## ICESALM 2025 - KEYNOTE SPEECH Rhodes, July 3, 2025

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# "Crypto Regulation and Public Policy: The MiCA Framework and Europe's Strategic Response to Digital Finance"

## **Opening**

Good morning everyone.

It is truly an honor to be here with all of you today at ICESALM and especially here, in Rhodes.

This remarkable island has stood for millennia as a literal and symbolic crossroads.

Merchants brought spices, cloth, and precious metals through its harbors.

Philosophers debated the nature of justice and virtue in its courtyards.

Explorers paused here, planning new voyages to places unknown.

Standing here today, to discuss how we are once again rewriting the rules of trade, value, and trust, feels almost poetic.

Almost as if history keeps choosing Rhodes as a stage for humanity's next chapters.

I want to take a moment to thank the organizers for their vision and hospitality.

Not just for arranging the logistics of this gathering, but for seeing the importance of bringing together academics, policymakers, industry leaders, and students from across countries and disciplines.

Because the questions we'll wrestle with today are too large, too consequential, to be left to any one group alone.

We are meeting at a time of profound transformation in the architecture of finance.

A transformation driven not by new commodities or colonial trade routes, but by cryptography, decentralized networks, and entirely new ways of engineering trust.

Because ultimately, and I think it's worth pausing on this, isn't money itself, whether a gold coin, a euro, or a Bitcoin, just an exercise in collective trust?

A shared social contract, written not on paper but in our mutual willingness to accept it in exchange for our labor, our goods, our dreams.

And now, for the first time in modern history, we have technologies that allow us to rewrite the terms of that trust without traditional gatekeepers.

No central banks.

No clearinghouses.

No institutional guarantees beyond cryptographic proofs and distributed ledgers.

It is exhilarating.

It is terrifying.

And it demands that we think very carefully about the world we are building.

So today, I invite you to join me on a journey.

A journey through three fundamental questions that will shape not just our financial systems, but potentially our entire social and political landscapes.

## 1. Why do we need to regulate crypto?

Is regulation simply a bureaucratic reflex to something new and poorly understood? Or is it an essential safeguard, born of centuries of financial manias, crashes, and human frailty?

## 2. What exactly is Europe trying to achieve through MiCA?

Is it merely about compliance and oversight? Or is it a bold attempt by the EU to assert its values and strategic interests in the emerging digital economy?

3. And beyond the dense legal texts, what deeper ethical, societal, even philosophical choices do these technologies force us to confront?

Choices about privacy. About power. About who we ultimately trust and why.

Because these are not just questions for economists or computer scientists.

They are questions for all of us.

For scholars, regulators, entrepreneurs, and citizens.

Questions that will shape the next chapters of global commerce, governance, and perhaps even the very notion of community itself.

## Part I: Why regulate crypto at all?

Let's wind the clock back.

It's 2008.

Global banks are collapsing.

Lehman Brothers has fallen, sending shockwaves through the entire financial system.

Millions of people lose their homes, their jobs, their hard-earned pensions, almost overnight.

And beyond the economic losses, something else fractures: trust.

Trust in banks.

In rating agencies.

In regulatory bodies that were supposed to protect the public.

For the first time in decades, people begin to question whether the institutions that safeguard our money are truly stable, or even honest.

Then, quietly, almost like a whisper lost in the chaos, a pseudonymous author named Satoshi Nakamoto posts a nine-page white paper on a cryptography mailing list.

It's called: "Bitcoin: A Peer-to-Peer Electronic Cash System."

A simple title, for an idea that would prove anything but simple.

Bitcoin was radical.

Not just because of its technology, but because of its philosophy.

It rejected the need for trusted intermediaries altogether.

No banks to validate transactions.

No central authorities to decide what is money.

No gatekeepers deciding who gets to participate.

It proposed a world where we could trust **math and code**, and the consensus of a decentralized network, rather than the promises of institutions that, as 2008 made painfully clear, could fail us.

