



# SASB-Index

## Deutsche Börse SASB Index Security & Commodity Exchanges Standard 2020

Table 1. Sustainability Disclosure Topics & Accounting 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>32<sup>1)</sup></td> <td>60m<sup>2)</sup></td> </tr> <tr> <td>Pause ("volatility interruption")</td> <td>231185<sup>3)</sup></td> <td>2m0s – 2m30s<sup>4)</sup></td> </tr> </tbody> </table> <ol style="list-style-type: none"> <li>Halt number for FY2020 and for Xetra trading venue as benchmark cash market in terms of liquidity and turnover</li> <li>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</li> <li>Pause number is for FY2020 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</li> <li>Pause duration is a range of min and max possible, as currently set up in the trading system</li> </ol> <p><b>Eurex:</b></p> <p>Suspension of the trading 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 the trading in home exchange in year 2020 totaled 10 (underlyings) altogether for 17 derivative products. The average duration of suspension was 246,5 minutes compared to the normal expected trading hours while median duration totaled 62,5 minutes. The difference is explainable by couple of underlyings being suspended the whole day or over several days.</p> <p>Volatility interruption in 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 2020 47 volatility interruptions occurred of which 37 took place during March 2020. Expected duration of the volatility interruption is couple of minutes.</p>		Number	Average Duration	Halt ("trading suspension")	32 <sup>1)</sup>	60m <sup>2)</sup>	Pause ("volatility interruption")	231185 <sup>3)</sup>	2m0s – 2m30s <sup>4)</sup>
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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% (all trades) in Eurex are generated from the automated trading system. In year 2020 the number of traded contracts totaled 1.861.416.584 in 170.368.292 trades in 255 trading days. Of this volume 64,85% was created through automatic matching and rest 35,15% through off-book trading (trade entry service).</p> <p>Deutsche Börse Group is aware that automated or algorithmic trading on its trading platforms creates opportunities and risks. Deutsche Börse currently reviews mechanisms which will make it possible 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>From the exchange point of view, non-public information regarding listed companies (aka "ad-hoc news") as a rule reach the exchange over fax/email 30m before it is made public over information service providers such as e.g. DGAP Ad-hoc-Service or 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 messages may be made public by listed companies or its representatives during or outside exchange trading hours. In case of publication within exchange trading hours, the exchange evaluates specific message in question in terms of material impact on the company, in particular on the price of its listed stock. If a material impact is expected, the share is temporarily 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.</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>Since April 2017 CSR reporting is mandatory as part of annual reporting for all listed companies with more than 500 employees in Germany. In order to fulfil the provisions of sections 289b–e and 315b–c of the Handelsgesetzbuch (HGB, German Commercial Code), companies must disclose information on non-financial matters, business related risks, due diligence processes and key performance indicators. 92% of all companies listed in DAX Indices were subject to the legal obligation to report on non-financial aspects. As there is already a EU-wide legal obligation to report on ESG aspects, Deutsche Börse does not require its listed companies to disclose ESG information, thus DB1 encourages companies to meet ESG rules and disclosure standards through the following measures:</p> <p>(1) Deutsche Börse Group offers access to ESG products and marketplaces across all asset classes through its individual business areas. A comprehensive product portfolio in the area of sustainable investments has emerged over the past few years. Deutsche Börse offers in particular a wide range of sustainability indices that investors can use as the basis for sustainable investment. For all indices, the ultimate goal is to provide solutions to investors who consider sustainability a key element of their investment strategy. As asset owners are steadily stepping up their fiduciary role and are implementing environmental, social and governance (ESG) investment strategies, Qontigo has developed new approaches for ESG-compliant versions of STOXX and DAX flagship benchmarks in 2020. One example is the DAX 50 ESG index, that removes companies involved in activities that are undesirable or controversial from a responsible-investing perspective. The index then selects the 50 securities that rank highest in the quantitative criteria of free float market capitalisation, order book volume and ESG score. Moreover, Eurex took over a pioneering role by introducing an ESG product suite based on European benchmarks in February 2019. With the introduction of derivatives on sustainable versions of various regional and global benchmarks in February and March 2020 Eurex has achieved a global coverage with its ESG offering. In November 2020 Eurex went one step further in terms of</p>

