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> epexspot

# Trading on EPEX SPOT 2020



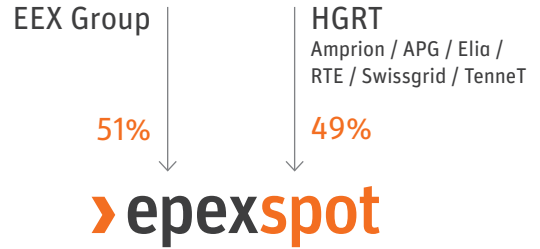
# About EPEX SPOT

The European Power Exchange EPEX SPOT SE operates organised short-term electricity markets with 24/7 market operation services. In 2019, **302 companies have traded 593 TWh of electricity** on EPEX SPOT representing 50% of the European electricity consumption.

From Intraday to Day-Ahead trading with physical fulfilment to Capacity auctions and Local Flexibility products – EPEX SPOT is your partner in trading – boosting innovation and providing a truly pan-European offer.

**Market Areas:** Austria, Belgium, France, Germany, Great Britain, Luxembourg, the Netherlands, Switzerland and the Nordic markets (expected Q1 2020)

In addition to this, EPEX SPOT prepares market launches in Poland and Baltic regions.



EPEX SPOT is a European company (Societas Europaea) in corporate structure and staff, based in Paris with offices or affiliates in Amsterdam, Bern, Brussels, Leipzig, London and Vienna. EPEX SPOT is held by EEX Group, part of Deutsche Börse, and HGRT, a holding of European electricity transmission system operators.

## Day-Ahead

Hourly Day-Ahead auction (CH)

European Hourly Day-Ahead coupled auction

30 min Auction (GB)



## Intraday

Auction

Continuous

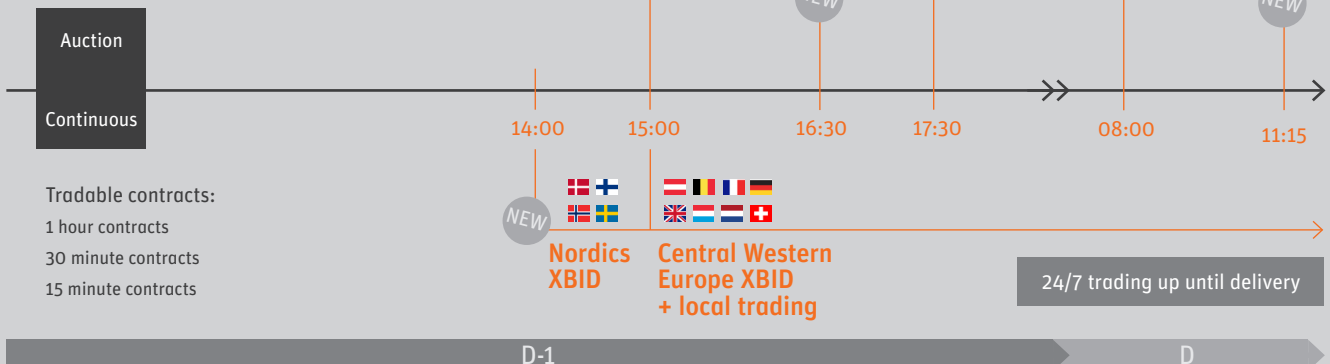
15 min Auction (DE)

60 min Auction (CH)

30 min Auction (GB)

30 min Auction (GB)

60 min Auction (CH)



Tradable contracts:

1 hour contracts

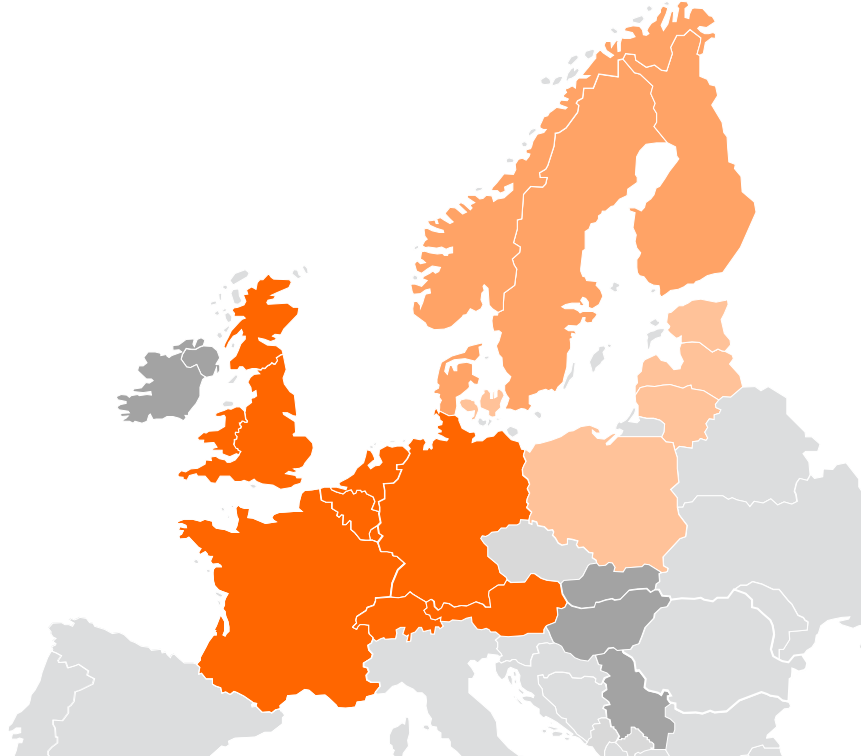
30 minute contracts

15 minute contracts

24/7 trading up until delivery

# Markets and volumes

- EPEX SPOT markets
- Nordic markets go-live in Q1 2020
- Coming soon
- Served Power Exchanges



## Exchange members

- Utility / Aggregator
- Local Supplier / Consumer
- Trading Company
- Transmission System Operator
- Bank and financial service provider and clearing member



EPEX SPOT is your partner in trading

### Innovation

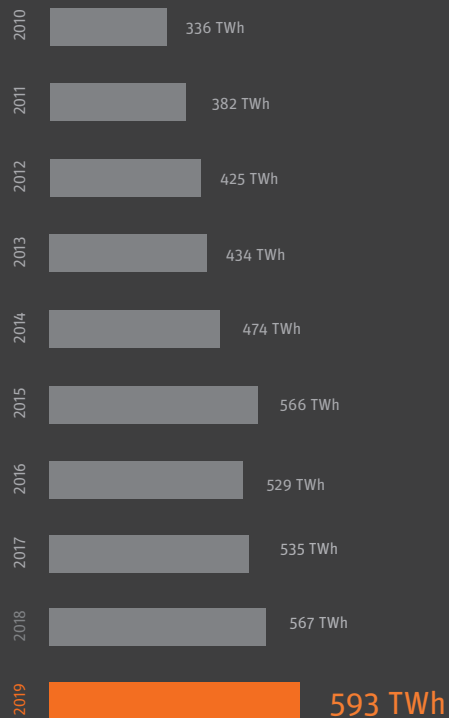
All products and innovations at EPEX SPOT are developed in close cooperation with our customers. The Exchange Council represents our trading community and makes sure all products and innovations are discussed and decided upon jointly with the market.

### Member first

With 24/7 market operations call support, geographical proximity, data & reporting services - we are at your service to ensure the most performant trading experience.

### Secured markets

The Market Surveillance Office is an independent exchange body which continuously monitors the EPEX SPOT markets, to secure they are running in a fair and orderly manner.



# dayahead

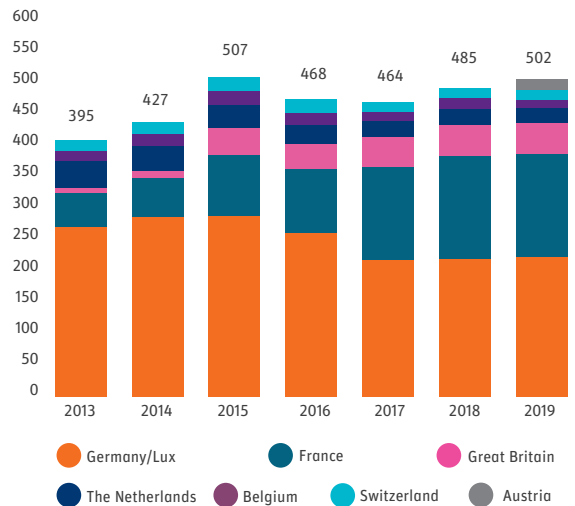
EPEX SPOT operates daily Day-Ahead auctions that are part of the European Market Coupling.

