



DEUTSCHE BÖRSE
MARKET DATA

Action on facts

Market Data & Analytics
Products & Services

Fast.
Concise.
Accurate.

Act on facts

The key to successfully operating in today's financial markets is information – fast, concise, and accurate. This is where you can rely on Deutsche Börse – Market Data & Analytics.

Serving a wide range of clients

To meet the constantly evolving needs of our broad range of clients – banks, brokers, trading firms, algo traders, asset managers, hedge funds, data vendors and other market participants – we are continuously developing new products and data solutions.

Providing data and services

Our data products provide information on all instruments listed on our own trading venues, such as the largest German stock market and pan-European electronic trading platform Xetra®, the leading international derivatives exchange Eurex® as well as those of our cooperation partners. In addition, we provide data for indices calculated by Deutsche Börse and STOXX Ltd. Further product highlights include our algo news feed AlphaFlash® as well as the news services from our subsidiary Market News International.

Focusing on speed

Getting trading relevant data to our clients as fast as possible is one of our top priorities. Our real-time data feeds benefit from proprietary state-of-the-art technology with system availability of more than 99.8 percent.

About Deutsche Börse Group

As one of the world's leading exchange organizations with more than 3,000 employees, Deutsche Börse Group provides investors, financial institutions and companies access to global capital markets.

Table of Contents

Direct Data Feeds	5
Low latency, real-time data feeds	
Algo Trading Products	9
Algo news feed; ultra low latency market data; historical data for back-testing	
Market Data	11
Trading data from the venues of Deutsche Börse Group (Eurex®, Xetra®) and its cooperation partners; Eurex® ICAP Swap Spreads; index data; alternative asset class data (longevity, carbon emissions)	
Historical Market Data	19
Historical market data from Xetra® and Eurex®; index data	
News Services	21
Real-time news; machine-readable economic and corporate news; insightMED pharmaceutical reports	
Analytics & Reporting Services	23
MiFID related services; statistics; analytics	
Reference Data	24
Instrument master data; corporate actions; closing prices	
Contact Information	26



Data availability in microseconds

Direct Data Feeds

Deutsche Börse's real-time data feeds provide market participants with trading relevant information at highest speed.

CEF® data feeds

- Deliver real-time data on bids, asks, prices, volumes, indices and analytics
- Are used by banks, trading firms, investment advisors, fund managers, algo traders, data vendors and other market participants
- Operate with state-of-the-art technology that ensures minimum latency and system availability of more than 99.8 percent
- Are able to deliver more than one billion messages per day without increasing latency
- Can be accessed via leased lines, proximity hosting, internet connection and VPN

AlphaFlash® algo news feed

- Delivers machine-readable global macroeconomic indicators and unscheduled corporate news
- Is designed for easy direct integration into trading algorithms
- Is the fastest and most economical algo news feed available
- Sends data directly from government lock-ups and embargoed releases at release time
- Offers various proximity hosting and other connectivity options
- Was developed by Deutsche Börse using the resources of its subsidiaries Need to Know News and Market News International

Data Feeds	Data Covered	Features	Access
CEF® Core	All market data products (equities, derivatives, bonds, indices), alternative asset class data, MNI Main Wire and insightMED	<ul style="list-style-type: none"> Level 1 or Level 2* information depth Complete trade chronology, netted pre-trade information 	Leased lines, proximity hosting, internet connection, VPN
CEF® ultra+ Xetra	Xetra®: pan-European electronic trading platform	<ul style="list-style-type: none"> Low latency Designed for algo trading Complete trade chronology, un-netted pre-trade information up to order book depth of 20 	Leased lines, proximity hosting, VPN
CEF® ultra+ Eurex	Eurex®: leading international derivatives exchange		
CEF® ultra+ Irish Stock Exchange	Irish Stock Exchange		
AlphaFlash®	U.S., Canadian, European, Australian, Japanese and Chinese macro-economic indicators (e.g. non-farm payrolls, CPI, housing statistics, GDP etc.) Unscheduled corporate financial data for companies listed in Germany	<ul style="list-style-type: none"> Low latency Designed for algo trading Data is sent directly from government lock-ups, embargoed releases are available instantly at release time 	Proximity hosting, co-location, leased lines, internet

* Level 1 real-time information contains best bid, best ask, last traded price and the respective quantity; Level 2 information also lists the top ten buy/sell offers and respective volumes in real-time