				<p>methodology by introducing futures and options on DAX 50 ESG and EURO STOXX 50 ESG indices combining screening out undesirable securities and considering ESG rankings as part of the selection process. (For more information please see: annual report 2020pp. 70-73).</p> <p>(2) Deutsche Börse founded the “Green and Sustainable Finance Cluster Germany”, which is a sustainability initiative for the German financial market that was initiated in April 2018. It is a merger of the Accelerating Sustainable Finance initiative of Deutsche Börse and the Green Finance Cluster Frankfurt of the Ministry of Economic Affairs for Hesse. The Cluster offers a platform for dialogue on topics relating to green and sustainable finance and involves all relevant stakeholders such as corporates, policymakers, civil society, and academics. Its central objectives – creating transparency and supporting standardisation. In that regard, Deutsche Börse aims at promoting and facilitating transfer of information among regulators, investors, and companies. The Cluster has also founded a so-called Task Force on Climate-related Financial Disclosures (TCFD) Think Thank, that organised a series of workshops on TCFD to foster knowledge on that topic and provide training and written guidance and information on how to incorporate the TCFD reporting recommendations and on how to use the TCFD recommendations with regard to the companies ESG disclosure.</p> <p>(3) Furthermore, Deutsche Börse Group has positioned its ESG Best Practice Guide as a guideline for companies affected by ESG regulation. The Guide presents internationally valid reporting methods including selected best-practice examples and, by giving seven recommendations, offers a structured approach to an intelligent and above all efficient way of dealing with the topic of sustainability in capital market communications. This makes it particularly suitable for smaller and medium-sized companies as well as for newcomers to reporting. The Guide, which is reviewed regularly to ensure it is up to date, therefore supplements Deutsche Börse Group’s range of services for issuers.</p> <p>(4) Moreover, Deutsche Börse participates in disclosure programs such as the Sustainable Stock Exchange Initiative</p>
Managing Conflicts of Interest	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	Quantitative	FN-EX-510a.1	<p>As of 31 December 2020 there were no 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>Further details regarding ongoing legal proceedings can be found in the annual report 2020 of Deutsche Börse Group on pages 83-88.</p>
	Discussion of processes for identifying and assessing conflicts of interest	Discussion and Analysis	FN-EX-510a.2	<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 their personal life 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> <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 conflict parties to act fairly and ethically, particularly either party’s objectivity to take a decision or to participate in a decision-taking process in the course of its professional obligations.</p>

DBG has implemented a group framework to identify and appropriately manage conflicts of interest. The management bodies of DBG 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. Group Compliance, the Compliance function of Deutsche Börse AG, maintains this framework, including the Group Policy on Conflicts of Interest, and is responsible for the implementation of respective procedures, awareness raising measures as well as advice, assessment, and controls. Group Compliance is supported by local Compliance functions established for certain DBG entities, which shall be directly involved within their respective areas of responsibility, and in turn have the responsibility to directly involve Group Compliance in conflict-related issues.

**General principles:**

- In the context of the role performed at DBG, all persons in scope shall act with honesty, objectivity, personal responsibility and in accordance with the highest standards of integrity through their professional and personal behaviour. They shall respect all applicable laws and regulations in all relevant jurisdictions. They shall carry out their professional duties with due skill, care and diligence, in the fair interests of their customers and the integrity of the market. As a core principle regarding any business activity of DBG, all customers shall be treated fairly at all times.
- Persons in scope are not permitted to take any decisions in their own interest, or in the interest of third parties, other DBG entities or persons closely associated to them, where such decisions are not in line with or contrary to regulatory requirements or DBG's interests.
- Furthermore, they shall in particular abstain from activities that compete with activities of DBG, from grasping any business opportunities to the detriment of DBG, as well as from any kind of misuse of inside information or other sensitive, non-public information obtained in the course of their professional responsibilities, or of their professional position, for their own personal gain.
- They shall contribute to identify, appropriately manage and document (potential) conflicts of interest

**Managements of conflicts of interest**

When identifying a situation where a (potential) conflict of interest cannot be avoided, appropriate actions to manage, document and, as applicable, report this situation shall be taken. Generic checks supporting the identification of (potential) conflicts of interest are implemented in various processes and procedures in DBG, i.e. in the context of recruitment, the implementation of new products and services, and procurement.

**Mitigating measures include**

- the Group Policy on Conflicts of Interest establishing general group standards and addressing business-/entity-specific requirements
- A tool-based solution supporting the processes of notification, assessment, and documentation
- Regular and ad hoc awareness-raising measures
- Transparency: requirement for persons in scope to notify any situation (potentially) leading to conflicts of interest for support, advice and further assessment
- Segregation/ separation (physical, virtual) in order to protect confidential information and ensure independence, particularly independence of mind
- Recusal, exclusion, termination
- Checks, controls and monitoring, escalation procedures in case of non-compliance/breaches
- Disclosure to customers or other third parties
- Documentation and reporting (to management and regulators)

