

FIA EPTA's Response to ESMA's Consultation Paper on Market Outages (ESMA70-156-6040)

Introduction and principles informing FIA EPTA's response

The European Principal Traders Association (FIA EPTA) represents Europe's leading Principal Trading Firms. Our members are independent market makers and providers of liquidity and risk-transfer for markets and end-investors across Europe. FIA EPTA works constructively with policy-makers, regulators and other market stakeholders to ensure efficient, resilient and trusted financial markets in Europe.

FIA EPTA members welcome the opportunity to respond to ESMA's consultation on market outages and are supportive of the work being done on this topic, particularly efforts to require trading venues to publish clear comprehensive outages plans on an ex-ante basis. Market resilience is at the core of efficient and competitive financial markets and it is imperative that trading venues clearly outline a well-planned approach to communication and management in the event of a market outage to provide certainty to market participants. The relevance for addressing these issues was clearly illustrated by outages experienced by two major exchange groups in November 2022 during the response period for this Consultation Paper. These outages again highlighted the importance of the closing auction and proper trading venue communication.¹

FIA EPTA members believe that trading venues should be required to observe the following issues when developing and implementing outages plans:

- **Clear, meaningful and frequent communication:** It is absolutely crucial that trading venues adopt a clear programme of regular and informative market communications with periodic status updates published at least every 15 – 20 minutes, with a notice of disruption to be provided as soon as possible upon occurrence of an outage. In this regard, FIA EPTA members propose that a central venue status communications

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- During the first of these outages, while appropriate warning was given regarding the halting of the intraday sessions of three of these market segments (including the cancellation of some trades), the exchange gave sudden and belated warning regarding the halting of a *fourth* market. This then was followed by last minute notices (giving market members only a 7-to-10-minute warning) regarding the cancellation of three of the closing auctions. Finally, only after the closing auctions were due to have concluded, did the exchange announce that the closing price for index calculations across all four of the affected markets would be the last traded price. Cancelling the closing auction in this manner had knock on-effects on exchange-traded product markets, post-trade processes such as clearing report creations and derivatives settlement. This incident further reinforced the need for exchanges to have a clear communications framework for outages as well as an established procedure for a back-up closing auction that is enacted in a timely manner.
- In addition, in there was a second outage at another major exchange, in the same month, which caused a halt to continuous trading of its commodities derivatives products and highlighted the importance of timely exchange communication. This venue experienced a technical incident and a failover had occurred on their Commodities segment at 10:46 CET. However, a market-wide notification of the incident on the market status webpage, and that fact that a failover had already been performed, wasn't issued until approximately 30 minutes later at 11:14 CET. This notification included detail that trading of commodity products was halted, with the venue working to resolve the situation in order to resume trading as soon as possible. Although, in this case, there was no direct negative impact to our EPTA members, we believe this notification delay would have caused uncertainty and issues for the wider trading community and reinforces the need for consistent, continuous market status alerts and timely communication.

platform be developed as an industry-wide initiative secure venue-status communications platform could provide a centralised tool to more identify outages quickly and to maintain continuity of trading.

