To whom it may concern,

**Re: Kaiko Response to ESMA Consultation Paper - Technical Standards specifying certain requirements of Markets in Crypto Assets Regulation (MiCA) - second consultation paper (the Consultation)**

This submission is made by Kaiko, a company headquartered in Paris and with presence in London, New York, Hong Kong SAR and Singapore.

Kaiko’s vision is to promote efficient market functioning by providing trusted information, from all markets, on all networks. Our mission is to bridge traditional and blockchain ecosystems by providing reliable and actionable financial data and services. We are grateful for the opportunity to reply to the Consultation and hope that we can contribute to the work ESMA is doing to ensure a successful implementation of MiCA.

**About Kaiko**

Kaiko is the leading source of cryptocurrency market data, providing businesses with industrial-grade and regulatory-compliant data. Kaiko empowers market participants with global connectivity to real-time and historical data feeds across the world's leading centralized and decentralized cryptocurrency exchanges. Kaiko’s proprietary products are built to empower financial institutions and cryptocurrency businesses with solutions ranging from portfolio valuation to strategy backtesting, performance reporting, charting, analysis, indices and benchmarks, pre-and post-trade.

**The Consultation Paper**

We have set out our responses to the two key areas where we have the most experience and expertise in the consultation paper in the following pages. Our overall message is that implementing robust risk management and compliance processes is vital, and quality, independent data is necessary to facilitate those processes. Across any institution operating in any ecosystem, bad data reduces transparency, thereby damaging market efficiency and facilitating bad decision making. Using high quality data helps to lift standards across the board.

We hope you find our response to the consultation paper helpful. We are very keen to contribute...
to the discussion and evolution of the European regulatory framework. We remain at your disposal should you wish to discuss any element of our response in more detail.

Yours faithfully

[Signature]

Ryan Keogh

Vice President, Legal & Compliance, Kaiko

ryan.keogh@kaiko.com
Offering pre- and post-trade data to the public

Q34: From your experience, are all crypto-assets trading platforms making their data available free of charge? If not, what specific barriers have you encountered to access the data (e.g. price, level of disaggregation).

One broad observation we would make is in respect of paragraph 92 of the Consultation, in which ESMA states that it “understands that generally the business of trading platforms does not rely on the selling of trading data and make their pre- and post-trade information available to the public free of charge through public interfaces”. Whilst this is largely true, it is increasingly our experience that trading venues are seeking to monetise trade and transaction data when dealing with data vendors and aggregators, in particular when that data is going to be used to create derived datasets (consensus pricing, cross-asset pricing, indices etc). Those derived datasets are fundamental to the successful operation of the digital assets market as they provide the required tools for institutions and individuals to achieve different market exposure and develop hedging strategies. Whilst we are not fundamentally opposed to trading venues monetising their data, we believe that consideration should be given to implement a FRAND (Fair, reasonable and nondiscriminatory) style requirement. This is particularly pertinent where exchanges own an index provider/benchmark administrator.

Record keeping obligations for CASPs

Q37: Do you agree with using the DTI for uniquely identifying the crypto-assets for which the order is placed or the transaction is executed? Do you agree with using DTI for reporting the quantity and price of transactions denominated in crypto-assets?

Yes Kaiko agrees that an identifier is necessary, and that DTI is one option.

Q38: Are there relevant technical attributes describing the characteristics of the cryptoasset or of the DLT on which this is traded, other than those retrievable from the DTIF register? Please detail which ones.

In terms of data model for crypto assets traded on exchanges, the following elements are highlighted based on Kaiko’s experience in collecting and standardizing crypto assets market data across more than 100 trading venues. Identifying the asset is a prerequisite but is not sufficient to properly carry out robust supervision or monitoring. Additional dimensions are needed to contextualize transactions.

Crypto assets may be traded against other crypto assets on specific trading venues. Therefore, an identification system must capture all different dimensions: assets but also pairs, and instruments, i.e. asset pairs traded on an exchange.
- **Assets** refers to crypto assets such as Bitcoin, Ether, USDT, etc. Assets must be identified by a unique identifier as evidenced by ESMA.

- **Pairs** refers to the combination of two assets such as (using ETH as the example asset): ETH-USD, ETH-USDC; ETH-BTC; or ETH-DAI etc.

It is also necessary therefore to identify Pairs in which a crypto asset is swapped. Pairs also utilize additional information that is necessary to proceed with valuation, in so much as a pair will normalize base and quote assets. Pairs tell which asset is the base asset and which asset is the quote asset. In this respect, crypto assets transactions are very similar to FX transactions.

- **Exchanges** or market places must also be identified by a unique identifier. As there is no market identifier similar to the ISO 10383 MIC system in financial markets, Kaiko has built a bespoke market identifier system for exchanges, whether they are CEX or DEX. This implies a list where identifiers are uniquely attributed to exchanges. Such a list should be centrally maintained or mandated, in order to avoid duplicates or low quality identifiers, i.e. identifiers of two exchanges which would be too close to each other and increase risks of permutation for instance. Additional relevant information can be useful, such as the type of Exchange, i.e. an attribute describing whether the trading venue operates certain markets such as spot, futures, options, etc.

- **Instrument** may also refer to asset pairs traded on an exchange (for example, ETH-USDC). Such a layered identification system is the condition to run any data analysis, including for regulatory supervision purposes.

The DTI identifier however does not encompass all of these elements and therefore may not provide sufficient context. Kaiko utilizes the Financial Instrument Global Identifier (FIGI) as maintained by the Object Management Group. FIGI identifies assets, pairs and instruments, which is a prerequisite for any data standardization in financial crypto assets markets. Kaiko has contributed to the FIGI system by being a Contributing Provider of FIGI identifiers.

FIGI also maps to ISIN at the asset level, whereas very few ISINs link to the DTI. We believe that adding FIGI as a mandatory field alongside ISIN and DTI will provide supervisors and market participants with the fullest possible picture of trading activity.