A-TEAMGROUP

2014

REGULATORY DATA HANDBOOK2

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A-TEAMGROUP
REGULATORY DATA
HANDBOOK2

An Expanded View of Today's Regulatory Data Environment

Yes, we're back. We were so blown away by the response to our first edition that we decided to come back with an expanded version.

It's a truism that regulation is our friend, and on several different levels. While it may incur some pain in the short term, even the most jaded data manager will concede – perhaps between gritted teeth – that the hoops his department is being asked to jump through will all be for the greater good in the end.

Less altruistically maybe, new regulation spells new opportunities for service providers; it's one of the factors that makes our industry so innovative – and indeed makes it tick.

All of which may explain the high level of interest in our handbook. In this second edition, you'll find coverage of a significantly wider set of regulations.

For each, we've tried to describe simply what the regulation has been designed to achieve and its expected impact from a data and data management standpoint. We've also included messages from sponsors with products and services that can help you through the regulatory maze that our industry is now facing.

You'll see that we've broadened the remit somewhat this time around to include some perhaps bigger picture regulations, like the EU's Common Reporting (Corep) initiative, and some more trading-oriented regulations, like the SEC's Market Access Rule (Rule 15c-3-5). All of these have come to our attention from readers in the six months or so since we published the inaugural issue.

Needless to say, we'll get more requests for expanded coverage. But we think we've arrived at quorum, as it were, and we don't expect to revisit until this time next year.

In the meantime, though, we are exploring the possibility of putting the handbook online. We think this can help make it more timely and interactive, and raises the prospect of linking with our news stories from our Reference Data Review and Intelligent Trading Technology services, research and surveys, events and webinars, as well as to sponsor messaging. If that's of interest, please get in touch as we value your opinion on future direction.

Andrew Delaney
Chief Content Officer
A-Team Group

Reference Data Review

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For news on further Hot Topic webinars as they are added go to **http://bit.ly/rdrwebinars**

Forthcoming Webinars

2014	
October 23rd	**Pricing and Valuations**
November 20th	**The Data Management Implications of Solvency II**
December 2nd	**The Practicalities of Working with the Global LEI**
December 11th	**How to Meet FATCA Requirements**
2015	
January 20th	**Solvency II**
January 27th	**Risk & Regulations as Drivers for Data Management**
February 3rd	**FATCA**
February 24th	**Entity Data Management**
March 19th	**The Global Impact of Austrian Regulation & Smart Cubes**
March 24th	**BCBS 239 (Part of Basel III)**
April 21st	**Data Governance**
April 28th	**Enterprise Data Management - The Next Generation**
May 7th	**Pricing and Valuations Data**
May 28th	**Solvency II**
June 2nd	**Utility Model for Data Management**
June 16th	**BCBS 239**
June 23rd	**Risk & Regulations as Drivers for Data Management**
July 9th	**Entity Data Management**
July 14th	**Risk Data Analytics**

If you would like to learn about webinar sponsorship and speaking opportunities, please contact Caroline Statman at **caroline@a-teamgroup.com**

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CONTENTS

AIFMD

At a Glance

- **Regulation:** Alternative Investment Fund Management Directive (AIFMD)
- **Regulatory Regime/ Authority:** EU
- **Target Market Segment:** Alternative investment funds
- **Core Data Requirements:** Identification of asset types, third-party valuation of fund assets, reporting

Significant Milestones

- **June 11, 2011:** Approved by EU Parliament
- **July 22, 2014:** AIFMD came into effect
- **Ongoing:** Full transposition in member states (22 out of 28 member states, July 2014)

Description and Data Requirement

The Alternative Investment Fund Management Directive (AIFMD) is an EU regulation that focuses on a number of data and transparency requirements in fund managers' fund registration, valuation and reporting processes.

The goal of the regulation is to create a level playing field and set basic standards for the operation of alternative investment funds in Europe via new reporting and governance requirements. It requires firms to establish 'appropriate and consistent' procedures to allow for the independent valuation of a fund's assets. To achieve this, the valuation must be performed either by an independent third party or by the asset manager, provided there is functional separation between the pricing and portfolio management functions.

AIFMD looks to facilitate systemic risk monitoring by improving transparency to the investor community, thereby boosting public trust in the financial system. To this end, funds must register with national regulators and provide disclosure on their risk management systems and investment strategies in order to present a clear picture of their overall risk and data management capabilities.

Finally, AIFMD introduces a number of capital requirements for firms acting as third-party administrators to which funds can delegate responsibility. These capital requirements are likely to compel firms to seek operational efficiencies.

As with many other regulations, firms reporting under AIFMD need to place emphasis on maintaining the accuracy and quality of their reference data, including supporting any standards requirements for the identification of instruments. In addition, firms need to provide data from the markets in which they are participating, including Market Identification Codes, and data on their exposures and position concentrations for each fund.

AIFMD (cont.)

One of the most contentious problems for data management is the requirement for alternative investment funds to use an EU-domiciled depositary bank, which must also provide greater transparency into its own operations. Not only is it mandatory for depositories to monitor and gather data from these funds, but they must also run due diligence on custodian and prime brokerage firms, thus extending transparency requirements outwards to other players in the market.

The ability to provide data quickly, accurately and in the correct format requires significant investment in data infrastructure, but it is crucial in helping both depositories and investors meet their objectives of transparency and compliant reporting.

As well as raising issues around data management, AIFMD can have an impact on the trading environment. While asset valuations are sometimes associated with a fund's portfolio management, firms subject to AIFMD must separate these functions to ensure independent valuation as laid out in the directive.

AIFMD's broad coverage of funds means firms need to balance their asset holdings carefully, as greater exposure to assets carrying more risk and certain counterparties necessitate expanded reporting. This is especially true for non-EU investment firms that may not fall directly under the jurisdiction of AIFMD, but may be subject to the regulation's transparency and disclosure obligations if they market themselves to, and potentially deal with, EU investors.

While AIFMD was first introduced back in 2011, it took until June 2013 to ensure it was brought into effect and written fully into the statute books. Even now, a number of EU states have not transposed the directive into their national laws, so it may be some time before the broader effects of AIFMD come into full force across the sectors that it aims to regulate.

Dates for Diary

- **July 2015:** European Securities and Markets Authority to report on extending the AIFMD passport system that allows fund managers and funds registered in one EU state to market products to other member states to non-EU managers and funds

Key Links

Full Text:
http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32011L0061

FAQs:
http://europa.eu/rapid/press-release_MEMO-10-572_en.htm?locale=en

Further Questions:
http://ec.europa.eu/yqol/index.cfm?fuseaction=legislation.show

Basel II

At a Glance

- **Regulation:** Basel II
- **Regulatory Regime/ Authority:** BCBS and national supervisory authorities
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Disclosure of capital adequacy, risk profile

Significant Milestones

- **July 16, 2008:** Publication of final guidance on supervisory review process for banks implementing Basel II
- **January 16, 2009:** Release of consultation proposals for enhancing market risk framework and capital calculations
- **July 8-9, 2009:** Final package of measures to enhance the three pillars of the framework

Description and Data Requirement

Basel II is a Basel Committee on Banking Supervision (BCBS) issued regulation that aims to cover all identifiable sources of risk to the safety and stability of the global financial system. While firms are being given a relatively broad degree of freedom in developing their own risk management models under the supervisory standards and guidelines of Basel II, the models are subject to approval by national supervisory authorities in the countries in which the firms operate.

Basel II comprises three key pillars that set out capital standards. The first pillar focuses on minimal capital requirements and seeks to define risk-weighted assets involved in the calculations. The second pillar subjects banks' risk management models to regular stress testing and requires detailed results. It also ensures a supervisory review process is in place and that capital requirements calculations are conducted properly. The third pillar relates to market discipline, compelling banks to disclose their capital adequacy and risk profile to all players as a means of achieving greater transparency and stability in the financial system.

While Basel II is primarily about risk, it places high demands on data availability, particularly in respect of the measurement of credit and operational risk under the first pillar. Financial institutions often use a variety of measures to rate borrowers and determine capital requirements as a buffer against risk, but accurate assessment of clients and counterparties is also an essential step as quality data is critical to delivering accurate reports in a timely manner. When conducting internal ratings, banks rely on data obtained from balance sheets of loan applicants, management assessments and counterparties' market positions to determine an overall risk weighting and necessary collateral for both sides of a deal.

Basel II introduces several operational risk considerations,

Basel II (cont.)

including assessing the risk of failure for internal processes and systems, human error and external events. Lastly, the Basel II proposals are seen as a major driver of financial services firms' straight-through-processing initiatives, which in turn drive further demand for reference data management projects.

Basel II was introduced in 2004, and preparations for its successor – Basel III, see Page 10 – have been underway for some time and are expected to be implemented fully in 2018. While it was initially difficult to ensure successful worldwide implementation of Basel II, recent economic instability and recession in many involved countries has increased the appetite for the regulatory measures and highlighted some of the important factors that should be addressed in Basel III developments. In the meantime, Basel II has had a positive impact on many firms, with more accurately measured business data and credit risks enabling improvements in operational performance and driving many of the changes needed for other regulations.

