

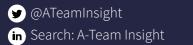


Regulatory Data Ninth Editi Handbook 2021/22



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A-TEAMGROUP

Content

Sarah Underwood sarah@a-teamgroup.com Jamie Icenogle jamie@a-teamgroup.com

A-Team Group Chief Executive Officer Angela Wilbraham angela@a-teamgroup.com

President & Chief Content Officer Andrew P. Delaney andrew@a-teamgroup.com

Product Director Jo Webb jo@a-teamgroup.com Marketing Operations Manager Leigh Hill

leigh@a-teamgroup.com Director of Event Operations

Jeri-Anne McKeon jeri-anne@a-teamgroup.com

Events Content Manager Lorna Van Zyl

lorna@a-teamgroup.com

Social Media Manager Jamie Icenogle jamie@a-teamgroup.com

Production Manager Sharon Wilbraham sharon@a-teamgroup.com Project & Events Coordinator Katie Delaney

katie@a-teamgroup.com

Design Victoria Wren victoria@wr3n.com

Postal Address

Coed Lank Farm, Broad Oak Herefordshire HR2 8QY +44-(0)20 8090 2055 info@a-teamgroup.com @ www.a-teamgroup.com @ www.a-teaminsight.com



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Introduction

A comprehensive guide to the ever-changing global regulatory landscape

Welcome to the ninth edition of A-Team Group's Regulatory Data Handbook, a publication dedicated to helping you gain a full understanding of regulations related to your organisation from the details of requirements to best practice implementation.

This edition of the handbook includes a focus on regulations being rolled out to bring order and standardisation to sustainable finance and its process of taking environmental, social and governance (ESG) considerations into account when making investment decisions in the financial sector. If this is a topic of interest for you, you can also download a copy of our in-depth dedicated **ESG Handbook 2021 here**.

Also, for the first time in its long history, the handbook takes a wider geographic view of the regulatory landscape, adding key regulations in the Asia Pacific jurisdictions of Hong Kong, Singapore and Australia.

Following Brexit, it reviews the emergence of financial policy and regulation in the UK, changes to specific regulations, and their similarities and differences to European Union obligations.

Alongside new ESG and Asia Pacific entries, the handbook includes recent regulatory mandates such as the US Corporate Transparency Act and the European Union's second Capital Requirements Regulation.

Other entries are updated to reflect their current status, and data and data management requirements, and all are accompanied by a brief 'At a glance' description of the regulation, as well as a timeline and links to original regulatory texts and other publications that we hope will be helpful.

To keep pace with all these regulations, their challenges and opportunities, sign up to access A-Team Group's Insight channels covering Data Management, RegTech, TradingTech and our recently released ESG channel at **www.a-teaminsight.com**.

You can also find out more about best practice approaches to regulatory requirements and find solutions to broader capital markets technology challenges by reading our blogs and white papers, and joining our highly regarded webinars. Still more, we hope to be back with live summit conferences in 2022 and look forward to seeing you at one of these events.

Finally, thank you to SmartStream and Solidatus for sponsoring the handbook. It isn't bedtime reading, but we hope it will be a good companion to your role in capital markets along with the many other resources we offer.

Angela Wilbraham Chief Executive Officer A-Team Group





Word from the Sponsor - SmartStream

By Linda Coffman, Executive Vice President, SmartStream Technologies



Data control, transparency and quality have become increasingly important to regulatory reporting processes in a post-pandemic and Brexit world characterised by uncertainty, divergence, and increased regulatory scrutiny. Data standards, automation and collaboration are also in the spotlight as both capital markets participants and, to an extent, regulators seek to ease the complexity and burden of regulatory reporting.

While the Covid-19 pandemic exerted pressure on all aspects of regulatory reporting, it also highlighted processes that need to be tightened up. National Competent Authorities (NCAs) dug deep, looking beyond reporting to examine the accuracy of content firms achieved in compliance with regulations such as Markets in Financial Instruments Directive II (MiFID II).

Control frameworks

Uncertainty caused by the pandemic also accelerated regulatory requirements for data control frameworks and their components, calling on market participants to question how they manage the data and derived data required to meet reporting obligations. If they delegate reporting to other firms, are the correct controls in place? Do they need to second source data to ensure the data they report is correct? For many, RegTech providers have answered the questions and helped them tighten up control and accuracy.

MiFID II was the first regulation to mandate control frameworks that can 'detect any risk of failure by the firm to comply with its obligations under the directive, as well as the associated risks'. Proactive firms have implemented frameworks not only for MiFID II, but also across other regulations with the aim of gaining efficiencies, reducing costs, improving accuracy, and delivering more certain reporting.

Data quality and standards

Data quality has been an elusive element of reporting for many firms over many years, despite its importance to risk analysis and accurate reporting. Similarly, data standards are limited, despite their potential to reduce complexity, improve transparency and decrease the burden and costs of regulatory reporting. These problems are now being addressed by regulators putting their own houses in order in terms of data quality and engaging in the





development of data standards such as the Unified Product Identifier (UPI) that will come into play next year.

Regulatory initiatives include European Securities Markets Authority's (ESMA) focus on improving MiFID II data quality by plugging holes in instrument classifications and helping firms define instruments at required levels of granularity. ESMA is also planning to add RTS 2 classifications to MiFID II's Financial Instruments Transparency System (FITRS). This data is key to streamlining reporting processes and should have a positive impact on operational costs. As regulators recognise the value of data quality and its centrality to accurate regulatory reporting and transparency, we can expect more of these kinds of changes.

Data sourcing

Innovation in both technology and collaboration offers opportunities for firms to improve data sourcing. Working with RegTech vendors with API capabilities, for example, allows firms to traverse decision trees, interpret data and improve decision making. In terms of collaboration, and moving on from the norm of not sharing data, the EU's European Market Infrastructure Regulation (EMIR) Refit provides opportunities for firms to work together to source standard data and, in some cases, more complex data. As volumes of regulatory reporting data continue to rise, collaboration will move into the mainstream.

Regulatory change

Regulatory change is a constant, covering everything from rewrites to the regulatory outcomes of Brexit. The most challenging regulatory rewrite in capital markets is, for most firms, the EMIR Refit. The initial regulation included a dual-sided reporting obligation. The refit adds instances where reporting counterparties must manage a larger load of data attributes. Automation is critical, but difficult to achieve across such a wide range and depth of attributes.

Brexit has yet to make a big impact on regulatory reporting, but there is more to come as ESMA and the UK Financial Conduct Authority (FCA) diverge. Firms with dual reporting obligations would do well to get ahead of the game by implementing flexible yet robust models and reporting platforms that can integrate divergencies efficiently and cost effectively. They also need access to subject matter experts (SMEs) who can reduce the amount of regulatory rewriting required in the wake of divergence and, in turn, decrease operational costs.



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Regulatory data solutions

Sourcing and managing regulatory data on an ongoing basis in a constantly changing regulatory environment can be complex, costly and time consuming, but there are solutions. SmartStream's approach eases the burden of data sourcing, reporting and managing exceptions by combining the provision of timely and high quality regulatory data with innovative integration technologies and the expertise of SMEs who can help firms meet their specific regulatory obligations.

The benefits of ingesting and integrating high quality regulatory data from the get-go include not only successful compliance, but also reduced operational costs, avoidance of penalties for non-compliance, and perhaps most importantly, the ability to focus on data initiatives that add value to the business.

Looking forward, SmartStream will lead the way as collaboration, transparency and quality reach the top of the regulatory data agenda.







Word from the Sponsor - Solidatus

By Philip Dutton, Co-Founder & Co-CEO, Solidatus



Amid continued challenges all around us, we are inspired by numerous examples of creativity, drive, and passion to do things differently – and hopefully better. A big part of this is better managing our growing mountains of complex data and deriving actionable intelligence from it. Our opportunity is to identify, connect and access the right data to maximize its potential. Easier said than done – especially when legacy silos or disparate systems add to the obstacles. But, when it comes to regulatory compliance, this is the only path to managing the complexity of the many requirements that exist today.

A cursory glance at this handbook's table of contents reminds us of how many rules we are subject to. New regulations are coming into effect, including some whose key phases or final deadlines were delayed in 2020-21 due to the pandemic; we are also anticipating updates to existing regulations. Managing sensitive data in accordance with a myriad of privacy requirements around the world is a rapidly expanding concern – for example, we see additional countries like India passing GDPR-like privacy legislation. We also expect regulators to increase their focus on the enforcement of existing regulations.

Further change is anticipated as post-Brexit UK seeks to confirm a return to confidence in its marketplaces, especially for derivatives trading from the EU. No longer focused on "equivalency" with the EU's rules, the FCA's post-Brexit review of MiFID II proposes a divergent set of changes that aim to make the UK more competitive as a financial market hub – potentially leading to new rules and one more set of divergent requirements.

The exponential growth in ESG investments, growing KYC requirements and increased adoption of institutional crypto trading, AI and ML, all present data management opportunities to be successful. As we see, there's certainly no shortage of intersecting, overlapping challenges!

Perhaps, even a perfect storm?

The data opportunity for regulatory compliance

Against this backdrop, we are encouraged by increased collaboration between regulators and financial services to streamline reporting and standardization of data. This will take time but the pressure is now high for businesses to reduce costs of compliance. 32% of financial institutions expect costs to be





greater than 5% of revenue (Source: Kroll/Duff & Phelps). KYC and AML alone will cost financial institutions a staggering \$213.9 billion in 2021 (Source: LexisNexis True Cost of Financial Crime Compliance Global Report). Fines are at an all-time high, but there is an answer: comprehensive yet flexible enterprise-wide data management technology.

