



# SASB-Index

## Deutsche Börse SASB-Index Security & Commodity Exchanges Standard 2024

Table 1. Sustainability Disclosure Topics & Metrics

Topic	Accounting Metric	Category	Code	Response									
Promoting Transparent & Efficient Capital Markets	(1) Number and (2) average duration of (a) halts related to public release of information and (b) pauses related to volatility	Quantitative	FN-EX-410a.1	<p><b>Cash Market (Xetra) as main trading venue:</b></p> <table border="1"> <thead> <tr> <th></th> <th>Number</th> <th>Average Duration</th> </tr> </thead> <tbody> <tr> <td>Halt ("trading suspension")</td> <td>26<sup>1)</sup></td> <td>60m<sup>2)</sup></td> </tr> <tr> <td>Pause ("volatility interruption")</td> <td>101,685<sup>3)</sup></td> <td>2m0s – 2m30s<sup>4)</sup></td> </tr> </tbody> </table>		Number	Average Duration	Halt ("trading suspension")	26 <sup>1)</sup>	60m <sup>2)</sup>	Pause ("volatility interruption")	101,685 <sup>3)</sup>	2m0s – 2m30s <sup>4)</sup>
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- Halt number** for FY2024 and for Xetra trading venue as benchmark cash market in terms of liquidity and turnover
  - Halt duration** as median of individual durations; 60m is benchmark while factual durations may deviate significantly e.g., with foreign shares dependent on a given circumstance
- Pause number** is for FY2024 and Xetra (standard) volatility interruptions, which are processed automatically by the trading system; extended volatility interruptions, which require manual interruption by Market Operations, are not included
  - Pause duration** is a range of min and max possible, as currently set up in the trading system

**Eurex:**

	Number	Average Duration
Halt ("trading suspension")	24	180m <sup>2)</sup>
Pause ("volatility interruption")	71	2m0s – 3m0s <sup>4)</sup>

- Suspension of the trading (**Halt number**) of the derivatives in Eurex may occur when trading of the underlying share is suspended in the home exchange of the underlying. The number of the halts due to the suspension of trading in the home exchange in the year 2024 totalled 24 (underlyings) altogether for 29 derivative products. The **average duration** of suspension was 4 hours compared to the normal expected trading hours while median duration totalled 3 hours. The difference is explainable by couple of underlyings being suspended over an entire trading day.
- Volatility interruption (**Pause number**) at Eurex takes place if the next expected execution price of a derivative instrument within a specific time frame is outside of the specific price range during continuous trading. During the year 2024, 71 volatility interruptions occurred. Compared to 2023 (32), the number is significantly higher due to volatility. **Expected duration** of the volatility interruption is a couple of minutes.

