

## BUY-SIDE USE-CASES FOR A REAL-TIME CONSOLIDATED TAPE<sup>1</sup>

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A real-time consolidated tape, provided it is made available at a reasonable cost, will bring many benefits to European capital markets. A complete and consistent view of market-wide prices and trading volumes is necessary for any market, though this is especially true for the EU where trading is fragmented across a large number of trading venues. A real-time consolidated tape should cover equities and bonds, delivering data in 'as close to real-time as technically possible' after receipt of the data from the different trade venues. For equities and ETFs, this will mean delivery in the second range (1000 millisecond). For fixed income the speed can be slower (in minutes) given the specific dynamics of price-driven markets which also need to take into account the applicable waivers and deferrals."

Global investment flows into Europe would increase as a result of a real-time tape, as would European retail investor confidence with the improved availability of price and liquidity data across EU venues. It would also improve small and mid-cap firms' access to capital market funding by providing better visibility into their liquidity profiles. Asset managers (buy-side firms) would stand to benefit from the real-time tape with a number of key asset management activities, as described below, relying on comprehensive and real-time trade data.

### Level Playing Field

A real-time consolidated tape is also a precondition for truly integrated markets where investors, irrespective of size or location, are able to access the same comprehensive dataset to inform trading and execution decisions. Currently, comprehensive and accurate market data is only attainable for the largest asset managers who replicate what the CT would deliver through in-house consolidation. This is out of reach therefore for the large majority of institutional investors and, all retail investors, creating an unlevel playing field among market participants.

From a market-wide perspective, an affordable CT should deliver greater transparency and actionable data, to all types of investors, while respecting deferral arrangements for applicable assets. The CT should be designed more with that end objective in mind, and less with a view to accommodating existing business models of stock exchanges. Today, the revenue generated by exchanges is based on data delivered at a very low latency. The consolidated tape would not disrupt these revenue streams, as the proposed speed on an equity CT is at a much slower seconds speed as compared to the millisecond

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<sup>1</sup> These use-cases only reflect part of EFAMA's position on Consolidated Tape – They should not be considered in isolation without taking into account the costs of setting up a real-time consolidated tape, and the pricing that the end-users (buy-side firms) will be subject to.

speed prevalent on exchanges' feeds (see Annex II) Looking ahead to coming waves of digital transformation for the asset management industry (DLT as an underlying technology and disintermediation being the front-runners), a real-time CT for Europe is a bare minimum to access the next phase of development and innovation.

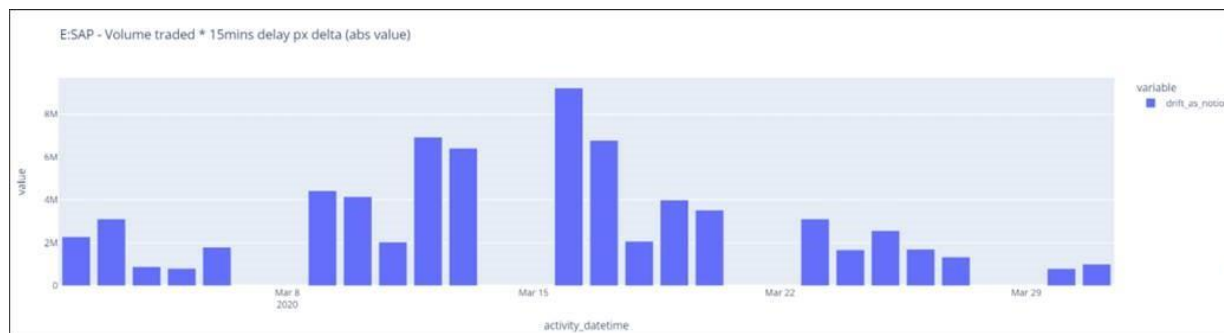
The use-cases associated with a real-time CT today are broad, though in the examples below we focus on the buy-side (asset management) use-cases. The use-cases rely on a real-time consolidated tape (delivered in seconds speed), supporting different asset classes including: equities, equity-like (Exchange Trade Products) and fixed-income. The data on the CT should also cover both pre and post-trade data.