Compliance can only be as good as your organization's data – and access to it. Businesses need a dynamic, sustainable data foundation; flexibility is key, as is overcoming the operational and organizational silos and restrictions of legacy systems and processes.

The answer lies in a lineage-first data management strategy to identify, connect and visualize data across a business, its departments and functions. Data lineage also promotes data quality – a key attribute for accurate, compliant reporting – by pinpointing problem spots (e.g. gaps, errors or incorrect uses) and understanding what else they are impacting. Data lineage goes hand-in-hand with metadata management by tracking how data is defined and also how and where it flows across the organization, which is crucial for risk data aggregation, and a requirement on its own for regulations such as BCBS239 and Solvency II.

Beyond compliance (and decreased costs and fines) and better data governance, an end-to-end lineage-first data management program unlocks the true business value behind data. By mapping complex data relationships across the enterprise, it enables organizations to simplify how they identify, access and understand them. With a reimagined, sustainable data foundation in place, businesses can mine actionable intelligence and solve complex problems to deliver transformational business results.

We don't know what is ahead, but with the recent experience we all have gained in managing change and confronting new challenges, and with data lineage and best data management practices in place, we know that we will make great strides moving forward.



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AIFMD

At a Glance

Regulation:

Alternative Investment Fund Management Directive (AIFMD)

Regulatory Regime: EU

Target Market Segment: Alternative investment funds

Core Requirements:

Identification of asset types, third-party valuation of fund assets, reporting

Significant Milestones

July 21, 2011: Adopted by the European Commission

July 22, 2013: Directive comes into force

2017/18: European Commission delays review of extension of passport system to non-EU countries as UK negotiates exit from EU under Brexit

March 2018: Proposal for a supplementary AIFM Directive (AIFMD 2) **August 2, 2019:** Two-year national implementation period began with full transposition by August 2, 2021

June 10, 2020: European Commission report on AIFMD October 2020 - January 2021: Consultation on AIFMD November 2021: First legislative proposal expected as a result of the consultation

Description and Data Requirements

The Alternative Investment Fund Management Directive (AIFMD) is an EU directive that focuses on data and transparency requirements in alternative fund managers' fund registration, valuation and reporting processes. The goal of the directive is to set regulatory standards and create a level playing field for the operation of alternative investment funds in Europe through the use of 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 separation between the pricing and portfolio management functions.

AIFMD also aims to facilitate regulatory systemic risk monitoring by improving transparency. 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 capital requirements for firms acting as third-party administrators for alternative investment funds

As with many other regulations, firms within the scope of AIFMD need to maintain the accuracy and quality of their reference data, and support any standards requirements for the identification of instruments, such as Market Identification Codes (MICs) and Legal Entity Identifiers (LEIs).

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One of the most challenging data management aspects of the regulation is completing Annex IV, a broad and prescriptive transparency reporting requirement that must be fulfilled by alternative investment fund managers. The annex includes a reporting template that comprises more than 40 questions, requiring managers to provide information including instruments traded, exposures, assets under management, liquidity profiles, a breakdown of investments by type, geography and currency, and stress test results.

The reporting frequency for Annex IV is determined by assets under management. Firms managing between $\in 100$ million and $\in 500$ million must file Annex IV reports annually, while those managing between $\in 500$ million and $\in 1$ billion are expected to file on a semi-annual basis, and those running in excess of $\in 1$ billion must submit reports on a quarterly basis.

While AIFMD initially covered alternative investment fund managers and funds registered in the EU, providing them with a passport system that allows fund managers and funds registered in one EU member state to market products to other member states, the European Securities and Markets Authority (ESMA) has been investigating whether the passport system should be extended to non-EU alternative investment fund managers and funds. In July 2015, ESMA published initial advice on the application of the passport system to six non-EU countries, namely Guernsey, Hong Kong, Jersey, Switzerland, Singapore and the US. In July 2016, ESMA extended its advice on the application of the passport system to a further six countries, namely Australia, Bermuda, Canada, Cayman Islands, Isle of Man and Japan. ESMA's advice on all 12 non-EU countries was due to be considered by the European Commission before any decisions were made on extending the passport system, but negotiations on the withdrawal of the UK from the FU under Brexit have delayed decisions by the European Commission on ESMA's advice

In March 2018 the European Commission launched a proposal for a supplementary AIFM Directive (AIFMD 2), amending AIFMD to provide a uniform regime for the premarketing of alternative investment funds. Directive (EU) 2019/1160 and the accompanying Regulation (EU) 2019/1156 were published in the Official Journal of the EU on July 12, 2019. A two-year national implementation period began on August 2, 2019 and the Directive was fully transposed by August 2, 2021.

The amended rules aim to harmonise the marketing and pre-marketing position across EU member states to standardise the point at which the

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fund must be registered with the local regulator. AIFMD 2 applies only to premarketing by EU AIFMs, not non-EU AIFMs.

However, Recital 12 to AIFMD 2 notes that complying with the new rules should not disadvantage EU AIFMs over non-EU AIFMs, suggesting that regulators are likely to apply the same definition of pre-marketing to non-EU AIFMs.

Under Article 69 of AIFMD the European Commission is required to review the scope and application of the directive to establish its impact on investors, AIFs and EU and non-EU AIFMs, and determine whether the AIFMD's objectives have been achieved.

The Commission began its review in 2018 with a general survey about the functioning of AIFMD. The results were published in January 2019. The Commission noted that most of the AIFMD provisions were assessed as having achieved their objectives, but also identified areas requiring further analysis. the Commission continued with its review of AIFMD and on June 12, 2020 published its report noting that: "AIFMD has improved the monitoring of risks to the financial system and the cross-border raising of capital for investments in alternative assets; AIFMD has played a role in creating an internal market for AIFs and reinforcing the regulatory and supervisory framework for AIFMs in the EU; and AIFMs are operating with more transparency for investors and supervisors."

The report has been submitted to the European Council and Parliament, and the Commission issued a consultation on AIFMD in the third guarter of 2020. The Commission is drafting a legislative proposal to amend the Level 1 Directive and. subsequently, the Level 2 Delegated Regulation. The Level 1 legislative proposal is expected to be published by end of November 2021. The proposal is anticipated to cover delegation, liquidity risk management tools, loan origination funds, depositary location requirements and certain technical clarifications

Building on the results of the survey,

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=celex%3A32011L0061

Q&A: https://www.esma.europa.eu/press-news/esma-news/esma-updates-aifmd-qas-1





AMLD6

At a Glance

Regulation: Sixth Anti-Money Laundering Directive (AMLD6)

Regulatory Regime: EU

Target Market Sector: Financial institutions

Core Requirements:

Legal entity and beneficial ownership data, customer data due diligence, screening for sanctions, PEPs and adverse news

Significant Milestones

1990 – 2020: EU adopts and enforces five AML directives
December 3, 2020: AMLD6 to be transposed into law
June 3, 2021: AMLD6 implementation
July 20, 2021: European Commission publishes package of proposed legislative changes to AML/CTF

Description and Data Requirements

The sixth EU Anti-Money Laundering Directive (AMLD6) is a development of both AMLD4 and AMLD5. Its arrival close on the heels of AMLD5 highlights the EU's intent to protect the integrity of the financial system and challenge the ever growing problem of anti-money laundering. Like AMLD5, AMLD6 expands the requirements of regulated firms within the scope of the directive through the use of amendments.

Member states were required to transpose AMLD6 into law by December 3, 2020, with implementation due by June 3, 2021.

Key amendments to the directive include:

- An updated list of predicate offences for money laundering. The list includes 22 offences that member states must criminalise and includes extensions such as environmental offences and cybercrime
- Additional offences such as aiding and abetting, and attempting and inciting money laundering
- An extension of criminal liability to

legal persons such as companies, as well as individuals, that commit offences for the benefit of their organisation, including where the offence was made possible by lack of supervision of an individual

- An increase in the minimum prison sentence for money laundering offences for individuals from one year to four years.
- Increased international co-operation for prosecution of money laundering; where two member states have jurisdiction over the prosecution of an offence, they must collaborate and agree to prosecute in a single member state
- A dual criminality component that requires member states to criminalise money laundering arising from six specified predicate offences, even if the conduct constituting the offences is lawful in the jurisdiction in which it is committed: the six offences are: participation in an organised criminal group and racketeering; terrorism; trafficking in human beings and migrant smuggling; sexual exploitation;

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illicit trafficking in narcotics and psychotropic substances; and corruption

The extended requirements of AMLD6 beyond those of AMLD5 are a tough, but necessary, challenge for financial firms and member states.

As a first step of implementing the extended requirements, firms will need to develop a deep understanding of each of the predicate offences, their relevant risk factors and typologies. This will require strong AML policies within the organisation.

Data sourcing and management will need to be expanded to alert firms to 22 predicate offences as well as additional offences. They will also be stretched as criminal liability is extended to companies and other legal entities.

Useful solutions include AML software platforms based on machine learning and AI technologies that can monitor a huge number of transactions in realtime, perform sanctions and politically exposed persons (PEPs) screening, raise alerts, and avoid an abundance of false positives.

On July 20, 2021, the European Commission presented a package of legislative proposals to strengthen the EU's AML/Counter Terrorism Financing (CTF) rules. The new measures are designed to enhance the existing EU framework by taking into account new and emerging challenges linked to technological innovation such as virtual currencies, more integrated financial flows in the Single Market, and the global nature of terrorist organisations.

The package consists of four legislative proposals:

- A regulation establishing a new EU AML/CFT authority
- A Regulation on AML/CFT containing directly applicable rules, including in the areas of customer due diligence and beneficial ownership
- Additions to AMLD6 including provisions that will be transposed into national law, such as rules on national supervisors and Financial Intelligence Units in member states
- A revision of the 2015 Regulation on Transfers of Funds to trace transfers of crypto assets.