- **Conclusive statement on order status prior to re-opening:** Trading venue outage playbooks should include a clear statement on how orders will be managed prior to market resumption. FIA EPTA members have a strong preference for a full order book purge, emphasising that a venue should not be allowed to re-open whilst order status is unknown. FIA EPTA members believe that it is in the best interests of the market and of orderly trading for the appropriate amount of time to be taken to properly resolve an incident before trading is recommenced, instead of forcing trading venues to adhere to an arbitrary restart deadline.
- **Absolute prioritisation of a trading venue's ability to operate the closing auction and print a closing price:** The reference price set in the closing auction is crucial to the proper functioning of financial markets. Listing markets should prioritise successful performance of the closing auction over other competing objectives such as resumption of the continuous trading session. Given that there is no viable alternative to the closing auction at present, trading venues should determine a consistent pre-determined procedure for calculation of an alternative closing price. Additionally, FIA EPTA members see this as yet one more reason why an effective Consolidated Tape is urgently needed in European markets, as the CT would enhance market resilience by ensuring the continued availability of a reference price.
- **A consistent pre-determined methodology for an alternative closing price:** Specifically regarding the back-up methodologies to be adopted by listing markets to arrive at an alternative closing price, FIA EPTA members would urge that these methodologies should be deterministic and be disclosed ex-ante in the trading venue's outage playbook. Use of such methodologies should be clearly communicated well in advance of the scheduled closing auction. FIA EPTA members have a preference for a cascading model of alternative price determination, by reference to market conditions and accurate price signals. Further, listing markets should communicate conclusively and well in advance of the scheduled closing auction that such alternative methodology will be used in substitution for the closing auction.
- **Efficient and robust trading venue governance structures addressing the management of outages:** These governance structures should include development and conduct of detailed scenario planning and stress testing of potential outages and the trading venue's response thereto, so as to ensure resilient outcomes that minimise the disruption to the price formation process in case of an outage. As best practice and to ensure a high availability, trading venue infrastructure should have effective and immediate standby capabilities. Where an exchange group operates multiple national markets in parallel, it should be a key priority to prevent multi-market outages from occurring. This could be achieved by using a multi-node system architecture so that the trading platform can continue to operate in the event that components of the infrastructure fail or falter.
- **Post-mortems should be made public to all market participants:** In case a trading venue outage has occurred, it is critical that a meaningful post-mortem be made public for review by all market participants so as to enable firms to properly understand the trading venue's analysis regarding the root causes and remedial actions taken. This will also ensure that the firm can provide appropriate feedback to the trading venue in order to improve outcomes going forward.

FIA EPTA members appreciate ESMA's consideration of our comments herein and welcome the opportunity to discuss further and provide additional input as required.

Q1: Do you agree with the main communication principles identified above?

FIA EPTA members generally agree with ESMA's proposed principles. We make a number of further suggestions to ESMA below.

By way of introductory comment, we would emphasise that the effectiveness of these principles will greatly depend on how trading venues will implement these principles in practice. In this regard, it will be critical for NCAs to set robust and ambitious supervisory expectations regarding the concrete manner by which trading venues operationalise these principles. Ill-managed trading venue outages can spell calamity for the well-functioning of European financial markets. They can even have, in extreme cases, potentially material financial stability implications. It will be important for NCAs, therefore, to hold trading venues to a high standard in this regard. Further, for these same reasons, we consider this to be an area where pro-active supervisory convergence monitoring by ESMA will also be critical to ensure effective supervisory practices across the Union.

Further, we note that this newly proposed ESMA guidance flows from regulatory obligations to which trading venues are already subject, in particular Article 48(1) MiFID II as further specified by RTS 7, and (in future) DORA. In this sense, ESMA's final guidance will only specify in more detail the supervisory expectations for venues in regard to the long-established requirement for them to have effective business continuity arrangements to ensure continuity of their services if there is a failure of their trading systems.²

Finally, specifically regarding ESMA's proposed principles, FIA EPTA members would call ESMA's attention to several points, where we consider the guidance would need to be further improved:

- Regarding updates to be provided by a venue, FIA EPTA members consider that markets should provide these with a frequency of at least every 15 to 20 minutes. We would emphasise that the updates either need to provide meaningful new information or should limit themselves to confirming the previous status.
- In addition, as set out in the proposed principles, FIA EPTA members consider that it is essential that trading venues provide market participants with a notice of disruption as soon as possible. Our members have seen instances of notification after the fact. We have also seen instances where, even though the market status is maintained on a trading venue's communications notice board, that status remains 'green' throughout the period of the outage, thus rendering it irrelevant at best (and misinforming participants that the market is operational when it is not, at worst). To note further that this may cause participants to question their own systems and think the issue is localised to themselves.
- Clear communication is essential. FIA EPTA members would like to highlight that currently communications can be scant providing little to no detail as to what the incident is or what is happening. However, conversely, other venues provide instrument by instrument notifications when a single incident is affecting multiple instruments which distracts from the issue at hand and causes undue confusion.
- FIA EPTA members would recommend that the main body of the incident alert notification ("headline story") includes a summary of the outage, current status, the segment/market impacted, detail on what the venue is doing to resolve the issue, next steps and confirmation that all other markets/segments are