## Latency

The speed of delivery is critical. The exclusive use of a consolidated tape providing 15-minute delayed data, as suggested by some stakeholders, would cause an estimated total annual value distortion of EUR 8 billion on EU equities held by Euro-area funds based on 2020 ECB data. <sup>2</sup> This EUR 8 billion figure represents the direct cost to end investors of asset managers making trading decisions based on 15-minute delayed data. (See Annex I)

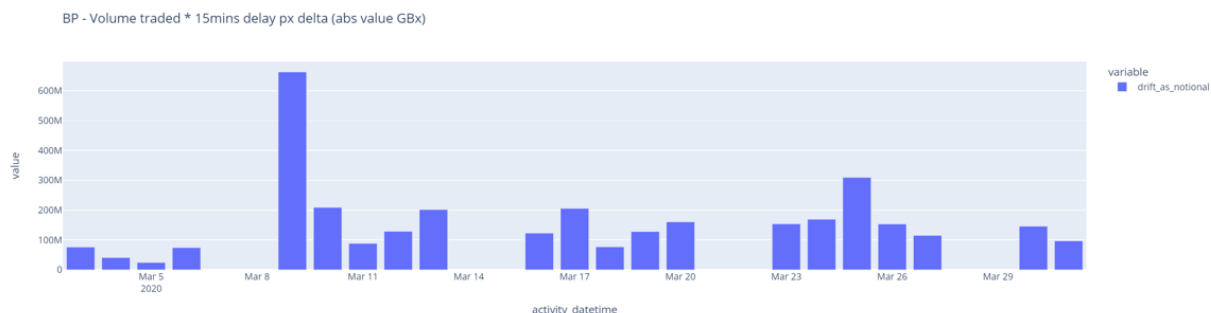
A similar analysis, tying trading decisions to 15-minute old data, can be performed in periods of extreme volatility like that experienced during March-April 2020. Using the same two stocks used for the annual analysis, 15-minute data can cause market impact (increase or decrease in price) as per the chart below. The difference in reported price can account for losses of up to EUR 8 million on a single stock, see SAP table below. Similarly for BP, a 15 minute delay could account for a difference in market value upwards of GBP 6 million.

### SAP - March 2020



<sup>2</sup> This is based on ECB data on EU Equities held by Euro-area funds, and the price movements of two shares BP and SAP over two days, showing movements of 0.3% and 0.4% respectively over a 15 minute period (selected as representative equities) See annex I

## BP – March 2020<sup>3</sup>



## BUY-SIDE USE-CASES

### Best execution

Institutional clients require real-time pricing and volume data to make informed decisions ensuring best execution under MiFID2.

With regard to **post-trade** data and analysis, a 15-minute delayed data feed would not provide the rich and deep set of data necessary to benchmark and scrutinise trading activity. 15-minute delayed data would lack real-time price and venue data which are critical in informing trading decisions as financial markets react to events during the trading day such as earnings results, an adverse event or new issues. Portfolio managers would not be able to make their trading decisions based on the real-time data that reflects the latest actual transactions that have occurred across trading venues. 15-minute data is meaningless in this context, as pricing and trading volumes can fluctuate a great deal in that time span. Reacting to real-time comprehensive data by asset managers will lead to better client outcomes for future trading; Decisions made on 15 minute delayed tape could result in a significant opportunity cost for the end investor. For example, in a fast, declining market, data that is 15 minutes old could be highly misleading versus the true price of the market in real time. (See BP/SAP examples above and ANNEX I)

**Pre-trade** data is also insignificant if delivered with a 15-minute delay. It would mean that a whole series of interdependent decisions are made on stale data: from the initial decision making when an order first arrives at the trading desk, to intra-day adjustments and post trade analysis.

When a dealer starts an order they will look at historic volume to evaluate how much impact the trade will likely have in the market (if real time data is not supplied then the volume would be distorted as it would be missing all the trades that had occurred in the last 15 minutes). By only looking at a single venue or listing, or simply having old data, this will skew the impact and limit the strategies the dealer may implement. It will also influence whether a trader decides to patiently trade in a lit market versus trading in the dark or even more immediately by executing a block trade with a broker. The less certainty a trader has about the market conditions, the more they are likely to trade in the dark or OTC.

