Fundamental Report

Prime Rating Report V2.1

Protocol: Armor.fi
Version: v1
Date: 16/02/2022
Previous Report: No previous reports

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Season/competition: Season 2

Scorecard

1. Value Proposition	Points
a) Novelty of the solution	7 / 15
b) Market fit/demand	5 / 15
c) Target Market Size	4 / 10
d) Competitiveness within market sector(s)	4 / 10
e) Integrations & Partnerships	9 / 15
Total Points - Value Proposition	**29 / 65**
2. Tokeneconomics	**Points**
a) Is the token sufficiently distributed?	2 / 15
b) What is the extent of the token's capabilities?	2 / 10
c) Is the issuance model able to improve the coordination of the protocol?	1 / 10
d) Is the value capture model able to accrue and distribute value?	3 / 10
e) Is the token sufficiently liquid to enable active use and trade?	1 / 5
f) Are there any extrinsic productivity use cases?	3 / 10
Total Points - Tokenomics	**12 / 60**
3. Team	**Points**
a) Is the team credible and public? (No, Partly, Yes & Anon , Yes & Public)	1 / 15
b) Does the team have relevant experience?	6 / 10
c) Does the team participate and help shape the public debate?	2 / 5
d) Is the team able to effectively attract and coordinate resources?	1 / 10
Total Points - Team	**10 / 40**
4. Governance	**Points**

a) Admin Keys	**5 / 20**
b) Extent of Governance capabilities	**3 / 15**
c) Active Governance contributors	**1 / 5**
d) Governance infrastructure	**5 /10**
e) Robustness of Governance process	**1 / 10**
Total Points - Governance	**15 / 60**
5. Regulatory	**Points**
a) Does the protocol have any legal accountability?	**N/A**
b) What is the quality of the legal jurisdiction?	**N/A**
Total Points - Regulatory	**N/A**
Total	**66 / 225**

1. Value Proposition

The Value Proposition section describes the value a protocol delivers to its users. Based on the proportion of the problem the protocol aims to solve and the potential of the protocol to effectively solve the problem - better than other industry solutions - a Value Proposition rating is created.

a) Novelty of the solution (15 points)

Answer:

"One winter night during one of the many German air raids on Moscow in World War II, a distinguished Soviet professor of statistics showed up in his local air-raid shelter. He had never appeared there before. "There are seven million people in Moscow," he used to say. "Why should I expect them to hit me?"

His friends were astonished to see him and asked what had happened to change his mind. "Look," he explained, "there are seven million people in Moscow and one elephant. Last night they got the elephant."

— **Peter L. Bernstein, <u>Against the Gods: The Remarkable Story of Risk</u>**

The main issue with the fast-growing Defi space is that innumerable elephants hide in plain sight. The crypto scams <u>list</u> is so long that one has to filter to <u>biggest scams of the year</u> for a fun read.

Design flaws and implementation bugs are <u>couple of key smart contract</u> risks leading to scams.

So, how would one insure against these risks? Is decentralised insurer or its intermediary the best place to buy the insurance?

Armor.fi certainly thinks so. It sells smart contract cover not requiring KYC and uses another party as an underwriter of risks.

But is this novel? No.

Insurance is as old as time itself. Lloyd's of London has been facilitating underwriting of risks since 17th century. Insurance industry has evolved with the perils of the changing times from writing marine risks in the early days to insuring crypto-wallet risks more recently.

Last couple of years have seen an unprecedented growth of Defi. It is no surprise then that Defi related crimes and hacks have grown significantly and in 2021 making up 76% of major hacks. So, it was inevitable that players such as Nexus Mutual, Unslashed and InsurAce emerged in the Defi space to underwrite the crypto risks.
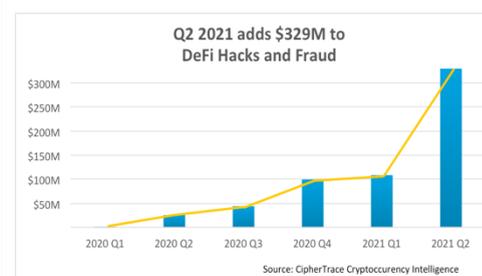
Nexus Mutual, the leader, chose to be a discretionary mutual based in the UK. This meant that one must subscribe to legal requirements and pay small membership fee (0.0020 ETH) to join the mutual. One will also need to verify identity using Nexus Mutual's Know Your Customer and Anti Money Laundering process.

