Introduction

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The aim of this document is to assist the process of aligning stakeholders in moving forward on and building support for a regulatory framework for *"responsible ICOs"*, based in the Netherlands.

Stakeholders that have been invited to co-write, read and provide feedback are listed at the bottom of this document.

Overview

ICO's (Initial Coin Offerings) represent a rapidly growing global crowd funding method that currently operates in an uncertain regulatory environment globally. A clear and thoughtful regulatory environment for ICOs could propel the Netherlands into a global leadership position. A positive and safe structure for ICOs would attract significant external investment, acquire talent and companies and technology development.

The current ICO market is only accessible for investors that own crypto currency. The biggest opportunity is to unlock the fiat currency market and enable anyone to invest, regardless of their currency. The current crypto market cap is about € 180 billion, which is a fraction of the amount of available Euros.

A clear ICO regulatory structure could do for the Netherlands what venture capital did for Silicon Valley.

Additionally, The Netherlands could be the first country to enable fiat money to participate in ICOs.

Funding Unique Strengths, leveraging country competence globally

The Netherlands possesses several unique attributes that if funded proactively could propel it into a more significant leadership position globally. These attributes are the technical sophistication of its people, logistics experience, tradition of trade and finance, international network, trust position, international peace and justice, science, history in public private partnerships and the level of blockchain activity focused on government services, commerce and supply chains.

Model to fuel the industry, when this regulatory framework is in place:

- Corporates and governments are excellent clients and co-creation partners for startups
- The best (international) entrepreneurs & teams incorporate in The Netherlands and co-create the best solutions.
- Regulatory clarity, guidance and enforcement
- Enable new influx of capital, spent in The Netherlands.
- Build from The Netherlands, for the internet, for the world to use.

Attributes of an ICO and Tokens (cryptocurrencies)

Tokens sold in an ICO are frequently tradable on secondary market exchanges. These exchanges make these tokens liquid (tradable) and they are most commonly traded for each other but can also be traded for fiat currency. Unlike stock, tokens can typically be exchanged within hours or days of their original issuance, unless restricted otherwise. Since the blockchain is a decentralized ledger there is no requirement for an intermediary to keep track of their ownership, this is automatically done by the blockchain.

The stock exchange is invented in The Netherlands to finance corporations. The world now seeks a properly regulated place to finance international ecosystems, which are typically funded by ICOs.

More than funding tools

Most of the highest funded tokens used their ICO as more than a funding tool. Where blockchain solutions typically serve ecosystems that involve numerous stakeholders that all have their own interested in the system, a distributed solution for ownership and funding is required. The best token economic designs create network effects that encourage adoption and use of a network as the ecosystem grows. These solve the chicken and egg problem with building a network effect business that serve ecosystems.

Four types of crypto-currencies/tokens used in ICOs

There are an infinite variety of tokens that can be created on the blockchain. However, all of the tokens that have been used to raise more than a million dollars fall into one or more of the four categories below. The best performing financially have not been tokens that act like securities but commodity tokens used to transfer value. In fact, the top 14 cryptocurrencies which represent 89% of the market cap are all commodity tokens.

Securities	Commodity Tokens	Utility / Licenses	Worker / Points
Participation in the value increase (profit) generated from the operation of an entity.	A store of value or a representation of a real world asset such as fiat currency or a commodity like gold.	A token that enables owners to do something that non-owners can't such as receive a discount or use a system	A token for the payment of goods or services that is consumed when used such as a voucher or airline points
Similar to stocks or bonds	Similar to commodities or currency	Similar to a software license or membership fee	Similar to a pre-paid card for a store

Regulatory Framework by Token Type

A regulatory framework needs to exist that takes a suitable approach for each token type. When tokens represent multiple types all requirements for the corresponding types could be merged to create the list of requirements.

Most of the regulations that support a "responsible ICO" are already in place. The aim here is to explore, with all stakeholders, what needs to be changed, so that responsible ICOs can actually happen here in The Netherlands. The following input mostly consists of suggestions and open thoughts.

INPUT FROM MinFin, AFM, DNB needed

Туре	Proposed Regulatory Framework					
Security Tokens	The main principle is that anyone should be able to invest a certain amount their accumulated wealth/ capital in projects they believe have a sound future, given any risk profile. The key is that trust can be build in the network by peers, cumulative (tier 1,2,3 etc). Existing security framework could apply with minor modifications, for example: 1) Technically Sophisticated Investors, 2) Proportional Income Investing 3) New due diligence requirements.					
Commodity Tokens	Tokens that represent a real world commodity should have proper custodial licensing for any commodities held on behalf of users. Tokens that represent digital commodities (e.g. a token economically pegged to the value of a commodity but not directly redeemable for the commodity) should require a combination of security audits of the smart contracts and crypto-economic audits of the incentive and value structure by industry recognized auditors.					
Utility / License Tokens	Utility and license tokens have an intrinsic value for the user. They operate much like a software license or a membership agreement. There should be some relationship between the token sales and the total value to users. For example, tokens sales might be limited to the intrinsic value of the tokens as measured by V * 5 * G (where V = the annual intrinsic value of all tokens actively used in the system and G = the Growth Factor). This would encourage projects to have multiple releases of tokens in a slow drip as they prove/increase the value of their tokens and their growth rate. New projects that don't yet have valid numbers for V or R could be allowed to raise money based on projections with X% of funds raised stored in escrow until values for V					