An overview: Deutsche Börse Group's flagship trading venues and data products

Xetra®

- More than 98 percent of the trading volume in DAX® shares is handled via Deutsche Börse's pan-European electronic securities trading platform Xetra®
- Xetra® is also Europe's largest platform for exchange traded funds (ETF) and exchange traded commodities (ETC)
- On peak days, Xetra® processes more than 2.1 million trades, investors have access to around 400,000 German and international tradable products
- Xetra® matches buy and sell orders from more than 240 market participants in 18 countries in a central, fully electronic order book
- The key Information Products providing Xetra® information are: Spot Market Germany, Xetra® ultra and Deutsche Börse Indices and Xetra® ETF

Eurex®

- Eurex® is one of the world's leading derivatives exchanges and is jointly operated by Deutsche Börse AG and SIX Swiss Exchange
- Eurex® offers a broad range of international benchmark products and operates the most liquid fixed income markets in the world, featuring open and low-cost electronic access
- With 418 market participants connected from 29 countries, trading volume at Eurex® exceeds 1.9 billion contracts a year
- The key Information Products providing Eurex® data are: Eurex® and Eurex® ultra



High speed data

Algo Trading Products

Deutsche Börse offers a full range of data solutions to support algo traders in the development and execution of sophisticated trading algorithms. Our state-of-the-art network infrastructure ensures that our clients receive data with minimum latency.

Products

AlphaFlash®	<ul style="list-style-type: none"> ■ Delivers machine-readable global macroeconomic indicators and corporate financial data ■ Macroeconomic data covers the USA, Canada, Europe, Australia, Japan and China ■ Unscheduled corporate financial data is provided for around 100 of the most liquid stocks listed in Germany ■ Designed for easy direct integration into trading algorithms ■ Consistently faster and more economical than competitor products ■ Data is sent directly from government lock-ups; embargoed releases are available instantly at release time ■ Global proximity hosting and other connectivity options
CEF® ultra+ low latency direct data feeds	<ul style="list-style-type: none"> ■ CEF® ultra+ Eurex and CEF® ultra+ Xetra deliver the full chain of Eurex® and Xetra® pre-trade and trade data up to an order book depth of 20 ■ High-speed data transmission due to multicast technology
Historical data	<ul style="list-style-type: none"> ■ Deutsche Börse offers a variety of historical data products designed for back-testing and verifying trading strategies ■ The data covers instruments traded on Eurex® and Xetra®



Select the data products that suit your needs

Market Data

Our market data Information Products contain data from a wide range of sources and satisfy the needs of traders, algo traders, investment advisors, fund managers, data vendors and other market participants.

- We are the exclusive provider of trading data for Germany's leading stock market and pan-European electronic trading platform Xetra® as well as for Eurex®, one of the world's leading derivatives markets
- We also provide trading data from our cooperation partners' trading venues, e.g. the Irish Stock Exchange and the Bulgarian Stock Exchange
- Our product offering further includes bond market data, index information (from Deutsche Börse AG, STOXX Ltd. and cooperation partners), longevity data and carbon emission data
- Most Information Products are available as Level 1 or Level 2 products; Level 1 real-time information contains best bid, best ask, last traded price and the respective quantity; Level 2 products also list the top ten buy/sell offers and respective volumes in real-time
- Level 2 information is available for the key spot and derivatives markets (Xetra® and Eurex®) and all other trading venues using electronic order books

Equity Markets – Information Products

Bulgarian Stock Exchange – Sofia	<ul style="list-style-type: none"> Market data from the only stock exchange in Bulgaria
European Energy Exchange (EEX®)	<ul style="list-style-type: none"> Market data from one of the leading energy exchanges in Europe
Spot and Derivatives Market	<ul style="list-style-type: none"> Also covers alternative asset classes, e.g. CO₂ emission rights
Irish Stock Exchange	<ul style="list-style-type: none"> Un-netted pre-trade and trade data from the Irish Stock Exchange Provides an exclusive overview of the on-exchange Irish stock market
Irish Stock Exchange ultra	<ul style="list-style-type: none"> Low latency un-netted pre-trade and trade data (up to order book depth of 10) market data for securities listed on the Irish Stock Exchange which are traded electronically on the Xetra® trading platform
MiFID OTC Trades	<ul style="list-style-type: none"> Compilation of the trades reported via the MiFID OTC Post-trade Transparency Service Data for over 7,000 equities
Regional Exchanges Germany	<ul style="list-style-type: none"> Market data from Germany's regional exchanges (Berlin, Düsseldorf, Hamburg-Hanover, Munich) In combination with the Spot Market Germany Information Product this data set provides a detailed picture of securities trading in Germany
Spot Market Germany (Frankfurt/Xetra®)	<ul style="list-style-type: none"> Provides market data covering over 85 percent of the trading volume in German shares Contains netted pre-trade and un-netted trade information for Xetra® and the Frankfurt trading floor Includes price information on the constituents of the DAX® index family