Over the next few years, this idea took shape in ways no one fully expected.

Early enthusiasts began mining Bitcoin on laptops.

They joined forums, debated tweaks, shared code.

They weren't hedge funds.

They were developers, libertarians, cryptographers, people disillusioned by Wall Street.

Then exchanges like Mt. Gox appeared, turning obscure lines of code into something you could trade for dollars, yen, or euros.

By 2013, Bitcoin found a controversial use case on the Silk Road, where people bought everything from books to, let's be honest, illegal drugs.

It was the first major headline moment for Bitcoin.

Governments took notice.

Regulators, too.

And yet, thousands of new users were drawn in by this borderless, censorship-resistant currency.

Then came Ethereum in 2015, a revolution layered on top of a revolution.

Ethereum didn't just let you send coins.

It let you write tiny, self-executing programs called smart contracts.

Suddenly, money wasn't just a bearer asset.

It was programmable.

It could unlock itself under certain conditions,

interact with other contracts, all without human intervention.

We weren't just moving value.

We were building decentralized protocols:

lending pools without banks, insurance agreements without insurers, even new kinds of organizations called DAOs.

By 2017, the ICO boom was in full swing.

Startups skipped venture capital.

They issued tokens directly to the public.

Billions were raised in mere months.

Some of these projects were genuine.

Many were outright scams.

Regulators watched, torn between fascination at this new funding model and horror at how little investor protection existed.

Then came the DeFi Summer of 2020.

People could deposit assets into smart contracts and earn double- or triple-digit yields.

Liquidity pools.

Automated market makers.

Collateralized loans, all happening instantly, without a single bank involved.

By 2021, the next wave arrived: NFTs went mainstream.

Artists sold digital works for millions.

Gaming platforms created entire virtual economies.

Brands launched NFT loyalty programs and collectibles.

People didn't just buy art, they bought virtual land, digital sneakers, tokenized experiences.

But then... the crashes.

The painful reminders of how fragile all this innovation can be.

Terra/Luna, a so-called "algorithmic stablecoin," promised a dollar peg without actual reserves.

It relied on intertwined tokens and market incentives.

When sentiment turned, it collapsed spectacularly, wiping out over \$40 billion in value.

Ordinary people lost life savings.

Some had taken out loans to buy in at the peak, believing the hype.

Entire communities were devastated.

Then came FTX, once hailed as "the most regulated crypto exchange."

In reality, it was a carefully constructed illusion.

When it fell, it took with it pensions, hedge funds, and countless retail investors — some had put away their kids' college savings there.

So why regulate?

Because without rules, markets can quickly turn into casinos.

Promises are made without accountability.

And when things go wrong, as history shows they always eventually do, it isn't just individual investors who pay the price.

It's trust itself that erodes.

And trust is the oxygen of any financial system.

Without it, the whole architecture struggles to stand.

But here's the paradox.

Crypto also thrives in open, lightly regulated spaces.

Many breakthroughs, automated liquidity, decentralized stablecoins, new forms of governance like DAOs, were born precisely because there was space to experiment without spending years chasing licenses or meeting compliance checklists.

So regulation stands before a real dilemma.

How do we protect people and the broader economy from fraud and systemic collapse,

without suffocating the creativity that makes this sector so alive?

Because if we clamp down too hard, we risk driving innovation elsewhere, or even back underground.

But if we regulate too lightly, we might be building castles on sand.

And that is the central tension that Europe, through MiCA, is now trying to navigate.

## Part II: What is MiCA? And why does it matter?

That question brings us directly to MiCA, Europe's ambitious attempt to answer this complex puzzle.

MiCA, formally known as the Markets in Crypto-Assets Regulation, is the European Union's flagship effort to bring order, safety, and coherence to the rapidly expanding world of cryptoassets.

Adopted in 2023, it stands out as the first comprehensive regulatory framework anywhere in the world specifically crafted for crypto, recognizing that these instruments don't fit neatly into traditional finance categories.

