Integrated Single Electricity Market.
Energy Portfolio Management solutions.
When choosing any vendor, Bord Gáis Energy looks for a company with a strong and stable reputation, a clear understanding and commitment to the Irish market, as well as the ability to deliver the service and specifications we require.

JOHN HEFFERNAN
BORD GÁIS ENERGY

Why ABB?
I-SEM Integrated Single Electricity Market.

At our Head Office on the Belgard Road, Tallaght we operate four divisions that are in turn organised in relation to the customers and industries we serve. These are Electrification Products, Robotics & Motion, Process Automation and Power Grids where staff are involved in sales, technical support, engineering and project management.

ABB’s Enterprise Software team have a long and rich heritage supporting the needs of the energy sector in Ireland, having provided a technology foundation for many participants at the inception of the All Island Single Electricity Market (SEM) in Ireland in 2007. Our teams of energy experts hold over 15 years’ experience providing market leading solutions for changing energy markets around the world, solving challenges around scheduling, bidding and settlement of generation and load. The team at ABB actively engage in the Irish market and have invested in a focused Irish energy team who are dedicated to serving our growing customer base who rely on ABB for market communications and settlements for SEM and in the future, I-SEM.

As the industry has continued to evolve, our expert consultants - who work with many energy companies on a market advisory basis - have been proactively engaged in monitoring the market to ensure we have kept fully up-to-date with all developments and timelines. In 2015, our commitment to the market was consolidated with the launch of a fully-proven cloud-based I-SEM market participant platform for market communications and settlements. This always up-to-date solution provides market participants, large and small, with the ability to take full advantage of the opportunities and value that the new I-SEM market will bring. What’s more, no matter how the market rules and structures change, ABB’s I-SEM solution will ensure that our customers are compliant and able to address all the opportunities of this new, integrated energy market, providing greater value to customers and shareholders alike.

ABB in Ireland.
Story of I-SEM.

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Irish Wholesale Electricity Markets.
All change.

The design of the new I-SEM Market is a radical departure from the current SEM market model.

**SEM**

- Market Operator takes care of Managed pool market, with participants only bidding volumes, start-up cost and no-load cost.

**I-SEM**

- I-SEM offers a fully open commercial market model, with opportunities to bid volumes and prices and to define bid strategies for distinct commercial advantage.

  Continuous Trading offers 24/7 opportunity to benefit from market participation.

- ‘Managed Pool Market’ model offers few commercial opportunities and is hard to participate in for smaller players.

  Limited number of trading gates.

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- Market Participant IT landscape is getting far more complex, with more market bodies to interact with. With continuous trading market and significantly increased volumes of data to support this, the bidding, settlement and credit obligations are getting far more onerous (cf. diagram to the right).
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Always up-to-date solution
ABB proactively follows the market and participates in market meetings and consultations. When markets change, ABB takes care of designing, building and deploying market updates into your solution, so that you can be confident that you are always compliant and ready to participate. Market updates are included in the annual subscription cost giving you predictable annual costs regardless of the number of market updates.

Great usability and flexibility
nMarket has a user-friendly modern web based interface. Excel like interaction means that it requires very little training to get going, and the different ways of getting data in/out (manual, file import and APIs) allow you to make full use of nMarket as a system of record for all data related to your participation in the I-SEM market.

Advanced visualization
nMarket’s configurable reporting and dashboarding module allows you to create reports using data from both the market as well as other systems. Real-time updates let you turn your data into actionable intelligence, pointing you to what you need to focus on next. As reports can be created by users in a matter of minutes you will no longer need expensive custom development to be able to see the data the way you need to.

Full I-SEM market participation functionality
Regardless of the size of your company, nMarket covers all your I-SEM needs including bidding and settlements for the Day-ahead and Intraday markets supporting the Euphemia order types, Balancing Market participation including submission of Physical Notifications, Capacity Market reliability options settlements, and support for settling FTRs. nMarket I-SEM also automatically downloads all market reports published by the various I-SEM market operators, which our customers use to define bidding strategies that give them a competitive advantage.

Full-service offering
nMarket is provided as a cloud based Software-as-a-Service solution which includes: IT infrastructure, application management, backups, and disaster recovery – leaving you to focus on your day job instead of on running your IT landscape.

nMarket is ABB’s tried and tested wholesale electricity market participation solution, relied upon by over 40 customers worldwide to take advantage of trading opportunities while staying compliant with market rules.

nMarket I-SEM
The scalable SaaS solution for operating in the new Irish wholesale electricity market.

Why is nMarket the right solution for your business?

Proven solution

Pre-configured non-customized standard solution with easy implementation for full market participant scope
Brings Trading & Settlement Code compliance for Bidding & Settlements, with low-cost fast on-boarding project to meet market deadlines.

