b-next
SECURE. PROTECT. COMPLY.

WHITEPAPER

# PROTECTING AGAINST MARKET MANIPULATION

» in the energy markets

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This paper explores how the adoption of sophisticated automated surveillance tools can help market participants to comply with REMIT (Regulation on Energy Market Integrity and Transparency / (EU) No 1227/2011) and meet the compliance operational requirements specified by ESMA (European Securities and Markets Authority) Guidelines, as well as the MAR (Market Abuse Regulation) and the US Energy Policy Act 2005.

# 01
# EXECUTIVE SUMMARY

Regulators including The United States Federal Energy Regulatory Commission (FERC), the Commodity Futures Trading Commission (CFTC) and in Europe, the Agency for the Cooperation of Energy Regulators (ACER) are taking a tough stance on allegations of market abuse and market manipulation in energy markets. Over the years, the agencies have issued severe fines for regulatory infringements. Recent cases involved reference price and index manipulation intended to influence the settlement of benchmark indices. Other cases involved uneconomic trading of physical or financial positions meant to benefit offsetting positions.

The above developments present a threat to the integrity of the energy markets. As the regulator's gaze is drawn towards allegations of market manipulation and price rigging in the energy markets, the need for protection against this type of fraud has become increasingly urgent.

Energy firms have recognised that manual methods of surveillance are inadequate for the task and are turning to trade surveillance technology for a solution. According to a recent survey, energy firms' use of technology to monitor for market abuse, is on the increase and has almost doubled over the last three years[1].

This paper explains how automated surveillance systems offer an efficient and practical means of fulfilling these requirements. Such systems help participants to comply with REMIT (Regulation on Energy Market Integrity and Transparency / (EU) No 1227/2011) and meet the compliance operational requirements specified by ESMA (European Securities and Markets Authority) Guidelines, as well as MAR (Market Abuse Regulation) and the US Energy Policy Act 2005 which is enforced by FERC.

The paper also highlights how, in an increasingly regulated environment, automated surveillance solutions are ideally suited to the complexity and magnitude of surveillance tasks. It also shows how these solutions can scale and have the flexibility to adapt to new regulatory requirements and future forms of market abuse.

[1] Annual energy trading and risk management software survey - Energy Risk Magazine 2017 (https://www.risk.net/commodities/energy/4002606/energy-firms-increase-use-of-trade-surveillance-technology)

# 02
# ENERGY REGULATIONS

## REMIT

REMIT (Regulation on the wholesale energy market integrity and transparency) is a legal framework for identifying and penalising insider trading and market manipulation in wholesale energy markets across Europe.

Article 3 of REMIT prohibits insider trading by persons who possess inside information in relation to a wholesale energy product. Article 5 prohibits any engagement in, or attempt to engage in, market manipulation on wholesale energy markets. Article 15 states that Persons professionally arranging transactions in wholesale energy products shall establish and maintain effective arrangements and procedures to identify breaches of Article 3 or 5.

## MAR

MAR was introduced in 2016. It has primacy over REMIT regarding criminal sanctions for market abuse. MAR's energy related regulations are also broader in scope. The regulations cover: commodity contracts; emission allowances; monitoring for manipulative activities and suspicious orders; and insider information disclosure.

## Energy Policy Act 2005 and FERC

The Energy Policy Act 2005 gave FERC the authority to issue rules to bar market manipulation in jurisdictional wholesale power and gas markets. FERC assures that its market manipulation rules are clear. Its aim is to make it easier for regulated entities to assure compliance, and make it easier for the Commission to identify violations[2].

[2] FERC and EPAAct 2005 (https://www.ferc.gov/legal/fed-sta/ferc-and-epact-2005.pdf)

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# ENERGY MARKET MANIPULATION SCENARIOS AND EXAMPLES

The energy markets are vulnerable to several forms of market manipulation, these include:

### WASH TRADES

These transactions are executed without a change in beneficial ownership or market risk. Such fictitious transactions can send misleading signals to the market regarding demand or supply of a financial instrument. According to Agency for the Co-operation of Energy Regulators (ACER), wash trades consist of "Entering into arrangements for the sale or purchase of a wholesale energy product, where there is no change in beneficial interests or market risk, or where beneficial interest or market risk is transferred between parties who are acting in concert or collusion." Wash trades can be part of a larger trading strategy aiming to manipulate wholesale energy markets. Wash trade surveillance should include detection of suspicious activities that are:

- By a certain customer
- By a certain trader
- At a certain venue
- Across multiple venues
- Carried out in a short period of time involving multiple market members (circle trading)

### MARKING THE FIX

This trading behaviour involves high volume buying or selling, or higher volumes than usual around the fix that influence price.