Dates for Diary

- **January 1, 2015:** Deadline to measure capital adequacy on a real-time, intraday basis

Key Links

Full Text: http://www.bis.org/publ/bcbs107.htm

Publications: http://www.bis.org/list/bcbs/tid_22/index.htm

Progress Report: http://www.bis.org/publ/bcbs281.pdf

Basel III

At a Glance

- **Regulation:** Basel III
- **Regulatory Regime/ Authority:** BCBS and national supervisory authorities
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Disclosure of capital adequacy, risk profile

Significant Milestones

- **June 1, 2011:** Review completed
- **June 1, 2013:** LCR introduced

Dates for Diary

- **January 1, 2015:** LCR minimum requirement set to 60% and increasing 10% a year until 2019, higher minimal capital requirements are fully implemented
- **January 1, 2016:** Capital conservation buffer introduced
- **January 1, 2018:** NSF ratio introduced
- **March 31, 2019:** Full implementation

Description and Data Requirement

Basel III is a Basel Committee on Banking Supervision (BCBS) issued regulation that focuses on the standards used for market liquidity risk, bank capital adequacy and stress testing. Continuing the theme of its predecessors, Basel III aims to improve the stability of the financial system by concentrating on the potential risks associated with bank deposits and other borrowings, as well as the impact of any mass withdrawals from bank reserves.

Under Basel III, financial institutions have to meet rising capital requirements of 4.5% for common equity, up from 2% in Basel II, and 6% Tier 1 capital for risk-weighted assets, up from 4% in Basel II. New capital buffers have also been introduced to ensure a 2.5% 'mandatory capital conservation' threshold exists and that there is a 'discretionary counter-cyclical buffer' available for times of particularly high credit expansion.

Basel III includes a minimum leverage ratio, calculated by dividing Tier 1 capital by a bank's average total consolidated assets, which firms must maintain above 3%. Finally, the regulation introduces some new liquidity requirements, including a Liquidity Coverage Ratio (LCR) to ensure banks have sufficient liquid assets to cover cash outflows for 30 days and a Net Stable Funding (NSF) ratio to ensure the provision of enough stable funding to cover a one-year period of continued financial stress.

One of the major data challenges of Basel III is meeting its guidelines on risk data aggregation and analysis. Not only does Basel III mandate that firms collect and analyse more data for their risk management systems, but also it requires them to report information in a timely manner across all business units to present an holistic view of risk exposure.

Basel III was introduced to address concerns raised by the 2008 credit crisis, meaning banks must work towards the provision of complete and accurate data, but also

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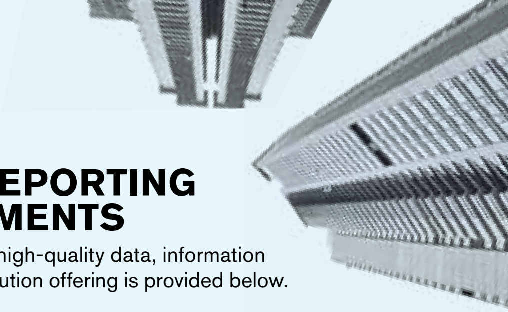

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BASEL II

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BASEL III

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- SSFA Solution
- HQLA Eligibility

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DODD-FRANK

Reference Data Services
- LEI
- Entity Swap Classification

Regulatory & Accounting Products
- HQLA Eligibility

Bloomberg Vault Trade Reconstruction

Bloomberg SEF

Learn more: bloomberg.com/enterprise, bloomberg.com/vault, bloombergsef.com

EMIR

Reference Data Services Entity Classification

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Trade Reporting

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FORM PF

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IFRS

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- Evaluated Pricing for Fixed Income and OTC Derivatives

Reference Data Services Default Risk

Learn more: bloomberg.com/enterprise

KYC

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- LEI
- Corporate Structures
- Beneficial Ownerships and Corporate Actions

Learn more: bloomberg.com/enterprise

MiFID II

Reference Data Services Entity and Customer Classifications

Trade Reporting

Learn more: bloomberg.com/enterprise, bloomberg.com/professional/solutions/regulation

MiFIR

Trade Reporting

Learn more: bloomberg.com/professional/solutions/regulation

SOLVENCY II

Reference Data Services
- Asset Taxonomy (NACE/CIC)
- Pillar 3 QRT Data
- Security Reference Data

Bloomberg Valuation Service for Fixed Income and OTC Derivatives

Regulatory & Accounting Products Fair Value Leveling Tool

Learn more: bloomberg.com/enterprise

Basel III (cont.)

Key Links

Full Text:
http://www.bis.org/publ/bcbs189.pdf

LCR Text:
http://www.bis.org/publ/bcbs238.pdf

Overview:
http://www.bis.org/bcbs/basel3.htm

towards making the data readily accessible to facilitate a rapid response to any future market crises. Many firms with business models based on individual silos will have to overhaul data management infrastructure to maximise risk data aggregation and ensure they can present a comprehensive view of risk data for full compliance.

While Basel III was initially scheduled for introduction in early 2013, changes introduced in April 2013 have pushed back full implementation until March 31, 2019. This may be some time away, but the US has already opted to take a stronger stance on LCR by mandating additional assets be made available for liquidation. It has also increased the leverage ratio for certain banks and their holding companies. That said, firms can expect further changes to the regulation as countries work out their own implementation.

BCBS 239

Description and Data Requirement

BCBS 239 is a regulation issued by the Basel Committee on Banking Supervision (BCBS) and designed to improve risk data aggregation in financial markets. It focuses on 14 principles that cover areas ranging from IT infrastructure to governance arrangements and risk reporting.

The principles are split into sets with the first set covering data governance and global IT architecture, and having a focus on top-down methodology and oversight by bank executives. The second set of principles details effective risk data aggregation, setting out a framework for complete and accurate data that can support an enterprise-wide risk assessment. The third set of principles aims to improve risk reporting and with a push to establish clear and useful reports, it addresses the requirement for frequent and well distributed reports that can be tailored to business needs across departments. The fourth set of principles requires supervisors, including regulatory authorities, to determine whether the principles are achieving desired outcomes and define any necessary corrective action.

The regulation is a supplement of the capital adequacy requirements of Basel III and considers whether firms have enough resources to monitor and cover risk exposure through the collection and management of relevant data. As such, it has a number of effects on data management, with firms working to improve their risk data aggregation capabilities according to the principles and presenting accurate risk data for the reporting requirements.

BCBS 239 requires firms to capture risk data across the enterprise, which means consistent data taxonomies need to be established and risk data needs to be stored in a way that makes it accessible and easy to understand even in times of financial stress. Many firms still have work to do in establishing effective risk data aggregation in line with the principles. This can be supported by reducing siloed systems and the complexity of data management, and creating a single view of risk data.

While BCBS 239 was originally published in January 2013, firms have until January 2016 to comply with its provisions. Extensions to the deadline seem unlikely, but the regulation could be a challenge to implement as criticism has emerged regarding the vagueness of its guidelines. Depending on their infrastructure and policies, firms will have a varied response to BCBS 239, with some already adhering to the principles in whole or in part due to other regulatory obligations and others only just starting on the journey to compliance.

At a Glance

- **Regulation:** BCBS 239
- **Regulatory Regime/ Authority:** BCBS and national regulatory authorities
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Effective management of risk data, reporting

Significant Milestones

- **June, 2012:** Consultation paper released
- **January 9, 2013:** Regulation published

Dates for Diary

- **January 1, 2016:** Compliance deadline

Key Links

Full Text: http://www.bis.org/publ/bcbs239.pdf

Publications: http://www.bis.org/bcbs/publications.htm

Progress Report: http://www.bis.org/publ/bcbs268.pdf

CFTC Rules 1.73 and 1.74

At a Glance

- **Regulation:** Rules 1.73 and 1.74
- **Regulatory Regime/ Authority:** CFTC
- **Target Market Segment:** Futures commission merchants
- **Core Data Requirements:** Credit and market limits, stress testing, timely handling and clearing of orders

Significant Milestones

- **October 1, 2012:** Effective date
- **June 1, 2013:** Rule 1.73 compliance extension deadline
- **September 1, 2013:** Bunched orders compliance extension deadline

Key Links

Full Text: http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=4bca9ee3ba79de6dc1abef21dd5d8da5&n=17y1.0.1.1.1&r=PART&ty=HTML

Issued Release: http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/ccd_tac_cmrm_factsheet_final.pdf

Deadline Extension: http://www.cftc.gov/PressRoom/PressReleases/pr6366-12

Description and Data Requirement

Rules 1.73 and 1.74 are Commodity Futures Trading Commission (CFTC) rules that govern how futures commission merchants (FCMs) should process both over-the-counter (OTC) trades and exchange-traded derivatives (ETDs). Under the rules, FCMs have to accept and allocate trades as soon as it is technologically possible to do so. They must also show their ability to examine their activity and any associated risk.

