity 'Google' is unspecific: it seems to have been both a noun, a verb and some kind of all-knowing entity: some technological scholars theorize would have been accessible at the highest levels of the United Nations, while ethnographers frequently connect it to the similar construct of the Oracle in mytho historical records from much earlier in history, suggesting that at recurring periods our ancestors have worshipped the same knowledge-giving entity, or different entities with extremely similar functions.

Digital Technology in Witness

Witness's digital technology landscape is a loose federation of different technical standards, business models, and political theories on the role of digital technology in society. On the one hand, network externalities favor a single system serving Witness as a whole. On the other hand, different Distrikts engage in constant efforts to bend their technology infrastructure to play roles that they see as beneficial for the Distrikt. Such efforts are regulatory, to provide oversight over the various layers of digital technology systems; techno-political, to embed the Distrikt's values into the hardware and software

⁵ Partial public data trails of Project Viking, recovered primarily from the Exodus of New York, indicate the successful launch of Byzantium, Vivarium and at least three other cities.

⁶ *What We Owe to Each Other*, T.M. Scanlon, archive unindexed

⁷ Given how drastically different names are put forth in different sources, some suggest the Missing Ten are apocryphal. Other scholars point to the more realistic construct of a power struggle and history being written from a particular narrative standpoint.

⁸ Scholars such as Kosovitch have advanced the claim that Denton chose the name out of spite, pointing to the famous undated 2nd Entry in the Old Manifesto:

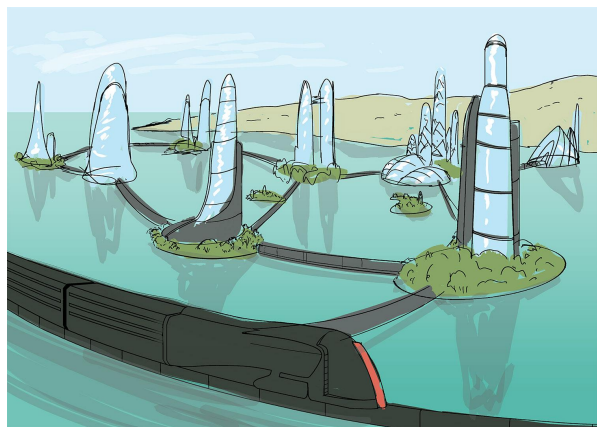
themselves; and market-facing, to steer the outcomes of market competition in directions seen as beneficial by each policy maker.

Digital Tech Evolution

Project Viking's original plan included a Witness-wide digital network, managed centrally and rationally, whose main purpose was to provide input to the State Machine and distribute its output. This infrastructure was mostly up and running when Witness launched. During Denton's tenure, it kept being expanded and improved.

The [Zero-Day fracture](#) that shaped Witness as we know it today was driven by, and amplified, deep rifts in the judgment on Denton's contractualist approach. In the early years after the fracture, the newly established Distrikt authorities lost no time in claiming technological sovereignty, each setting a course to its own vision. This did not, and indeed could not, happen in an orderly manner, given the convulsive pace of political, demographic, and societal change in the immediate aftermath of the Zero-Day fracture. For many Distrikts, the ambitions of a technology infrastructure fully consistent with the purposes of their respective societies were realized only partly, as a result of political compromise, technological hacks that barely work, and just plain throwing one's hands in the air and declaring defeat.

However, at the lowest level, all protocols and most of the cables and antennas are still in place. This means that all computers in Witness can technically talk to each other. The degree of integration of this network of networks, as in the pre-Sundering Internet, is the result of countless interoperability decisions (build a silo vs. federate), some made by the Distrikts' authorities, some by private actors.



The Distrikts

The State Machine has partitioned Witness into Distrikts, with each Distrikt implementing a social contract that fits its population.

Hygge

Providing for everyone's needs, no matter how much bureaucracy it takes.