### PHANTOM ORDERS

Such behaviours involve placing orders without the intention of fulfilling them. This form of market abuse is typically identified by cancelled orders and also open orders which are not executed at the end of the day.

### SPOOFING

Spoofing involves placing and cancelling orders quickly before they are executed. Spoofing alters market price spreads by targeting the placement of orders, followed by executing transactions on the opposite side of the market, thereby taking advantage of movements in the price.

### LAYERING

Layering creates an artificial market price by placing orders which enhance the order book without the intention of execution.

### RAMPING

Ramping scenarios are characterised by the manipulation of the market price which is achieved by executing a large number of transactions or material volume in a short period of time.

Recent high profile cases of market manipulation in the energy markets include:

### BARCLAYS BANK

In 2012 FERC alleged Barclays and its traders manipulated the power market in California and the US Midwest from 2006 to 2008. The alleged activity involved the manipulation of the market to affect the index price at which related financial instruments settled. FERC proposed a $435 million fine against Barclays which recent reports say is now close to being settled[3].

In a separate case, the CFTC also fined Barclays for failing to create, maintain, and promptly produce required confirmations for a significant number of Exchange for Related Position (EFRP) metals and energy trades in violation of CFTC Regulations[4].

### IBERDROLA GENERACIÓN

In 2015 Spain's Iberdrola Generación was issued with a €25million fine by the Spanish National Markets and Competition Commission (CNMC)[5] following allegations of market manipulation of energy prices, which infringed REMIT regulations. CNMC alleged the firm had deliberately withheld water at hydroelectric plants, supplying nearly half of Spain's hydroelectric power. The alleged action saw energy prices and costs surge.

### JP MORGAN VENTURES ENERGY CORPORATION

In 2013 FERC fined JP Morgan Ventures Energy Corporation $410m for manipulating electricity prices in California and the US Midwest. The Commission said it had found JP Morgan traders engaged in manipulative bidding strategies designed to make profits from power plants. JP Morgan Ventures Energy Corporation traders were alleged to have offered to sell electricity at artificially low prices, so companies would put their power plants on standby mode to generate energy quickly. This would earn special fees. The traders would then offer to sell electricity from the plants at higher prices in the market for last-minute energy needs[6].



The above examples are not exhaustive and others will doubtless come to light given the dynamic nature of market abuse in the energy markets.

Surveillance solutions can detect such market abuse and the case for implementing such solutions strengthens with every fine and conviction that the regulators make.

[3] https://www.ferc.gov/enforcement/market-manipulation.asp

[4] http://www.cftc.gov/PressRoom/PressReleases/pr7452-16

[5] https://www.cnmc.es/sites/default/files/editor_contenidos/Notas%20de%20prensa/2015/Energia/20151130_NP_sancionador_Iberdrola_act.pdf

[6] https://www.ferc.gov/enforcement/market-manipulation.asp

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# THE ROLE AND BENEFITS OF AUTOMATION

## Automated Surveillance Systems

REMIT, MAR and the Energy Policy Act 2005, aim to prohibit market manipulation. Market Participants are expected to promote and maintain a robust control and compliance environment, to effectively identify, measure, monitor, manage, and report on the risks associated with their engagement in the energy markets.

Automated surveillance systems can alert compliance officers early on by identifying suspicious situations based on a number of pre-defined scenarios. In the case of Energy surveillance tools such as b-next's CMC:eEnergy and CMC:Market Abuse, suspicious trading activity can be identified automatically. Automated solutions of this kind will typically provide alert analysis including market data, covering global energy trading activity aggregating and analyzing data from across all time zones, allowing for cross linking between all parts of a global institution.