Q2 2021 adds $329M to DeFi Hacks and Fraud

Source: CipherTrace Cryptoccurency Intelligence

To some, this is against the credo of Defi: If one must follow the law of the land then it's Regfi, not Defi. It is to this niche that Armor.fi caters its products.

In sum, Armor.fi essentially does what an insurance brokerage does in Tradfi. Selling cover while the insurer, in this case Nexus Mutual, underwrites the risks. So, what is novel is that due to tokenisation one can buy cover without KYC, which is impossible in Tradfi.

Also, as one doesn't need KYC, Armor.fi UX is easier to use. One can easily buy cover on a per second basis with a few simple clicks.

The protocol has introduced minor organisational innovation – by disintermediating Defi Insurance value chain and inserting itself as a broker– and technical innovations – such as per second coverage– to become an established intermediary player in the defi insurance space and is given a score of 7.

Score: 7

b) Market fit/demand (15 points)
This score evaluates the degree to which the protocol satisfies a strong market demand. The market fit evaluates if the protocol is able to satisfy the needs of a specific market (can also be measured by user adoption/ #of users). To what extent has the protocol proven to meet the demand of a specific market? Is the timing of the product right for the market? Is the protocol targeting the right market?

Answer:
Market demand for Armor.fi protocol can be analysed by comparing it with the market leader Nexus Mutual.

Nexus Mutual vs Armor (as on 15-Feb-2022)

	Metric	Nexus Mutual	Armor.fi (% of Nexus Mutual)
1	Active Cover Amount	$480M	$26.8M (5%)

2	Active Cover over last 1 year		
3	Current cover (15 Feb 2022) to 1 Year (19 Feb 2021) high in ETH	155.3k / 520k Now at 29.8% of 1 year high	8.7k on 400k Now at 2% of 1 year high
4	Total premiums paid	$37.85M	$9.8M (25%)
5	No of Unique Buyers	5211	275

Note: As Armor.fi uses Nexus Mutual as its underwriter there is significant double counting in above numbers.

Although demand for cover is far less (5%) compared to Nexus Mutual, Armor.fi has been able to obtain substantial chunk of premiums. This makes sense as the perceived value and risks of no KYC contracts cover must be higher, justifying the higher premiums required.

But Active cover amount over last one year isn't a pretty picture. The demand for both players seem to be significantly reducing. In general, it seems to follow the hard and soft market cycles as seen in Tradfi insurance; a market frenzy leading to increase in demand and consequently increasing premiums and a bear spell leading to premiums holding steady or decreasing.

Given above data, it is prudent on the part of Armor to diversify and dabble in other products such as arNFT, arVault and arShield.

Therefore, one can conclude that protocol has not found an exact market fit and has a clear strategy of being a smart cover brokerage and add-on products provider.

Score: 5

c) Target market size? (10 points)

The target market size evaluates the current and future size of the problem the protocol is aiming to solve. The category of the Open Finance solution can be used as a reference to the target market (for example: Lending). Because Open Finance is by definition global, the global market for a specific problem equals the target market size.

Answer:

One way to measure the total market size is to look at traditional market size of cyber security insurance that covers similar technology risks.

According to MordorIntelligence, the cybersecurity insurance market was valued at $7.36 billion in 2020 and is expected to reach $27.83 billion by 2026, registering a CAGR of 24.30%.

As industry's big players are slowly [moving](#) towards Defi, the technology risks in Defi space will become more apparent in the coming years and will hopefully increase the need for coverage. An optimistic case would be 25% of Tradfi cybersecurity insurance moves to Defi, which will give it a total market size of $7 billion.

Assuming that [half of all cover is intermediated](#) as in Tradfi, the target market for intermediaries, therefore, is estimated to be $3.5 billion.

In the short and medium term(1-3 years), on an optimistic 30% per annum growth rate, the TVL of the Defi Insurance which is [currently about $650 Million](#) – after accounting for double counting of assets– will reach a market size of $1.4 Billion.

Armor has diversified into the area of yield farming, which has a current [combined TVL of $22.8 Billion](#). In the short to medium term, on an optimistic 30% per annum growth rate, the TVL of yield farming sector will reach a market size of $ 50 Billion.

The target market size of Armor's core product is small but has the potential to grow.