² In addition to being caused by technical failures of exchange systems, outages can also potentially result from cyberattacks, including by state actors. Trading venues are required to have appropriate cybersecurity measures in place. However, should these fail, then the effectiveness of outage protocols and back-up measures discussed here will take on additional urgency. That these concerns are widely felt, is illustrated by recent research by PGIM, who found that a cyberattack on a major financial platform is a tail event on the minds of institutional investors around the globe, coming in as the second leading tail risk in a recent survey undertaken by PGIM. See: <https://www.pgim.com/global-tail-risks/outthink-future>

unaffected. Then there should be the ability to click into the notification/link to pull up the more micro details of the exact instruments impacted and other relevant information.

- With regard to the notice of disruption being published on the trading venue's public website and include a dedicated contact line or person at the affected trading venue: FIA EPTA members would recommend that the main market status page is used to alert market participants of disruptions. In certain cases, venues have a main 'market status' page/news board but also an 'emergency' news board, the existence of a separate news board means that differing messages are available on both. For ease of use, it would be more efficient to post information about market disruptions on the core 'market status' page/news board.
- FIA EPTA members would also like to highlight that the person/people operating the dedicated contact line should not also be those individuals trying to resolve the issue: It detracts them from the main task at hand, delays issue resolution and, also, they do not have the time to provide the appropriate level of detail to participants. A technical account manager or someone akin to this role would be more appropriate and we have seen instances where this division of roles has worked very well during recent events.
- As we set out in our response to Question 14, FIA EPTA members consider that additional to the direct communication protocols implemented by a trading venue, there exists a need for the development of a central venue-status communications platform. Such a wider market status communication tool will enable market participants to view in one place the published status of relevant trading venues, and, crucially, to communicate anonymously about the observed health of the venues. While the development of such a platform should be market participant-led, public authorities should set out their expectations in this regard. We would be open to discussing further should ESMA determine this concept has utility.
- FIA EPTA members strongly consider that post-mortems following an outage should be made public so as to enable market participants to reflect on the causes of the outage. Therefore, reviewing the post-mortems should not remain the preserve of NCAs and we would urge ESMA to change its draft guidance in paragraph 43 to this effect.

Q2: To promote harmonisation, should the guidance include a template on what trading venues' communication notices should include?

FIA EPTA members do not consider harmonisation of the templates to be critical for achieving ESMA's objectives with its proposed guidance in this area. We consider that the key aim for trading venues should be to have communication processes and procedures that ensure that all market stakeholders are informed synchronically and in a proactive, timely and unambiguous manner regarding the status of trading venue systems. We consider further that the material delivery of these objectives is more important than for the various templates to be identical across different trading venues.

Q3: Do you agree that trading venues should have a maximum of one-hour to provide clarity on the status of the orders during an outage? If not, what would be an appropriate timeframe in your view and why?

FIA EPTA members consider that a one-hour clarification period regarding order status would be significantly too long. Trading venues should strive to provide information to market stakeholders as soon as possible following an outage. At the very least, trading venues should be expected to be able to communicate regarding the outlook from an outage within a 10 to 15-minute period after the outage started.

FIA EPTA members would emphasise that a venue should not be allowed to reopen while the status of orders is still unknown. To this end venues should provide full detail on order status ahead of a reopening (i.e., whether the order is still live, or whether it was filled, or killed).