A real-time CT will then help to paint a picture of the book depth. Does the market depth indicate if the market is positioned as a net buyer or seller? Are there large orders on the buy side of the spread just below the bid which would indicate there is momentum to move a price up. This may then result in working a buy order more aggressively and a sell order more passively.

If during the course of the order a block of natural liquidity becomes available a CT will help with the negotiation. This block of liquidity would be entirely missed if only a 15-minute delayed data were available. Conversely, a real-time (seconds) tape pointing to the depth of the order book will help to

<sup>3</sup> The price is reported in pence not GBP.

determine the best price available. If an asset manager only has 15 minute old data then they will be disadvantaged during their negotiations about the block trade versus a counterparty that may have more accurate data. Poor pricing will be passed to the end investor.

A CT will also lead to a tighter quote so when we are crossing the spread to pay for liquidity we will not have to sacrifice as much performance as if we cross a wider spread looking at just a single venue.

A tighter spread will be of particular benefit to retail investors who will be able to interact with more liquidity and trade at better prices than looking at a single venue.

In all of these instances a 15 minute delay would offer no benefit as the picture for decision making would not be complete.

As an example, to demonstrate how a CT can enable better execution, client X is executing \$5,000,000 in SPY5 GY (SPDR S&P 500 UCITS ETF). The client enters the trade on Tradeweb as a 2-way price quote and receives quotes back from the 5 counterparties they have chosen. The prices received from the liquidity providers are measured against the best bid/offer on Xetra as it is the primary trading venue for SPY5 GY. This does not reflect the full depth of the order book, however, as SPY5 is listed on multiple Exchange venues and also trades actively on MTFs and also through Approved Publication Arrangements ("APAs"). The client could potentially have received a better price trading not on Xetra but an alternative trading venue. Furthermore, the volume shown on Xetra is unlikely to be representative of the entire volume traded across the market. A real-time consolidated tape would solve many of these issues. An end-of-day consolidated tape would not solve for intraday trading of equities, fixed income or Exchange Traded Products ("ETPs").

## **Liquidity Risk Management**

Liquidity risk management is an important function performed by the portfolio manager. Its importance is heightened in times of market volatility, with pricing needing to be monitored across portfolios, and funds themselves being subject to redemptions and drawdowns. For instance during the market upheaval caused by the Covid crisis, certain asset classes (government and corporate bonds) showed a breakdown in pricing. A real-time consolidated tape would have reduced some of this liquidity freeze by providing real-time data on existing liquidity, and it would have supported regulators in surveilling stressed capital markets.

In general terms, for a portfolio manager, the ability to screen securities for an accurate, consolidated, single-counted liquidity profile is crucial in managing their portfolio and estimating likely transaction costs. At the moment, it is very difficult and expensive to get a comprehensive view of trading activity for specific assets across trading venues in the EU. This leads to either a conservatism in the allocation of capital, particularly for less liquid stocks or an over estimation of how much investor money should be deployed into a single firm or sector. Establishing a real-time consolidated tape provides the managers with clearer and enhanced information necessary to have a better picture of the overall liquidity situation of an asset across the market. This improves the managers' ability to manage liquidity risk and to make better buy/sell reactions throughout the day. The closer to real-time that the consolidated tape provides the information, the more accurate the liquidity profile and the better informed the manager's decisions.

For example, a well-functioning investment risk function of an asset management firm will be measuring the ability of each of its investment strategies to invest and return assets to clients in an orderly manner. They do this through measuring the agreed liquidity guidelines each fund or strategy is measured against and makes sure it stays within those parameters. Investment Risk teams will also measure group wide holdings in a stock against a range of liquidity metrics. The importance of the accuracy of the data being used as inputs to these calculations is critical. We would argue this is the very basis of market integrity. Some of these calculations will be based on the liquidity of the instruments it invests in. The less accurate the figures, the greater the structural risk on markets and potentially the higher risk to the end investor.