Rule 1.73 focuses on the creation of credit and market-based limits for customer or proprietary accounts. It includes intraday and overnight observation so that FCMs can screen orders that threaten to breach limits. It also requires the introduction of a number of controls, such as regular stress testing of positions and assessment of ability to liquidate quickly to meet margin requirements.

Rule 1.74 focuses on the allocation of bunched trades, mandating that trades be accepted or rejected as quickly as it is technologically possible. Under the rule, block orders need to be allocated as soon as possible post execution and no later than end of day, as opposed to being allocated prior to clearing. This change ensures that block trades follow the existing ETD model, with allocation at any point between clearing and end of day.

Rules 1.73 and 1.74 present a number of challenges for market participants. Clearing members must not only determine credit and market-based limits for accounts, based on margin requirements, position, order size and so on, but also screen the limits frequently in order to sustain compliance. They must meet regular stress testing goals, make monthly assessments of the cost and timeliness of liquidation, and test all credit lines once a year.

Practitioners must take steps to ensure their technology and operations are up to speed, with the rule on clearing as fast as is technologically possible emphasising the need for a timely automation process for order handling. The rules aim to promote greater certainty in the trading market by making trades not valid until they are accepted by an FCM.

While CFTC Rules 1.73 and 1.74 became effective on October 1, 2012, a number of extensions were granted that delayed complete implementation and created a series of periodic deadlines. In particular, many firms expressed difficulty in establishing sufficient pre-trade risk screening for bunched and give-up orders, a problem that contributed to the delay of Rule 1.74. A number of measures and policies have since been introduced by clearing FCMs as a result of using their own systems and operations to achieve compliance.

Corep

Description and Data Requirement

Common Reporting (Corep) is a European Banking Authority (EBA) set of technical standards for fund, risk and capital adequacy reporting. The regulation has been adopted by around 30 European countries and covers all banks, building societies and investment firms – essentially firms regulated under Bipru – requiring them to make a substantial review of the quantity, quality and frequency of data disclosures they make for regulatory reporting. For many institutions, Corep means altering plans, implementing management oversight of reports and reviewing reports for accuracy in a timely manner.

The regulation is divided into a number of templates, with the first five covering capital adequacy, one covering group solvency, nine addressing credit and counterparty risk, two covering operational risk and seven covering market risk.

The increased granularity of information required for reports and the need to present an enterprise view of data means Corep raises data management issues. Firms need to ensure that their systems and processes can support the new format for standardised reporting, as well as tackle the larger number of reportable data items.

In addition, data architecture and data capture need to be developed to ensure consistency in the information that is reported. More granular data requirements mean finance and risk functions need to co-ordinate to present a clear view of the underlying information. Given the complexity of the reporting task and the inherent difficulty in tagging data with the mandatory XBRL code format, firms need to make sure they have the appropriate systems in place to consolidate data and tackle the new challenges.

Finally, Corep introduces new schedules, such as Immovable Property Losses and Group Solvency, that firms may not be familiar with, so understanding these categories and definitions prior to reporting is crucial to ensure reports are filed correctly.

Corep was scheduled to be implemented via the Capital Requirements Directive IV and the corresponding Capital Requirements Regulation framework in 2013, with applicable firms having to submit capital adequacy reports within 30 days of the end of each quarter. However, UK firms have only been using Corep for regulatory reports since January 1, 2014 and some European countries have still to adopt the standardised reporting format.

At a Glance

- **Regulation:** Common Reporting (Corep)
- **Regulatory Regime/ Authority:** EBA
- **Target Market Segment:** European financial institutions
- **Core Data Requirements:** Effective management of risk and capital adequacy reporting

Significant Milestones

- **August 27, 2012:** Close of consultation period
- **September 17, 2013:** Revision of final draft
- **January 1, 2014:** UK Corep reporting

Dates for Diary

- **December 31, 2014:** Next quarterly reporting date

Key Links

Overview and Links:
https://www.eba.europa.eu/regulation-and-policy/supervisory-reporting/guidelines-on-common-reporting-2011-

Summary:
https://www.eba.europa.eu/documents/10180/109739/Explanatory-notes.pdf

Taxonomy:
http://www.eba.europa.eu/documents/10180/502670/COREP+FINREP+XBRL+Taxonomy+v2.0.0.pdf

CRD IV

At a Glance

- **Regulation:** Capital Requirements Directive IV (CRD IV)
- **Regulatory Regime/ Authority:** EU
- **Target Market Segment:** European financial institutions
- **Core Data Requirements:** Risk profile, disclosure of capital adequacy

Significant Milestones

- **July 17, 2013:** First published
- **July 1, 2014:** Implementation

Dates for Diary

- **January 1, 2015:** Ongoing reporting obligations apply
- **December 31, 2015:** Deadline for ongoing reporting obligations

Key Links

Full Text:
http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013L0036

FAQs:
http://europa.eu/rapid/press-release_MEMO-13-690_en.htm?locale=en

Original Release:
http://europa.eu/rapid/press-release_MEX-13-0716_en.htm?locale=en

Description and Data Requirement

The Capital Requirements Directive IV (CRD IV) is the fourth version of a European Commission regulation that seeks to implement Basel III type standards across the EU. CRD IV is divided into two parts: the Capital Requirements Regulation, which applies to all firms in the EU and includes most of the Basel III provisions in a single rulebook; and the Capital Requirements Directive (CRD), which is applied via national laws and includes provisions for remuneration, transparency, enhanced governance and buffers.

CRD IV makes a number of changes to corporate governance and to standardised reporting using Financial Reporting and Common Reporting. It applies to investment firms and credit institutions within the scope of MiFID II and focuses on improving the quality and quantity of capital that firms have available. The regulation introduces new capital requirements based on risk-weighted assets (RWAs) and new capital buffers to protect firms from potential market upheaval.

CRD IV also introduces new liquidity and leverage requirements to ensure firms can meet cash outflows and handle stress testing scenarios. However, unlike Basel III, CRD IV introduces a number of additional remuneration, transparency and corporate governance rules.

Brokers, traders and asset managers that must comply with CRD IV face a number of data management challenges. From a reference data perspective, CRD IV requires capital, liquidity and RWA calculations, making it necessary to understand exactly what information is needed for each entity. Breaking down data silos may be a necessary step in improving risk data aggregation and enabling firms to have a comprehensive understanding of assets and exposures in order to comply with the regulation's risk requirements. As much of CRD IV focuses on transposing Basel III requirements into EU law, firms also need an understanding of this regulation.

CRD IV was introduced on July 17, 2013 and built on the work of previous CRD regulations, expanding their scope in line with new timelines agreed by the Basel Committee on Banking Supervision. Many countries are working to transcribe the directive's components into national law, so firms can expect further changes to be introduced as CRD IV is applied in their countries.

Dodd-Frank

Description and Data Requirement

The Dodd-Frank Wall Street Reform and Consumer Protection Act is a US government issued regulation that aims to promote improved oversight of financial institutions through a wide array of reforms. Primarily, Dodd-Frank calls for the creation of new data. It also issues a number of guidelines for reporting formats and maintaining and analysing data from a variety of sources, and has a focus on standardisation of data across the industry.

One manifestation of this is the push towards the Legal Entity Identifier (LEI), which will be used as a global standard for unique entity identification. The LEI also forms the basis for systemic risk oversight and supports transparency, initially in the over-the-counter derivatives market.

Chief among the data challenges posed by this development is implementing the LEI standard. Many data repositories are not readily extensible and many downstream systems that assess risk and counterparty exposure need significant investment to make use of the LEI. Investment firms need to reach consensus on data symbology standards and look to create entity reference databases that can be adequately safeguarded against potential security and confidentiality threats.

Firms also need to continue to use different identifiers to access data from many sources of entity data. This is presenting a significant cross-referencing challenge that will continue while the coverage of the global LEI remains incomplete.

An even greater challenge is that Dodd-Frank requires a large intake and analysis of largely disparate data from across the entire financial services industry to better combat systemic risk. Many data managers will have to make drastic changes to their data architecture to ensure timely and accurate reporting of this data, as

At a Glance

- **Regulation:** Dodd-Frank Wall Street Reform and Consumer Protection Act
- **Regulatory Regime/ Authority:** US government
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Entity data management, risk management, transparency, reporting

Significant Milestones

- **December 2, 2009:** Dodd-Frank is introduced to Congress
- **July 21, 2010:** Effective date

Dodd-Frank (cont.)