So let's take a closer look at what MiCA actually sets out to achieve.

MiCA lays out four central objectives, each critical for building trust and stability in this new ecosystem:

1. To protect consumers and investors through mandatory disclosures, safeguarding of client assets, and rigorous oversight.

- 2. To provide legal certainty for crypto businesses, so innovators and institutions know exactly what rules apply, avoiding the patchwork of conflicting national laws across Europe.
- 3. To safeguard financial stability and uphold market integrity, preventing the speculative bubbles, frauds, and hidden leverage that could spill over into the broader economy.
- 4. And to promote harmonized standards across all EU member states, blocking regulatory arbitrage and fostering a level playing field.

#### MiCA in practice: how does it actually work?

MiCA's architecture starts by classifying cryptoassets into three broad categories, each with distinct regulatory obligations.

- Asset-referenced tokens, like stablecoins tied to baskets of currencies or commodities, designed to hold a stable value.
- E-money tokens, pegged to a single fiat currency, like the euro or dollar, similar to traditional e-money under older frameworks.
- And then everything else, including utility tokens, governance tokens, and in many cases NFTs that function more like securities.

Depending on the category, issuers face tailored requirements.

- They must prepare and publish white papers with standardized, detailed disclosures.
- Maintain appropriate capital and reserve buffers, especially strict for stablecoins.
- Follow ongoing governance standards, undergo audits, and have crisis management plans.
- Enforce a strict separation of client assets from company funds, protecting users if the company fails.
- And comply with tough AML/KYC protocols, aligned with Europe's anti-money laundering laws.

For crypto service providers, exchanges, brokers, custodians, MiCA introduces the "single passport" principle.

Once authorized in one EU country, a provider can operate across the entire block without needing separate licenses for each jurisdiction.

Imagine the strategic advantage: a startup launched in Lisbon can seamlessly serve clients in Warsaw, Athens, and Paris under one framework.

That's regulatory scale, transforming the EU's vast, diverse market into a unified arena for crypto innovation and commerce.

Why is this strategically important?

Because, and this is critical, setting the rules means setting the future.

Regulation shapes incentives, determines who enters markets, and decides which business models even survive.

Through MiCA, Europe isn't just cleaning up loose ends.

It's actively designing the legal infrastructure that will underpin the next generation of digital finance.

Let's contrast this with other major jurisdictions.

In the United States, the SEC and CFTC are still locked in turf battles over whether tokens are securities, commodities, or something else.

Much oversight happens retroactively, through enforcement actions, creating regulatory uncertainty and an environment of "rules by lawsuit."

In China, the approach is nearly opposite: authorities have banned most crypto trading outright, focusing instead on building a controlled central bank digital currency.

The UK, post-Brexit, is trying to craft its own innovation-friendly framework, but is still deep in consultations without a single, unified structure.

Meanwhile, Switzerland and Singapore have built reputations as crypto hubs by offering lighter, bespoke regulatory regimes — but they simply can't match the EU's economic scale or the power of its integrated market.

So through MiCA, Europe sends a clear, strategic message:

We will not just react to Silicon Valley or offshore havens.

We will lead.

We will offer a transparent, robust environment that protects consumers and market stability, while still encouraging responsible innovation.

In doing so, Europe doesn't just secure its own financial future, it potentially sets a template for global standards, much like the GDPR did for data privacy.

## Part III: The deep societal questions

Now let's zoom out even further.

Because crypto isn't just about finance or markets or new ways to make a return.

It fundamentally challenges some of our deepest social, ethical, even philosophical assumptions.

## Who do we ultimately trust with money?

A central bank governed by elected representatives, accountable through monetary policy?

A cryptographic algorithm running on thousands of machines across the world?

Or a DAO, a decentralized autonomous organization, where decisions are made by anonymous token holders, many of whom we will never meet or even identify?

#### What happens when code is law?

Imagine a smart contract that automatically liquidates loans.

It does exactly what it was programmed to do, no corruption, no favoritism.