## Market Outages

When a primary market is down due to a technical issue, investors are typically unable to continue trading in instruments whose primary listing is on the effected venue. Firstly, there is no single flag that indicates to the market, in real time what the issue is. Exchanges only have the ability to communicate with their direct members, which can number a few hundred banks or brokers at most. The rest of the market which includes thousands of asset managers and millions of end investors must wait for information to filter through the market and then slowly react.

A real time tape, would provide instant communication to the entire market that a problem existed. It would allow continuous updates of pre and post trade real time pricing across alternative trading venue to be visible. Whilst it would be preferable for both pre and post trade data to be available, the existence of real time post trade data alone would give the market the confidence to establish prices to continue to trade on alternative venues. A real-time consolidated tape would therefore vastly improve resiliency in European capital markets and play a much more useful role than a 15 minute tape which, in the case of market outages, would not be enough to help restart the market.

## Retail Investors

A real-time consolidated tape democratizes access to comprehensive and standardized market data, not only in cash products but also in ETFs as ETFs do not have any clearly established domestic market. Currently this is only available to a sub-group of highly-resourced institutional investors who can consolidate data in-house. A real-time consolidated tape would go a long way in leveling the playing field with retail investors in Europe, increasing retail investor confidence and participation in capital markets.

At the same time, buy-side firms whether managing collective funds or acting on a mandate, are ultimately managing assets of retail savers and pensioners. This makes the preceding use-cases not just relevant for asset managers, but also for their end client, the retail investor.

## Global competitiveness of EU securities

European UCITS products are very popular in other regions (predominantly in Asia and Latin America), due in part to the withholding tax benefits compared to US ETFs. Yet EU issuers of ETFs are unable to capitalize on this interest due to a lack of a real-time consolidated tape. Asian and Latin American investors are consistently overlooking EU ETFs due to this inability to see real-time volumes efficiently. A real-time CT would put the EU on a par with the US which offers real time data. There is at stake around 10-20% of AUM (Assets Under Management) in US ETFs that are held today by non US clients (APAC, Latin America and some EMEA). This represents around 1 trillion USD of AUM , a good portion of which could be migrated to EU ETFs .

## Compliance

Compliance functions within asset management firms monitor the activities of portfolio and trade managers to ensure no misbehaviour is occurring: i.e. insider trading, market manipulation and trade and transaction reporting failures.

Investors need confidence in the markets that they are investing in. A real-time CT would enhance the ability of compliance managers across all market participants to monitor and react to any detected instances of market abuse. Market abuse cases historically take a lot of time to solve and can utilise many resources at investment firms and regulators. With a more comprehensive real time data set and the increasing use of artificial intelligence tools in surveillance roles, anomalies can be picked up by compliance and surveillance departments and escalated or discounted immediately. Market abuse such as spoofing and layering can already be identified real time. The longer it is allowed to go on for, the more it impacts the market. If someone could make a phone call or send an alert to a Trading Venue in real time, a call could be made to the offender, whose firm may be deliberately or accidentally executing such strategies. Either way, the activity could be stopped immediately. In liquid stocks, a lot of damage could

be done in fifteen minutes which worsens the outcome for end investors. Equally, with good real time data visible to participants and regulators alike, inside trading could also be picked up in real time.

## ANNEX I

**Annual cumulated price distortion for EU equity traded by Euro Area funds by price movement and turnover rate**  
in EUR millions

		Average portfolio turnover rate							
		25%	50%	75%	100%	125%	150%	175%	200%
Average price movement in a 15-minute trading slot	0,00%	0	0	0	0	0	0	0	0
	0,25%	1.303	2.606	3.908	5.211	6.514	7.817	9.120	10.422
	0,50%	2.606	5.211	7.817	10.422	13.028	15.634	18.239	20.845
	0,75%	3.908	7.817	11.725	15.634	19.542	23.451	27.359	31.267
	1,00%	5.211	10.422	15.634	20.845	26.056	31.267	36.479	41.690
	1,25%	6.514	13.028	19.542	26.056	32.570	39.084	45.598	52.112
	1,50%	7.817	15.634	23.451	31.267	39.084	46.901	54.718	62.535
	1,75%	9.120	18.239	27.359	36.479	45.598	54.718	63.838	72.957
	2,00%	10.422	20.845	31.267	41.690	52.112	62.535	72.957	83.380