Percentage of trades generated from automated trading systems	Quantitative	FN-EX-410a.2	<p><b>Cash market (Xetra) as main trading venue:</b></p> <p>100% (all trades) in Xetra are generated from the automated trading system.</p> <p><b>Eurex:</b></p> <p>100% (i.e., all trades) at Eurex are generated from the automated trading system. In the year 2024, the number of traded contracts totalled 2,080,535,223 executed through - 183,509,265 trades in 254 trading days. Of this volume 67.09% were created through automatic matching and remaining 32.91% through off-book trading (trade entry service).</p> <p><b>Risks and opportunities resulting from automated trading systems</b></p> <p>Deutsche Börse Group is aware that automated or algorithmic trading on its trading platforms creates opportunities and risks. Deutsche Börse Group applies and constantly reviews mechanisms to systematically monitor and process opportunities such as higher trading volumes or risks such as higher volatility of securities.</p>
Description of alert policy regarding timing and nature of public release of information	Discussion and Analysis	FN-EX-410a.3	<p>According to Article 7 (1) MAR, insider information is a specific, non-public information about a publicly traded company that, if disclosed, would likely have a significant impact on its stock price or other financial instruments issued by the company. Generally, inside information relating to Deutsche Börse AG or any of its financial instruments must be published without undue delay (Art. 17 (1) MAR; § 26 (4) WpHG in conjunction with § 3b (2) WpAV)</p> <p>Via fax/email, information service providers such as e.g. EQS Group AG and presstext Nachrichtenagentur get informed and they will publish the inside information in a timespan of 30m. In some cases, the information can be published on the company's own website (exception is a foreign share, listed on the exchange parallel to listing on its reference market, where the exchange follows the reference market decisions). These pre-publication messages may reach the exchange during or outside exchange trading hours. If the exchange is notified within exchange trading hours, the exchange evaluates the specific information in question, in particular whether or not orderly trading in the relevant financial instrument can still be ensured. If the result of the evaluation is that orderly trading cannot be ensured, the financial instrument is suspended (halted) from trading any time before the message is due to be made public and generally for 60m from suspension timestamp. Trading suspension is communicated on the exchange news board and on the website under Deutsche Börse Xetra - FWB Bekanntmachungen.</p>
Description of policy to encourage or require listed companies to publicly disclose environmental, social, and governance (ESG) information	Discussion and Analysis	FN-EX-410a.4	<p><b>Information disclosure regarding Deutsche Börse Group</b></p> <p>Since 2017, sustainability reporting is a mandatory part of the annual report of listed companies with &gt; 500 employees. For their Annual Report 2024, Deutsche Börse Group has published its first sustainability statement in accordance with the requirements of Directive (EU) 2022/2462 of the European Parliament and the Council of 14 December 2022 (Corporate Sustainability Reporting Directive, CSRD). It complies with the requirements of Sections 289 b-e in conjunction with 315 b-c HGB for a consolidated non-financial (Group) statement of Deutsche Börse Group and Deutsche Börse AG. The sustainability statement strengthens transparency towards stakeholders and includes information about environmental, social and governance matters of Deutsche Börse Group. The full statement can be found in our Annual Report 2024.</p> <p><b>Information disclosure regarding listed entities on the stock exchange</b></p> <p><b>(1) ESG Visibility Hub</b></p> <p>With the ESG Visibility Hub, Deutsche Börse Cash Market provides issuers a voluntary opportunity to present ESG information to their issuer profiles on the Börse Frankfurt Website. Issuers have the possibility to present their sustainability profile and direct link to their non-financial reports and relevant ratings. Links and information may include issuer sustainability report and thereby also GHG emissions disclosures. Consequently, this can enable investors to easily access issuer climate information. The information provided by the issuers on the ESG Visibility Hub is not verified by Deutsche Börse AG and the links provided by the issuers lead to external sites.</p> <p><b>(2) ESG Clearing Compass</b></p> <p>Eurex Clearing AG can help Clearing Members and their clients navigate through their sustainability journey through the ESG Clearing Compass. The offering aims to provide market participants with relevant data to further enable decision making based on sustainable criteria. The ESG Clearing Compass was introduced to assist in increasing transparency, monitoring, and reporting regarding the transition to a sustainable economy. The ESG Clearing Compass currently consists of two distinctive initiatives to enhance transparency and visibility on some of the most relevant metrics, they include:</p> <p><i>1. ESG Portfolio Assessment</i></p> <p>Powered by data from ISS ESG, the ESG Portfolio Assessment reports help Clearing Members to enhance insights on collateral and transaction data held at the CCP with climate metrics and E (Environment) ratings</p>

on a portfolio level. In addition to individual reports for Clearing Members, Eurex Clearing AG provides the entire clearing community with access to an assessment to the universe of Eurex Clearing AG’s admissible securities in the ESG Admissible Securities Assessment which is publicly available on the website of Eurex Clearing AG. Examples of climate-related metrics which are provided by ISS ESG include: emissions exposure (Scope 1&2 as well as Scope 3 emissions based on position ownership ratio), production emissions, relative emission exposure, such as carbon intensity and carbon risk rating for the portfolio.

*2. ESG Visibility Hub Clearing*

Members of Eurex Clearing AG can voluntarily provide information on their sustainability strategy, provide links to sustainability reports and thereby also climate-related disclosures. Additionally, Clearing Members can display available ratings from various agencies. Clearing Members are fully responsible for the information provided to the public via the ESG Visibility Hub. The information provided by the Clearing Members is not verified by Eurex Clearing AG and the links provided by the Clearing Members lead to external sites.

<p>Managing Conflicts of Interest</p>	<p>Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations</p>	<p>Quantitative</p>	<p>FN-EX-510a.1</p>	<p>As of 31 December 2024, there were no monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behaviour, market manipulation, malpractice, or other related financial industry laws or regulations.</p> <p>Further details regarding ongoing legal proceedings can be found in the annual report 2024 of Deutsche Börse Group on pages 283 et seq.</p>
	<p>Discussion of processes for identifying and assessing conflicts of interest</p>	<p>Discussion and Analysis</p>	<p>FN-EX-510a.2</p>	<p>Being a market infrastructure provider with broad interaction with major market participants along the value chain, the potential for conflicts of interest is inherent in Deutsche Börse Group’s business. Moreover, individuals may be subject to circumstances in their professional as well as personal lives that create the potential for conflicts of interest. Thus, it is of utmost importance that Deutsche Börse Group can identify and effectively manage potential or actual conflicts of interest between itself (including its management body members, employees, or any persons closely associated to them) and third parties.</p>

Conflicts of interest may arise in situations in which the interests of one party interfere with (or appear to interfere with) the interests of another party. This can impair the ability of one or both parties involved to act fairly and ethically, particularly their objectivity to make a decision or to participate in a decision-making process in the course of their professional obligations.

