

MARKET CONSULTATION: PROPOSED ENHANCEMENTS TO THE USE OF FX RATES IN INDEX CLOSING CALCULATIONS DURING DISRUPTION EVENTS

30 June 2025



Background to the Market Consultation

Solactive AG's indices are calculated throughout the trading day using the most recently available stock prices and corresponding spot FX rates. For closing index levels, however, the index methodology, as specified in the relevant Index Guidelines and Equity Index Methodology, mandates a switch from spot FX rates to the WM/Refinitiv 4PM Fixing rate (the "4PM Fixing"). In the event the 4PM Fixing is not available—whether due to unexpected delays, technical failures, or market closures—the current methodology, in line with common industry practice, defaults to the most recently available 4PM Fixing, typically from the previous trading day.

*The current logic is described in Solactive's [Equity Index Methodology](#) section 1.5:

Market Issue and Risk to Index Users

While this fallback is operationally straightforward and aligned with prevailing practices among major index providers, we have identified that such an approach may result in materially unfair outcomes for index users. Specifically, reliance on outdated FX rates during times of disruption or elevated volatility can produce closing index levels that significantly diverge from levels that would be considered a fair representation of market conditions.

These distortions have direct and measurable implications for users of the index, such as index-tracking funds and derivatives traders, who rely on the published closing levels for NAV calculations, hedging, performance measurement, and portfolio valuations. Persisting with methodologies that accept potentially stale, or misaligned FX inputs creates a systemic risk of tracking errors, valuation mismatches, and hedging inefficiencies.

We highlight two examples:

1. Unplanned Disruption – April 3, 2025 (FX Fixing Delay, US announcement of new tariff policies "Liberation Day")

On April 3, 2025, a technical disruption at LSEG coinciding with extraordinary market conditions led to a significant delay in the publication of the 4PM Fixing. FX volumes surged to record highs following unexpected geopolitical developments, and the fixing—normally published promptly at 4PM London time—was delayed until approximately 8PM London time. In accordance with the existing methodology, the previous day's 4PM Fixing rate was used in the closing calculation for numerous indices. Given the extreme volatility, this substitution resulted in deviations of up to 3.5% from the fair index level that would have been achieved using the intended fixing. Such discrepancies can distort fund NAVs, materially impact derivative pricing and index replication, and can create tracking errors.

2. Planned Market Closure – Public Holidays

On certain holidays, specific FX markets may be closed or close early, and the 4PM Fixing rate may not be published. Under current methodologies, including our own, the fallback is again to the most recently available 4PM Fixing—typically from the previous business day.

If these closures occur during periods of heightened volatility or following significant price movements, the use of stale FX data may lead to closing index levels that no longer accurately reflect the true end-of-day value of the index constituents.

These scenarios demonstrate that current fallback mechanisms, while operationally robust, are economically inadequate and risk undermining the utility, reliability, and fairness of index levels for end users.

Proposal

Solactive AG believes that enhancements are necessary to protect the economic interests of market participants and ensure closing index levels remain aligned with fair value. To that end, we propose the following amendments to our index methodology:

1. Unplanned Disruption of the 4PM Fixing

In the event of an unplanned delay or disruption of the WM/Refinitiv 4PM Fixing rate, we propose to implement a **synthetic 4PM fixing rate**. This rate would be calculated by Solactive AG using a **time-weighted average** of spot FX rates observed in the five-minute window surrounding the 4PM fixing time—specifically, from 2 minutes and 30 seconds before to 2 minutes and 30 seconds after. Our analysis shows that this Solactive calculated synthetic fixing rate is typically within 0.01% of the actual WM/Refinitiv 4pm Fixing rate and ensures a more accurate and market-reflective closing level in the absence of a timely official fixing.

2. Unavailability Due to Planned Market Closures

Where a fixing rate is known to be unavailable in advance—such as during public holidays or early market closures—we propose to use the **most recent hourly fixing rate published by WM/Refinitiv**, rather than defaulting to the prior day's 4PM fixing rate. This reflects the latest available market conditions and mitigates the risk of valuation distortion.

Conclusion

We believe that the current industry-standard handling of FX fixing disruptions is no longer fit for purpose in all scenarios. While operational continuity remains important, it must not come at the expense of fairness and accuracy in index calculation. The use of outdated FX rates during times of disruption can lead to significant economic harm for users of the index.

The proposed enhancements are designed to address this gap by providing a more market-reflective, fair, and economically sound solution. We welcome feedback from all stakeholders and invite market participants to contribute their views on the proposed methodology changes.