### Assumptions

Average portfolio turnover rate 75%

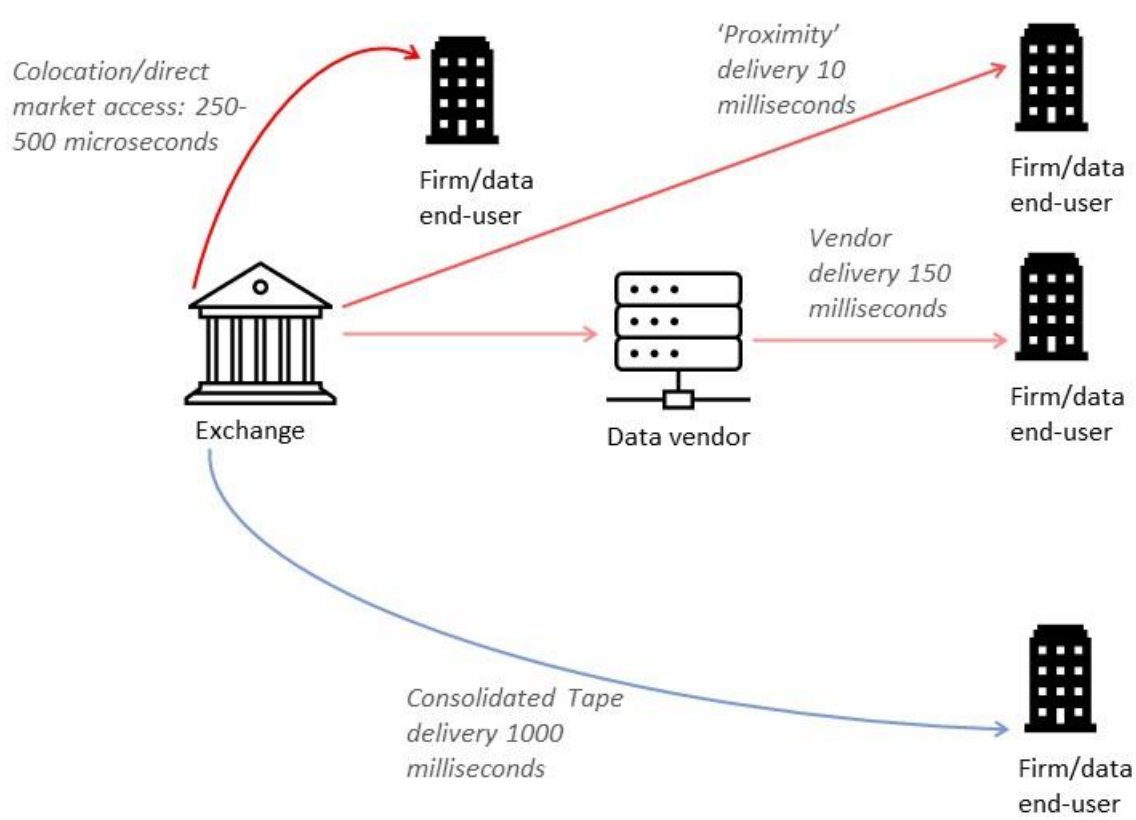
Holdings of EU equity by Euro Area Investment Funds 2.084.494  
(as of 30/6/21 in EUR millions)

Source: <https://sdw.ecb.europa.eu/browseTable.d...>

Average price movement in a 15-minute trading slot 0,5%

ANNEX II

Data Feed Latencies



Source: EFAMA

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## About EFAMA

EFAMA is the voice of the European investment management industry, which manages over EUR 27 trillion of assets on behalf of its clients in Europe and around the world. We advocate for a regulatory environment that supports our industry's crucial role in steering capital towards investments for a sustainable future and providing long-term value for investors.

Besides fostering a Capital Markets Union, consumer empowerment and sustainable finance in Europe, we also support open and well-functioning global capital markets and engage with international standard setters and relevant third-country authorities.

EFAMA is a primary source of industry statistical data and issues regular publications, including Market Insights and the authoritative EFAMA Fact Book.

More information is available at [www.efama.org](http://www.efama.org).

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