But what if it triggers during a flash crash, wiping out thousands of small investors who had no chance to react?

Who bears responsibility then?

The developers who wrote the code?

The users who agreed to the protocol?

Or is there simply no one to hold accountable?

### How do we balance privacy with compliance and security?

Blockchains by design are transparent, every transaction is publicly visible.

Yet the parties behind those transactions can stay pseudonymous, shielded by cryptographic addresses.

Regulators argue they need traceability to stop money laundering, terrorism financing, tax evasion.

Privacy advocates warn about mass surveillance, chilling effects on free association, or misuse of data by authoritarian regimes.

## Then there's the climate.

Proof-of-work systems like Bitcoin consume enormous energy.

Some estimates say the Bitcoin network alone uses more electricity than entire countries.

Should regulators or markets push these systems toward sustainable models like proof-of-stake?

MiCA starts by requiring environmental disclosures, but is disclosure alone enough to drive change?

Or do we need explicit incentives, or even restrictions?

#### And what about inclusion?

Crypto is often championed as "banking the unbanked," opening financial services to those ignored by traditional banks.

But in practice, it often requires high technological literacy, reliable internet, and comfort with complex interfaces.

During periods of network congestion, gas fees on Ethereum have shot up so high that a simple transaction might cost \$50 or more, a week's wage for many people around the world.

### These aren't abstract puzzles.

They're choices societies will have to make, through laws, through market norms, through collective values.

Will we build a digital economy that is more equitable and robust?

Or will we replicate old inequalities in new, more opaque systems?

Will we prioritize privacy?

Or sacrifice it in the name of security?

Will we allow algorithmic governance to become the default?

Or insist on human accountability?

These questions will define not just the future of crypto, but the broader evolution of digital society itself.

And they remind us that regulation isn't just a bureaucratic exercise.

It's a moral and civic one, shaping how we live, how we trade, and how we trust.

## Part IV: The future under MiCA: opportunities & tensions

MiCA tries to strike a delicate balance.

It's not an outright embrace of unregulated innovation, nor is it a knee-jerk clampdown designed to smother experimentation.

It's an attempt to thread the needle, to build a robust framework that gives both investors and developers confidence, while still leaving room for creativity and evolution.

It does this by deeply integrating with other pillars of Europe's digital finance strategy.

Take the Digital Operational Resilience Act, or DORA.

It ensures financial platforms, including those in crypto, can withstand hacks, system outages, and cyber attacks.

Because truly, what good are elegant smart contracts if the infrastructure beneath them crumbles under assault?

MiCA also complements Europe's evolving anti-money laundering directives, and broader cybersecurity and consumer protection regimes.

Taken together, they form a dense web of safeguards that embed crypto squarely into the larger financial ecosystem.

And then there's the conversation around a Digital Euro.

By standardizing how private stablecoins are issued and supervised, MiCA lays essential groundwork for coexistence, ensuring that if and when a European central bank digital currency emerges, it will do so in a legal landscape already tested on issues of digital issuance, privacy, and interoperability.

But despite all this careful design, big challenges remain.

Take DeFi protocols.

They have no corporate headquarters.

No board of directors.

Often no identifiable leadership at all.

Who do regulators call if something goes wrong?

Will they try to impose obligations on developers who merely wrote the code, even if they no longer control it?

Or on the operators of websites that act as frontends, even though the smart contracts live on forever, independent of any single company?

Then there are NFTs.

For now, MiCA largely postpones detailed rules on NFTs to future efforts.

But already NFTs are racing ahead — being used to represent fractional ownership in real estate, to securitize debt portfolios, even to stand in for carbon credits in emerging ESG markets.

So where will these hybrid instruments fit legally?

As collectibles?

As securities?

Or as something so new it demands an entirely fresh legal category?

And we can't overlook compliance costs.

MiCA is undeniably rigorous.

That rigor builds trust, but it also comes at a price.