Score: 4

d) Competitiveness within market sector(s) (10 points)

This score evaluates the competitiveness of the protocol within the market sector(s) it operates in. This score offers a relative comparison of the protocol and other protocols operating in the same market sector(s). To evaluate this, metrics to directly compare with the competition can be used (e.g., TVL, trading volume, number of users).

Answer:

Defi insurance market consists of 15+ players with [Armor.fi in top place](#) when TVL is used as the main metric for comparison.

However, using TVL in this case is too [simplistic and confusing](#) as Nexus Mutual and Armor have a symbiotic relationship and there is significant overlap and double counting of assets. It is more useful to look at active assets under cover of leading players to determine the market share.

	Project	Area	Sales/Underwriting	Claims	KYC required	Active assets under cover	Cumulative cover purchases
1	[Nexus Mutual](#)	Ethereum based discretionary mutual	Yes	Yes	Yes	[$480M](#)	[6810](#)
2	[Unslashed](#)	Defi insurance protocol	Yes	Yes	No	[$40M](#)	Not available
3	[InsurACE](#)	Multi-chain insurance	Yes	Yes	No	[$72.5M](#)	[751](#)
4	[Armor.fi](#)	Defi Brokerage	Yes	No	No	[$26.8M](#)	[765](#)

Armor.fi has less than 5% of the active assets covered by top 3 players in this space. No covers are in single digit percentages. Although Armor.fi is established as an intermediary because of its relationship with Nexus Mutual, it is still finding its feet when the overall market is concerned.

Score: 4

e) Integrations & Partnerships (15 points)

Due to crypto's open-source nature, the code of most protocols can easily be forked. This score represents a piece of "unforkable value". Some indicators to look at are the number of applications built on top of the protocol (vertical integration), other entities integrating the protocol's services (horizontal integration) or the number of relevant partnerships (be careful of logo collections/ partnerships without much purpose).

Answer:

Armor's main partnership is with Nexus Mutual. Nexus acts as the underwriter for Armor's smart cover.

Some other partnerships worth noting are:

EPNS: Enables Armor.fi to connect with its users and push notifications on their cover
Umbrella: Sources data for Armor Vaults from Umbrella Network's decentralized oracles to automatically provide cheaper coverage without needing any maintenance or renewals

In addition, users may cover their assets against smart contract risks across popular protocols such as Uniswap, Sushiswap, AAVE, Maker, Compound, Curve, Synthetix, Yearn, RenVM, Balancer and more.

As Armor.fi is built on top of Nexus Mutual in the value chain, there are no dapps that horizontally integrate with it.

In sum, the protocol has some partners and some integrations into other protocols.

Score: 9

2. Tokeneconomics

The Tokeneonomics section assesses the function of a protocol's token. This includes the token distribution, functionalities of the token, the ability of the token to incentivize positive behaviour in the protocol, and the ability of the token to capture a portion of the value created.

a) Is the token sufficiently distributed? (15 points)

The token distribution can be an indicator of a healthy protocol. When the protocol tokens are widely distributed among different stakeholder groups and contributors, this genuinely improves the coordinating capability of the token and strengthens the resiliency of the protocol. Was the initial distribution balanced between relevant stakeholders? Are the tokens distributed over sufficient participants (10, 25, 100 largest addresses)?

Answer:

ARMOR token was launched in Jan 2021. 1 Billion tokens were minted at genesis and were designed to become accessible over 2 years. 65% were allocated to community members. 35% to ARMOR team members.

More details about the ARMOR launch are available here.

Although Armor had a number of strategic backers in January 21, prior to a 24 week token sale, it has all gone a bit quiet on the funding side of things.

94% of the tokens are held by top holders.

The token issuance, however, token issuance has the whiff of a pump and dump scheme.

Robert Forster, one of the project's co-founders, suggests that the other co-founders [blatantly disregarded the agreements](#) that were made during the initial stages, and pumped and dumped the token in the last 12 months.

[Price action](#) on the token seems to support this.

It is down 98.31% from an All-time high on 4th Feb 2021.

In December, the project unsuccessfully tried to revive the price by [burning 250M tokens](#) and reallocating the share of tokens to founders.