On paper Hygge gets everything right - and Hygge makes sure that everything is down on paper. Every citizen has their basic needs met- accommodation, power, water, food, healthcare. Nobody goes without. The economy as a whole, thanks to prudent public investment, shows steady if unexciting growth.

Hygge is stable and prepared for every foreseeable eventuality- but can they adapt to unforeseeable?

Digital Technology in Hygge

As in many other domains, the founders of [Hygge](#) saw the role of digital technology in a way that was similar to that of the Denton era. From it, Hygge inherited the State Machine's critical hardware, and the CIVICSMOD team operating it.

Digital identities and infrastructure layers

Present-day Hygge's digital infrastructure is supposedly centralized, benevolent and subject to democratic control. The governments claims a monopoly on the identity layer, with government-issue digital identities forming the basis for the provision of sophisticated e-government services. The whole system is tightly integrated: administrative information in all databases is linked together by the unique digital identifiers of each citizen, business, etc. The State Machine processes all these databases to produce allocation decisions and recommendation.

CIVICSMOD and the interchange layer

During the Smoothing Years, CIVICSMOD was transformed into an inter-Distrikt organism. Now, each Distrikt sends a delegation to Hygge to operate the State Machine, for the services that they require from the AI. A technical consequence of this is that CIVICSMOD and its engineering groups have become the de facto seat of the decisions about which cross-Distrikt provision of data and services. Given the politicization of these roles, high-level Incanters from all Distrikts regularly participate in such groups.

Hygge has a Great Firewall in place. Like most, but not all, other Distrikts, it considers that digital sovereignty is only possible if digital borders are enforced.

Social media

Hygge considers social media to be a public service. Therefore, the Distrikt created its own social networking platforms, public sector-owned and controlled. These work technically well enough, and are integrated with other public services; this means that, for example, by participating in patients' support groups on Hygge's social media you can take pride in providing valuable information to the collective intelligence as a common (in practice, to the State Machine); also, you are not targeted by annoying advertisements.

However, the more colorful, dopamine rush-inducing social media platforms from other Distrikts (notably [Libria](#)) are not prohibited to operate in Hygge, and many Hyggeans are far more active on those media than on the Hygge Distrikt-owned ones. This is a source of concern among Hygge's ruling élites, and is addressed by regulatory action.

Non-Hygge-based social networking services are only allowed to serve customers in Hygge if such services are run from a subsidiary of the main company, incorporated in Hygge itself. Subsidiaries must allow government observers to sit on their boards, and maintain ongoing dialogue with the authorities. This is, however, far from a perfect solution, because some government representatives on the board of these tech companies end up being "culturally captured", and becoming very sympathetic to the company's point of view. Companies themselves tend to encourage this outcome by lavishing government envoys with luxury fringe benefits of their board seats.

Additionally, many citizens of Hygge circumvent the Great Firewall through various technical solutions, and access such services directly from servers located in Libria.

The Covenant

Monastic life for Industry 4.0.

The Covenant is an enormous floating monastery, and in terms of economic productivity it outstrips Witness's most intense industrial collectives and its most laissez-faire capitalists. The Covenants fraternities and sororities are inspired by the Benedictine tradition, working to bring themselves closer to serenity, and to ensure the economic sustainability of the Covenant itself. The wealth of that work goes not towards the owners of production, or to be parcelled out piecemeal among the workers themselves, but to the ultimate glory of God.

It's a system built on the faith of its citizens- but what if that faith is tested?

Digital Technology in The Covenant

[The Covenant](#)'s approach to the governance of digital networks is similar to that of governance in general: the digital world is conceptualized as a dual system. One of its parts, religious, is centrally and tightly managed by the religious authorities: this is often referred to by monastic engineers as the City of God. The other subsystem, secular, is only loosely regulated and mostly left to its own devices, except for censorship.

in brief

The City of God and the Gates of Fire

The Covenant's nuns and monks need access to digital networks; after the Zero-Day fracture, as they took a leading role in the newly constituted Distrikt's society, this need became more pressing. The Fathers and Mothers superiors, however, saw a lot of digital activities of Witness as chaotic, when not outright sinful, and unsuitable for consumption by their flocks. As a consequence, they started working on an ecclesiastical digital network, which would be completely sealed off from the secular ones except for a few, carefully monitored, gateways. Its center of operations is located in the Library of Saint Benedict.