The package will be discussed by the European Parliament and Council ahead of a legislative process. The AML authority should be operational in 2024 and will start its work of direct supervision slightly later, once the directive has been transposed and the new regulatory framework starts to apply.

While the EU has introduced six AML directives, and as a member of the EU, the UK has implemented the first five, the sixth AML directive came into effect for EU member states on December 3, 2020, four weeks short of the end of the Brexit transition period.

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The UK government chose not to implement the sixth directive into national law as it considered its domestic legislation 'is already largely compliant with the directive's measures, and in relation to the offences and sentences set out in the directive, the UK already goes much further'.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ .L_.2018.284.01.0022.01.ENG





AnaCredit

At a Glance

Regulation: AnaCredit

Regulatory Authority: European Central Bank

Target Market Sector: EU credit institutions

Core Data Requirements:

Counterparty, instrument, collateral and accounting data

Significant Milestones

2011: European Central Bank initiates AnaCredit

December 2017: Early adoption

September 30, 2018: Phase 1 reporting starts covering loans granted by credit institutions to legal entities

July 18, 2019: ECB establishes procedure for recognising non-euro area member states as reporting member states under AnaCredit

Q4 2018 – Q4 2019: Phase two and three reporting extend reach of AnaCredit

Description and Data Requirements

AnaCredit (analytical credit datasets) is a European Central Bank (ECB) regulation set up to build a dataset of detailed information on individual bank loans and deposits in the Euro area and harmonised across all EU Member States.

It is designed to make it possible to identify, aggregate and compare credit exposures and to detect associated risks on a loan-by-loan basis. The project was initiated in 2011, early adoption was introduced in December 2017, and full data collection and complete reporting started on September 30, 2018.

The scope of data collection covers data on credits extended or serviced by EU credit institutions that are not branches of other credit institutions; foreign branches of EU credit institutions, including non-Euro area branches; and foreign branches that are located in the Euro area but are part of a credit institution resident outside the Euro area.

In the first stage, only credit data related to loans of a minimum €25,000 and extended to legal entities that are not natural persons have to be reported. Loans to private households are not covered.

The second and third stages of reporting were rolled out from the end of 2018 to the close of 2019. They cover additional financial institutions such as deposit taking corporations other than credit institutions, asset management vehicles and other financial corporations.

The regulation requires over 100 data points to be reported for each exposure, including 94 data attributes and seven unique identifiers used several times across various regulatory templates.

The ECB expects the information provided to be 'granular, exact and detailed'. The required information

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includes data related to the counterparty, such as LEI code, address, balance sheet total, data related to the instrument, type, currency, status, interest rate type, payment frequency, data related to the collateral, type of protection, location, value, and accounting data, such as accumulated impaired amount and source of encumbrance. procedures it would follow to recognise non-euro area member states as reporting member states under AnaCredit.

Most recently, in April 2021, the ECB updated the annexes to the AnaCredit manual and publication of the list of postal code formatting rules and regular expressions per country.

In July 2019, the ECB established

Key Links

Text: https://www.ecb.europa.eu/ecb/legal/pdf/celex_32016r0867_ en_txt.pdf

Q&A: https://www.ecb.europa.eu/stats/money_credit_banking/ anacredit/questions/html/index.en.html



Basel IV

At a Glance

Regulation: Basel IV

Regulatory

Authority: BCBS and national supervisory authorities

Target Market Segment: Global financial institutions

Core data

requirements: Risk data, regulatory data, data classification

Significant Milestones

December 7, 2017: BCBS publishes reforms to Basel III referred to as Basil IV

May 2018: Consultation paper on capital requirements for market risk

January 14, 2019: BCBS oversight body endorses revisions, implementation date January 1, 2020

March 27, 2020: BCBS delays implementation deadline

January 1, 2023: Implementation of body of Basel IV

January 1, 2023 to January 1, 2028: Phased implementation of output floors

Description and Data Requirements

Changes to the Basel III global regulatory framework commonly known as Basel IV are designed to make capital ratios more robust and improve confidence in the financial system following the crisis of 2008. They are also central to market risk and capital calculations at the heart of the Fundamental Review of the Trading Book (FRTB) regulation that is due to be implemented in January 2023.

The Basel III reforms were published by the Basel Committee on Banking Supervision (BCBS) on December 7, 2017, concluding proposals and consultations that had been ongoing since 2014 and considering credit risk, credit value adjustment (CVA), operational risk, leverage ratio, and output floors.

Output floors, which set a floor in capital requirements calculated

under internal models, were the most controversial aspect of the reforms, as market participants suggested their introduction would raise capital requirements. Aiming to resolve the problem, the BCBS agreed to set an initial output floor that will rise over a five-year period.

The key aims of the Basel III revisions were to reduce excessive variability of risk-weighted assets (RWAs). At the peak of the financial crisis, a wide range of stakeholders lost faith in banks' reported risk-weighted capital ratios. Analysis by BCBS also noted material variability in banks' calculation of RWA.

A consultation document on revisions to minimum capital requirements for market risk was published in May 2018, before the BCBS oversight body, the Group of Central Bank Governors and Heads of Supervision (GHOS), met on January 14, 2019 and endorsed a set of

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revisions to the market risk framework that would enhance its design and calibration.

Key revisions included:

- Introduction of a simplified standardised approach (SA) for banks with small or non-complex trading portfolios
- Clarification of the scope of exposures subject to market risk capital requirements
- Enhanced risk sensitivity of the SA by revising the treatment of foreign exchange risk, index instruments and options
- Revision of SA risk weights applicable to general interest rate risk, foreign exchange risk and selected credit spread risk exposures
- Revamping of the assessment process to determine whether a bank's internal risk management models appropriately reflect the risks of individual trading desks
- Revision of requirements for identifying risk factors that are eligible for internal modelling and the capital requirement applicable to risk factors that are deemed non-modellable

The revisions were informed by quantitative impact analyses by BCBS. Once implemented, the revised framework is estimated to result in a weighted average increase of about 22% in total market risk capital requirements relative to the Basel 2.5 framework published in 2009. In contrast, the framework issued by the BCBS in 2016 as part of the development that would lead to the Basel II revisions resulted in a weighted average increase of about 40%. The share of risk-weighted assets (RWAs) attributable to market risk remains low, at around 5% of total RWAs.

The implementation date of Basel IV was initially set as January 1, 2022, with the output floor phased in from January 1, 2022 to January 1, 2027.

However, on March 27, 2020, the BCBS announced that it would delay implementation of Basel IV to allow banks to focus resources on navigating the coronavirus pandemic. The revisions now have an implementation date of January 1, 2023, with the transitional arrangement for the output floor to extend to January 1, 2028.

A revised market risk framework finalised by the GHOS in January 2019 and due to be implemented alongside the Basel III reforms endorsed by the GHOS in December 2017, has also been delayed to January 1, 2023. Disclosure requirements finalised in December 2018 have been pushed back to the same date.

Implementation of Basel IV is widely acknowledged by capital markets participants to be one of the biggest challenges of the next

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few years, and one that must be tackled sooner rather than later. Ultimately, the introduction of new rules covering the calculation of RWA and the capital ratios of all banks are expected to make a fundamental impact on the development of banks' strategies and how they shape their business models.

From a data management perspective, challenges include sourcing and analysing more,

and more difficult to source, data than previously to meet revised approaches to aggregating and understanding market risk, and completing capital requirement calculations. Disclosure includes details of regulatory capital and its reconciliation with reported accounts, as well as comprehensive explanations of how banks calculate regulatory capital.

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Key Links

Final Basel III reforms: https://www.bis.org/press/p171207.htm **BCBS defers implementation:** https://www.bis.org/press/p200327. htm

Revisions to market risk framework: https://www.bis.org/bcbs/ publ/d457.pdf



BCBS 239

At a Glance

Regulation: BCBS 239

Regulatory

Authority: BCBS and national supervisory authorities

Target Market Segment: Global financial institutions

Core Requirements:

Risk data aggregation and reporting

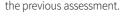
June, 2012: Consultation paper released January 9, 2013: Regulation published January 1, 2016: Compliance deadline

Significant Milestones

Description and Data Requirements

BCBS 239 is a regulation issued by the Basel Committee on Banking Supervision (BCBS) and is designed to improve risk data aggregation and reporting across financial markets. It is based on 14 principles that cover disciplines ranging from IT infrastructure to data governance and supervision, and came into force on January 1, 2016.

BCBS 239 is acknowledged across the financial industry as a base for improved risk data aggregation, data governance and accurate reporting. The BCBS 2019 progress report published in April 2020, shows that banks have made notable improvements in their implementation of the principles since



While these efforts are reflected in governance, risk data aggregation capabilities and risk-reporting practices, there is still considerable work ahead for several banks. especially with respect to the further improvement of their data architecture and IT infrastructure

The BCBS 239 principles are interdependent, designed to underpin accurate risk aggregation and reporting in normal times and times of crisis, and split into four sets.

The first set of principles covers data governance and IT architecture requirements necessary to risk data aggregation and reporting. The focus here is on top-down methodology and oversight by bank executives. The second set details effective risk data aggregation across a bank, outlining a framework for automated aggregation of complete, accurate and timely data that can support on-demand reporting.

The third set of principles aims to improve risk reporting, and with a push to establish clear and useful





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reports, it addresses the requirement for frequent and well distributed reports that can be tailored to business needs across departments.

The fourth set requires supervisors, including regulatory authorities, to determine whether the principles are achieving desired outcomes and define any corrective action.

BCBS 239 is a supplement of the capital adequacy requirements of Basel III, which consider whether firms have enough resources to monitor and cover risk exposure. Like Basel III, BCBS 239 has a significant effect on data management, requiring firms to improve risk data aggregation capabilities according to the principles and present accurate risk data for reporting.