Further, if after one hour the status of orders is still unknown, follow-on action will be required, which may include purging the orderbook and cancelling all outstanding orders.

In order to provide certainty to market stakeholders, FIA EPTA members would emphasise that trading venues should continue to provide status updates, on an ongoing periodic and sufficiently frequent basis, for as long as the outage persists.

The minimum frequency for such status updates should be set and made public beforehand in the trading venue's communication protocol. These updates should include confirmation that there is no new information available and that the previously communicated status is still valid.

Q4: Do you think the possibility of requiring trading venues to offer an order book purge should be considered in the guidance? If yes, should ESMA provide further guidance on when the integrity of the orders has been largely compromised?

FIA EPTA members agree that implementing a mandatory order book purge is beneficial to provide certainty to members that no compromised or stale orders remain in the orderbook. Repopulating the orderbook from scratch at the re-open after the outage clearly is the cleanest and most responsible approach, ensuring that firms are not exposed to inadvertent risk which may subsequently complicate the restart of the trading session following the outage.

We would note, by way of additional comment, that a full order book purge may pose some challenges for retail investors where they had submitted any time limited or conditional order types. To address this issue, it will be important that retail intermediaries inform their retail clients in a timely manner regarding the occurrence of an order book purge in the context of a trading venue outage.

Q5: What is your view with regards to the conditions under which a trading venue should reopen trading?

FIA EPTA members would emphasise that the fundamental principle guiding trading venues which are affected by an outage should be that a trading venue should not be allowed to reopen while the status of orders is still unknown.

That said, we support ESMA's suggestion that venues include a pre-opening phase prior to the resumption of trading and to have an auction amongst participants before resuming continuous trading.

While FIA EPTA recognises the spirit of the aim to resume trading as rapidly as possible, the reality of IT incidents is that they take time to assess and resolve. The true nature or cause of an incident is often not apparent from its symptoms. In order to properly resolve any incident, a careful analysis must be taken, followed by an orderly fix. Only then can trading be restarted, which must also occur simultaneously with the restart of members' trading systems as well.

Coordinating this properly simply takes time. FIA EPTA believes that it is in the best interests of the market and of orderly trading for the appropriate amount of time to be taken to properly resolve an incident and to restart afterward, instead of forcing trading venues to adhere to an arbitrary restart deadline. Forcing haste in such matters will often lead to further issues later on.

In this regard, FIA EPTA members note that mismanagement of market re-opening was one of the key challenges faced by market participants in the course of recent outages. We would like to stress the need that the timing of market re-opening should be effectively evaluated and risk-assessed in advance. In addition, as

indicated earlier in this submission, effective and efficient communication during outages, including in respect of market re-opening is absolutely critical.

Trading venues should ensure that all problems have been identified and resolved prior to re-opening. In advance of re-opening, trading venues should communicate clearly to the market at least 30 minutes prior and re-open on a “round” time increment, as well as place market in pre-open state to ensure participants can cancel/amend orders as required. Prior to re-opening, trading venues should also provide a window for market participants to flag whenever there are any outstanding issues that may be further exacerbated by the market re-opening.

There might be various scenarios for the outage to occur, and each of those should be set out in the playbooks developed by the trading venues. Such playbooks should also set out scenarios under which trading venues will or will not re-open and set out clear procedures for re-opening. To this end, and mindful of further possible scenarios for market outages, we would like to highlight non-exhaustively the following:

1. *Primary market subject to an outage and all trading ceased, but market can resume sometime during the same day:* As indicated above, it is critically important from the market participants’ perspective to avoid rushed re-openings. FIA EPTA members can point to examples of such rushed openings that had resulted in duplicate trades and other unresolved issues from the initial outage, hence only increasing the risks.
2. *Primary market subject to an outage but trading continues on alternative trading venues:* As indicated above, the same principles of careful evaluation, risk assessment and effective and clear communication should apply.
3. *Primary market subject to an outage, only able to run the closing auction:* (Please see our comments on the closing auction in Q6 below.)
4. *Primary market subject to an outage, remains closed for the duration of the day and can only re-open the following day:* While FIA EPTA members are of the view that rushed market re-openings following an outage should be avoided, it is also necessary to avoid excessively delayed market re-openings, such as the following day. We note that in the case of slow re-openings the lack of proper communication was even more problematic, as market participants continued to carry uncertain market and operational risk and investors carried uncertain financial risks, linked with the fact that the closing price could not be established effectively. That said, we acknowledge that there might be a situation in which a market cannot re-open the same day. In that case it is critically important for a trading venue to have a pre-defined procedure for determining the market closing price (and again, this procedure may differ depending on if the market was closed only for a part of the day, or if the trading venue did not open at all).

Q6: What is your view in relation to the closing auction being affected and the procedures that trading venues should have in place to minimize disruption?

FIA EPTA members observe that at this time in the current European market structure there is no viable alternative for the closing auction of the original listing market which is the most relevant in terms of liquidity.

Given that this is the case and given the overwhelming importance of the reference price set in the closing auction, FIA EPTA members consider that listing markets should be held to a very high standard to ensure the integrity of the closing auction process.

As a general principle, FIA EPTA members are of the view that in order to be able to effectively manage any market outages that may occur in the future, trading venues must have efficient and robust governance

structures in place. Such governance structures must include development and conduct of detailed scenario planning and stress testing of potential outages and the trading venue's response thereto so as to ensure resilient outcomes that minimise the disruption to the price formation process in case of an outage.

Such scenario planning and stress testing must also include, in particular, an in-depth assessment of the various scenarios under which the ability for a listing market to run the closing auction might be threatened, as well as the actions and measures by the listing market so as to ensure that this risk is mitigated, including that robust alternative, deterministic measures are in place for setting a closing price.

We further consider as follows:

- While it is important for a listing market to have the ability to postpone a closing auction (where it cannot be run at the scheduled time), that the scope for such delays be limited. Given the aforementioned importance of the closing price certainty about the latest time that it can be established is important.
- While venues' trading and connectivity systems should as much as possible be designed with redundancy in mind, this is the more critical for ensuring the continuity of the auction process.
- Whenever an outage occurs, the ability for the listing market to successfully perform the closing auction should have absolute priority over other competing considerations regarding the restart of the continuous trading session.
- In extremis this could mean the listing market concentrates all its efforts on its ability to perform the closing auction and forego any further efforts to reopen beforehand.
- Further, trading venues, as best practice to ensure high availability, should have hot-hot, or at a minimum warm, standby capabilities. This could be achieved using multi-node architecture so that the platform can continue to operate in the event that components of the infrastructure fail or falter.³
- Also, venues that span multiple national markets, should deploy load balancing capabilities to ensure the flow is spread across separate nodes and avoid concentration of markets and single point of failures. Such a set-up would reduce the risk of failure of all markets going down in tandem and would inherently provide additional standby nodes providing 'hot-hot' or 'hot-warm' standby failover capabilities. These separate nodes can then be utilised in a failover capacity so that the market of original failure can be restored in a short time frame with minimal impact to the market.

Q7: Do you agree not to mandate trading venues to have an alternative trading venue capable of running the closing auction for them? If not, please explain.

³ These terms should be understood as follows:

- **Hot-Hot:** Software components are installed and available on both primary and secondary nodes. The software components on the secondary system are up but will not process data or requests. Data is mirrored in near real time and both systems will have identical data. Data replication is typically done through the software's capabilities. This generally provides a recovery time of a few seconds.
- **Hot-Warm:** The software component is installed and available on the secondary node. The secondary node is up and running. In the case of a failure on the primary node, these software components are started on the secondary node. This process is usually automated using a cluster manager. Data is regularly mirrored to secondary system using disk based replication or shared disk. This generally provides a recovery time of a few minutes.