Deutsche Börse Group has implemented a group framework to identify and appropriately manage conflicts of interest. The management bodies of Deutsche Börse Group entities establish, approve and oversee the implementation and maintenance of effective organisational and administrative arrangements to identify, prevent, assess, manage, mitigate and/or make transparent (potential) conflicts of interest. Dedicated principles aim to ensure compliance with applicable laws and regulations, protecting DBG, its employees, and management from sanctions, reputational damage, and loss of stakeholder confidence.

**General principles and responsibilities include:**

- **Acting with honesty, objectivity, personal responsibility and in accordance with the highest standards of integrity, respecting applicable laws and regulations, and carrying out duties with due care in the fair interests of customers and market integrity**
- **Refraining from decisions in one’s own interest or in the interest of third parties if such decisions are contrary to regulatory requirements or the interests of Deutsche Börse Group**
- **Abstaining from activities that compete with activities of Deutsche Börse Group, from grasping any business opportunities to the detriment of Deutsche Börse Group, insider dealing or any other misuse of sensitive, non-public information**
- **Contributing to identification, management, documentation and reporting of (potential) conflicts of interest**

**It is required to consider any circumstances which may give rise to a conflict of interest and of which, to the best of one’s knowledge, awareness is present or expected. Furthermore, generic checks supporting the identification of (potential) conflicts of interest are implemented in various processes and procedures in Deutsche Börse Group, e.g., in the context of recruitment, the implementation of new products and services, and procurement.**

General preventative measures include the Group Guideline on Conflicts of Interest and corresponding internal procedures, a tool-based solution for notification, assessment, documentation and reporting (to management and regulators), as well as awareness-raising measures. On a general or case-by-case basis, the

following measures are implemented (non-exhaustive):

- Transparency and notification requirement for (potential) conflicts of interest
- Confidentiality segregation and independence
- Recusal, exclusion, or termination of conflict situation
- Checks, controls and monitoring
- Conflict disclosure to third parties

For more information, see the **Principles on the management of conflicts of interest at Deutsche Börse Group**, published on our website.

To do justice to the importance of this topic, Deutsche Börse Group has also integrated it into its **Code of business conduct, published on our website.**

<p>Managing Business Continuity &amp; Technology Risks</p>	<p>(1) Number of significant market disruptions and (2) duration of downtime</p>	<p>Quantitative</p>	<p>FN-EX-550a.1</p>	<p>(1) In addition to multiple testing of the used software, its verified roll-out and the end-to-end monitoring of servers, network and applications disaster recovery tests were executed successfully after each major software deployment and also the yearly FIA test with customers and partners was used for testing. The system availability for the spot market trading system reached <b>100 percent</b> and the figure for the derivative market trading system reached out <b>99.9958 percent</b>.</p> <p>(2) This corresponds to <b>no downtime</b> during the entire year.</p>
	<p>(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected</p>	<p>Quantitative</p>	<p>FN-EX-550a.2</p>	<p>Reporting of personal data breaches is subject to Deutsche Börse Group’s Data Protection Policy in accordance with GDPR requirements. Within 2024 Deutsche Börse Group is reasonable comfortable having addressed potential data protection shortcomings in a sufficient way by the measures described herein. All employees must conclude mandatory data protection training including personal data breach awareness. In case of personal data breaches additional training has been provided and data protection by design and default reevaluated. Where necessary additional controls have been performed by the Data Protection Officer. Lessons learned from personal data breaches are regularly considered for improvement of the data protection management system. In all cases notified to the competent data protection authority due to our proactive notification approach also in cases of doubt (maximum transparency towards authority) the authority responded that the incident had no impact on the individuals, and all mitigating measures were adequate.</p> <p><b>Data for 2024:</b></p> <p>(1) Number of data breaches: 178                  (2) Percentage involving personally identifiable information (PII): 5.06%                  (3) Number of customers affected: 31483</p> <p>No case of delay disclosure.</p>
<p>Description of efforts to prevent technology breaches, and market disruptions</p>	<p>Discussion and Analysis</p>	<p>Discussion and Analysis</p>	<p>FN-EX-550a.3</p>	<p>Measures for high availability, short Recovery Time Objective (RTO) and a targeted zero RPO (Recovery Point Objective) of the applications is achieved with generally two different approaches:</p> <p>(1) Trading systems with design target of lowest latency are run in one data centre on a redundant server and process setup, where each server process has an immediately available backup process which steps in if primary fails. The physical layout of the servers and switches distribute these pairs in two rooms with separate power and air condition and secured by fireproof walls within the same data centre for fast fail over. In case of a total loss of one data centre, a disaster recovery system sets up as a logical copy of the primary is provided in a disaster recovery data centre. A manual restart within the given RTO is tested multiple times per year.</p> <p>(2) Clearing and risk systems with design target of high data resilience and a zero RPO are run in a disaster tolerant setup. The servers are distributed symmetrically over the two geographically distant data centres, and the storage is synchronously copied. In case of failure of servers or even whole data centres, the residual capacity is still sufficient to run the service and the application fails over, respectively reconnects automatically. The synchronous data storage allows for a zero RPO.</p> <p><b>Information Security:</b></p> <p>Deutsche Börse Group’s information security approach is based on a model with three lines of defence and includes overall measures in accordance with ISO/IEC 27001 covering both the development phase and the operational phase. Across the Group we operate a programme to sensitise our employees to the responsible handling of information, raise their awareness of information security aspects and report security incidents</p>