Risk data must be captured across a bank, which means consistent data taxonomies need to be established. and the data needs to be stored in a way that makes it accessible and easy to understand, even in times of financial crisis. While many banks adhered to some of the principles of BCBS 239 due to other regulatory obligations before the compliance deadline, most had work to do to ensure compliance with all the principles, particularly those covering data governance, risk data aggregation and reporting. Compliance can be eased by breaking down data silos and creating a single enterprise-wide view of risk.

While BCBS 239 was originally published in January 2013 with the intent that G-SIBs should be compliant by the January 2016 deadline, many G-SIBs struggled with the automation of risk data aggregation and were not fully compliant when the regulation took effect. Instead, they were either materially compliant and able to show regulators a small subset of risk reports, or able to show substantive plans, a commitment to compliance and a timetable for completion.

An assessment of compliance by supervisors of the national jurisdictions indicated that of the 34 G-SIBs designated during the period 2011 to 2019, before the onset of the Covid-19, none of the banks were in full compliance with the principles.

Data architecture and IT infrastructure compliance remains difficult. Notably, data quality and integrity with ineffective data quality frameworks, dependence on siloed systems and reporting timeframe crunches are among the outstanding challenges.

However, significant efforts have indicated tangible progress in the areas of governance, risk data aggregation and reporting practices.

The committee recommends that to increase adoption of the Principles, banks should continue to work toward implementation while taking into account any changes in the financial sector and supervisors should address delays and ineffective



RegTech DataManagement ESG implementation.

The Covid-19 pandemic has led regulators to finding middle ground in terms of BCBS implementation.

The BCBS augmented BCBS 239 requirements around liquidity in 2016 with the issuance of BCBS 248. This layers a new requirement on BCBS 239 that improves the understanding of risk by superseding BCBS 239 requirements for inter-day liquidity monitoring and requiring intra-day monitoring. The outcome is greater robustness in financial markets. Domestic systemically important banks (D-SIBs) are advised, rather than required, by national supervisors to adhere to the principles of BCBS 239, although some are expected to act ahead of regulatory intervention, acknowledging the potential advantages of BCBS 239 compliance including better customer service, improved business decisions based on accurate and timely information, reduced operational costs and increased profitability.

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Key Links

Text: http://www.bis.org/publ/bcbs239.pdf Publications: http://www.bis.org/bcbs/publications.htm Progress Report: https://www.bis.org/bcbs/publ/d501.htm





At a Glance

Regulation: Benchmarks Regulation (BMR)

Regulatory Regime: EU

Target Market Sector: Global financial institutions

Core Data

Requirements: Index and benchmark data management, data governance

Significant Milestones

September 18, 2013: European Commission proposes regulation November 25, 2015: European Parliament agrees on regulation February 2016: European Commission requests ESMA comment

June 30, 2016: Regulation published

January 1, 2018: Regulation comes into force.

January 1, 2020: End of transitional period for significant and non-significant EU benchmarks

July 24, 2020: Commission adopts proposal to amend BMR to ensure the EU's financial stability when a benchmark is phased out

November 30, 2020: EU approves amendments

January 1, 2022: ESMA to take over the supervision of non-EU benchmarks

December 31, 2023: End of extended transitional period for critical and third-country benchmarks

March 5, 2021: FCA confirms withdrawal of Libor at end of 2021

Description and Data Requirements

Benchmarks Regulation (BMR), or Regulation on Indices used as Benchmarks in Financial Instruments and Financial Contracts or to Measure the Performance of Investment Funds, is an EU regulation that came into force in June 2016. It aims to make benchmarks more reliable and less open to manipulation by improving how they function and are governed.

Regulation of benchmarks was initially proposed by the European Commission in September 2013 following alleged manipulation by financial firms of benchmarks including the London Interbank Offered Rate (LIBOR), the Euro Interbank Offered Rate (Euribor) and other benchmarks such as those for foreign exchange and commodities.

The regulation contributes to the accuracy and integrity of benchmarks by ensuring contributors to benchmarks are subject to authorisation and ongoing supervision. It also improves the governance of benchmarks, for example by making provisions for the management of conflicts of interest, and requires greater transparency of how a benchmark is produced. Finally, the regulation aims to ensure appropriate supervision of critical benchmarks, the failure of which could create risks

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for market participants and financial stability at large.

The Benchmarks Regulation requires firms to reassess the manner in which indices are evaluated, and ensure the accuracy of determinants such as asset prices, interest rates and quotes. The more accurate the underlying data, the more accurate the pricing of financial instruments including interest rate swaps, commercial and noncommercial contracts.

The June 2016 regulation was followed by a European Commission implementing regulation establishing a list of critical benchmarks used in financial markets. The implementing regulation came into force in August 2016 and allowed supervisors to make use of certain provisions of the Benchmarks Regulation in advance of its application in January 2018.

The regulation required benchmark providers to be authorised or registered by their national competent authority (NCA), and defined a benchmark as 'any index by reference to which the amount payable under a financial instrument or a financial contract, or the value of a financial instrument is determined or an index that is used to measure the performance of an investment fund.'

It also sets out three main categories of benchmarks:

Critical benchmarks

Benchmarks used for financial

instruments, contracts and performance of investment funds having a total value of at least €500 billion, and meeting qualitative criteria such as location of contributors and importance of the benchmark in the country where a majority of contributors is located.

Significant benchmarks

Benchmarks used for financial instruments, contracts and performance of investment funds having a total value of at least €50 billion over a period of six months, and meeting qualitative criteria such as the benchmark has no reliable substitute, and its absence would lead to market disorder.

Non-significant benchmarks

Benchmarks that do not fulfil the conditions set for critical or significant benchmarks.

Euribor was the first benchmark to be included in the list of critical benchmarks. It was joined by Libor and the Euro Overnight Index Average (Eonia).

Firms that customise or create composite benchmarks will become benchmark administrators and will need to implement data governance policies to ensure they comply with the regulation, a task that will become onerous as these types of benchmarks are more widely adopted and create the need to manage increasing volumes of bespoke data.

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The end of LIBOR

An investigation into LIBOR rates starting in 2012 revealed that rates were being manipulated for profit by some banks. Regulators in the US, UK and the European Union fined banks more than \$9 billion for rigging LIBOR. Since 2015, authorities in both the UK and the US have brought criminal charges against individual traders and brokers for their role in manipulating the benchmark although the success of these was mixed.

Change was needed and the UK government began considering reforms to LIBOR, whose regulation, as a London-based benchmark, falls under the UK's purview. The UK Parliament passed legislation in 2012 to strengthen financial regulation in general, and reform LIBOR.

After further consideration and suggested improvements to LIBOR, and an initial lack of regulatory intervention, in March 2021 the UK Financial Conduct Authority (FCA) confirmed that LIBOR would cease to be available as an interest rate benchmark from January 1, 2022. The exception is US dollar LIBOR, where most LIBOR terms will continue to be published until the end of June 2023.

Most recently, in October 2021, the FCA released further arrangements for the orderly wind down of LIBOR at the end of 2021. While the sterling, Japanese yen, Swiss franc and euro LIBOR panels will cease on 31 December 2021, the FCA says that to avoid disruption to legacy contracts referencing the 1-, 3- and 6-month sterling and Japanese yen LIBOR settings, it will require the LIBOR benchmark administrator, ICE Benchmark Administration, to publish these settings using a synthetic methodology. These settings will be based on term risk-free rates for the duration of 2022 and can only be used in legacy contracts.

The FCA will specify which legacy contracts are permitted to use the synthetic LIBOR rates before the end of 2021. They have been created to provide a reasonable and fair approximation of what panel bank LIBOR might have been in the future. The synthetic rates will no longer, however, be 'representative' as defined in BMR, and will become permanently unrepresentative of their underlying markets from January 1, 2022. The first nonrepresentative publication under the synthetic methodology will be on January 4, 2022.

The UK's exit from the EU led to UK BMR, which reflects the provisions of EU BMR. The UK BMR applies to the:

- Provision of benchmarks
- Contribution of input data to a benchmark
- Use of a benchmark within the UK

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Under UK BMR, only the following types of benchmarks may be used by supervised entities within the UK:

 Benchmarks that are provided by UK based administrators who have been granted authorisation or registration under the UK BMR and who are identified on the register maintained by the FCA

Benchmarks that have been

entered onto the FCA register that are provided by third country administrators who have either: satisfied the requirements for equivalence, or acquired recognition under the UK BMR, or successfully sought endorsement from an UK authorised or registered administrator or other supervised entity for specific benchmarks.

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32016R1011

FAQs: http://europa.eu/rapid/press-release_MEMO-13-799_en.htm







At a Glance

Regulation: Comprehensive Capital and Analysis Review (CCAR)

Regulatory Regime:

US Federal Reserve Board

Target Market Segment: Large bank holding companies

Core Data Requirements:

Financial, risk and reference data, data aggregation, reporting

Significant Milestones

March 18, 2011: First CCAR conducted
November 22, 2011: Federal Reserve issues final rule on capital plans
January 30, 2017: Federal Reserve excludes large and non-complex firms from the qualitative assessment of CCAR
2018: Federal Reserve adds six IHCs to the stress test
June 27, 2019: Federal Reserve releases 2019 CCAR results
June 2020: Temporary and additional restrictions implemented in light of coronavirus pandemic

June 2021: Temporary restrictions end for most institutions

Description and Data Requirements

The Comprehensive Capital Analysis and Review (CCAR) is an annual exercise carried out by the Federal Reserve to assess whether the largest bank holding companies (BHCs) operating in the US have sufficient capital to continue operations through times of economic and financial stress, and have robust, forward-looking capital planning processes that account for their risks.