Equity Markets – Information Products (continued)

Tradegate®	<ul style="list-style-type: none"> Market data from Tradegate®, the Berlin exchange targeted at private investors The data currently covers 4,000 equities, 1,500 bonds and 1,000 funds
Xetra® European Stars	<ul style="list-style-type: none"> Market data for the Xetra® European Stars segment
Xetra® International Market	<ul style="list-style-type: none"> Market data for the Xetra® market segment for European blue chip stocks (currently, more than 800 European equities are tradable on XIM) Covers all stocks included in the Euro STOXX 50® index and highly liquid equities from Austria, Belgium, Denmark, Finland, France, Great Britain, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland
Xetra® ultra	<ul style="list-style-type: none"> Provides low latency market data covering over 98 percent of the trading volume in DAX® shares, including data for more than 400,000 instruments in total Contains un-netted market data with increased order book depth of all instruments traded on the highly liquid electronic platform Xetra® If sourced via our CEF® ultra+ Xetra data feed, single pre-defined product groups can be selected Designed for processing in algorithmic trading machines
Xetra® US Stars	<ul style="list-style-type: none"> Market data from the Xetra® US Stars quality trading segment Includes information on shares of the Dow Jones Industrial Average and other US shares traded actively on Xetra®

Derivatives Markets – Information Products

Eurex®	<ul style="list-style-type: none"> ■ Provides market data from Eurex®, one of the world's leading derivatives exchanges ■ Includes information on some of the most heavily traded futures and options contracts world-wide ■ Complete and un-netted real-time Eurex® trading chronology with netted pre-trade information
Eurex® Agriculture	<ul style="list-style-type: none"> ■ Market data for futures and indices on European processing potatoes and London potatoes, dairy products as well as futures on piglets and hogs
Eurex® ICAP Swap Spreads	<ul style="list-style-type: none"> ■ Provides benchmark information for Euro yield spreads ■ Derived from ICAP Euro interest rate swap rates and government bond future pre-trade data from Eurex® ■ Updated every 250 milliseconds
Eurex® ultra	<ul style="list-style-type: none"> ■ Provides low latency market data from Eurex®, one of the world's leading derivatives exchanges ■ Contains the most granular Eurex® market data quality available ■ If sourced via the CEF® ultra+ Eurex data feed, single pre-defined product groups can be selected ■ Designed for processing in algorithmic trading machines

Indices – Information Products

Bulgarian Stock Exchange – Sofia Indices	<ul style="list-style-type: none"> ■ Index information for the Bulgarian stock market
Customized and Focus Indices	<ul style="list-style-type: none"> ■ Provides information on tailor-made index products, customized indices and selected Deutsche Börse indices ■ Underlying data for structured products and exchange traded funds (ETFs) ■ The data is also included in the Information Product Deutsche Börse Indices and Xetra® ETF
Deutsche Börse Indices and Xetra® ETF	<ul style="list-style-type: none"> ■ The complete Deutsche Börse index universe with more than 3,000 price and performance indices including the DAX® index ■ Underlying data for some of the most liquid futures and options products as well as ETFs ■ The DAX® index alone serves as an underlying for more than 30,000 financial products ■ Profound overview of German, European and global market trends ■ Trading data for the XTF® segment with more than 750 ETFs and 37 percent of the European trading volume for exchange-traded funds
STOXX® Customized Indices	<ul style="list-style-type: none"> ■ Information on indices that STOXX Ltd. creates on behalf of providers of structured products ■ The data is also included in the Information Product STOXX® Indices
STOXX® Indices	<ul style="list-style-type: none"> ■ Provides access to real-time market data of the STOXX® index family ■ Profound overview of European market trends ■ Basis for well known exchange-based and OTC products such as the liquid EURO STOXX® 50 index futures