				<p>For more information, see the Principles on the management of conflicts of interest at Deutsche Börse Group, which are also published on the DBG extranet (here).</p> <p>To do justice to the importance of this topic, Deutsche Börse has also integrated this into its Code of business conduct. For more detailed information, see code of business conduct (here).</p>
Managing Business Continuity & Technology Risks	(1) Number of significant market disruptions and (2) duration of downtime	Quantitative	FN-EX-550a.1	<p>(1) Multiple testing of the software used, its verified roll-out and the end-to-end monitoring of servers, network and applications were not able to prevent two successive complex malfunctions in the internal high-speed InfiniBand-network, where re-routing was not able complete in time, which brought the system availability for the spot market trading system down to 99.815 per cent and the figure for the derivative market trading system down to 99.891 per cent (same 2 events affected both markets).</p> <p>(2) These levels corresponded to downtimes of around 5.7 hours and 6.05 hours, respectively, during the entire year. Wide-ranging steps were taken to rule out such malfunctions in future, which have largely been completed. They particularly involved accelerating the emergency procedures, in order to make the system available again quickly, even if the faults cannot be prevented. Emergency tests are now carried out more frequently, the underlying messaging software has been optimised and is still being revised. (2020, annual report, p. 65, 73).</p>
	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected	Quantitative	FN-EX-550a.2	<p>Reporting of personal data breaches is subject to Deutsche Börse Group's Data Protection Policy in accordance with GDPR requirements. Within 2020 Deutsche Börse Group is reasonable comfortable having addressed potential data protection shortcomings in a sufficient way by the measures described herein. All employees have to 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.</p> <p>Data for 2020:</p> <p>(1) Number of data breaches: 92</p> <p>(2) Percentage involving personally identifiable information (PII): 4.34%</p> <p>(3) Number of customers affected: 1,804</p> <p>No case of delay disclosure.</p>
	Description of efforts to prevent technology errors, security breaches, and market disruptions	Discussion and Analysis	FN-EX-550a.3	<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 center, a disaster recovery system, set 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, the storage is synchronously copied or written with host based shadowing. In case of failure of</p>

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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.

**Information Security:**

Deutsche Börse Group's security approach includes overall measures in accordance with ISO/IEC 27001.

The Information Security function at Deutsche Börse operates a Group-wide program designed to raise staff awareness for the responsible handling of information.

Additionally, a wide catalogue of services is mandatory to protect the technology environment used by Deutsche Börse Group.

The Group operates a situation center (Computer Emergency Response Team, CERT), which detects and assesses threats from cybercrime at an early stage, and coordinates risk mitigation measures in cooperation with the business units.

There was no successful attack on Deutsche Börse Group's core systems in 2020. (2020, Annual Report, p.89ff)

For more detailed information, see annual report 2020 pp. 65-69 (stable, transparent, and fair markets) and pp. 89-90 (Information security).

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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 2020, the combined average daily number of trades (buy+sell) on trading venues Xetra, Börse Frankfurt and Tradegate amounted to</p> <p>Equities: 1,661,779</p> <ul style="list-style-type: none"> <li>• ETFs, ETCs, ETNs: 111,011</li> <li>• Bonds: 3,211</li> <li>• Funds: 3,601</li> <li>• Structured Products and Other Instruments: 50,485</li> </ul> <p><b>Eurex:</b></p> <p>The average daily number of trades in 2020 totaled 668.111 in 255 trading days resulting in 170,368,292 trades for year 2020. The number of trades in equity index derivatives reached 99,141,341 trades (58.19%), interest rate derivatives 66,392,195 (38.97%), equity derivatives 2,926,027 (1.72%) and all the rest asset classes including volatility index derivatives, dividend derivatives, ETF &amp; ETC derivatives, foreign exchange derivatives and commodity derivatives 1,908,729 (1.12%).</p> <p><b>360T:</b></p> <p>The average daily number of trades in 2020 totaled 43.319,2 trades.</p>
Average daily volume traded, by product or asset class	Quantitative	FN-EX-000.B	<p><b>Cash Market:</b></p> <p>In 2020, the combined average daily order book turnover (single-counted) on trading venues Xetra, Börse Frankfurt and Tradegate amounted to:</p> <ul style="list-style-type: none"> <li>• Equities: €7,004 million</li> <li>• ETFs, ETCs, ETNs: €975 million</li> <li>• Bonds: €23 million</li> <li>• Funds: €13 million</li> <li>• Structured Products and Other Instruments: €84 million</li> </ul> <p><b>Eurex:</b></p> <p>The average daily volume of traded contracts totaled 7,299,673 leading to contracts per trade ratio of 10.9. The total volume in terms of traded contracts reached 1,861,416,584 contracts of which equity index derivatives covered 1,019,059,736 (54.75%), interest rate derivatives 528,515,769 (28.39%), equity derivatives 266,319,440 (14.31%) and all the rest asset classes including volatility index derivatives, dividend derivatives, ETF &amp; ETC derivatives, foreign exchange derivatives and commodity derivatives 47,521,639 contracts (2.55%).</p> <p><b>360T:</b></p> <p>360 T daily trade volumes reached 87 €bn in 2020 (Annual report 2020, p. 38).</p>