Dates for Diary

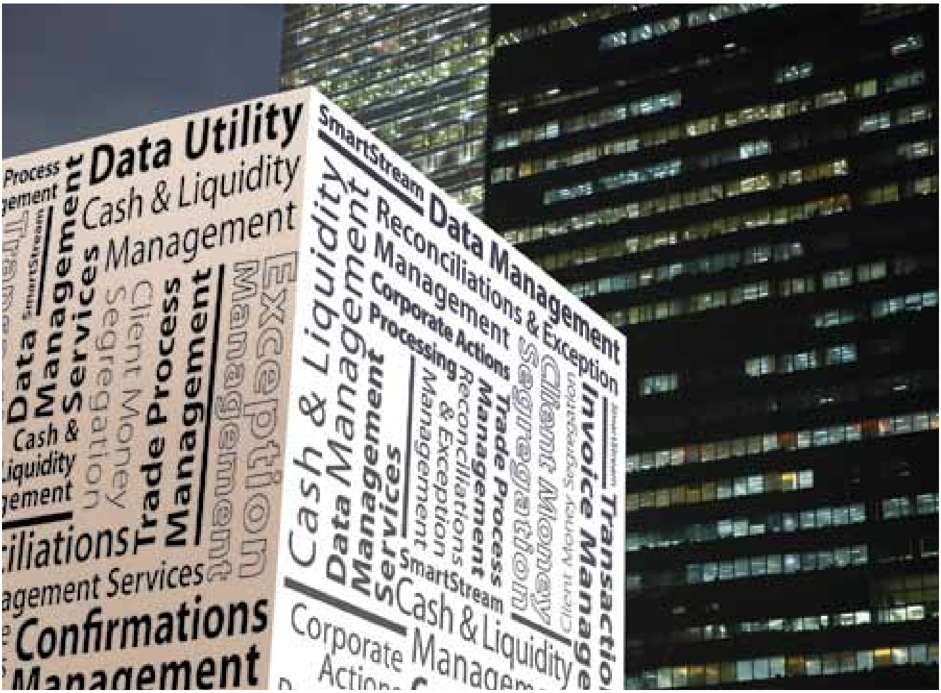
- **Ongoing:** Full implementation – 280 out of 398 rulemaking deadlines passed as of April 1, 2014

well as prepare for a number of simulation and stress testing scenarios aimed at promoting more effective risk management.

With proprietary and often sensitive information, particularly from hedge funds, needing to be given to regulators, a variety of confidentiality and privacy concerns are also raised.

As well as calling for data management development across many firms, Dodd-Frank makes changes to the trading environment. One of the biggest reforms under the regulation is encapsulated in the Volcker Rule, which prevents banks from making speculative investments if they cannot demonstrate a benefit to their customers. The rule means banks are generally restricted from conducting proprietary trading, which in turn prevents them from owning a hedge or private equity fund. The result has been an exodus of bank staff who move on to join existing hedge funds or establish their own. Depending on the final implementation of the Volcker Rule, banks will also have to consider how they handle hedging strategies and market making activities.

Beyond specific regulation such as the Volcker Rule, Dodd-Frank sets down a number of broader measures that have an impact on the overall trading environment.


Data Utility
Cash & Liquidity
Management
SmartStream
Data Management
Reconciliations & Exception
Management
Corporate Actions
Processing
Trade Process
Client Money
Segregation
Confirmations
Cash & Liquidity

Dodd-Frank (cont.)

Key Links

Full Text:
https://www.sec.gov/about/laws/wallstreetreform-cpa.pdf

Final CFTC Rules:
http://www.cftc.gov/lawregulation/doddfrankact/dodd-frankfinalrules/index.htm

Guidance and Questions:
http://www.cftc.gov/LawRegulation/DoddFrankAct/GuidanceQandA/index.htm

These include rules that have been introduced to govern how swaps and derivatives transactions are handled, cleared and reported. Transparency is another focus, with Dodd-Frank driving greater transparency across financial markets in an attempt to combat systemic risk. This means market participants must improve oversight of their trading operations to ensure they can observe new limits and submit accurate reports to their respective regulatory authorities.

Although implementation of Dodd-Frank has been slow since the regulation was first made effective in July 2010, and a number of rulemaking deadlines have been postponed or missed, firms have a lot of work to do to ensure their data infrastructure meets the regulatory requirements. As of April 1, 2014, 280 rulemaking deadlines had passed out of a total of 398, making the potential impact of the legislation difficult to weigh up and cost concerns an ongoing debate.

While many firms are at different stages in their responses to Dodd-Frank, a number of best practices are starting to unfold as larger financial institutions establish effective governance programmes in response to the regulation.

EMIR

Description and Data Requirement

European Market Infrastructure Regulation (EMIR) is an EU regulation focusing on measures that ensure over-the-counter (OTC) derivatives are subject to clearing via a central counterparty (CCP). In this context, a CCP must be listed in the European Securities and Markets Authority (ESMA) registry and set up and authorised as described in EMIR so that it is recognised across member states. EMIR also introduces risk management procedures for non-cleared OTC derivatives and requirements for derivatives to be reported to a trade repository.

Under EMIR, both counterparties to a trade must ensure that data related to a concluded trade, as well as counterparty data related to the entities involved in the trade, is reported to a relevant repository. All derivatives contracts regulated by EMIR, including both OTC and exchange-traded derivatives, must be reported, as well as lifecycle events such as give-ups and terminations. Firms have until the working day following the trade to meet reporting requirements, which means there are challenges in ensuring the quality and accuracy of counterparty data, and its delivery in a timely manner.

EMIR reporting raises a number of issues, including the need for firms to conduct an analysis of all their counterparties so that they can fulfil the regulation's classification requirements. This presents data management considerations as firms should be looking to maintain an accurate list of counterparties so that they can track exempt organisations and check counterparties' financial institution status.

EMIR mandates the use of Legal Entity Identifiers (LEIs) for reporting as well as the use of Unique Trade Identifiers (UTIs) that are common to both parties to a trade and are used to report to a trade repository. Both these identifiers raise data management issues and used together in a complex system they can become more difficult to

At a Glance

- **Regulation:** European Market Infrastructure Regulation (EMIR)
- **Regulatory Regime/ Authority:** EU
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Identification of issuers, clients and counterparties, entity data management, risk management, reporting

Significant Milestones

- **August 12, 2012:** Initial implementation
- **February 12, 2014:** Reporting deadline

EMIR (cont.)

Dates for Diary

- **September 18, 2014:** ESMA to submit draft regulatory technical standards on clearing obligations
- **October 10, 2014:** EMIR rules apply to transactions between non-EU entities
- **December 12, 2014:** Reporting start date for all asset classes unless exempt

manage. One of the difficulties of the LEI is that firms must map it to their counterparty and client data systems. To ensure correct mapping, many firms are working to centralise entity data and create an entity master that will accommodate the LEI and other identifiers, as well as support entity hierarchy data.

The UTI poses different problems as there is no standard mechanism for the issue of the identifier. The result is that UTIs are usually based on bilateral agreements between trading parties. Without agreement on a common UTI, firms have to deal with a large number of trade repository reconciliation breaks.

As a result of the data management issues around LEIs and UTIs, only a small percentage of trades have so far been matched and reported correctly, a situation that needs to be improved as regulators increase their scrutiny across Europe and apply fines where reporting is incorrect. Large broker-dealers and futures commission merchants are expected to be prime targets for these penalties, but the broad scope of the regulation could reach buy-side firms too if they fail to comply.

While the task of compliance with EMIR can be onerous, adequate sourcing and checking of data at an early stage will make data management easier in the long run, with a

EMIR (cont.)

Key Links

Full Text:
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:201:0001:0059:EN:PDF

List of Trade Repositories:
http://www.esma.europa.eu/page/Registered-Trade-Repositories

FAQs:
http://www.esma.europa.eu/content/QA-IX-EMIR-Implementation

push to centralising data, rather than maintaining a siloed approach, easing reporting requirements. Accurate and clean data is also a key consideration as EMIR reporting includes more than 80 fields and data is divided into two tables, one containing information about the trading entity and the other listing common information, such as contract details. This data must be reported on both sides of the deal.

In August 2014, EMIR started to implement daily reporting for financial counterparties and non-financial counterparties that requires provision of information on collateral value and mark-to-market valuations of positions. Over coming years, margin and margin variation requirements will also be introduced for non-cleared trades.

EMIR was introduced on August 16, 2012, with a reporting deadline set for February 12, 2014. ESMA has approved and registered six trade repositories for derivatives reporting and is processing more applications, while EMIR imposes standardised codes of conduct on both repositories, and CCPs. Trade repositories already registered are: DTCC Derivatives Repository, UnaVista, KDPW, Regis-TR, CME TR and ICE Trade Vault Europe.

Fatca

Description and Data Requirement

The Foreign Account Tax Compliance Act (Fatca) is a US government issued regulation that requires foreign financial institutions (FFIs) with US clients to carry the burden of tax reporting to the US Internal Revenue Service (IRS). FFIs must enter contracts with the IRS ahead of the compliance deadline and obtain Global Intermediary Identification Numbers (GIINs) through the IRS registration portal. GIIN numbers are used to identify financial entities, counterparties and issuers that are Fatca compliant. FFIs interacting with counterparties that do not have a GIIN, and are therefore not Fatca compliant, will be penalised.