Indices – Information Products (continued)

iBoxx® Indices	<ul style="list-style-type: none"> ■ Provides international bond market information ■ Based on real-time prices from the trading desks of contributing banks
Irish Stock Exchange Indices	<ul style="list-style-type: none"> ■ Index information for the Irish stock market
Volatility Indices	<ul style="list-style-type: none"> ■ Comprises the real-time data of three volatility indices (VDAX-NEW®, VSTOXX®, VSMI®) covering the euro zone ■ These indices serve as benchmarks for assessing short-term market volatility

Certificates/Warrants/Funds – Information Products

Börse Frankfurt Funds	<ul style="list-style-type: none"> ■ Contains trading information for around 3,600 investment funds ■ The Frankfurt Stock Exchange is the largest market place for actively managed funds in Europe
Scoach® Frankfurt	<ul style="list-style-type: none"> ■ Provides trading data for more than 600,000 certificates and warrants ■ Contains the traded prices, best bid/ask and volumes

Bond Markets – Information Products

Eurex® Bonds	<ul style="list-style-type: none"> ■ Price information for German bonds, Pfandbriefe, Dutch government bonds and European covered bonds ■ The Eurex Bonds segment serves as a platform for bond trading in Europe
Eurex Repo®	<ul style="list-style-type: none"> ■ Insight into inter-dealer repo data comprising best bid/ask quotes with respective sizes ■ Eurex Repo® is one of Europe's leading repo platforms with more than 50 trading members
iBoxx® Consolidated Prices	<ul style="list-style-type: none"> ■ Based on real-time bid and ask quotes from the contributing banks ■ Serves as underlying for the construction of inter-market spreads, inter-sector spreads and rating yield curves

Alternative Asset Classes – Information Products

Xpect®	<ul style="list-style-type: none"> ■ Xpect® provides generation life tables and indices on a monthly basis ■ Separate data on life expectancy and mortality risk for men and women in Germany, the Netherlands and England/Wales ■ Xpect® data enables clients to evaluate longevity risk on a monthly basis ■ Xpect® indices serve as an underlying for index-based financial instruments, such as longevity or mortality swaps and forwards
Monthly Carbon Report (MCR)	<ul style="list-style-type: none"> ■ Provides monthly reports based on effective CO₂ emissions data supplementing the annual official publication ■ CO₂ emission data is available on a monthly basis for every EU27 segment



Historical data helps shape future results

Historical Market Data

Historical Market Data from Deutsche Börse provides a reliable and solid basis for the development and execution of investment strategies and risk analyses.

Historical Market Data

Historical Data	<ul style="list-style-type: none"> ■ Covering Xetra® (spot market) and Eurex® (derivatives market) ■ Tick data, best bid/ask, price and turnover time series, order book turnover, liquidity measures, index data, etc. ■ OTC settlement statistic for structured products ■ Instant availability through direct download from WebShop
Eurex® Top Level Order Book	<ul style="list-style-type: none"> ■ Provides low cost market data for developing and reviewing trading strategies ■ Detailed order book data for Eurex® products ■ Data includes best bid/best ask (Level 1) information
EnBS Historical Data Eurex®	<ul style="list-style-type: none"> ■ Designed for back-testing and optimizing algo trading strategies ■ Original complete copy of order book information up to order book depth 20 from the Eurex® Enhanced Broadcast Solution data feed incl. quotes, trades and reference data ■ All trades and quotes with original time stamp in milliseconds ■ Format: FIX 5.0 FAST 1.1
EnBS Historical Data Xetra®	<ul style="list-style-type: none"> ■ Designed for back-testing and optimizing algo trading strategies ■ Original complete copy of order book information (up to order book depth 20) from the Xetra® Enhanced Broadcast Solution data feed including quotes, trades and reference data ■ All trades and quotes with original time stamp in milliseconds ■ Format: FIX 5.0 FAST 1.1



Number one in terms of speed and quality

News Services

Deutsche Börse provides leading edge news services to its clients. AlphaFlash® and the Market News International (MNI) products benefit from the fact that our subsidiary MNI is a fully accredited news agency whose experienced journalists have direct access to government lock-up rooms and embargoed news.