Armor Price Chart

[Source](#)
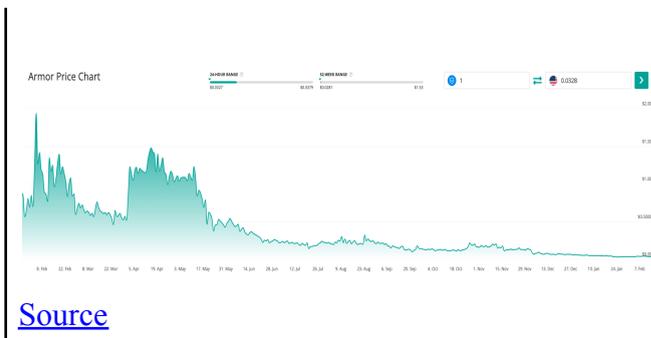
We can therefore conclude that the initial distribution was skewed and not well-intentioned towards building a healthy protocol.

Score: 2

b) What is the extent of the token's capabilities? (10 points)

Is the token useful within the protocol? Does the token allow the holders to participate in governance or influence the protocol in any way? Does it serve any other purposes?

Answer:

ARMOR is the [governance token](#) for the system. By staking the tokens into a Liquidity Pool one can earn pool fees and staking rewards.

The ARMOR token can be swapped with [vArmor](#) token which allows one to vote on the protocol and system updates. As an incentive for staking tokens and participating in the governance of the system, the token holders for the ArmorDAO may vote to be given a share of the revenue made by the arCore system.

However, till date only [one proposal, on token burning,](#) has been voted upon.

Therefore, in practice, the token provides limited governance and until date has assigned no revenue rights to the holder.

Score: 2

c) Is the issuance/distribution model able to improve the coordination of the protocol? (10 points)

To what extent does the issuance of the token support the advancement and function of the protocol? Are the tokens justifiably being issued? Does the issuance model incentivize the right behaviour? Are all relevant stakeholders benefiting from the issuance model?

Answer:

$ARMOR tokens currently can be bought in the open market, or by participating in the vested liquidity and usage reward programs which includes incentives for staking wNXM, staking arNFTs, and by using the product to protect deployed assets across various protocols.

Discord channels have [a number of discussions](#) expressing concerns about functioning of reward programmes. The price of ARMOR token hasn't helped.

It is clear from the [burning of 25% of the total tokens](#) that the tokenomics hasn't worked. The details of the revised tokenomics are yet to be made public.

Score: 1

d) Is the value capture model able to accrue and distribute value? (10 points)

A value accrual and distribution mechanism can help improve the utility of a token and its ability to be used as an effective coordination mechanism. Does the protocol have mechanisms to distribute some of the value created to the token holders?

Answer:

Armor token has no utility to speak of as it is mainly a [governance](#) token.

One can [stake ARMOR](#) on armor.fi to receive yield bearing vArmor tokens. Current APY on staking is 33%.

As a reward for staking tokens and participating in the governance of the system, the token holders for the ArmorDAO were planned to be given a share of the revenue made by the arCore system. This hasn't happened yet.

There are no real mechanisms for users of protocol to get incentivised using ARMOR. Given the price action, not sure any will want the token until the trust is rebuilt.

Score: 3

e) Is the token sufficiently liquid to enable active use and trade? (5 points)

Is the token widely available and is there sufficient liquidity available to facilitate all protocol functionalities?

Answer:

The Armor token can be [traded on](#) most of the Decentralised Exchanges such as Uniswap V2 and SushiSwap.

The token has been given a [poor liquidity score](#) by CoinMarketCap, which grades all crypto markets with a score from 0 - 1,000, with 1,000 reflecting the most liquid of markets and 0 for the most illiquid. Except for Uniswap V2 (Score of 422), Armor token on other exchanges scores well below 100.

[94% of the tokens](#) are held by top holders.

Therefore, one can conclude that the token has very limited availability and is largely illiquid.

Score: 1

f) Are there any extrinsic productivity use cases for the token? (10 points)

Besides the protocol's value distribution model as described in 2. d), can the token be used productively on other protocols (e.g. as collateral, for lending, LPing, yield farming, etc.)?

Answer:

Armor can be [staked on](#) its own app to obtain vArmor tokens. It can also be [LPed on](#) Uniswap, SushiSwap and Balancer, and 1inch.

Score: 3

3. Team

The Team section describes the quality of the team behind the protocol. The current version of Prime Rating favours teams that are publicly identifiable. In the case of an anon team, the track record of the specific anons involved can be taken into account

a) Is the team credible and public? (15 points)

Are the identities of the core contributors and team publicly identified? In the case of anon team members, is there any way to track their background/record?