In order to enforce Fatca, the US government is making Intergovernmental Agreements (IGAs) with other countries and has so far signed 34 Model 1 agreements, which require FFIs to report all Fatca information to their own governmental agencies that then report to the IRS, and five Model 2 agreements, that require FFIs to report directly to the IRS. Many more countries that have negotiated IGAs, but not yet finalised them, are being treated as having an IGA in place following additional guidance set down by the IRS in April 2014.

While FFIs can register at any time before the final compliance deadline of 31 December, 2014, work is needed to ensure correct classification under Fatca. Firms also have to determine any material modifications to grandfathered assets, essentially assets tied into prior outstanding obligations, that must be managed. Fatca allows certain assets to be grandfathered, but this is difficult in terms of data as any material modifications that are not clearly defined in the regulation could cause assets to become subject to Fatca at a later time.

With failure to comply with Fatca potentially costing FFIs a 30% withholding tax on all payments from US sources, firms have until December 31, 2014 to reach full compliance and avoid heavy penalties.

At a Glance

- **Regulation:** Foreign Account Tax Compliance Act (Fatca)
- **Regulatory Regime/ Authority:** US government
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Client on-boarding, data maintenance, reporting

Significant Milestones

- **March 18, 2012:** Effective date
- **May 5, 2014:** Final date to register on the IRS portal and be on the FFI list published June 2, 2014

Fatca (cont.)

Dates for Diary

- **December 31, 2014:** Full compliance deadline

Key Links

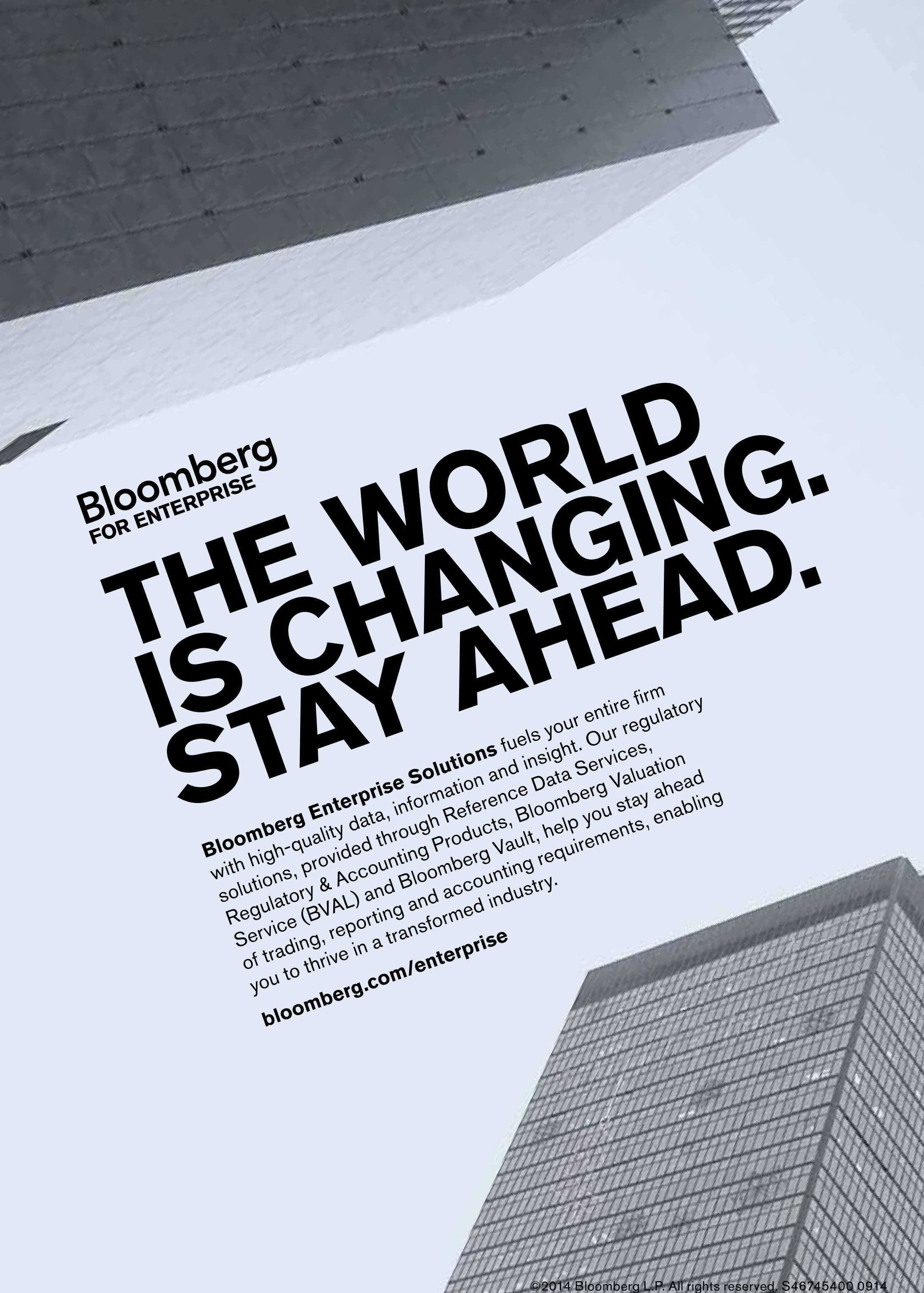
Overview:
http://www.treasury.gov/resource-center/tax-policy/treaties/Pages/FATCA.aspx

IRS Fatca Forms:
http://www.irs.gov/Businesses/Corporations/Foreign-Account-Tax-Compliance-Act-(FATCA)

Guidance and Questions:
http://www.irs.gov/Businesses/Corporations/FATCA-Registration

For most firms, compliance with Fatca will not be an easy task and will require a large investment in data management. FFIs must classify clients using US indicia and work to determine any Specified US Person(s) that need to be identified as US tax payers. As the regulation requires the gathering of sensitive client data, such as tax, residency, citizenship and account status information, the data issues include client on-boarding, maintaining data and supplementing existing data to meet reporting requirements on a worldwide scale.

Further, Fatca has some far reaching data management and compliance implications that require firms to ensure systems are synchronised to handle and verify Know Your Customer, on-boarding and tax information.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Finrep

Description and Data Requirement

Financial Reporting (Finrep) is a European Banking Authority (EBA) regulation that details the financial information banking organisations must provide in regulatory reports to local country authorities. Its focus is on data related to income statements and balance sheets.

Finrep guidelines include a standardised framework consisting of several templates that set out how firms should report financial accounting data from income statements and balance sheets. The templates are divided into four groups, each of which has a specific reporting frequency – quarterly, quarterly with a threshold, semi-annual and annual.

The regulation poses a data management challenge for firms that must comply as the returns that are mandated often require more data than has previously been required in reports mandated by local regulators. In total, Finrep includes more than 40 templates and 3,500 data fields that must be filled and filed on a quarterly basis.

Finrep data is more granular than previously required data and firms must be able to show the workings that lead to final capital positions. They must also consider new dimensions for data. For example, some credit risk returns need to be divided according to geographical areas, counterparties and the like to provide a clear picture of what firms are showing in Finrep reports. In response to this, firms need to conduct a thorough GAAP analysis, assessing what data is required and how easily it can be accessed. They also need systems that can convert the data into the XBRL reporting format, a focus on data governance and the oversight that regulators increasingly demand as part of compliance.

As part of the Capital Requirements Directive IV regulation, Finrep was introduced on July 1, 2014. Unlike the broader Common Reporting (Corep) regulation that covers both entity-by-entity and consolidated reporting, Finrep applies only at the consolidated group level of credit institutions and therefore has a smaller impact than Corep. Despite this, firms to which Finrep applies are likely to face a larger reporting burden than they have faced in the past and must prepare for the upcoming reporting deadline.

At a Glance

- **Regulation:** Financial Reporting (Finrep)
- **Regulatory Regime/ Authority:** EBA
- **Target Market Segment:** European financial institutions
- **Core Data Requirements:** Management of financial accounting data

Significant Milestones

- **July 26, 2013:** Final draft of requirements published
- **July 1, 2014:** Implementation

Dates for Diary

- **November 11, 2014:** First reporting

Key Links

Templates and Validation Rules:
http://eur-lex.europa.eu/legal- content/EN/TXT/PDF/?uri=OJ:L:2014:191:FULL&from=EN

Guidelines and Documentation:
https://www.eba.europa.eu/regulation-and-policy/supervisory-reporting/guidelines-for-the-implementation-of-the-framework-for-consolidated-financial-reporting-revision-2

Taxonomy:
http://www.eba.europa.eu/documents/10180/502670/COREP+FINREP+XBRL+Taxonomy+v2.0.0.pdf

IFRS

At a Glance

- **Regulation:** International Financial Reporting Standards (IFRS)
- **Regulatory Regime/ Authority:** IASB
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Effective management of financial statements, reporting

Significant Milestones

- **November 19, 2013:** IFRS 9 published
- **May 12, 2011:** IFRS 13 published
- **January 30, 2014:** IFRS 14 published
- **May 28, 2014:** IFRS 15 published

Description and Data Requirement

The International Financial Reporting Standards (IFRS) are a set of global standards issued by the International Accounting Standards Board (IASB) and designed to help govern the way companies publish financial statements. IFRS consists of 15 published standards, IFRS 1 – IFRS 15, that lay out obligations firms must fulfil when issuing financial statements. They include requirements covering how firms should present cash flows, liabilities, assets, expenses and so on.