The Day-Ahead price, in particular, the German Phelix, has become a European reference thanks to its underlying liquidity. Apart from Switzerland, all markets are part of the Multi-Regional Coupling which stretches across 20 markets from Portugal to Finland and from Ireland to Italy.

**Market Areas coupled auctions:** Austria, Belgium, France, Germany, Great Britain, Luxembourg and the Netherlands Q1 2020: Denmark, Finland, Norway and Sweden

**Market Areas local auctions:** Switzerland and Great Britain

## Day-Ahead volumes (TWh)



## Tradable Contracts

24 hourly contracts are available on the auction, corresponding to the 24 hours of the following day. Hour 1 starts at 24:00 and ends at 1:00, hour 24 starts at 23:00 and ends at 24:00. Contracts can be traded either in single hours or in blocks of combined hours.

## Single hours

Orders contain up to 256 price/quantity combinations for each hour of the following day. The 256 prices are not necessarily the same for each hour. A volume – whether positive, negative or nil – must be entered at the price limits. A price-inelastic order is sent by putting the same quantity at the price limits.

## Blocks

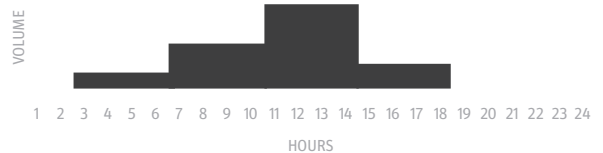
Block Orders encompass several hours at the same price. A block order is executed at the same ratio on all its hours.

## Specific conditions:

- Maximum volume per classic block order is 600 MW in DE/LU, AT and FR, 500 MW in GB, 400 MW in NL and BE and 150 MW in CH
- Either buy or sell
- Can be either entirely executed or entirely rejected (All-or-None); or executed above a minimum acceptance ratio defined by traders (**curtailable blocks**)

- Volumes can be different across hours (profiled blocks):

## Profiled Blocks:



## Smart and big blocks

Smart and big blocks portfolios are classic portfolios with the additional functionality allowing the submission of linked, exclusive and big blocks.

- **Linked blocks** are a set of blocks with a linked execution constraint, meaning the execution of one block depends on the execution of its father block. They allow to represent the variation of electricity generation with regards to the market price.
- **Exclusive blocks** are a group of blocks within which a maximum of one block can be executed, so that electricity is traded at the most profitable moment.
- **Big blocks** are larger than classic blocks with the maximum size going up to 1300 MW and allows to cover large production capacities.
- **Loop blocks** are families of two blocks which are executed or rejected together. They allow to bundle buy and sell blocks to reflect storage activities.

## GB Half-hour Day-Ahead 15:30 Auction

The GB half-hour auction at 15:30 offers members an opportunity to trade half hour contracts in a local Day-Ahead auction.

### Trading Procedure

An auction takes place once a day, 365 days a year. Results are published as soon as possible from 15:45 (GB local time).



### Minimum price /volume increment

Price tick: 0.1 GBP/MWh  
Volume tick: 0.1 MW



### Minimum and maximum prices

Min: -500 GBP/MWh  
Max: 3000 GBP/MWh



### API (Application Programming Interface)

Order submission and results retrieval are both available through API access, in addition to the client access.

## Hourly Day-Ahead Auctions

### Trading Procedure

A blind auction takes place once a day, 365 days a year. Results are published as soon as possible from 12:50 for all Day-Ahead coupled markets; as soon as possible from 11:10 for Switzerland. The order book opens 45 days (14 days in GB) in advance and closes one day before delivery at 12:00 for all Day-Ahead coupled markets, at 11:00 for Switzerland.



### Clearing and Settlement

EPEX SPOT transmits trade information to the central counterparty, European Commodity Clearing (ECC), for settlement and delivery. ECC nominates to the concerned TSO on behalf of the Exchange Member 4 times per hour until the local nomination deadline.