The Federal Reserve issued the CCAR capital plan rule in November 2011, requiring BHCs with consolidated assets of \$50 billion or more to submit annual capital plans for review. The regulation has since been expanded to cover BHCs with consolidated assets of \$10 billion or more and foreign banks with US operations exceeding \$50 billion in assets.

The Federal Reserve capital plan rule specifies four mandatory

requirements that span both quantitative and qualitative factors. The first requirement is an assessment of the expected uses and sources of capital over a nine-month planning period. The assessment must include estimates of projected revenues, losses, reserves and proforma capital levels and capital ratios over the planning period under baseline conditions, supervisory stress scenarios, and at least one stress scenario developed by the BHC and appropriate to its business model and portfolios.

The second requirement calls for a detailed description of a BHC's process for assessing capital adequacy, while the third requirement covers a BHC's capital policy, and the fourth requires a BHC to notify the regulator of any changes to its business plan that are likely to have a material impact on its capital adequacy or liquidity.



The Federal Reserve can object to a capital plan if it has either quantitative or qualitative concerns about the plan or underlying elements such as governance, internal controls, risk identification and management, management information systems, and assumptions and analysis that support the capital planning process.

On January 30, 2017, the Federal Reserve Board finalised a rule adjusting its capital plan and stress testing rules, effective for the 2017 cycle. The rule removed large and non-complex firms from the qualitative assessment of CCAR, focusing the qualitative review in CCAR on the largest, most complex financial institutions.

Large and non-complex firms are defined as BHCs and US intermediate bank holding companies as IHCs. These firms are still required to meet capital requirements under stress as part of CCAR's quantitative assessment and will be subject to regular supervisory assessments that examine their capital planning processes.

Since 2018, the Federal Reserve has been working towards resetting CCAR and reducing the regulatory burden while increasing transparency. In May 2018 the Economic Growth, Regulatory Relief, and Consumer Protection Act (the Relief Act) was passed, promising a more risk-based approach and exempting institutions with under \$100 billion in assets. In October 2018, it introduced a new rule defining four categories for firms with assets above \$100 billion, replacing the previous 'large and complex' and 'large and noncomplex' definitions, each subject to different stress-testing requirements.

In February 2019 the Federal Reserve extended further relief to less-complex firms from stress testing requirements and CCAR by effectively moving the firms to an extended stress test cycle for this year, applicable for firms with total consolidated assets between \$100-250 billion. These less-complex firms were not subject to a supervisory stress test during the 2019 cycle.

In March 2019, the Federal Reserve also announced that it would limit the use of the 'qualitative objection' for CCAR 2019. The changes eliminate the qualitative objection for most firms due to the improvements in capital planning made by the largest firms.

From a data management perspective, CCAR requires data sourcing, analytics, risk identification, risk data management and risk data aggregation for stress tests designed to assess the capital adequacy of BHCs and for regulatory reporting purposes. Data must be accessed, validated and reconciled across a BHC, often requiring data to be managed across several siloed systems, to provide consistent and accurate data. Financial, risk and reference data must then be integrated to fulfil the regulation's

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annual reporting requirement.

The extent of data required for compliance and the Federal Reserve's focus on risk identification and its link to capital planning and scenario generation, as well as on enterprise risk management and data governance, call for a move away from siloed systems and investment in a robust and automated regulatory framework and a flexible reporting solution.

The Federal Reserve widened the scope of CCAR, with the addition of six IHCs to the stress test in 2018.

On June 25, 2020, the Federal Reserve Board released results of stress tests for 2020 and additional sensitivity analyses conducted in light of the coronavirus pandemic.

The results of the sensitivity analyses led the board to take actions to ensure large banks remain resilient despite the economic uncertainty posed by the pandemic. For the third quarter of this year, the board is requiring large banks to preserve capital by suspending share repurchases, capping dividend payments, and allowing dividends according to a formula based on recent income. The board is also requiring banks to re-evaluate their longer-term

capital plans.

As of June 30, 2021, those additional restrictions ended for firms who remained in compliance with the minimum risk-based capital requirements and would be subject to the Financial Stability Board's stress capital buffer framework's normal requirements. Any bank that fell below the minimum risk-based capital requirements would then be subject to the additional restrictions for three more months, until September 2021. Following that timeframe, any bank remaining below the capital required by the stress test at that time, the framework of the regular stress capital buffer regime will impose even stricter distribution limitations.

CCAR is complemented by Dodd-Frank Act stress testing (DFAST), a forwardlooking exercise that is supervised by the Federal Reserve and designed to help assess whether institutions have sufficient capital to absorb losses and support operations during adverse economic conditions. CCAR and DFAST are distinct testing exercises, although they do rely on similar processes, data, supervisory exercises and requirements.

Key Links

Overview: https://www.federalreserve.gov/supervisionreg/ccar.htm **CCAR 2021:** https://www.federalreserve.gov/supervisionreg/ccar-2021.htm





COREP

At a Glance

Regulation: Common Reporting (COREP)

Regulatory Regime: EBA

Target Market Segment: European financial institutions

Core Data Requirements: Risk and capital adequacy reporting

Significant Milestones

January 1, 2014: UK starts Corep reporting January 18, 2017: EBA updates XBRL taxonomy for reporting September 2018: Publication by EBA of draft Data Point Models (DPM) on proposed changes to LCR reporting

October 26, 2018: Deadline for feedback on proposed revisions to LCR reporting

May 28, 2019: Publication of amendments to supervisory reporting March 31, 2020: First reporting reference date for COREP changes

Description and Data Requirements

Common Reporting (COREP) is a standardised reporting framework issued by the European Banking Authority (EBA) for reporting under the Capital Requirements Directive IV (CRD IV). The framework includes a number of templates to support the reporting of credit risk, market risk, operational risk, own funds and capital adequacy ratios.

The regulation has been adopted by most European countries and covers all banks, building societies and investment firms, essentially firms covered by the prudential sourcebook for Banks, Building Societies and Investment Firms (Bipru). It requires these firms to make a substantial review of the quantity, quality and frequency of data disclosures they make as part of their regulatory reporting regimes.

For many institutions, COREP means altering processes, implementing

management oversight of reports and reviewing reports for accuracy in a timely manner. The increased granularity of information required for reports increases the volume of data that must be managed, while reports must present an enterprise view of data, often requiring finance and risk functions to work together to provide consistent underlying data.

Additionally, the quality and robustness of data may need to be enhanced to generate more frequent reports and firms must ensure their systems can support the XBRL taxonomy that is mandated by COREP for reporting. The taxonomy was updated by the EBA in January 2017. Reports with reference dates from June 30, 2017 onwards must use the new taxonomy, known as set 2.6.

COREP also introduces new schedules, such as Immovable Property Losses and Group Solvency,

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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 due to be implemented alongside CRD IV and the corresponding Capital Requirements Regulation in 2013, with firms within its scope submitting capital adequacy reports within 30 days of the end of each quarter. Regulated organisations in the UK have been required to use COREP to make regular statutory reports since January 1, 2014. In total, the reporting framework has been adopted by 30 European countries.

On August 28, 2018 the EBA launched a consultation to review proposed revisions to Implementing Technical Standards (ITS) for COREP Liquidity Coverage Requirement (LCR) reporting for credit institutions. The proposed revisions reflected an amendment to the Capital Requirements Regulation made in July 2018 regarding the calculation of inflows and outflows in securities financing transactions.

In May 2019, the EBA published amendments to the ITS on

supervisory reporting. The updated corresponding Data Point Model (DPM) and XBRL taxonomy include amendments to COREP to reflect the new securitisation framework, as well as amendments with regard to liquidity in response to the LCR Delegated Act, and clarifications and corrections as regards reporting on COREP and additional monitoring metrics for liquidity (technical amendments).

The package forms part of the EBA reporting framework version 2.9. The first reporting reference date was March 31, 2020 for COREP changes, April 30, 2020 for changes regarding liquidity (LCR and ALMM) and December 31, 2019 for resolution planning.

Reporting framework 3.2 is expected to be released from December 2021. The main changes to COREP include changes to own funds in response to RTS on software, securitisations to align with the Capital Markets Recovery Package (CMRP) in response to the covid-19 crisis, and technical amendments. The reference date for these amended reporting requirements is December 2022.





Key Links

Guidelines: http://www.eba.europa.eu/documents/10180/37070/ CP04rev2_Annex-1.pdf Final Draft ITS 2019: https://eba.europa.eu/

documents/10180/2751085/Final+draft+ITS+amending+Regulati on+680-2014+%28EBA-ITS-2019-01%29.pdf

Reporting Framework 2.9: https://eba.europa.eu/risk-analysis-and-data/reporting-frameworks/reporting-framework-2.9

Reporting Framework 3.2: https://www.eba.europa.eu/risk-analysisand-data/reporting-frameworks/reporting-framework-3.2







At a glance

Regulation: Corporate Transparency Act (CTA)

Regulatory Regime: US

Target Market Segment:

Corporations, wealth managers, special purpose vehicles

Core Requirements:

Reporting of beneficial ownership data

Significant milestones

January 1, 2021: Congress passes CTA

April 2, 2021: FinCEN issues Advance Notice of Proposed Rulemaking, seeks public input

January 1, 2022: CTA rule expected to come into force January 1, 2024: Expected deadline for covered companies to submit first report

Description and data requirements

The US Corporate Transparency Act has been a long time coming, and over a decade in the making. Although falling under the Anti-Money Laundering Act of 2020, it was signed into law by Congress on January 1, 2021 as part of the National Defense Act.