Cloud / SaaS deployment
Reducing CAPEX needs and ongoing operational costs & ease maintenance plus updates.

Vendor-led market following & market update approach
Predictable upgrade budgeting and market updates included in the software cost.

Extensive Integration Layer (APIs / Web Services)
For systems integration and functional extension around the Market System.

Scalable pricing model
Giving access to the full solution from the start, with costs growing as business revenues grow.

Partner-led deployment
An approach that supports an ‘All Market Go-Live’ scale.

Add-on functionality
Go beyond communications & settlements to suit a more complex market landscape (bid creation, visualization & reporting, portfolio optimization, market analysis, forecasting).
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ABB’s I-SEM solution comes with a dynamic, configurable reporting framework that allows you to produce dashboards and reports based on market data held in nMarket and when required to combine it with data held in other systems. The solution allows users to configure their own reports using the data that matters to them and to view it all in one place, regardless of the various IT systems in which it may reside.

Our I-SEM customers use this module to turn their data into actionable intelligence. User defined reports and dashboards allow you to quickly pin-point the most relevant information about your market participation and use this to decide what you need to focus on next.

This functionality is ideal for quickly and easily putting together position management reports that get instantaneously refreshed as your data changes; defining bid status screens that display what bids you have already submitted, which ones have already been awarded and what is still available to bid; displaying wind forecast views that are updated in real time; showing shadow settlement results that help you decide whether to raise a dispute with the market; or creating management reports and summaries.

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**I-SEM Reporting**

Real-time dynamic visualization across your portfolio.

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**Report Builder**

The reporting tool provides a wizard-based report builder that guides the user through the process of adding a report to the system, including configuring the data selection requirements and the desired report format.

**Reports and Dashboards**

Dashboards are configurable areas that display multiple reports, related by business function, underlying system or simply a user’s desire to view them together. Dashboards can be company-wide, private or restricted to particular user groups and can be added to and modified as required. Reports are configured rather than coded and can be tabular or of a range of graphical formats. A report-builder wizard is provided to enable users to produce their own reports giving them absolute freedom over how they view data.

**Action Reports**

The reporting tool provides the ability to configure pro-active alerts, assigned by job function, which appear on a user’s desktop regardless of the report or dashboard they are currently viewing, when events or situations occur about which the user needs to be aware. Each alert is associated with a report that the user can view in order to see more information about that particular event. The module allows email notifications to be set up so users can be alerted to events that matter most to them without needing to constantly monitor the dashboards.

**Auto-Refresh**

I-SEM reporting tool enables users to configure instances of reports to auto-refresh their data content, ensuring that they are up-to-date regardless of how long a dashboard has been on a user’s screen. If required, a “last refresh date” can be displayed.

**Automated Drill-Down Functionality**

Where appropriate, reports are able to act automatically as drill-downs from other reports without any further configuration. This means that reports can be built that are multi-level or can drill down or across into one another, by users, simply and effectively, without the need for complex structures.

**Web Sites and RSS**

As well as reports based on underlying systems, web pages and RSS feeds can also be added, as report objects, to a dashboard, further enriching the reporting experience.
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**Long-Term Market Outlook (Reference Case)**
Compiled by ABB’s energy experts, published twice a year, and offering a long-term outlook and price forecast for the European and American energy markets.

**Fundamental Market Analysis & Economic Transmission Modelling**
Models entire electricity markets and allows you to simulate the impact of operational and planning decisions.

**Energy Velocity**
ABB’s flagship data solution providing market data and virtual analysts to give you insights into how the market is operating and what this means for your assets within the market.

**Short-Term Forecasting**
A neural network forecasting tool able to provide you with short-term demand or price forecasts.

**Portfolio Optimization**
A Unit Commitment and Economic Dispatch solution for your power generation portfolio. Its output can be used to feed into a bid management tool to inform bidding into the I-SEM market.

**Bid Manager**
Creates the bids you should be submitting to the market.

**Credit Cover**
Views and forecast your financial collateral responsibility.

**Strategic energy consulting**
Services provided by ABB’s energy market experts to market participants, banks, regulators and other stakeholders.

“Using the Microsoft Cloud enables organisations of all sizes to use systems of intelligence in the Cloud to transform their businesses. ABB’s I-SEM solution is built on Microsoft Azure to provide a market participation solution that is highly available, scalable, secure and always up to date, while at the same time allowing you to make significant savings by eliminating the need for IT infrastructure and application management.”

TIBBS PEREIRA
MICROSOFT

“Bord Gáis Energy has recently procured ABB’s nMarket product to support its I-SEM Communications & Settlement needs, and we look forward to working with ABB to support the continual development of our customer communications requirements.”

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For more details, please contact our dedicated Irish Energy Team for a one-to-one overview of how ABB’s solutions help Irish market participants to be successful in the I-SEM market.

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