## The Benefits of Automation

Such is the complexity, magnitude and dynamic nature of the surveillance task that automation is emerging as a viable and practical solution. The benefits of implementing automated solutions are wide reaching and can include:

- The ability to respond quickly to regulatory changes and reporting requirements
- A reduction in workload and associated costs
- Proactive management of suspicious trends
- Improvements to the quality of market abuse monitoring
- Improvements to risk management and compliance oversight
- Increased competitive advantage
- Reduced exposure to risk
- Global monitoring of market abuse and insider dealing behaviour
- Flexibility and scalability to cope with future changes to regulation and new scenarios of market abuse
- Early alerting and deep insights into potential incidents
- Fulfilment of REMIT requirements and response to regulatory changes
- Unique market and business insights via data held in a harmonised database
- Fast roll-out and go-live

Market abuse in Energy markets is a moving target, so while there are software solutions that can help institutions to protect themselves against market manipulation, the need for scalability, flexibility and innovation will remain constant.

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# CASE STUDY: ENERGY MARKETS SURVEILLANCE

## Accelerating energy trading compliance for a leading energy trading house

### OVERVIEW

**Industry**

Energy Markets – Energy trading house

**Customer Profile**

b-next's CMC:eEnergy allows a leading energy trading house, to monitor its trading activities.

**Goals**

The customer's goals can be summarised as follows:

- Fast analysis of trading activities and comparison with market data
- Timely and rapid identification of trading
- Irregularities
- Compliance with regulatory mandates
- Data visualisation

**Solutions**

The following b-next solutions were deployed:

- CMC:eSuite
- CMC:eEnergy
- CMC:Market abuse alert visualisation

**Benefits**

- 25 market abuse scenarios
- 75 different analysis methods
- Regulatory compliance with Energy Markets regulation such as REMIT
- Rapid, accurate and easy data processing
- Data visualisation
- Increased marketplace integrity

### BACKGROUND

Boasting a sophisticated energy trading floor, this leading energy trading house must ensure that all its trading activities are fair and compliant. Relevant regulatory mandates include the Regulation on Energy Market Integrity and Transparency (REMIT) and the compliance operational requirements specified by European Securities and Markets Authority Regulatory (ESMA). In addition to meeting complex regulatory and compliance obligations, several important technical challenges needed to be solved.

### CHALLENGES

With increasing volumes of data coming from different sources and market segments, data integration and processing speeds had become a priority. Data analysis tasks had also increased in complexity. Trading activities of all market participants and comparison of the results with other markets and relevant transactions were required. An additional challenge was the ability to load and analyse market participant data quickly, to identify irregularities and undesired trends instantly. In order to identify these irregularities and trends, there was a need for configurable rules and the capability to visualise the results for analysis. An internal build was considered, however using a proven product was viewed as the most efficient use of time and resources. This prompted a search for additional support from external experts.

## SOLUTIONS

Following a period of evaluation of trade surveillance and compliance solutions, b-next was selected to help solve the above challenges. The recommended solution involved implementation of b-next's CMC:eEnergy, part of the CMC:eSuite platform. The solution ensures fast data integration. It also utilises order data, transaction data and instrument data, as well as external prices and volume information from relevant exchanges and trading platforms. This data can be imported from different sources using a series of standard interfaces. Analysis scenarios make it possible to identify behaviours related to market manipulation and insider trading.

> "We were impressed by the ability of b-next CMC:eEnergy to integrate data from different sources and process it quickly. Timely data analysis and visualisation capabilities were also central to our requirements. b-next was able to match these complex needs closely, helping us to meet our compliance obligations fully."
>
> HEAD OF GLOBAL RISK SERVICES, LEADING ENERGY TRADING HOUSE

## RESULTS

With implementation now well underway, the following positive outcomes have been achieved:

- Rapid data processing and analysis
- Enhanced data visualisation
- Timely identification of non-compliant behaviour

Easy and rapid data processing, as well as risk reduction have been facilitated through data harmonisation. Analysis, evaluation and processing have been simplified across silos. Alerts are visualised via the CMC:Market Abuse visualisation tool. Irregularities in trading activity can be identified, processed and documented quickly. All processing activities are audited securely. Risks resulting from the behaviour of market participants can also be identified in a timely fashion.