The new regulation represents a radical overhaul of beneficial ownership reporting, amending the Bank Secrecy Act to require a wide range of entities including all US-registered corporations, limited liability companies, and similar entities to report their beneficial owners to FinCEN (the Financial Crimes Enforcement Network, a division of the US Treasury Department), to form part of a national registry of beneficial ownership information. This information can be requested by any Federal agency, and by financial institutions for the purpose of customer due diligence.

The changes plug a significant gap in US AML legislation and are likely to have a major impact on data management requirements for reporting companies. The goal of the regulation is to increase transparency and discourage the use of complex shell companies and paper trails by forcing firms to declare beneficial ownership.

Some entities are exempt, including those that already fall under Federal supervision such as banks, broker/ dealers, regulated financial and investment institutions, and publicly traded companies; along with USregistered firms with more than 20 employees, and turning over more than \$5 million annually. Foreign owned firms are only categorised as 'reporting companies' if they are registered to do business in the US, although they may still have to make a disclosure if they are a beneficial owner of a US reporting company.

This means that the onus is placed squarely on smaller firms that the regulator identifies as higher risk – and it could have particular impact for special purpose vehicles and

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family offices, along with their wealth managers, which may see a substantial increase in their reporting obligations, along with the possibility of heavy penalties for non-compliance. Fines for failure to disclose (or disclosing the wrong information) can reach \$500 per day in civil penalties, plus up to \$10,000 and/or two years in jail. The misuse of beneficial ownership information also carries a penalty of up to \$250,000 and/ or five years in jail.

The CTA defines a beneficial owner as someone who, directly or indirectly, 'exercises substantial control over the entity' or 'owns or controls not less than 25% of the ownership interests of the entity'. Specific information on these individuals must be reported, including:

- Full legal name
- Date of birth
- Current residential or business
 address, and
- A unique identifying number, either from an approved form of ID or generated by FinCEN upon request.

It should be noted that the CTA overlaps to a certain extent with the existing Customer Due Diligence (CDD) Rule, which requires certain financial institutions to provide information to FinCEN on entity customers and to create procedures to collect data on customer profiles. The new CTA requires the Treasury to revise the CDD rule within 12 months of its enactment, to bring it in line with CTA requirements and to reduce any duplication.

The CTA regulation will introduce considerable data management challenges for reporting firms once it is introduced, which is expected to be within a year of the law passing. Once live, firms falling under its remit will have two years to begin submitting reports on their beneficial owners, while any changes to that ownership must subsequently be reported within one year.

For financial institutions however, especially those that already fall under the aegis of the existing CDD, things should be a little easier. The CTA specifically directs FinCEN to bring the CDD in line with the new legislation, and the creation of a new database could substantially streamline compliance requirements and provide a valuable new pool of direct and validated data with which to meet AML and due diligence requirements.

Key Links

Notice of proposed rule making: https://www.federalregister. gov/documents/2021/04/05/2021-06922/beneficial-ownershipinformation-reporting-requirements





CRD IV and CRD V

At a Glance

Regulation: Capital Requirements Directive IV (CRD IV)

Regulatory Regime: EU

Target Market Segment: European banks

Core Data Requirements: Risk profile and disclosure of capital adequacy

Significant Milestones

January 1, 2014: Effective data

May 25, 2018: Council of the European Union agrees CRD V, a new package of measures aimed to reduce risk in banking

May 14, 2019: European Council adopts CRR II and CRD V reforms. June 7, 2019: CRR II and CRD V regulations published in the Official Journal of the EU.

June 27, 2019: CRR II and CDR V enter into force December 28, 2020: Final PS29/20 published, confirming CRD policy. June 24, 2021: Implementation deadline for the majority of CRR II provisions

Description and Data Requirements

Capital Requirements Directive IV (CRD IV) is the fourth version of a European Commission regulation that implements Basel III type standards covering market liquidity risk and bank capital adequacy across the EU. The directive is divided into two parts: the Capital Requirements Regulation (CRR), 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 implemented by national law and includes provisions for transparency, governance and capital buffers.

CRD IV applies to investment firms and credit institutions within the scope of Markets in Financial Instruments Directive II (MiFID II) and focuses on improving the quality and quantity of their available capital. It builds on previous capital requirements directives, extends corporate governance and supervisory requirements, and adds sanctions for non-compliance. It also introduces capital requirements based on risk-weighted assets (RWAs), capital buffers designed to protect firms from potential market upheaval, and liquidity and leverage requirements to ensure firms can meet cash outflows and handle stress testing scenarios. Reporting is standardised using Financial Reporting (FINREP) and Common Reporting (COREP).

CRD IV came into effect on July 1, 2014.

The spectre of CRD V appeared in November 2016, when the European Commission outlined proposals to amend the Capital Requirements Regulation and the Capital Requirements Directive.

On May 25, 2018 the Council of the



European Union agreed on a new package of measures aimed to reduce risk in the banking industry. The banking reform package comprises Directive 2013/36 (or CRD V), along with the Capital Requirements Regulation and Directive (regulation 575/2013or CRR II, Bank Recovery and Resolution Directive (directive 2014/59/EU or BRRD 2), and Single Resolution Mechanism Regulation (806/2014 or SRMR 2).

In April 2019, the European Parliament endorsed an agreement on the banking reform, with CRD V expected to come into force by the end of 2020 and CRR II by mid-2021, which means banks need to be working on how they will implement the proposals now.

Key elements of the package include:

- Leverage ratio requirement: There will be a binding 3% ratio of non-risk weighted assets to Tier 1 capital for all institutions in addition to current risk weighted capital requirements
- Net stable funding ratio (NSFR): This will be set at 100%. NSFR requires banks to make sure that any exposures are matched with stable funding sources and measures the ratio of available stable funding (ASF) to the required amount of stable funding (RSF) over a one year time period
- Market risk: A new market risk framework for reporting purposes has been set. The FRTB set out what level of capital was needed

to absorb trading losses but due to time constraints, CRR II has only addressed the reporting requirement. The capital elements of FRTB will be implemented at a later point but until then banks will still need to use current CRR for calculating market risk capital

- Own-fund deductions: Depending on the type of software asset, it won't necessarily have to be deducted from Tier 1 capital as per current rules
- Pillar 2 capital: Under CRD V, the current Pillar 2 framework is set to change and make the distinction between mandatory Pillar 2 addons, which are more like capital buffers, and the supervisory expectation that firms hold capital additional to Pillar 1
- Pillar 2 guidance: Firms will have to meet Pillar 2 capital with at least 75% Tier 1 capital. This is similar to what capital the PRA currently requires banks to hold to meet their Pillar 2 capital requirement
- Proportionality: Smaller, less complex banks will have less onerous disclosure requirements under CRR II. Simpler alternatives are being introduced for smaller banks to calculate market risk, NSFR, counterparty credit risk and interest risk in the banking book. A simplified counterparty credit risk will be available to banks with derivatives of less than 10% of the bank's total assets or €300 million

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- CRD V requires large third-party country institutions with over €40 billion of assets (including third party branch assets) to establish an intermediate EU holding company (IPU). This will allow for easier supervision and resolution of EU activities but introduces a new consolidation group requirement for many third-party banks.
- Financial crime: New measures will also be introduced to enhance the role of prudential supervisors in combating money laundering and terrorist funding.

European Parliament and of the Council of 20 May 2019 amending the Capital Requirements Directive IV as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures (CRD V) was published alongside CRR II in the Official Journal of the EU on June 7, 2019. Both regulations entered into force on June 27, 2019. Member states were required to amend their local CRD rules in order to reflect the new CRD V provisions by December 28, 2020. The implementation deadline was June 24, 2021.

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Directive (EU) 2019/878 of the

Key Links

Full CRD V Text: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/ ?uri=CELEX:32019L0878&from=EN







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CRR II

At a glance

Regulation: Second Capital Requirements Regulation (CRR II)

Regulatory Regime: EU

Target Market Segment: Banks

Core Requirements: New disclosure and

reporting obligations

Significant Milestones

February 14, 2019: EU Banking Package finalised
June 7, 2019: Banking Package published in Official Journal
June 27, 2019: Final drafts enter into force
June 28, 2021: CRR II application date
June 2022: ESG risk disclosures added to CRR II reporting requirements.

Description and Data Requirements

The revised Capital Requirements Regulation (CRR II), alongside the revised Capital Requirements Directive (CRD V) are the latest step in the implementation of Basel III across the EU. The new regulation was signed into law as part of the EU Banking Package in 2019 alongside the Bank Recovery and Resolution Directive (BRRD II), and the Single Resolution Mechanism (SRMR II), and came into effect in June 2021.

CRR II, which builds on the existing prudential framework laid out in 2013 by CRD IV/CRR, makes a number of significant changes to the reporting requirements for banks and large firms, and meeting these could prove challenging and potentially costly, without a robust prior strategy in place.

These changes include the introduction of a binding new Leverage Ratio, which requires Tier 1 capital of at least 3% of non-risk weighted assets, along with an additional buffer for global systemically important institutions. It also introduces a new Net Stable Funding Requirement (NSFR) to ensure that banks maintain a minimum amount of stable funding based on asset characteristics such as liquidity, residual maturity, and counterparty over one year, to ensure that all exposures and liabilities are matched by stable funding sources.

The CRR II/CRD V package also introduces new tools such as the implementation of Total Loss Absorbing Capacity (TLAC) for systemically important institutions, a new framework for market risk capital requirements (under Basel III and aligned with FRTB, initially applying only as a reporting requirement), and a new framework for counterparty credit risk (incorporating the standardised and more risk sensitive Basel III approach).