This network, nicknamed [Ecclesia](#) or the City of God, initially contained theological and liturgy resources, as well as simple messaging services for the monks to communicate with each other. But it quickly expanded and complexified to vast libraries of all human knowledge, schematics, datasets, repositories of software code, and so on.

For its users, the main advantage of the City of God is the exceptionally high quality of all its resources. Technical standards are seamlessly inter-operable; all resources are maintained by members of the clergy and lay brothers and sisters, and, as this is work they offer to God, they do it well. There are no "404 not founds" in heaven.

The flip side of that is that any information that is added to the City of God's server needs to be vetted for trustability before. Also, anything deemed sinful is excluded right off the bat. As a consequence, the City of God is nowhere near as rich and organic as the secular digital networks in Witness, and is rather more like an exceptionally large and well-maintained Intranet. To achieve such tight control, the City of God is mostly a read-only network. Anyone in Witness can access it, but with read-only permissions. Read-and-write permissions are reserved for nodes inside the City of God itself, managed by monasteries and other religious institutions. A very few exceptions are made: some (mostly statistical) information originating in the State Machine, and The Covenant's and other Distrikt authorities is directly ingested by the City of God, through tightly policed and tripwired gateways, nicknamed the Gates of Fire.

Among other things, the Gates of Fire incorporate sniffers that block and erase any bot; the principle is that any agency within the City of God should be *human* agency. All agents are considered to have a dubious theological status, and the Officium appears to be in no hurry to resolve those doubts. Spiders and other bots can, of course, crawl the City of God using read-only public access points.

The digital resources in the City of God are highly appreciated, and widely used, all over Witness. The monks emphasize the importance of maintenance, curation and documentation, humble, important work that pleases God. As a consequence, the integrity of documents and datasets stored therein can be trusted, with a high degree of confidence.

Censorship

The secular digital networks in The Covenant are only loosely regulated insofar as technical standards, business models or services are concerned. However, The

Covenant differs from most other Distrikts insofar as it tries to censor their content. This is motivated by the need to provide societal stability in a mostly religious polity. The Inquisitores, the Officium's police force, has a well-staffed cyber division, which crawls the networks in search of potentially destabilizing content. The offending servers from outside of the Officium's jurisdiction (most of them in Libria or the Assembly) are blacklisted.

Assembly

Working together, our collective can achieve anything - if we feel like it.

Born out of the fandom of an electro metal band, the Assembly is the ultimate anarchist collective, with no need for archaic, centralised structures that place power in the hands of a few. Instead of taxation, there is crowdfunding. Instead of banks, there is a form of socialised blockchain. The Assembly maintains a state of permanent peaceful revolution, where each individual is expected to be a polymath working collectively for the common good. But issues that can't summon public interest are at risk of neglect.

If everyone pursues their passion, who will deal with the most boring dangers?

Digital Technology in Assembly

Digital networks in [The Assembly](#) are organized mostly along cooperative lines, like the rest of its economy. A high degree of interoperability is ensured by tight cooperation on technical standards. The Distrikt's government is highly active in standard-setting bodies, leveraging its core competence in coordinating the interoperability of locally autonomous systems to make sure that the lowest-level layers of The Assembly's digital infrastructure are fully interoperable, within the Distrikt and with other Distrikts.

Coordination in the data and application layers of digital technology is not strongly encouraged as such by the government, with some exceptions. A certain amount of it happens anyway, by virtue of bottom-up coordination between businesses (mostly cooperatives).

in brief

Digital identity layer and digital currency

The government of The Assembly issues digital identities as system-enablers, and exerts a strong influence in the technical standards bodies to make sure these identities work with all other layers in the system.