At this time, FIA EPTA would agree with ESMA's conclusions that there are significant barriers to holding an alternative to the existing closing auction of the listing market. In addition to the points already highlighted in ESMA's consultation paper and in its Final Report on Algorithmic Trading⁴, FIA EPTA would further add the challenges posed by the highly fragmented post-trade landscape in Europe (18 CCPs and 22 CSDs), which would likely entail multiple alternative auction providers or the broader adoption of full interoperability in post-trade services to be viable. Such costs would likely be significant for all industry participants and would most likely outweigh the benefits given the relatively rare occurrence of an outage over a primary market auction.

FIA EPTA can also foresee other incremental costs for the industry, such as incremental market data costs from the alternative venue(s) for instruments that might otherwise not trade there on a regular basis and would potentially fall outside of existing market data agreements. There is also the risk that such a failsafe mechanism may fall into the existing chicken-and-egg scenario that occurs during continuous trading whereby firms are reluctant to be the first movers to alternative platforms when they have no benchmark or history with which to reliably predict that the alternative market will be reflective of the genuine market price. This effect is likely to be magnified with the closing auction given its importance as a benchmark for a significant amount of trading activity.

We would reiterate that running a closing auction is a critical element of establishing a reference price for a given instrument – especially considering the increasing amount of trading volumes that tend to execute within the closing auction – the absence of which has significant (and detrimental) knock-on effects in particular for the pricing of instruments that have a given stock as the underlying or component. Using alternative methods to calculate a reference price such as the last traded price will in almost all circumstances deliver an inferior outcome, for example in the case of illiquid stocks or in situations where an outage has been ongoing for a significant amount of the trading day or occurs prior to significant, market-moving news. In these cases, the last-traded price would be a very inaccurate reference point to use as the key input component for instrument valuations.

Ultimately, it would be in Europe's long-term interest for its market structure to develop in such a way that a viable alternate closing auction will be possible, at least across all instruments in the main benchmark national and pan-European indexes (given their criticality in the derivatives and ETP markets).

FIA EPTA would therefore encourage ESMA and other policymakers to work towards the creation of a true single market framework without artificial barriers created by legacy infrastructure and the desire to promote national interests over those of EU capital markets as a whole.

As there exist, as set out above, significant barriers at this time for developing an alternative auction structure, we would reiterate the importance for the listing market to have a highly robust system to ensure the continuity of the closing auction, as set out in response to Q6 above.

This said, however, we would not dismiss the concept for a listing market to designate – as an ultimate failsafe – another trading venue to run the closing auction for them. This should remain a policy option to be revisited at a future date when reviewing the effectiveness of the guidance ESMA is currently proposing.

FIA EPTA members therefore believe that, in case the currently proposed guidance would turn out to be insufficient, future regulatory intervention may still prove to be needed to require trading venues to designate another trading venue (of their choice). Likely this would then need to be one operating on a pan-European basis, as their back-up venue for the purposes of running a closing auction if the venue that is experiencing an outage is not able to resume orderly trading one hour before the scheduled time of the closing

⁴ https://www.esma.europa.eu/sites/default/files/library/esma70-156-4572_mifid_ii_final_report_on_algorithmic_trading.pdf

auction. As an alternative, venues could also be encouraged to create a common failsafe closing auction execution facility, the operating costs of which could be distributed proportionately across the participating venues.

We note further that significant shortcomings exist in EU trading markets preventing market participants from having an integrated consolidated view of the state of liquidity and price formation across different venues and liquidity pools. We would reiterate that also for the strengthening EU capital market resilience, it will be important that an effectively designed Consolidated Tape (CT) becomes a reality.

FIA EPTA members are of the view that the development of a truly functioning CT would support continued trading on other markets whilst the primary market is subject to an outage, reducing disruption (including in relation to the availability of the closing price). Please see our response to Question 10 below for additional detail.