As the implementation phase progresses, REMIT requirements will continue to be fulfilled and strong foundations will be established to respond to future regulatory change.

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# THE FUTURE FOR ENERGY MARKETS SURVEILLANCE

Energy trading market abuse is firmly in the regulator's gaze. As scrutiny tightens and the full force of REMIT, MAR and the much anticipated MiFID II is felt, firms will come under increasing pressure to comply. Automated surveillance solutions are ideally suited to the complexity and magnitude of surveillance tasks. The signs of increasing surveillance technology adoption among energy firms are already present according to recent research. Although the net has tightened regarding market abuse, regulation alone is unlikely to put an end to manipulative practices in the energy markets. Surveillance technology has the potential to tighten the net further by monitoring more accurately and effectively for market abuse activities. The combined effect of regulation and surveillance will act as a strong deterrent for all but the most determined or reckless market manipulators. An increase in the adoption rates of surveillance technology and the sophistication of monitoring scenarios, will help to ensure that those intent on manipulation of the energy markets, have increasingly fewer weaknesses to exploit and fewer places to hide.

# GLOBAL GROWTH

fuelled by client success


**100+**
**SCENARIOS**

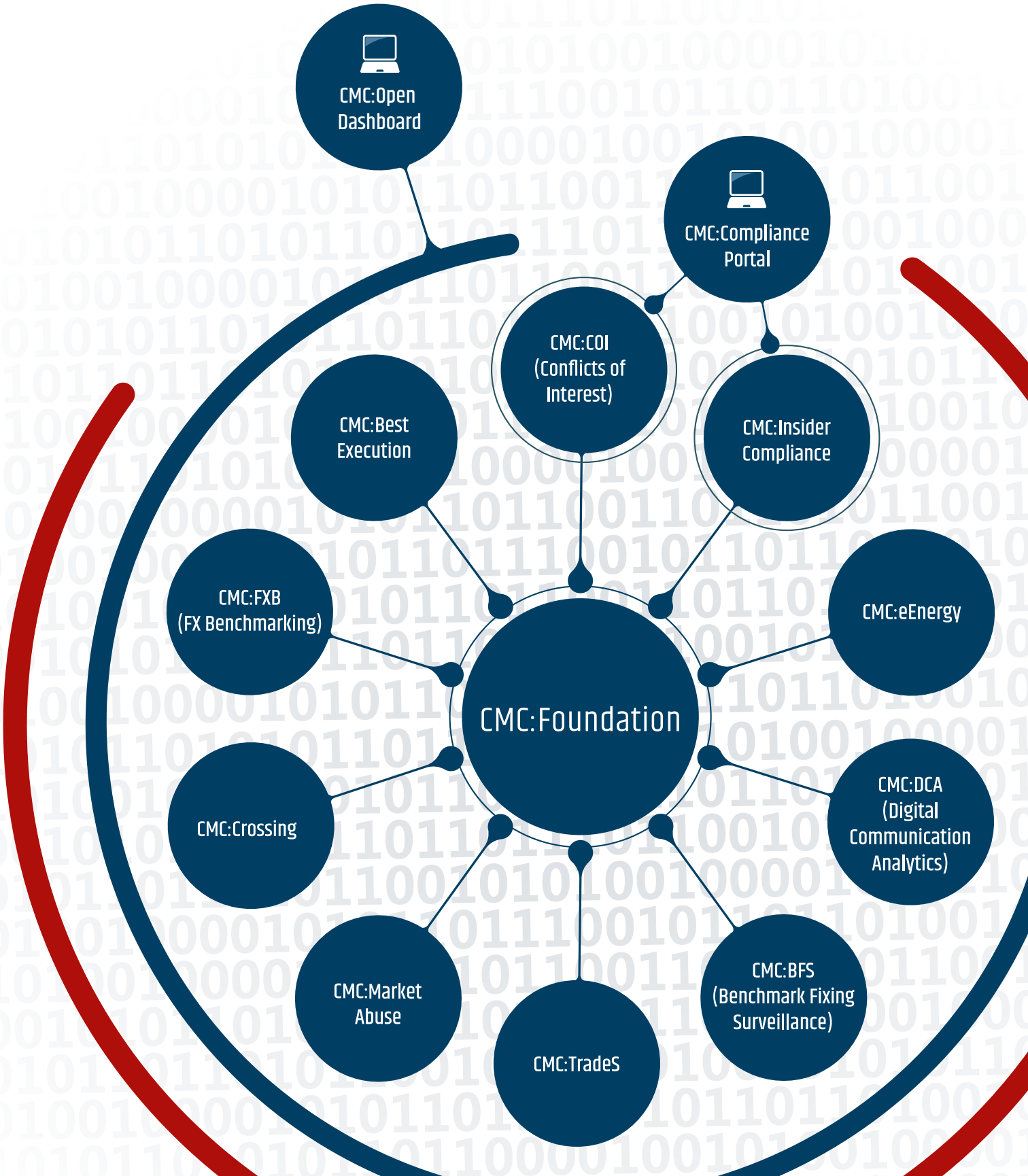
b-next's **CMC:Suite** solution offers a single integrated compliance platform with over **100 DIFFERENT SCENARIOS** for the detection of Market Abuse, Insider Trading, Conflicts of Interest, FX Benchmarking, Derivatives/OTC Monitoring, Best Execution Monitoring and Reporting of Trading Activity. It supports a diverse range of global clients including banks, brokers, asset managers, exchanges, regulators, funds and energy utilities.