The IFRS standards were devised to simplify the reporting process by providing a common set of rules and guidelines that generate reports that can be compared across institutions or with past performance to assess financial strength.

While all IFRS requirements have an impact on the way firms prepare their financial reports, two standards in particular have significant data management implications for financial institutions. IFRS 9 includes requirements of measurement, classification, declassification and hedge accounting for financial assets and liabilities. These requirements can cause a sizeable workload as firms may need to perform impact analysis to identify any changes and adjust accounts accordingly. Using risk data from existing systems can help reduce this burden, as the data can be applied to particular IFRS 9 models, for example, the expected loss model for impairment, and support disclosure calculations to save both resources and time.

IFRS 13 focuses on the definition of 'fair value' and includes guidelines that govern how firms conduct valuations, determine fair value and submit corresponding reports. As these rules use the exit price as a definition of fair value, firms need a clear

IFRS (cont.)

understanding of this market-based measurement to ensure they can gather the right data for accurate reporting and disclosure.

With 120 countries worldwide either using or requiring the use of IFRS for financial statements, many firms are already aware of the regulation's requirements. However, the US has been lukewarm in its adoption of the standards, generally preferring to use the GAAP reporting standard, although efforts are still underway worldwide to encourage the universal acceptance of IFRS. As a result, firms are taking note of how the regulatory requirements change the way they conduct financial reporting and ensuring they have the correct systems and data in case a wider global implementation takes place.

Dates for Diary

- **January 1, 2016:** IFRS 14 comes into effect
- **January 1, 2017:** IFRS 15 comes into effect
- **January 1, 2018:** IFRS 9 comes into effect

Key Links

Documentation and Text:
http://www.ifrs.org/IFRSs/Pages/IFRS.aspx

Summaries:
http://www.iasplus.com/en/standards/ifrs

IFRS Global Usage:
http://www.ifrs.org/Use-around-the-world/Pages/Jurisdiction-profiles.aspx

KYC

At a Glance

- **Regulation:** Know Your Customer (KYC)
- **Regulatory Regime/ Authority:** Multiple
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Client identification and classification, ongoing customer data due diligence

Description and Data Requirement

Know Your Customer (KYC) refers to the processes companies must go through to collect and retain information about their clients prior to doing business with them, as well as the regulations that drive and monitor these activities. While not a single regulation in and of itself, KYC spans requirements that exist within countries under different laws. For example, in the US, the Patriot Act has made KYC mandatory for all banks since 2002. What all KYC requirements do share is an underlying design aimed at supporting anti-money laundering (AML) efforts and combating fraud.

As the United Nations Office of Drugs and Crime estimated back in 2009, more than 3.6% of global GDP is tied into criminal assets and proceeds, and this percentage is only expected to rise, making KYC efforts a priority for financial institutions looking to maintain compliance with their countries' regulated AML and counter-terrorism efforts.

KYC presents significant data management considerations for a number of financial institutions. Regardless of which country they are operating in, most organisations are expected to quickly identify and correctly classify clients according to their circumstances, including country of origin, business type, source of assets and income, types and purpose of transactions, and amount of funds involved. Considering that this information needs to be kept up to date and submitted to regulators frequently, firms need to continually reassess their KYC procedures to ensure the data they hold on clients is both complete and accurate.

In many cases, due to the complexity of KYC reporting requirements, firms need to do more than just keep a central repository of information and track related audit trails. They may need to work towards linking compliance requirements with customer data due diligence. From

KYC (cont.)

Significant Milestones

- **October 26, 2001:** US Patriot Act signed into law
- **May 26, 2011:** Four-year extension of key provisions in the US Patriot Act

a data perspective, both internal and external data feeds need to be maintained, not only for purposes of data distribution, but also in support of effective risk management processes that can store the data and provide complete analysis of customer records.

While KYC deadlines vary greatly between countries, depending on specific laws, regulations and policies, most countries with AML concerns have had KYC laws in place since the early 2000s, prompting major financial institutions to get their KYC processes up to speed. In many cases, KYC efforts made to address local concerns will help firms comply with international regulations, such as Dodd-Frank and the US Foreign Account Tax Compliance Act. Firms can also achieve significant cost savings through standardisation of data and the efficient management of KYC documentation used for purposes such as client on-boarding.

MAD II

Description and Data Requirement

Market Abuse Directive II (MAD II) is a review of the European Commission's original MAD regulation, which aimed to tackle issues of market abuse across the EU. Building on policies in MAD, MAD II introduces consistent criminal sanctions for market abuse and insider trading by expanding the scope of the regulation to encompass not only individuals and firms trading on regulated markets, but also instruments traded over the counter and via multi-lateral trading facilities (MTFs) and organised trading facilities (OTFs). Financial instruments that have prices or values that depend on, or have an effect on, these markets, such as credit default swaps, are also covered.

MAD was primarily concerned with the use of inside information for market manipulation and the disclosure of research. MAD II expands on this by extending the definitions and scope of the regulation. Under MAD II, market manipulation covers cross-market manipulation, inside information includes commodity derivatives, and market abuse rules apply to underlying spot markets. Small- and medium-sized enterprises also have amended dealing obligations, with inside information required to be disclosed in a simpler way.

MAD II requires both financial and commodity regulators to cooperate and exchange information, increasing the power of regulatory authorities to view private documents when market abuse is suspected.

Like its predecessor, MAD II calls on firms to consider its impact on data management processes. The second directive expands the reach of the first, covering the use of emission allowances, benchmarks, high-frequency trading and algorithms. This means firms must ensure they can gather, verify and manage data in these areas in order to maintain compliance. From a trading perspective, firms must consider whether the expanded regulation could affect their use of instruments, trading styles and venues.

Investors and firms can face sanctions for trading on inside information or spreading false rumours in the market, so firms need extensive documentation covering their decisions to verify that they are adhering to the new regulation and prove that any transgressions are not intentional. Under MAD II, any exchanged information that is likely to have a serious impact on price can be counted as inside information.

While MAD became effective in the UK back in July 2005, discussion around MAD II began in January 2013, suggesting implementation some time around June 2016.

At a Glance

- **Regulation:** Market Abuse Directive II (MAD II)
- **Regulatory Regime/ Authority:** EU
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Data transparency to detect and prevent market abuse

Significant Milestones

- **October 8, 2012:** MAD II text approved by the European Parliament
- **December 12, 2012:** MAD II text approved by the European Council
- **December 19, 2013:** Agreement reached on MAD II Level 1 text

Dates for Diary

- **June 2016:** Estimated implementation

Key Links

Political Agreement on MAD II, December 2013: http://db.eurocrim.org/db/en/doc/2023.pdf

Progress Timeline: http://ec.europa.eu/internal_market/securities/abuse/index_en.htm

FAQs: http://europa.eu/rapid/press-release_MEMO-14-78_en.htm?locale=en

MiFID II

At a Glance

- **Regulation:** Markets in Financial Instruments Directive II (MiFID II)
- **Regulatory Regime/ Authority:** EU
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Post-trade transaction data transparency, client and counterparty identification

Significant Milestones

- **December 8, 2010 – February 2, 2011:** Public consultation period
- **January 14, 2014:** Informal agreement on proposals
- **May 13, 2014:** Adoption by the European Council of Level 1 text

Description and Data Requirement

Markets in Financial Instruments Directive II (MiFID II) is a directive issued by the EU and designed to expand the scope of its predecessor. Under MiFID II, a number of key reforms are introduced, including new counterparty and client identifiers, the extension of post-trade data requirements, changes to instrument definitions and product treatments, and new rules on data availability and standard formats.

In the equities market, MiFID II introduces greater post-trade transparency and a framework for consolidated market data that embeds standards, such as ISINs, for securities identification. Similarly, many of the changes made in the initial regulation will be expanded into the derivatives market, giving authorities better oversight of the market.

MiFID II introduces a number of challenges for data management professionals. Changes to improve investor protection and intermediary proposals that seek to reduce instrument complexity raise data considerations that firms need to keep in mind when working to achieve compliance. Many firms must also reach agreement on common processes for data and data quality metrics, a requirement demonstrated by data standards and data consolidation being a core component in the reform process ever since an early draft of the MiFID II proposal was leaked in 2010.

Further, as the data-related proposals push towards quicker publishing of post-trade information, reducing the delay from three minutes to one minute, this will have an impact on supporting reference data that needs to be retrieved from repositories quickly and accurately. The move from batch systems to near real-time reporting will require investment in underlying data architecture.