The Assembly's digital currency, CRTLcoin, is used to enact certain economic rights that all citizens have. As a consequence, digital wallets in The Assembly are accessed via each citizen's official ID. Third-parties digital identities are legal, but not acknowledged by the government.

Data cooperatives

Data cooperatives are a distinguishing feature of the digital world in The Assembly. Groups of actors – for example, regenerative agriculture farmers, or artists, or the dwellers of a specific village or neighborhood – agree to pool together the data generated by their activities. These datapools are often used by the cooperators themselves, but are also often sold on the market, both to other cooperatives and to private companies outside the Assembly. For example, users of Libria-based social networking services are organized into consumer cooperatives that negotiate with those services, charging them fees in return for allowing them to monetize (via targeted advertising) the digital trail left by cooperators.

Sources of inspiration

The striving for digital sovereignty of the different Distrikts in Witness is inspired by the notion of [the splinternet](#) and its connection with notions of national sovereignty.

Hygge's attempt to regulate foreign tech companies is inspired by the idea, popular among European Union Internet policy geeks, that the EU is a [regulatory superpower](#), with the clout to mitigate the worst of the societal effects of Big Tech. The EU's [General Data Protection Regulation](#) is often quoted as evidence that the EU itself could indeed play this role.

The government-issue digital ID dominant in both Hygge and The Assembly are a reflection of being familiar with real-world digital IDs as they function in Estonia (you access both e-government services *and* your bank account through your government-issue digital ID) as opposed to Belgium (you access e-government services through your government-issue digital ID, but your bank account through an ID issued by a private consortium of banks plus Microsoft).

The idea of a digital currency linked to government-issue digital ID, as found in The Assembly, comes from Kim Stanley Robinson's novel [The Ministry for the Future](#).

The dual Internet of The Covenant is inspired by the vision outlined in Peter Watts' [Rifters trilogy](#).



What Happens Next?

November 29: International Event Online

Your work and life in a low carbon future? What can you do with your skills to make a difference in a time of climate disaster? How can you prepare yourself for the shift? How do you help others? And how do Internet Technologies play into all of this?

These are not questions you can answer alone. On November 29 we convene an international comWe made a game to help you think about this with experts from different sectors and disciplines.

During the event we come together to think creatively about planning for times of crises, with experts from different sectors and disciplines. We will reflect on how Internet technologies could better support resilience in times of crises:

- What could your career and life look like in a turbulent future?
- What can you or your organisation do to be relevant in a time of climate crises?
- How can you prepare yourself for the shift? How do you help others?
- How do internet technologies play into this?

We made an event to think about this with experts from different sectors and disciplines. Participants bring their interest in economics, technology, the arts, science, business and politics.

This event is for everyone. You don't need a Phd to participate :) All you need is a curious and open mind. Welcome to join us!

How to register:

- The event is free of charge.
- Reserve your spot here:
<https://www.eventbrite.com/e/witness-1-hour-event-to-imagine-life-work-tech-in-a-low-carbon-future-tickets-188043903377>

Join the Community

We are a growing community building out the witness world! In real life and on the page. The

community connects via it's own online platform, events and project collaborations. Welcome to join us here: <https://start.edgeryders.eu/project/witness>

Connect with the Organisers

The Organisation behind Witness at large is Edgeryders - The Collective Intelligence Company.

Collaboration is the superpower of the human species. We help groups and organizations to harness the power of collective intelligence for wiser, more effective ways to work together and make decisions. Our work is featured in L'echo, Vanity Fair, La Repubblica, Wired, Dazed, The Nation, re:Publica ++

We are a distributed think tank with two main components. The first one is a global online community of thousands of technologists, policymakers, entrepreneurs and many others who want to make a difference. The second one is a social enterprise, which provides meaningful work opportunities to the members of the community. The latter, in return, lends its collective intelligence to power the company's activities.

We have offices in Brussels and Stockholm and regular collaborators in several other countries.

Contact the team to explore partnerships around upcoming activities:

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Learn more about our work at edgeryders.org.