Products

AlphaFlash®	<ul style="list-style-type: none"> ■ Delivers machine-readable economic data (e.g. employment figures, CPI, GDP) from the USA, Canada, Europe, Australia, Japan and China ■ Provides unscheduled corporate financial data (e.g. earnings, dividend announcements) for companies listed in Germany ■ Designed for easy direct integration into trading algorithms ■ Available in 11 data centers across the globe
insightMED	<ul style="list-style-type: none"> ■ Provides trading relevant information for around 100 of the most important international pharmaceutical companies ■ insightMED reports are based on the expertise of a network of 42,000 physicians and contain comments and survey results regarding patents and clinical studies, drug approvals and warnings, side effects, product recalls etc.
MNI Bullets	<ul style="list-style-type: none"> ■ Available for Fixed Income, Foreign Exchange and Credit ■ Offer authoritative, minute-by-minute reporting on global markets, presented in succinct bullet point format ■ Focus on trading flows, order levels and market sentiment
MNI Main Wire	<ul style="list-style-type: none"> ■ Provides real-time intelligence for global markets in scrolling headline format backed by in-depth stories ■ Includes assessments of current monetary thinking at the major central banks, daily reports from bond trading floors, exclusive interviews and analyses
MNI Monitor	<ul style="list-style-type: none"> ■ Fastest available web-based screen display of economic data ■ Easy to sign up, easy to use, mobile-friendly



Tapping directly into the source

Analytics & Reporting Services

Our analytics and reporting services support our clients when it comes to fulfilling reporting requirements and risk management needs.

Analytics

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| Info Cube | <ul style="list-style-type: none"> ■ Management tool to monitor a firm's own trading activities ■ Can serve to market a firm's own trading skills using a breakdown of ranking and market share in individual securities and market segments/sectors ■ Provides information on a member's trading activities on Xetra® as well as an analysis of the trades of all individual market participants (anonymous) ■ Increased market transparency in securities trading due to detailed analysis of trade flows |
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Reporting Services

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| MiFID OTC
Post-trade
Transparency
Service | <ul style="list-style-type: none"> ■ Fulfilment of the post-trade transparency requirements set out in the MiFID Directive ■ Coverage of all MiFID relevant shares traded across the EEA ■ End-of-day compliance report ■ Attractive price model and potential revenue-sharing |
| TRICE®
Transaction
Reporting
Service | <ul style="list-style-type: none"> ■ Offers a comfortable way to report all transactions in securities electronically to the Federal Securities Supervisory Authority (BaFin) and the French Financial Markets Authority (AMF) ■ Automatic reports from the electronic trading systems Eurex® and Xetra® |
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Reference Data

Deutsche Börse offers a range of reference data services that help market participants improve process and settlement quality. Most of the services are based on WSS (Securities Service System) which is also used to feed Deutsche Börse's trading and settlement systems.

- We provide a comprehensive range of reference data (instrument master data and corporate actions) captured from Deutsche Börse Group's listing and admission procedures as well as from various other sources
- The services satisfy the need for clean and reliable reference data

Reference Data System – WSS

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| WSS Securities Service System | <ul style="list-style-type: none"> ■ Information database that supplies master, event and price data information on more than 800,000 international securities listed in Germany and abroad ■ Broad content universe of information sourced by Deutsche Börse Group and various third party content providers ■ Data available as file service (WSS Batch) with several updates per day and/or as online view (WSS Online and WSS Online Plus) |
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WSS Data Products

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| PROPRIS® – Process Proven Information Services | <ul style="list-style-type: none"> ■ Instrument reference data, income events, corporate actions for all ISINs in collective safe custody at Clearstream Banking Frankfurt ■ Availability of three sub-products for DE-ISINs, LU-ISINs and XS-ISINs |
| Deutsche Börse Group data via WSS | <ul style="list-style-type: none"> ■ Real-time and historical quotes (Spot Market Germany, Xetra®) ■ Daily statistics of trading data |
| Third Party Content via WSS | <ul style="list-style-type: none"> ■ Reference data provided by Wertpapier-Mitteilungen (WM) ■ Master data and corporate actions data for all equities listed worldwide (EDI Exchange Data International) ■ International quotes and prices provided by Thomson-Reuters and SIX Telekurs ■ Bond price validation service in collaboration with Interactive Data |
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Contact Information

For information regarding:

- Direct Data Feeds (CEF® and AlphaFlash®)
- Algo Trading Products
- Market Data
- EnBS Historical Data for Eurex® and Xetra®
- News Services

please contact:

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For information regarding:

- Historical Market Data
- Analytics & Reporting Services
- Reference Data

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Last Update: May 2011
Order Number: 2310-4114