In addition, CRR II expands the reach of the previous regulation to include holding companies, which will now have to ensure compliance with

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the same core capital, exposure, liquidity, and reporting requirements. It lowers the capital requirements for investments in infrastructure by 25% (as long as risk and cash flow criteria are met) and also adds new provisions for the management of non-performing loans (NPLs) and disclosures around collateral and financial guarantees. Finally, it adds some sustainability-specific features, including the requirement for large institutions to publicly disclose their ESG-related risks (from June 2022).

The goal of CRR II is to achieve comparability with Basel III disclosure standards, in order to achieve consistency with non-EU international banks. This means that reporting standards are likely to be closely scrutinised, and the quality and consistency of disclosed information will be of crucial importance.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ .L_.2019.150.01.0001.01.ENG&toc=OJ:L:2019:150:TOC





At a Glance

Regulation: Central Securities Depositaries Regulation (CSDR)

Regulatory Regime: EU

Target Market Segment: EU Central Security Depositories

Core Requirements:

Securities settlement, authorisation, reporting

Significant Milestones

August 2014: CSDR published in the Official Journal
September 17, 2014: CSDR enters into force
September 2017: CSDs file for CSDR authorisation
February 1, 2021: Entry into force of CSDR settlement discipline regime
January 1, 2023: Any new securities to be issued in book-entry form

January 1, 2023: All securities to be in book-entry form February 2022: Settlement discipline due to enter into force in EU

Description and Data Requirements

The Central Securities Depositories Regulation (CSDR) is one of the key regulations adopted after the financial crisis and is part of wider EU regulatory reforms including the European Market Infrastructure Regulation (EMIR) and Markets in Financial Instruments Directive II (MiFID II).

CSDR introduces new measures for the authorisation and supervision of EU Central Security Depositories (CSDs) and sets out to create

DTCC's Institutional Trade Processing provides an integrated suite of solutions to help support CSDR compliance, minimizing the risk of trade failure by ensuring that clean and accurate golden source data are used to create an authoritative trade record, automated processing through a notouch workflow and efficient exception management.



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a common set of prudential, organisational, and conduct of business standards at a European level. A large part of the regulation is designed to support the objectives of the Target2Securities (T2S) system through the introduction of a securities settlement regime.

The aim is to harmonise certain aspects of the settlement cycle and settlement discipline, and provide a set of common requirements for CSDs operating securities settlement systems across the EU. CSDR plays a pivotal role in post-trade harmonisation efforts in Europe as it will enhance the legal and operational conditions for crossborder settlement in the EU.

At the operational level of securities settlement, CSDR includes provision of shorter settlement periods, mandatory buy-ins, and cash penalties to prevent and address

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CSDR IS COMING – DTCC CAN HELP

The upcoming Central Securities Depositories Regulation's (CSDR) Settlement Disciple Regime (SDR) will impose new measures to prevent settlement failure such as cash penalties for failing and/or late matching trades. Given these new, potentially large, impacts of a failed trade – the time is now to focus efforts on the prevention of failure.

DTCC's Institutional Trade Processing provides an integrated suite of solutions to help support CSDR compliance, minimizing the risk of trade failure by ensuring that clean and accurate data are used to create an authoritative trade record, automated processing through a no-touch workflow and efficient exception management.

Learn how DTCC can help clients prepare for CSDR's Settlement Disciplinary Measures, visit www.dtcc.com/csdr



settlement failures. The new rules also stipulate that CSDs will need to apply for authorisation from their national competent authorities.

CSDR entered into force on 1 February 2021 and applies to all European CSDs and market operators in the context of securities settlement. Trading parties, central counterparties (CCPs), clearing and settlement agents, which are members of the CCPs and CSDs, and trading venues will also be impacted and will have to directly comply with some of the measures, in particular the introduction of a mandatory buy-in regime and cash penalties for settlement failures.

As well as these operational challenges, CSDR sets out three phases of practical implementation:

Phase 1: CSDs and their direct participants must offer clients the choice between omnibus segregation and individual client segregation and inform them of the costs and risks associated with each option.

Phase 2: Internalised settlement reporting applies to both direct and indirect participants of CSDs. An internalised settlement is where two clients trade with each other but as they share the same settlement account, no instruction is actually sent to the CSD.

ESMA has drafted technical standards to establish the forms, templates

and procedures for the reporting and transmission to the relevant competent authorities.

Phase 3: Settlement discipline regime (SDR) rules introduce measures to prevent settlement fails by ensuring that all transaction details are provided to facilitate settlement, as well as further incentivising timely settlement by cash penalty fines and buy-ins. The Settlement discipline rules are expected to come into force in the EU in February 2022.

CSDR adds a significant operational and reporting burden to the role of CSDs, but by the same token should improve settlement on the basis of the new rules and threats of cash penalties for settlement failures.

In one of the first examples of post-Brexit divergence, the UK Government did not adopt the CSDR settlement discipline regime after Brexit, although most UK market participants will still need to comply.

Instead, the statement envisages that market participants will continue to rely on existing industry led settlement discipline contractual frameworks for securities transactions and securities financing transactions (SFTs) that settle via the UK CREST system.

UK market participants will be subject to the CSDR settlement regime when any in-scope securities transactions and SFTs settle via an



EU CSD, including both the Euroclear and Clearstream settlement systems, and regardless of where the counterparties to the transaction are located and whether they are direct or indirect participants of the EU CSD.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32014R0909

ESMA statement on settlement: https://www.esma.europa.eu/ regulation/post-trading/settlement

FAQs: https://ec.europa.eu/commission/presscorner/detail/en/ MEMO_14_312





MAS DCG

At a glance

Regulation: Data Collection Gateway (DCG)

Regulatory Regime: Singapore

Target Market Segment: Regulated financial institutions

Core Requirements:

Over 300,000 fields of balance sheet data across all banking functions including finance, risk, operations, and legal and compliance.

Significant milestones

April 1, 2018: All regulatory filings to MAS must be submitted in machine-readable format

August 18, 2020: MAS publishes revised notices 610 and 1003 on submission of statistics and returns

April 2020: DCG pilot launched

July 1, 2021: MAS610/1003 comes into effect, all reporting obligations through DCG enforced

Description and data requirements

The Monetary Authority of Singapore (MAS) has been working on a major overhaul of its regulatory reporting framework and, by extension, its data collection process, since 2017.

Notices 610 (covering all banks except merchant banks) and 1003 (covering merchant banks), came into force in July 2021 and apply to all banks in Singapore. They massively expanded firms' reporting obligations, increasing data points from around 4,000 to around 340,000 across 67 different reports covering functions ranging from finance, risk, operations, legal and compliance.

Concurrently, in 2018, the regulator unveiled a new roadmap towards the transformation of its data collection approach, with the goal of improving transparency and increasing granularity. This included objectives to decrease duplication and automate data submission from financial institutions.

As part of this Data Transformation

Programme, and in order to expedite the processing of this vast influx of new banking data, MAS partnered with Vizor Software to launch a new Data Collection Gateway (DCG), which launched in April 2020 with a six-month pilot before going live at the same time as the new 610/1003 reporting requirements.

The new system was designed to provide a fully automated method of submitting large sets of granular balance sheet data, which includes a monthly statement of assets and liabilities, a monthly return on foreign exchange business, and a quarterly return on classified exposures and collateral value for housing loans. Around 7,700 unique data points are currently required to be reported by financial institutions through DCG, which acts as a replacement for MAS's previous Electronic Returns Submission System (ERSS).

The change in reporting obligations has been significant, requiring a



substantial uptick in resources, time, and technology in order to produce and submit the correct data each month. However, the automated DCG process allows for the collection, analysis and publication of large sets of granular data, which can then be integrated with other platforms for analysis and visualisation. The DCG platform is likely to be the first foray by Singapore into SupTech, but it is unlikely to be the last.

Key Links

DCG user guide: https://masnet.mas.gov.sg/portal/masnet/vmedia/get/?path=1034/dcg-user-guide.pdf





APRA DCS

At a glance

Regulation: Data Collection Solution (DCS)

Regulatory Regime: Australia

Target Market Segment: Regulated financial institutions/ deposit-taking institutions

Core Requirements:

Granular automated data entry across banking operations

Significant Milestones

January 2020: Project resumed

March 12, 2020: Revised implementation and timeline released by APRA

June 2020: Test environment launched

September 13, 2021: Go live date for APRA Connect End September 2021: Superannuation Data Transformation collections expected to be introduced

October 2021: Private Health Insurance Reform (HRS 605.0) expected to be introduced

March 2022: ARS 220 on credit quality and ARS 115 on operational risk expected to be introduced

Description and Data Requirements

The Australian Prudential Regulation Authority (APRA) recently gave its 20-year old data collection system a brand new look, replacing the old desktop-based D2A (Direct to APRA) software with a brand new platform called APRA Connect.

In 2017, APRA launched its data modernisation programme to collect economic and financial statistics (EFS), data which is published as APRA's Monthly Authorised Deposittaking Institution Statistics (MADIS). In the same year, the regulator issued a new Reporting Practice Guide (RPG) to give financial institutions guidance on quality and reporting requirements for data collection, which included a strategic focus on moving away from manual, formbased submission to a granular, automated reporting process.

In late 2019, APRA partnered with industry bodies to seek feedback on alternative implementation approaches for a new data collection solution, and subsequently worked with an international consortium to develop APRA Connect, which was delayed by six months due to Covid-19 but finally launched in September 2021. It is currently used by around 4,500 financial institutions in Australia to meet their data reporting requirements. APRA Connect also requires authorised users within reporting firms to be designated Relationship Authorization Managers (RAM).