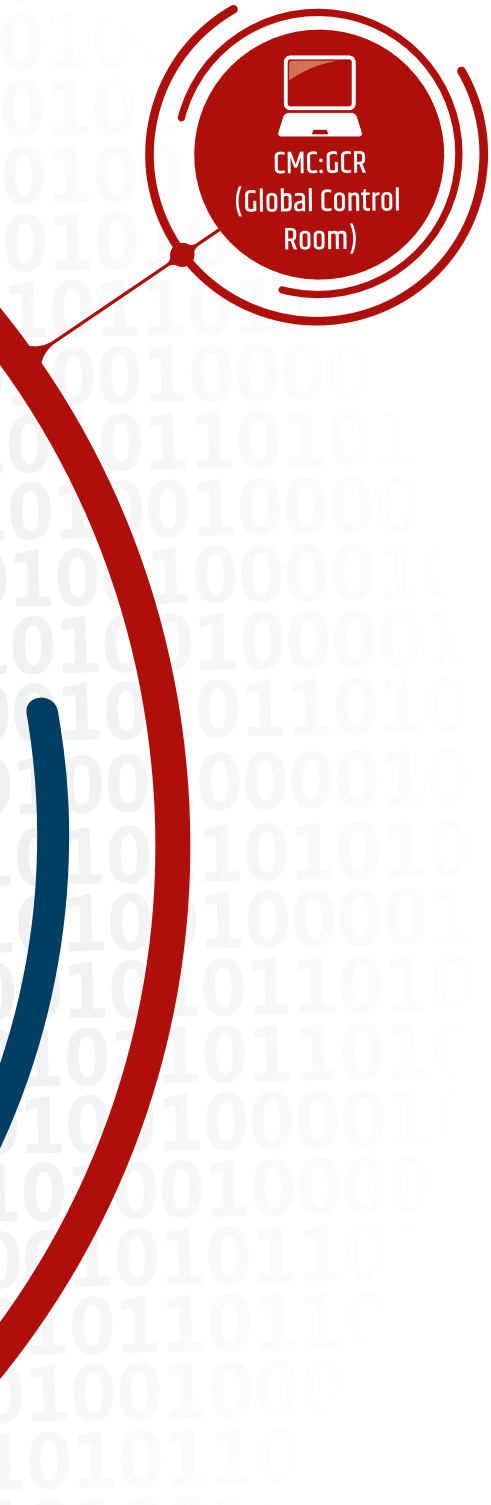
**25+**
**YEARS**

A highly focused provider of capital markets solutions for more than 25 years, b-next has a growing international client base, supported by offices in Europe and the US. Our proprietary development team and strong client centric approach ensure that our solution set remains at the leading edge of regulatory change and market best practice.

# CMC:eSUITE INTEGRATION

This integrated platform from b-next, helps detect market abuse, insider trading, and conflict of interest, as well as derivatives/OTC monitoring, best execution reporting and monitoring of trading activity.

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