Consultation Questions

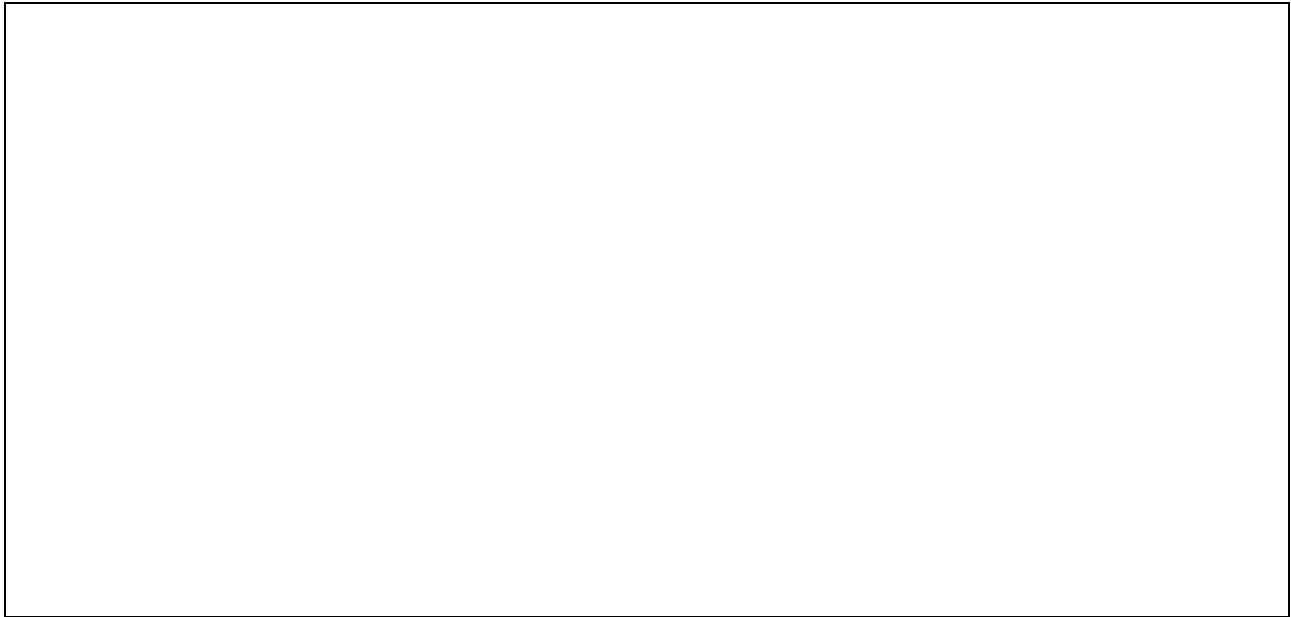
1. Do you agree with the use of a synthetic 4PM fixing rate calculated by Solactive AG in the index closing calculation in the case of unavailability of the official WM/Refinitiv 4PM Fixing Rate?
2. Do you agree with the use of the latest available WM Fixing Rate in the index closing calculation in the case of planned non-publication by LSEG of the respective 4PM Fixing Rate?
3. Would you consider any of the following alternatives to be more appropriate in the index closing calculation, and if so, why?
 - a. Use the last published 4PM WM/Refinitiv fixing from the previous day (status quo).
 - b. Use the prevailing closing spot FX rates (i.e. latest tradable spot quotes at the index close).
 - c. Use the prevailing closing spot FX rates for the initial calculation, but do not publish files. Index levels will be restated, and files will be produced only once WM/Refinitiv publishes the official fixing (Delay)
4. Do you have any other suggestions that you would like Solactive to consider?

Feedback on the proposed changes

If you would like to share your thoughts with Solactive, please use this consultation form and provide us with your personal details and those of your organization.

Name	
Function	
Organization	
Email	
Phone	
Confidentiality (Y/N)	

Solactive invites all stakeholders and interested parties to participate. We particularly welcome any additional comments regarding how these potential changes could impact your use of Solactive indices or improve our index solutions going forward.



Consultation Procedure

Stakeholders and third parties who are interested in participating in this Market Consultation are invited to respond until *August 31st, 2025*.

Please send your feedback via email to marketconsultation@solactive.com, specifying “**Market Consultation-FX Rates**” as the subject of the email, or

via postal mail to: **Solactive AG**
Platz der Einheit 1
60327 Frankfurt am Main
Germany

Should you have any additional questions regarding the consultative question in particular, please do not hesitate to contact us via above email address.

CONTACT

Solactive AG

German Index Engineering

Platz der Einheit 1

60327 Frankfurt am Main

Germany

Tel.: +49 (0) 69 719 160 00

Fax: +49 (0) 69 719 160 25

Email: info@solactive.com

Website: www.solactive.com

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