Q8: Do you agree that trading venues should have a cut off time (30 minutes before the normal schedule) to inform market participants on whether or not they intend to hold a closing auction?

Yes, FIA EPTA members agree that an unambiguous cut-off time will be critical. We consider that a differentiated approach will be preferable in this regard. Trading venues should provide guidance no later than 30 minutes before the scheduled auction time whether it expects the auction to take place or not. This should include a status update regarding the material issues that still need to be resolved in order for the listing market to be able to run the closing auction and an estimation by the listing market of its ability to do so.

No later than 15 minutes before the scheduled auction time, the trading venue should communicate its final unambiguous decision whether the auction will take place or not. The trading venue should only communicate that it will run the auction if by this time all matters have been fully resolved and the listing market is fully confident that the auction can be performed without issues.

In the case where the trading venue has not completed all remedial steps in time (> 15minutes before the close) the venue should move to an alternative method to producing a closing price. This should be clearly stated in their rule book and could be any of number of processes which may be different depending on instrument and segment, and time of initial issue but should be completely deterministic by the venue and its users, as we set out in more detail in our response to Question 9.

This alternative closing price should be disseminated through the usual methods, if possible, but also via appropriate alternative methods (e.g., website and direct communication to firms) not later than 15 minutes after the expected closing price.

In this context, we reiterate that outages can occur under various scenarios with different levels of certainty regarding the causes and scope of the problems and the likelihood and feasibility for a timely resolution.

In some situations, an outage may have been caused by a known bug where the trading venue can with certainty communicate that it will be able to resolve the matter in a timely fashion. However, there are other possible scenarios where the problems may be so complex or pervasive as to make it highly unlikely that a timely resolution may be possible. Also, it can be that the trading venue may be too optimistic and overestimate its ability to resolve matters in a timely manner.

In all instances, FIA EPTA members would reiterate the importance for timely, frequent and unambiguous communication to all market stakeholders. As we have set out in our response to Question 6, trading venues

should implement clear policies whereby in case of a complex outage they should end the continuous trading session and focus exclusively on safeguarding the auction process.

Q9: Do you agree that the use of the last traded price is an appropriate solution in those cases that a trading venue cannot run the closing auction? If not, what alternative would you propose?

FIA EPTA members consider that using last traded price can cause potential issues for illiquid instruments. Conceivably, the last traded price may be from a long time before the closing auction and the fair trading value may have moved considerably since then – or potentially for these illiquid instruments there is a greater chance that the last price could be from a small trade at a price away from the fair trading value.

Equally, alternative models such as the pre-auction mid-point may cause issues where an instrument's spread is wide or a book particularly lopsided.

In light of the above, FIA EPTA members prefer an alternative solution to be based on a cascading model which takes into account relevant market conditions and price signals by reference to all liquidity across the market at the given time. We would welcome views from trading venues as to which reference prices and inputs they consider relevant and appropriate and are open to developing a more definitive list based on industry discussion.

We would emphasise that the methodology by which the listing market will adopt an alternative closing price should be deterministic and be disclosed ex-ante in the trading venue's outage playbook, and be communicated clearly and in a timely manner in case the listing market would be unable to operate the closing auction (as set out further in our response to Question 8 above).

Q10: Is the lack of a reference price an issue in an outage context? If so, please provide details.

FIA EPTA members are of the view that the lack of a reference price during an outage is indeed a problematic issue for market participants. In this context, we would like to reiterate our view that the development of an efficient European Consolidated Tape would help market participants to manage the consequences of an outage. A CT could enhance the resilience of European markets by ensuring the continued availability of a reference price. As indicated in our response to Question 7 above, in the event of an outage on a primary market, trading could resume on other venues and prices be provided via CT, thus minimising the adverse impact of the market disruption caused by the outage.