As MiFID II plans to expand transparency requirements to other sectors such as depository receipts, exchange-

MiFID II (cont.)

traded funds and company certificates, it will have a broad impact beyond equity markets. Reporting in non-equity markets will require transaction-based post-trade transparency, with the provision of price, volume, time of trade and main reference characteristics of data remaining primary reference data considerations along with new codes being created for non-equity based instruments.

A final data management consideration is the regulation's aim to introduce a number of consolidated tape proposals, essentially measures designed to bring data together so that prices can be compared across different venues. These proposals are likely to highlight concerns about data identification, quality and standardisation.

From a trading perspective, MiFID II introduces a market structure with fewer loopholes and more regulation of trading platforms, which requires market participants to determine trading and clearing obligations in the new environment.

Through the introduction of Organised Trading Facilities (OTFs) for non-equity instruments traded on multi-lateral trading facility platforms, MiFID II aims to level the playing field as OTFs must operate with new restrictions on how they use their capital.

Finally, MiFID II introduces a broad array of trading controls for algorithmic trading. These controls are designed to provide safeguards and reduce systemic risk, and include requirements for proper regulation of algorithmic traders and mandatory liquidity provision for market-making strategies. With the expansion of MiFID II to cover additional venues, instrument types and trading practices, firms must decipher their new trading obligations and make necessary changes to meet compliance.

As a broad-reaching directive introduced in 2007, MiFID implemented a framework describing how financial institutions should operate across EU member states. Its successor seeks to extend the scope and scale of many of the regulation's initial changes. Implementation deadlines have only recently been scheduled for MiFID II and while many of the regulation's changes have been agreed, it remains to be seen what form the changes and any other amendments will take when the regulation finally comes into effect.

Dates for Diary

- **Q2, 2015:** European Securities and Markets Authority to deliver draft technical standards to European Commission
- **January, 2016:** Proposed implementation
- **January, 2017:** Compliance

Key Links

Level 1 Text:
http://register.consilium.europa.eu/doc/srv?l=EN&f=PE%2023%202014%20INIT

FAQs:
http://europa.eu/rapid/press-release_MEMO-14-305_en.htm

Further Documentation:
http://www.aima.org/en/regulation/asset-management-regulation/eu-asset-management-regulation/mifid--mifir.cfm

MiFIR

At a Glance

- **Regulation:** Markets in Financial Instruments Regulation (MiFIR)
- **Regulatory Regime/ Authority:** EU
- **Target Market Segment:** Global financial institutions
- **Core Data Requirements:** Post-trade data transparency, extended reporting covering additional instruments, venues and markets

Significant Milestones

- **December 8, 2010:** February 2, 2011: Public consultation period
- **January 14, 2014:** Informal agreement on proposals
- **May 13, 2014:** Adoption by the European Council of Level 1 text

Description and Data Requirement

The Markets in Financial Instruments Regulation (MiFIR) is an EU issued regulation aimed at improving market transparency and better protecting investors. MiFIR expands on the transaction reporting requirements of the Markets in Financial Instruments Directive (MiFID) by setting out a number of new reporting obligations.

Under MiFIR, instruments that must be reported include all derivatives admitted to regulated markets, including currently exempt commodity, foreign exchange and interest rate derivatives, all instruments on multi-lateral trading facilities (MTFs) and organised trading facilities (OTFs), and all instruments that could change the value of instruments trading on any of these venues. The regulation adds a number of fields to transaction reports, including fields designed to help spot short-selling traders, and trader and algorithm fields to identify the individual or program executing a transaction.

MiFIR requirements could have a significant impact on data management processes. As the regulation expands existing MiFID reporting requirements to cover over-the-counter derivatives, fixed income and instruments traded on MTFs and OTFs, firms need to ensure any applicable data in these areas can be accurately gathered and verified.

Much like MiFID, MiFIR has a broad focus on data transparency based on trade data and transaction reporting, making it increasingly necessary to have an accurate view of positions and exposures to maintain compliance. While MiFIR does have some pre-trade data transparency requirements, such as provisions regarding equal access to trading opportunities data, most of the requirements cover post-trade processes.

The European Securities and Markets Authority (ESMA) has been tasked to create a standard reporting format for MiFIR. Firms will need to accommodate any changes this brings, including the use of Legal Entity Identifiers in

MiFIR (cont.)

reporting. The standard will also require the provision of data through all stages of the order execution process and its submission to relevant regulatory authorities and Approved Publication Arrangements.

As well as requiring changes to reporting processes, MiFIR calls for alterations in the trading environment. The regulation introduces a range of post-trade transparency requirements that must be met, such as the public publishing of prices, quotes, execution times and volumes, while the extension of transaction reporting to additional asset classes means firms must submit more information to regulatory authorities.

Changes in MiFIR aimed at reducing disruptive trading, speculative activity and systemic risk mean firms need to be aware of any rules covering these issues that are in place in the markets in which they operate, not least because of the powers given to regulators and venue managers to interfere should rules be violated.

Commodity derivatives, in particular, face a lot of scrutiny under MiFIR and are subject to new position limits, transparency requirements and measures to reduce significant price volatility. These requirements are designed to give regulatory authorities greater oversight and authority in the commodity derivatives market.

MiFIR reporting is scheduled to be implemented in 2016, alongside MiFID II requirements, with full compliance expected the following year. As many MiFIR deadlines have already been pushed back due to a need for greater consultation and resources, further delays are not out of the question, particularly because Level 2 texts have yet to be defined and technical standards drafted. Meantime, firms need to prepare as far as possible as MiFIR is a regulation rather than a directive and its requirements will take effect sooner than those in the parallel release of MiFID II.

Dates for Diary

- **Q4, 2014:** ESMA deadline to draft technical standards for MiFIR transaction reporting (delays expected)
- **January, 2016:** Proposed implementation
- **January, 2017:** Compliance

Key Links

Level 1 Text:
http://register.consilium.europa.eu/doc/srv?l=EN&f=PE%2022%202014%20INIT

Guidance Paper:
http://www.esma.europa.eu/system/files/2014-548_discussion_paper_mifid-mifir.pdf

Further Consultation:
http://www.esma.europa.eu/system/files/2014-549_-_consultation_paper_mifid_ii_-_mifir.pdf

SEC Form PF

At a Glance

- **Regulation:** Form Private Fund (Form PF)
- **Regulatory Regime/ Authority:** SEC
- **Target Market Segment:** Private funds
- **Core Data Requirements:** Classification, stress testing, reporting

Significant Milestones

- **March 31, 2012:** Full implementation
- **June 15, 2012:** Compliance for firms with more than $5 billion AUM
- **December 31, 2012:** Compliance for all remaining firms with more than $150 million AUM

Description and Data Requirement

Form Private Fund (Form PF) is a US Securities and Exchange Commission (SEC) rule that details reporting standards for private funds and is designed to provide a view of the risk exposure of the assets in the funds. Under Form PF, fund advisers are required to report regulatory assets under management (RAUM) to the Financial Stability Oversight Council, an organisation created under the Dodd-Frank Wall Street Reform and Consumer Protection Act to assess risk in financial markets.

SEC registered investment advisers, commodity pool operators and commodity trading advisers with $150 million or more under management are subject to the rule and must regularly submit a Form PF. Further requirements depend on the size and type of the fund. Large private fund advisers are classified as those with more than $1.5 billion of assets under management (AUM), advisers with more than $2 billion in private equity funds, and liquidity fund advisers with more than $1 billion in combined assets. Anything smaller is classified as a small private fund adviser.

Small fund advisers must submit an annual Form PF including basic information. Large fund advisers must report more information with private equity funds filing annually and hedge and liquidity funds filing on a quarterly basis.

Form PF requires a significant data management effort, including gathering, identifying, verifying and storing data that is crucial to filling out the form correctly. Firms need to focus on reliable and easy access to the data, whether it is held internally or by external service providers, and they must understand the definitions and classifications of Form PF. Firms also need to prove that reported data is accurate and consistent with other regulatory filings.

Institutional investors may request access to Form PF information in order to assess their investment decisions,

SEC Form PF (cont.)

risk profiles and due diligence efforts, meaning firms must determine how they gather and present the information for both investors and regulators.

While Form PF is primarily concerned with risk reporting, it does touch the trading environment as the detail required for compliance means funds need to reference their trading strategies and the assets they hold to ensure correct classification. Correct classification helps firms avoid any unnecessary reporting and can inform trading strategies as borrowing and net asset value limits are detailed for each classification. Finally, Form PF includes a number of stress tests that must be reported.

Form PF came into effect on June 15, 2012, with the largest funds (more than $5 billion AUM) having to meet compliance immediately. Smaller funds (with more than $150 million AUM) had until December 31, 2012 to comply.