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promptly. The Group operates a situation centre (CERT), which detects and assesses threats from cybercrime at an early stage, and coordinates risk mitigation measures in cooperation with the business units. In order to maintain the integrity of our Group's data, and to mitigate and control the risks, we are continuously implementing measures to increase information security.

These measures include regular threat analyses, for example, and the systematic testing of our applications for vulnerabilities. The aim is to proactively make procedures, applications and technologies against cybercrime and other potential attacks more robust by adapting them to the current threats and regulatory requirements. We are a full member of trade associations (World Federation of Exchanges) and international networks (Financial Services Information Sharing and Analysis Center, FS-ISAC) which contribute significantly towards a forward-looking stance vis-à-vis cyber threats, and the development of strategies to fend off such threats. Furthermore, we are a member of the ECB's Euro Cyber Resilience Board for pan-European financial infrastructures (ECRB). There was no serious attack on the Group's IT systems in 2024. For more detailed information, see the annual report 2024 p. 53ff (Risk Report) and pp. 132ff (Transparent, stable and secure markets)

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Table 2. Activity Metrics

Activity Metric	Category	Code	Response
Average daily number of trades executed, by product or asset class	Quantitative	FN-EX-000.A	<p><b>Cash market:</b></p> <p>In 2024, the combined average daily number of trades (buy+sell) on trading venues Xetra and Börse Frankfurt amounted to</p> <ul style="list-style-type: none"> <li>• Equities: 628,817</li> <li>• ETFs, ETCs, ETNs: 145,096</li> <li>• Bonds: 2,093</li> <li>• Funds: 531</li> <li>• Structured Products and Other Instruments: 16,702</li> </ul> <p><b>Eurex:</b></p> <p>The average daily number of trades in 2024 totalled 722,477 in 254 trading days resulting from 183,509,265 trades for year 2024. The average daily number of trades in Equity Index derivatives reached 296,962 (41.10%), interest rate derivative 404,819 (56.03%), equity derivatives 9,280 (1.28%) and all the rest asset classes including volatility index derivatives, dividend derivatives, ETF and ETC, FX derivatives and commodity derivatives 11,416 (1.58%).</p> <p><b>360T:</b> The average daily number of trades in 2024 totalled 513,679 trades.</p>
Average daily volume traded, by product or asset class	Quantitative	FN-EX-000.B	<p><b>Cash Market:</b></p> <p>In 2024, the combined average daily order book turnover (single-counted) on trading venues Xetra and Börse Frankfurt amounted to:</p> <ul style="list-style-type: none"> <li>• Equities: €4,158 million</li> <li>• ETFs, ETCs, ETNs: €916 million</li> <li>• Bonds: €41 million</li> <li>• Funds: €2 million</li> <li>• Structured Products and Other Instruments: €44 million</li> </ul> <p><b>Eurex:</b></p> <p>The average daily number of traded contracts in 2024 totalled 8,191,084 in 254 trading days resulting from 183,509,265 trades for year 2024. The average daily contract volume in Interest Rate derivatives reached 3,827,037 (46,72%), equity Index derivatives 295,9073 (36,13%), equity derivatives 1,191,103 (14,54%) and all the rest asset classes including Volatility Index derivatives, Dividend derivatives, ETF and ETC, FX derivatives and commodity derivatives 213,869 (2.61%).</p> <p><b>360T:</b></p> <p>360 T daily trade volumes reached 146 €bn in 2024.</p>