Specifically, a European CT aggregating both on-venue and OTC post-trade market data would lower the reliance of market participants that they currently have on a "most relevant market" for price discovery. A CT could reliably provide a reference price more reflective of the entire market, as it would facilitate trading to continue uninterrupted on other trading venues in the event of an outage on the "most relevant market".

Q11: Do you agree with the proposed approach for non-equity instruments? Do you agree that provisions on par. 37-39 can be exempted for those trading venues that do not provide CLOB?

Yes, FIA EPTA members agree with ESMA that the guidance on communication of outages described in the previous sections should be extended to all types of trading venues (including those which usually focus on non-equity instruments). Our members believe this is essential and would like to highlight that although trading of some non-equity asset classes is less affected by an outage this is not always the case. For listed derivatives, for example, a regulated market outage has a significant impact as off-book/block trading can only occur when the regulated market is operational and the facility to register these trades is available i.e., trading

in the impacted non-equity instruments cannot continue (cannot move to an alternative platform/method of trading).

FIA EPTA members, also, agree that provisions set out in paragraphs 37-39 of ESMA's Consultation Paper can be exempted for those trading venues that do not operate a CLOB.

Q12: Is there any particular issue relating to trading of non-equity instruments that should be taken into account in the case of an outage? Where possible please differentiate between bonds and derivatives.

N/A

Q13: Is there a direct link/connection between an outage on an equity primary market and those derivatives that have these instruments as underlyings?

Yes - FIA EPTA members consider this to be significant risk and a key reason why the resilience of trading venue systems need to be further strengthened: If an outage on a listing market would prevent orderly settlement price formation for, e.g., a benchmark index future or at a stock options expiration, there would be no clear replacement mechanism for settlement and the knock-on effects to the entire financial system could be severe. If such an outage were coupled with heightened volatility, participants could conceivably go bankrupt and trigger systemic disruption.

Q14: In your view is there any further element ESMA should consider in the proposed guidance?

FIA EPTA proposes that a central venue status communications platform be developed as an industry-wide initiative. Good communications from trading venues are heavily reliant on a venue to be first aware that it is experiencing technical difficulties and to be incentivised to notify participants. In practice, market participants are often the first to notice issues with connectivity, market data, or order flow at a venue.

Presently, there is no standardised and commercially secure way in which participants can communicate amongst themselves to alert others of potential outages and identify if the issue is internal to the participant's systems or a broad venue issue. To solve this, FIA EPTA considers that a secure venue-status communications platform could provide a centralised tool to more identify outages quickly and to maintain continuity of trading.

This platform should be simple and secure in its design and we envision a stepwise, iterative approach to its development. In the future, such a platform could form a valuable single central hub whereby any participants or other stakeholders could obtain information about the health of trading venues. However, to get to that state would be a large project and, in some ways, parallel or duplicate efforts and tools that trading venues already maintain. Therefore, we propose beginning with a simple platform with the goal of offering market participants a multilateral place to communicate anonymously about trading venue issues and health, and only after its proven adoption possibly expanding its function.

The platform should have the following features:

- Secure and validated; users should be bona-fide participants, venues, or relevant stakeholders in a place to offer actual insight into venue health.
- Monitorable by regulators; to ensure no market abuse occurs.
- Anonymous to each other; users should not need to balance any reputational issues against open communication.



- Multilateral: all users should be able to view and participate in the discussions.
- Simple to implement; ideally leveraging existing widely adopted industry communications platforms.
- Built with an awareness of the potential broader functions in the future.

We believe that a simple communications platform can allow market participants and venues to far more rapidly and efficiently identify outages or technical failures at trading venues. Following this identification, trading venues would take up the responsibility for communicating information about the outage, order book/execution status, and planned resolution. To keep the platform initially simple to implement, we envision this second stage of communication to occur through existing venue channels, subject to minimum standards as described below. That said, we do believe that with time, the envisioned communications platform can potentially become a central point of venue communication.