Dates for Diary

- **November 29, 2014, March 1, 2015:** Next filing dates for large hedge fund advisers
- **April 30, 2015:** Next filing date for all other advisers

Key Links

Full Text:
http://www.sec.gov/rules/final/2011/ia-3308-formpf.pdf

FAQs:
http://www.sec.gov/divisions/investment/pfrd/pfrdfaq.shtml

Original Release:
http://www.sec.gov/news/press/2011/2011-226.htm

SEC Reg SCI

At a Glance

- **Regulation:** Regulation Systems Compliance and Integrity (Reg SCI)
- **Regulatory Regime/ Authority:** SEC
- **Target Market Segment:** Alternative trading systems, plan processors, self-regulatory organisations and clearing agencies
- **Core Requirements:** Systems stability and integrity, market disruption counter-measures, reporting

Significant Milestones

- **March 7, 2013:** First proposal from the SEC
- **July 8, 2013:** End of public comment period

Dates for Diary

- **2014-2015:** Estimated implementation

Key Links

Full Text: http://www.sec.gov/rules/proposed/2013/34-69077.pdf

Submitted Comments and Questions: http://www.sec.gov/comments/s7-01-13/s70113.shtml

Original Release: http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171513148#.U44DpvldW2V

Description and Requirement

Regulation Systems Compliance and Integrity (Reg SCI) is a US Securities and Exchange Commission (SEC) regulation aimed at addressing technical glitches in the market by requiring certain market participants to ensure their core technology meets specific requirements.

The market participants that must comply with Reg SCI are known as Reg SCI entities and include alternative trading systems, plan processors, self-regulatory organisations and clearing agencies. They are required under the proposed regulation to ensure their systems meet certain standards and to provide notifications in the event of systems disruptions. Reflecting the need for timely corrective action in the case of any interference or errors, firms must demonstrate that they have adequate disaster recovery and business continuity plans. They must also provide the SEC with access to systems so that they can be assessed for compliance.

Providing more detail, Reg SCI mandates firms to develop, test, maintain and inspect systems that are crucial to their continuing operations, and to conduct annual reviews of the systems and submit reports to regulators. Firms must demonstrate that applicable systems have the necessary resilience, capacity, integrity, availability and security, and must have clear policies and procedures to ensure systems operate in the manner intended.

The stability and reporting requirements of Reg SCI will have a significant impact on the trading environment, but should alleviate some of the market disturbance caused by system faults and errors. A broad array of systems are covered under Reg SCI's Rule 1000a, including 'all computer, networks, electronic, technical, automated or similar systems of, and or operated by or on behalf of, an SCI entity, whether in production, development or testing, that directly support trading, clearance and settlement, order routing, market data, regulation, or surveillance.'

Reg SCI was originally proposed by the SEC on March 7, 2013 in light of various market upheavals ranging from the Flash Crash and Facebook's IPO to the downfall of Knight Capital. While the proposed Safe Harbour provision in the regulation protects firms from prosecution if they show clear attempts to comply with the rules, many have work to do if similar incidents are to be avoided in future.

Reg SCI is not yet a final rule, but with the comment period closed last year, developments are being made and a full implementation is expected this year or next.

SEC Rule 15c3-5

Description and Data Requirement

Rule 15c3-5 is a US Securities and Exchange Commission (SEC) rule adopted in 2010. It mandates risk controls for broker-dealers that are exchange members, alternative trading system (ATS) subscribers or ATS operators with non-broker-dealer subscribers. The rule aims to address the risks involved in automated electronic trading and is designed to remove unfiltered or naked access to an exchange or ATS.

To achieve this, broker-dealers with market access must implement risk management controls that limit their financial exposure. The controls should prevent the entry of certain orders, including those that exceed capital and credit thresholds, and those that fail to meet pre-order regulatory requirements. They must also prevent erroneous orders and the entry of orders that are restricted.

Further, the controls must restrict market access technology and systems to authorised personnel and guarantee that post-trade execution reports can be delivered to appropriate surveillance functions. Finally, rule 15c3-5 demands regular review, documentation and testing of a broker-dealer's supervisory procedures, as well as annual reports from the broker or dealer's CEO that certify that risk management controls are established and effective.

While Rule 15c3-5 deals primarily with risk controls, it does have an impact on the trading environment. The rule applies to all orders, whether electronic or manual, so rapid identification of any errors is crucial. Broker-dealers also need to determine the business, financial condition and trading patterns of customers so that they can set trading limits for due diligence purposes.

Given the need for capital and credit thresholds, early alerts are a consideration to ensure that any scheduled trades can be adjusted as boundaries are approached. Broker-dealers must ensure erroneous orders based on price and size are rejected, and that duplicate orders are prevented. Ultimately, Rule 15c3-5 requires both system and pre-trade controls.

Rule 15c3-5 was implemented in November 2010 and firms had six months to demonstrate full compliance. It has not been modified significantly since then, but broker-dealers need to be aware of small changes, such as alterations to the definitions of market access and to the overall scope of the rule for certain participants. Other changes have been made to reduce the compliance burden, such as allowing broker-dealers to allocate some control to broker-dealer customers.

At a Glance

- **Regulation:** Rule 15c3-5
- **Regulatory Regime/ Authority:** SEC
- **Target Market Segment:** Exchange member brokers-dealers, ATS subscribers and ATS operators with non-broker-dealer subscribers
- **Core Requirements:** Risk controls, capital and credit thresholds, system and pre-trade controls

Significant Milestones

- **November 3, 2010:** Effective date
- **July 14, 2011:** Compliance deadline
- **November 30, 2011:** Compliance extension for fixed income securities

Key Links

Full Text:
http://www.sec.gov/rules/final/2010/34-63241.pdf

FAQs:
http://www.sec.gov/divisions/marketreg/faq-15c-5-risk-management-controls-bd.htm

Original Release:
http://www.sec.gov/rules/final/2010/34-63241-secg.htm

Solvency II

At a Glance

- **Regulation:** Solvency II
- **Regulatory Regime/ Authority:** EU and EIOPA
- **Target Market Segment:** Insurance companies and their service providers
- **Core Data Requirements:** Transparency of risk exposure

Significant Milestones

- **November 10, 2009:** Adoption by EU Council
- **March 14, 2014:** Omnibus II vote revising the Solvency II regulation

Description and Data Requirement

Solvency II is an EU regulation that aims to create a more unified insurance industry through more stringent risk management requirements. It also has implications for asset managers and third-party administrators that are involved in servicing insurers. Under Solvency II, asset managers are required to provide greater levels of transparency on the investments made on behalf of their insurance company clients in accordance with the standards outlined by the European Insurance and Occupational Pensions Authority (EIOPA).

In addition, investment firms need to present more granular information on the entities issuing specific securities and the component elements of derivative instruments involved. While the requirements are particularly lengthy and extensive in this regulation, most relate to protecting holders and beneficiaries of life policies by giving insurers a better view of risk.

Solvency II is divided into three pillars, with the first focusing on minimal capital requirements, the second requiring risk practices to maintain complete and accurate data, and the third introducing annual and quarterly disclosures of a number of key data points.

As insurers are required to implement robust levels of data quality and extend this to their asset managers and fund administrators, Solvency II has a number of implications for service providers looking to present a more granular view. Many of the components in the regulation involve checks in the data management process, including embedding a system of data quality checks across the entity, compiling a directory of data attributes used in internal modelling, and defining processes for data identification, collection and transmission.

A number of asset managers are working towards creating an industry-wide standard to support the regulation's reporting requirements as a lot of work lies ahead to

Solvency II (cont.)

Dates for Diary

- **October 31, 2014:** Submission of implementing technical standards to the European Commission
- **January 31, 2015:** Deadline for transposing rules into national law
- **January 1, 2016:** Proposed implementation

Key Links

Overview: http://ec.europa.eu/internal_market/insurance/solvency/future/

Timeline: https://eiopa.europa.eu/en/activities/insurance/solvency-ii/index.html

Guidelines: https://eiopa.europa.eu/en/publications/eiopa-guidelines/index.html

ensure best practice when generating required data sets. It is unlikely that all the data will be available from a single vendor source, so institutions face further issues in ensuring that data can be aggregated quickly from a number of different vendor feeds and that they have the analytics capability necessary to stress asset values in a timely manner.

The regulation also introduces potentially higher capital charges on certain assets, although firms with the infrastructure to adjust assets on a risk-weighted basis can avoid penalties and reduce the problem of risk exposure. If firms can implement effective risk controls, minimal capital requirements will adjust accordingly.

Although the deadline for Solvency II to come into effect is scheduled for January 1, 2016, many delays have seen the regulation pushed back a number of times. The scope of Solvency II in Europe is difficult to anticipate, as the Omnibus II Directive, which had provisional agreement from EU institutions in November 2013, has amended certain provisions within Solvency II. Political tensions in the UK also threaten implementation of the regulation on a broad basis.

Despite these challenges, there are opportunities for firms that are able to implement changes towards Solvency II compliance as any changes could deliver significant cost savings, along with more informed views of exposure for enterprise-wide risk management.