Answer:

Azeem Ahmed, one of the (now ex) co-founders, is a [controversial](#) figure in the Defi space. The story of Armor.fi begins at [Yearn Finance](#).

To overcome the limitation of KYC in defi space, Yearn Finance created yInsure where users can buy Nexus Mutual's covers without doing KYC. yInsure was [supposed to be taken over](#) by Safe Protocol. However, due to some infighting between the founder, Alan and Azeem, then a prominent community member, the project was cancelled. Alan went on to release Cover Protocol and Azeem took over the yInsure product and released it as Armor protocol.

[Accusations](#) on Azeem by [Robert Forster](#), the remaining Armor co-founder and the most visible face on the project, are stunning. He claims that Azeem has done a rug pull.

After leaving Armor.fi in Nov 21, Azeem is now focused on [Mochi.fi](#), which was recently banned by Curve after an alleged [governance attack](#).

What a sad story for investors that a protocol that intends to make Defi space safe has turned out to be a scam! Shameful.

The team now led by Robert, therefore, suffers from bad credibility and will need to rebuild trust.

Score: 1

b) Does the team have relevant experience? (10 points)

Are there any documents or trails available to showcase the track record of the team? Do the team members have relevant backgrounds and skill sets?

Answer:

Robert Forster has been in blockchain space since 2011. He is technical with software development background.

Harry Kikstra serves as the Operations lead and seems to provide Marketing cover.

Armor has recently hired

- Rus Hughes as Tech Lead
- Romke Jonker as Development Manager
- Christopher Hearey as Community Manager

It is unclear whether Armor.fi has skilled professions in other functions such as HR and Legal.

It's a skilled team with some relevant experience in the block chain space.

Score: 6

c) Does the team participate and help shape the public debate? (5 points)

To what extent do the protocol contributors participate in the public debate around open finance? Are the team members giving presentations, sharing their thoughts and opinions, and do they help raise the collective intelligence of the industry?

Answer:

The team occasionally participates in the public debate mostly around the area of Defi Insurance. Robert Forster who has been in the Blockchain space since 2011, seems to be the most active and visible face of the project.

The discussion is mostly around the Armor product and Defi Insurance in general.

Several podcasts, medium articles and YouTube videos are available online. Some are listed below:

- https://open.spotify.com/episode/2VWTU2hz0SKHOqGBso5Z6a
- https://anchor.fm/crypto-is-easy/episodes/Interview-With-Robert-Forster--CTO-of-Armor-Fi-e16o5al
- https://anchor.fm/d-corenet/episodes/23-DeFi-Insurance--Black-Swans--Exploits--Bugs--Platform-Review-and-more--Robert-Forster--Armor-Fi-e119p4d

The development team is active on social media, especially on Twitter.

Score: 2

d) Is the team able to effectively attract and coordinate resources? (10 points)

How effective is the team at attracting and coordinating resources for the benefit of the protocol? Has the team raised sufficient funding or are there mechanisms in place to attract resources when needed?

Answer:

Azeem, one of the (ex) co-founders is a serial entrepreneur which was quite active in the defi space before launching Armor. He seems to have a core set of individuals that move with him from project to project.

The project seems to have focused mainly on building Technical and Marketing skills.

In the initial days, the project obtained backing from several strategic investors. After this, it has all gone a bit quiet.

As seen from above sections, it seems that team was not focused on building a healthy, self-sustaining protocol. It has not attracted sufficient resources and is coordinating highly inefficiently.

Score: 1

4. Governance

The Governance section evaluates how the protocol is governed and who the governors are. The different governance functionalities and processes are evaluated to determine to what extent the Protocol will be able to self-govern in a way that ensures the development of the protocols while respecting the needs of all current and future stakeholders.

a) Admin Keys (20 points)

Admin Keys allow some critical functionalities of a protocol to be controlled by an admin. This allows the developers to react to potential bugs, but also creates a risk as the developers could potentially misuse the admin keys to exploit the protocol. Does the protocol have admin keys and how are they managed?

Answer:

Armor smart contracts are non-custodial in that they only track the assets in a user's wallet to provide cover. Armor connects to wallets such as Metamask but has no control over the assets in the wallet.