### Minimum and maximum prices

Min: -500 €/MWh  
Max: 3000 €/MWh



### Delivery Zones

50Hertz, Amprion, APG, Elia, NationalGrid, RTE, Swissgrid, TenneT DE & NL, TransnetBW



### Minimum price/ volume increment

Price tick: 0.1 €/MWh  
Volume tick: 0.1 MW



### API (Application Programming Interface)

Order submission and results retrieval are both available through API access, in addition to the client access.

# > intraday

Our Intraday markets cover the entire European region, from CWE to the Nordic markets (planned in Q1 2020). Intraday markets are mainly used for:

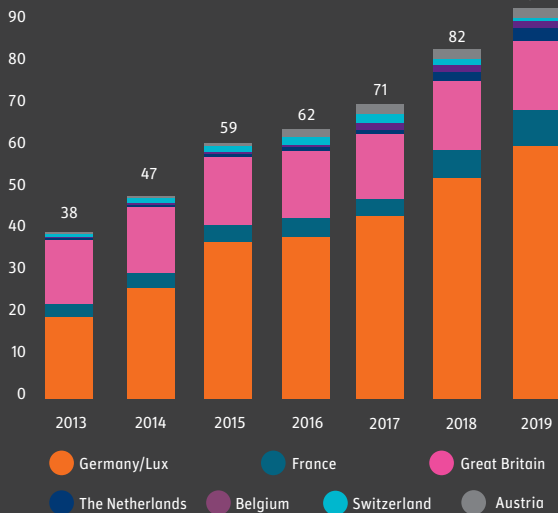
- Plan generation and adjust purchases & sales closer to delivery
- Managing forecast errors or unforeseen events
- Adjusting from hourly positions to 15 minutes
- Offering flexible generation as a substitution for renewables
- Enabling cross-border arbitrage and trading

The Intraday market is divided into continuous and auction trading. All continuous Intraday markets of EPEX SPOT run on the M7 trading system, an industry-standard in terms of performance. These markets are by far the most liquid Intraday markets in Europe.

Some innovations of EPEX SPOT since 2014:

- 15 minute auction on the German market, with new blocks up to 100MW
- 30 minute contracts in France and 15 minute contracts in Belgium & Netherlands
- 4 coupled auctions between GB & Ireland, and Switzerland & Italy

## Intraday Volumes (TWh)



## DE 15 Min Opening Auction

### Trading Procedure

A blind auction takes place once a day, 365 days a year. Results are published as soon as possible from 15:10. All tradable contracts are 15 minute contracts. The order book opens 45 days in advance and closes at 15:00, one day before delivery.



### Minimum and maximum prices

Min: -3000 €/MWh  
Max: 3000 €/MWh



### Minimum price/volume increment

Price tick: 0.1 €/MWh  
Volume tick: 0.1 MW



### Delivery Zones

50Hertz, Amprion, TenneT, TransnetBW



### Clearing and Settlement

EPEX SPOT transmits trade information to the central counterparty, ECC, for settlement and delivery. ECC nominates to the concerned TSO on behalf of the Exchange Member until the local nomination deadline.



## CH Hourly Intraday 16:30 and 11:15 Coupled Auctions

### Trading Procedure

Blind auctions take place twice a day, 365 days a year. All tradable contracts are 60 minute contracts. The order books open 14 days in advance and closes at 16:30 (D-1) and 11:15 (D). Results are published as soon as possible from 16:45 and 11:30.



### Minimum and maximum prices

Min: -500 €/MWh / Max: 3000 €/MWh



### Clearing and Settlement

EPEX SPOT transmits trade information to the central counterparty, ECC, for settlement and delivery. ECC nominates to the concerned TSO on behalf of the Exchange Member until the local nomination deadline.



### Minimum price /volume increment

Price tick: 0.1 €/MWh / Volume tick: 0.1 MW



# GB Half-hour Intraday 17:30 and 8:00 Coupled Auctions

## Trading Procedure

Blind auctions take place twice a day, 365 days a year. All tradable contracts are 30 minute contracts. The order books open 14 days in advance and closes at 17:30 GMT/BST (D-1) and 8:00 GMT/BST (D). Results are published as soon as possible from 08:30 and 18:00.