Could it unintentionally lock in the dominance of large, well-funded players who can afford teams of lawyers and compliance officers?

Will it push smaller, more innovative startups to relocate to jurisdictions like Dubai, Singapore, or the Bahamas, places that promise lighter regulatory burdens?

Imagine a small team in Athens or Porto that's built a clever liquidity aggregator for decentralized exchanges.

Under MiCA, the costs of registration, audits, and ongoing reports might simply prove too much.

So instead, they incorporate in a more permissive environment, taking their talent, their ideas, and their future economic activity with them.

In response, some regulators champion regulatory sandboxes, controlled spaces where startups can experiment under lighter supervision, building track records before facing the full weight of regulation.

Others propose modular or phased licensing, where obligations grow with the scale or risk profile of the project, letting small initiatives breathe and evolve.

There are even proposals for dynamic frameworks that adapt in near real-time, using Al-driven monitoring to calibrate compliance requirements as technology changes.

Whatever approach ultimately emerges, one thing is certain:

MiCA is not the end.

It is only the beginning of a much longer journey.

The first chapter in a story that will be written by technical standards bodies, interpreted by courts, refined by new legislation, and tested again and again by the unpredictable realities of the market.

Because technology always moves faster than law, this dialogue will never stop.

Each breakthrough, whether it's in decentralized identity, algorithmic credit, or quantum-proof cryptography, will raise fresh questions MiCA's drafters could barely imagine.

And so the story continues.

# Closing: A vision, not just rules

So let me end on this thought.

MiCA is truly historic.

It stands as Europe's decisive move not to simply follow the tides of technological disruption, but to actively shape them.

It is a statement that says:

we will define the rules of digital finance based on our values — transparency, consumer protection, fairness —rather than let them be dictated by the strongest market players or the fastest-moving jurisdictions.

It is, in many ways, Europe asserting that innovation does not have to come at the expense of responsibility.

That we can build frameworks where creativity and oversight are not enemies, but partners.

But ultimately, and I want to emphasize this, crypto regulation is not just about statutes, licensing applications, or compliance checklists.

It is about something much more profound.

It is about the kind of economic and social fabric we want to weave for the generations that come after us.

Do we want financial systems that are lightning-fast and borderless, yet so brittle that a single hack or liquidity crisis can wipe out billions overnight?

Do we want systems that are dazzlingly innovative, but exclude those without technical literacy or access to advanced tools?

Do we prize privacy so highly that we allow illicit actors to flourish, or do we sacrifice privacy entirely in the name of security, creating new avenues for surveillance?

Or, and this is the hopeful vision, can we come together, across disciplines and across borders, to design rules and norms that channel this extraordinary technological power toward outcomes that are more just, more resilient, and more human-centered?

Imagine, for a moment, decentralized systems that don't just maximize profits, but also embed principles of equity.

Imagine stablecoins and digital ledgers that make cross-border remittances seamless and cheap, lifting entire communities out of poverty.

Imagine DAOs that govern community projects transparently, where every stakeholder truly has a voice.

But also imagine how fragile it all is without guardrails.

We've seen what happens when unchecked speculation runs rampant: families devastated, trust eroded, and promising technologies tainted by scandal.

So this is why MiCA, and the broader conversation it represents, matters so deeply.

It is about setting the foundation stones now, with care, with debate, with inclusiveness, so that the edifice we build does not collapse under its own weight in a decade.

And make no mistake: this work does not end with MiCA, or any single piece of legislation.

The questions we face will evolve as quickly as the code itself does.

Each new breakthrough, whether in zero-knowledge proofs, decentralized identity, or programmable money, will reopen debates about oversight, rights, responsibilities.

That means it will be up to all of us, as scholars conducting rigorous research, as regulators crafting policies, as entrepreneurs pushing boundaries, and as citizens defending our collective interests, to keep asking these difficult questions.

To keep ensuring that technology serves humanity, and not the other way around.

Thank you all for your attention.

It's been a pleasure sharing these thoughts with you.