Armor claims "Hybrid Decentralization" in managing these smart contracts. Hybrid Decentralization in Armor's words is *sufficiently* decentralised at launch. Armor claims to launch contracts with proxies that can be let go when full decentralization is in place. In practice, it means a core set of developers launching a product with community discussions on telegram and Discord. Simply put, decentralization seems like an aspiration while a bunch of developers hold control.

The development team owns a multi sig with timelock. This is worrying. When Azeem, one of the co-founders, left the project he took with him some of the developers. Whether the current team fully controls the multi sig is anybody's guess.

ArmorDAO exists in theory, but not in practice. There is just one proposal that has gone through the DAO.

There is no indication of any pause control available on this platform.

Score: 5

b) Extent of Governance capabilities (15 points)

Distributed governance allows the token holders to participate in the governance of open finance protocols. How much influence does the governance mechanism have? Are the votes affecting on-chain changes or do they function solely as signals to the team?

Answer:

Currently the development team controls everything. Governance barely exists and one can infer that it only functions as a signal and has no actual impact on the protocol.

Score: 3

c) Active Governance contributors (5 points)

Governance is a process that can be rather resource-intensive if executed well. To ensure good governance is practiced by the protocol, it's important to have a sufficient number of governors allocate resources to the governance process of the protocol. How many individuals participate in the debate around the protocol? How active are voters?

Answer:

As previously mentioned, the developers are acting as the governors of the protocol.

158 holders hold the vArmor token that provides voting rights. Only 19 of them voted for the one decision that was made with voting.

The protocol has a small group of active governors and almost no debate.

Score: 1

d) Governance technology/infrastructure (10 points)

The Governance infrastructure relates to the technology, software, and models used by the protocol's governance. Does the protocol have a reliable and usable voting mechanism? Are there channels for governance debate? Is there sufficient documentation available?

Answer:

Armor has an active Discord, Twitter and Telegram community. It is also operating an online forum, although the engagement can be improved.

The protocol has used withtally for the one proposal it had to vote on.

There have been discussions to use [snapshot](#) for governance, but it has stalled.

Score: 5

e) Robustness of Governance process (10 points)

This score requires documentation specifically on the governance process that sets the basic framework in terms of agreements, norms, and language for governing the protocol and to create social consensus. Does the protocol have a formal governance process? How robust is the governance process and does it promote good governance?

Answer:

The protocol governance [exists](#) in theory but has little to show in practice. As it has not been used in anger, it is rated as a protocol with no specified practice that works in the real world.

Insurance is a highly regulated industry for good reason. Insurers and their intermediaries collect premiums in advance with a promise to pay when *it* happens.

The story of Armor CEO having informal discussions with the claimant while [denying $1.6m claim](#) beggars belief. It seems like there is no governance where it matters in Insurance, i.e., when paying claims.

Score: 1

5. Regulatory

The Regulatory section describes the extent and quality of the regulatory environment that affects the Protocol. To be able to guarantee functionality, security, and legality the protocol should comply with regulatory requirements, or limit itself to facilitating services to users who are willing to operate outside of the traditional regulatory environment.

a) Does the protocol have any legal accountability? (15 points)

Does the protocol have any form of legal accountability? Can users and partners hold the protocol accountable in case of a breach of the agreement?

Answer:

Please note that this section is not scored as Armor.fi is a [DAO only](#) entity.

Armor.fi is listed as [Privately Held](#) with its primary office in San Francisco, CA. But the [company searches](#) on the internet do not return anything positive, which probably means that the project has unclear legal set up.

A [recent job posting](#) specified the location as North America – Remote. Compensation was specified as

Full-time position, $90,000 - $150,000 paid in USDC/DAI and $100,000 - $200,000 in ARMOR token equity incentive

Insurance is a high regulated industry. Licenses are required to [operate as an insurance aggregator](#). Given the opacity of information available around its set up it's highly likely that the protocol has no legal entity or mechanism for accountability.

Score: N/A

b) What is the quality of the legal jurisdiction? (10 points)

If the protocol has a legal entity, what is the quality of the jurisdiction the entity is established in? Will the jurisdiction be able to facilitate the legal framework for the protocol to expand while remaining accountable.

Answer:

Please note that this section is not scored as Armor.fi is a DAO only entity.

As the protocol's legal structure is unclear, it has questionable or no jurisdiction.

The Development team – noted from their LinkedIn profiles -- is from US, UK and France, top tier jurisdictions with applicable laws.

Score: N/A

About the Author: CrypticAndy