## Clearing and Settlement

EPEX SPOT transmits trade information to the central counterparty, ECC, for settlement and delivery. ECC nominates to the concerned TSO on behalf of the Exchange Member until the local nomination deadline.



## Minimum and maximum prices

Min: -150 €/MWh  
Max: 1500 €/MWh



## Minimum price /volume increment

Price tick: 0.1 GBP/MWh  
Volume tick: 0.1 MW



# Continuous Markets

## Trading Procedure

- Continuous trading 7 days a week, 24 hours a day, all year around
- hourly contracts for the next day open at 15:00 pm (D-1) for DE, FR, CH, AT, NL & BE
- 30 min contracts for the next day open at 15:30 (D-1) for CH & DE, at 15:00 for FR
- 15 min contracts for the next day open at 4.00 pm (D-1) for DE and CH, at 15:00 for NL & BE
- all contracts for the next day open at 00:00 (GMT/BST) D-1 in GB

# 24/7

## Lead Time

- AT, BE, DE, NL: 5 minutes
- GB: 15 minutes for 30 Minute contracts
- FR: 30 minutes
- CH: 30 minutes
- Cross-border: 60 minutes



The lead time is the time between the end of the trading session and the start of the delivery period.

## Minimum price/ volume increment

Price tick: 0.01 €/MWh  
Volume tick : 0.1 MW



## Clearing and Settlement

ECC nominates to the concerned TSO on behalf of the exchange member every 15 minutes.



## Minimum and maximum price

Min: -9999 €/MWh  
Max: 9999 €/MWh



## Delivery Zones

50Hertz, Amprion, APG, Elia, NationalGrid, RTE, Swissgrid, TenneT DE & NL, TransnetBW



## Tradable Contracts

Block orders

- pre-defined blocks (baseload, peakload)
- user-defined blocks linking several consecutive hours

1 hour contracts

30 minute contracts

15 minute contracts

## Trade Registration

OTC clearing services allowed for hourly and block orders.



## API (Application Programming Interface)

Versatile, performant and standardized API services are available for order submission and results retrieval, in addition to the client access.

# Join us in the Nordics

Go-live Q1 2020 – Providing you with a truly pan-European offer

- › Liquidity ensured from go-live
- › Most performant Intraday trading system (M7)
- › Unique product offer fitting the Nordic energy mix

EPEX SPOT will be offering the **12 am Day-Ahead auction** (single Day-Ahead price) and **XBID Intraday continuous** trading in all Nordic market areas within Denmark, Finland, Norway and Sweden – benefitting from the full market coupling benefits and EPEX SPOT innovations.

#### Day-Ahead auction

- ALL EPEX SPOT block order types available
- Bigger blocks & increased number of order families

#### Intraday continuous

- 1,000,000+ offers submitted daily
- Advanced API trading

#### Member Services

- 24/7 call support
- API support
- REMIT reporting

#### EEX Group Services

- EEX Transparency platform
- Cross-margining savings across all spot venues cleared by ECC

Fee holiday until 30 June 2020 followed by attractive bundle offers

Take advantage of our competitive offer now



See EPEX SPOT Website > Downloads: [Nordic Member Readiness Checklist](#)

Contact us: [sales@epexspot.com](mailto:sales@epexspot.com)

#### EPEX SPOT Market Operations

Auction Hotlines (incl. Intraday 15 minute Call DE)

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Continuous Intraday Hotlines

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## How to become a member

1. Contact us to find the membership that suits you best  
E-mail: [sales@epexspot.com](mailto:sales@epexspot.com), Tel +33 1 73 03 62 62

2. Find a clearing bank or sign a direct clearing agreement with ECC

3. Become a Balance Responsible Party

4. Follow the admission process including the trader exam

5. Start trading

## More services: Market Data & API offers

Exchange members and third parties can benefit from a range of additional services:

- e-learning, to better understand the power market and take the trader exam
- market data and indices, as soon as available, to derive crucial market insights
- API solutions, to customize your trading experience

Contact us: [marketdata.sales@epexspot.com](mailto:marketdata.sales@epexspot.com)