	and R can be demonstrated to be in line with projections or a release is approved by a vote of 51% of project contributors.				
Worker / Point Tokens	If the worker token is directly exchangeable for fiat currency, existing money transmission rules should apply. If the token is not exchangeable for fiat currency by project directly but only goods or services no special rules should apply.				
	Sale of Worker tokens in advance of their use should be restricted. For example, to the projected 5 year maximum needed supply U * 5 * G (where U = the annual usage and G = the growth factor). New projects that don't have actual numbers could be required to post projections with a setup of milestones based on monthly use of worker tokens in the system (e.g. 100K tokens/mo, 200K tokens/mo, etc.). x% of funds raised could be placed in escrow. Every time the project achieve a milestone the percentage that milestone represents of the total number of milestones could be released. A release could also be allowed if approved by a vote of 51% of project contributors.				

Security tokens additional requirements

Technically Sophisticated Investor

Technically sophisticated investors are investors that have work in the field of the investment or have a degree in the area of the investment. Security Token investors should provide evidence of competency in the field of the investment if they don't meet sophisticated investment rules.

Proportional Income Investment

Proportional income investments are investments that are minor in light of the income of the investor. Anyone should be allowed to invest up to X% of his or her income or X% of his or her total amount of capital in ICO within the Dutch process. Any adult should be allowed to invest at least 100 euros.

Due Diligence

Projects seeking to accept investments from unsophisticated investors could be required to have at least X% of their initial raise from professional investment firms who perform due diligence on the project. In order to qualify, initial investments must proceed at a price that is close to ICO price (e.g. no less than 40% of VWAP (volume-weighted average price) in the first 6 months of crowdfounding and no less than 70% of the initial price at outset) and must impose sufficient transfer restrictions on early investors (e.g. no less than 6-12 months longer than ICO participants).

Disclosures

All token projects should be required to disclose tokens and other payment structures for all project contributors and advisors. Due diligence providers, advisors and key employees should have a token vesting plan that transfers control of tokens over at least a 3 year period. Spending of ICO funds must be sufficiently restricted to that defined in the original ICO documents (a.k.a. "Project whitepaper") and any material changes

to ICO fund spending must undergo public review and approval by token holders. All projects should be required to have a public comment form where questions can be asked and answers provided.

The price paid or value of services received for any token sale in the project's history should be fully disclosed.

Preventing Manipulation of Tokens (Speculation)

To prevent manipulation of the tokens price by pump and dump strategies, projects should be required to use at least 10% of their total tokens for treasury activities that reduce speculation. Funds raised from these tokens should be maintained in a separate treasury used only for this purpose. If the project feels the price of its tokens is too high it should be allowed to sell tokens and if tokens are being dumped it should be allowed to buy its tokens with its treasury funds. Projects should be allowed to contract with an outside entity to perform this service.

Exemptions

Any project should be allowed to go file for an exemption to the normal requirements. For example, a utility token project that wants to raise more than the network Value * 5 * Growth Factor should be able to ask for an exemption. Exemptions would be granted on the merits of the argument. Projects would be required to propose alternative requirements along with the reasons for the exemption request.

Growth factor

Growth factor would be based on average 3 year growth rates and published in a table such as the one below.

Growth Rate	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 5	Qtr 6	Qtr 7	Qtr 8	Qtr 9	Qtr 10	Qtr 11	Qtr 12	Factor
1%	100	101	102	103	104	105	106	107	108	109	110	112	1.12
3%	100	103	106	109	113	116	119	123	127	130	134	138	1.38
5%	100	105	110	116	122	128	134	141	148	155	163	171	1.71
10%	100	110	121	133	146	161	177	195	214	236	259	285	2.85
15%	100	115	132	152	175	201	231	266	306	352	405	465	4.65
20%	100	120	144	173	207	249	299	358	430	516	619	743	7.43
25%	100	125	156	195	244	305	381	477	596	745	931	1,164	11.64

Presales

Presale or pledges of tokens prior to the launch of the product in a usable form should be restricted to project: contributors, employees, consultants, advisors, service providers and any investors meeting the requirements for securities investors above.

KYC / AML Compliance

All projects should be KYC / AML compliant

Extra topics to be discussed with AFM/ DNB:

Governance

- Board competence
- KYC/ AML
- Sandboxing

Input for this document:

Invited to co-write, read and provide feedback

Ministry of Finance, Ministry of Economic Affairs, Ministry of Economic Affairs, Dutch Blockchain Coalition, AFM, DNB, Mattereum, Coinfund.io, Deloitte, RUG, UVA, StartupDelta.