The new system represents a substantial increase in the quantity of data the regulator requires, with the objective of improving its overview of the market while still reducing the



compliance burden for regulated firms. APRA Connect is designed to eliminate duplication and reduce workload, which has been an issue in the Australian market with various regulatory agencies often requiring similar, but not identical, data. 'When fully rolled out, the expected result is a framework that delivers APRA the data it needs to achieve its objectives while at the same time minimising entities' effort and compliance costs,' said the regulator.

APRA Connect is web-based rather than desktop-based, and introduces

a variety of new restrictions to ensure usability – including the prohibition of copy and paste by supporting only manual entry of single cells. Other methods of entry, including data uploads via XML or XBRL formatted files, are also supported, while APIbased data uploads are on their way.

However, those firms that still rely on manual entry or multiple cell copy and paste should as a matter of urgency seek to re-evaluate and upgrade their data collection systems and submissions processes.

Key Links

APRA Connect: https://www.apra.gov.au/apra-connect



Dodd-Frank

At a Glance

Regulation: Dodd-Frank Wall Street Reform and Consumer Protection Act

Regulatory Regime: US Government

Target Market Segment: Global financial institutions

Core Data Requirements:

Identification of issuers, clients and counter parties

Significant Milestones

December 2, 2009: Dodd-Frank is introduced to Congress **July 21, 2010:** Effective date **July 16, 2015:** SEC statement on fifth anniversary of the regulation **May 22, 2019:** Partial Papublican rollback of Dodd Frank to release

May 22, 2018: Partial Republican rollback of Dodd-Frank to release SME banks from stress-testing

June 25, 2020: FDIC says it will loosen restrictions of the Volcker Rule January 1, 2021: Amended Volcker rules take effect

Description and Data Requirements

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) is a US government regulation that was introduced in 2010 in an attempt to prevent the recurrence of events that triggered the 2008 financial crisis.

The regulation largely covers the swaps market, which was previously unregulated, and is designed to promote the financial stability of the US by improving accountability and transparency in the financial system, monitoring companies deemed 'too big to fail', and protecting taxpayers

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and consumers from abusive financial services practices.

Dodd-Frank includes a large number of rules that have been implemented by the US Securities and Exchange Commission (SEC), along with additional reforms designed to strengthen the nation's financial infrastructure, improve transparency and reduce risk.

The SEC is generally charged with regulating security-based swaps, with input from the US Commodity Futures Trading Commission (CFTC), and the CFTC is generally charged with regulating non-security-based swaps, with input from the SEC.

The introduction of such widespread reform raised significant data management challenges for many financial institutions. One major challenge is the requirement to aggregate, analyse and report on large volumes of disparate data. The aim of the analysis is to provide



RegTech DataManagement ESG better oversight of systemic risk, but with it comes the need to develop data architecture that supports stress-testing scenarios designed to promote effective risk management and timely and accurate reporting.

To support implementation, Dodd-Frank includes guidelines on managing and analysing data from a variety of sources, as well as guidelines on reporting formats. It also introduces a focus on data standardisation across financial markets that is manifested by the inclusion of the Legal Entity Identifier (LEI), a global standard for unique entity identification that is required by Dodd-Frank not only for reporting, but also as the basis for systemic risk oversight and improved transparency.

One of the regulation's key reforms was encapsulated in the Volcker Rule, which prevents banks from making speculative investments if they cannot demonstrate a benefit to their customers. In most cases, this means banks must withdraw from proprietary trading, which in turn means they cannot own a hedge fund or private equity fund.

In May 2018, US Congress implemented the first major rollback of the regulation, voting 258-159 to free thousands of small and medium-sized banks (with less than \$250billion in assets) from the strict stress tests and leaving fewer than 10 banks subject to full Federal oversight.

In August 2019, the Office of the Comptroller of the Currency voted to amend the Volcker Rule in an attempt to clarify what securities trading was and was not allowed by banks. Also in 2019, banks with under \$10 billion in assets were excluded from the Volcker Rule.

On June 25, 2020, Federal Deposit Insurance Commission (FDIC) officials said the agency will loosen the restrictions from the Volcker Rule, allowing banks to more easily make large investments into venture capital and similar funds. In addition, the banks will not have to set aside as much cash for derivatives trades between different units of the same firm. That requirement had been put in place in the original rule to make sure that if speculative derivative bets went wrong, banks wouldn't get wiped out. The loosening of those requirements could free up billions of dollars in capital for the industry.

The revised rules became effective on January 1, 2021.

Dodd-Frank Act stress testing (DFAST) is a forward-looking exercise that is supervised by the Federal Reserve Board and designed to help assess whether institutions have sufficient capital to absorb losses and support operations during adverse economic conditions.



DFAST is complementary to the Comprehensive Capital Analysis and Review (CCAR), an annual exercise carried out by the Federal Reserve to assess whether the largest bank holding companies operating in the US have sufficient capital to continue operations throughout times of economic and financial stress, and have robust, forwardlooking capital planning processes that account for their unique risks. DFAST and CCAR are distinct tests, although they do rely on similar processes, data, supervisory exercises and requirements.

Key Links

Text: https://www.sec.gov/about/laws/wallstreetreform-cpa.pdf **Final Rules:** https://www.cftc.gov/LawRegulation/DoddFrankAct/ Dodd-FrankFinalRules/index.htm





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EMIR and EMIR REFIT

At a Glance

Regulation: European Market Infrastructure Regulation (EMIR)

Regulatory Regime: EU

Target Market Segment: Global financial institutions

Core Data Requirements:

Identification of clients and counterparties, risk management, reporting

Significant Milestones

August 16, 2012: Effective data February 12, 2014: First reporting deadline May 2015: European Commission launches review of legislation January 2017: EMIR 1.5 is adopted November 2017: Compliance with EMIR 1.5 June 12, 2018: European Parliament votes to make changes to EMIR II May 28, 2019: Regulation (EU) 2019/834 of the European Parliament and of the Council is published in the Official Journal June 17, 2019: EMIR REFIT enters into force July 8, 2020: ESMA provides updated Q&A

Description and Data Requirements

European Market Infrastructure Regulation (EMIR) is an EU regulation aimed at improving the transparency of over-the-counter (OTC) derivatives markets and reducing the risks associated with these markets.

To achieve this, EMIR requires OTC derivatives meeting certain requirements to be cleared using a central counterparty (CCP). The

SmartStream's reference data for derivatives is critical to the EMIR reporting lifecycle. Available as a managed service it delivers complete, accurate and timely reference data for use in critical regulatory reporting and risk management operations. Additionally, SmartStream delivers pre-built reconciliations solutions and workflow management which manages the trade and its process legs across the entire lifecycle.



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CCP must be listed in the European Securities and Markets Authority (ESMA) registry and authorised as described in EMIR so that it is recognised across member states. EMIR also introduces risk mitigation procedures for bilaterally cleared OTC derivatives and requires all derivatives transactions 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 trade repository. Both OTC and exchange-traded derivatives must be reported, as well as life cycle events such as give-ups and terminations.

Firms have until the working day following the trade to meet





reporting requirements, which presents challenges in ensuring the quality and accuracy of counterparty data, and its timely delivery.

Other reporting issues include the need for firms to conduct an analysis of all their counterparties so that they can fulfil the regulation's classification requirements. This raises data management concerns as firms should aim to maintain an accurate list of counterparties so that they can check their status and track any organisations that are exempt from regulation.

Another major concern regarding data is the sheer volume. With the implementation of the central clearing requirement for standardised OTC derivatives contracts, the amount of transactions that occur through CCPs will increase. Data infrastructure will be key to ensuring a smooth transition throughout the implementation process.

EMIR mandates the use of the Legal

For EMIR reporting, we offer more than just technology. Our award-winning ACA Regulatory Reporting Monitoring & Assurance (ARRMA) solution provides analysis of reports generated, challenging assumptions built into reporting frameworks. The exceptional extra is our independent consulting expertise, which helps firms quickly understand recognised failings. ARRMA has identified errors in 97% of firms reviewed, across more than 30 unique types.



Entity Identifier (LEI) and the Unique Trade Identifier (UTI), which is common to both parties to a trade, for reporting to a trade repository.

The Unique Product Identifier (UPI), which is due to be released in Q3 2022, will also be required to provide clear and consistent identification of products traded in derivative transactions.

Overall, EMIR reporting includes more than 80 fields with data divided between two tables, one containing data about the trading entity and the other listing common information, such as contract details. This data must be reported on both sides of the trade.

EMIR came into effect on August 16, 2012, with a reporting deadline of February 12, 2014. In August 2014, the regulation introduced a requirement for financial counterparties and non-financial counterparties to provide daily reports on mark-to-market valuations of positions and on collateral value.

The first clearing obligations were introduced in June 2016 for interest rate swaps, with credit default swaps following in February 2017 and all clearing requirements in place by 2019. Large institutions were obliged to meet margin requirements for noncentrally cleared trades in September 2016, with other institutions phased in by September 2020.



RegTech DataManagement ESG Following the introduction of EMIR, ESMA approved and registered eight trade repositories for derivatives processing: DTCC Derivatives Repository, UnaVista, KDPW, Regis-TR, CME TR, ICE Trade Vault Europe, and the Bloomberg Trade Repository, and NEX Abide Trade Repository.

In August 2017, ESMA issued final guidelines on data transfer between trade repositories authorised under EMIR, saving data portability is essential for data quality, competition between trade repositories and for risk monitoring by authorities. The guidelines establish a consistent and harmonised approach for the transfer of data between repositories and cover the transfer of data at the request of a repository participant and the transfer of data due to withdrawal of repository registration.

During 2014 and early 2015, ESMA authorised 17 European CCPs to offer services in the EU in accordance with EMIR, and in 2015 added 11 thirdcountry CCPs established in Australia, Hong Kong, Japan and Singapore to the list. In 2016, it added a further nine third-country CCPs in South Africa, Canada, Mexico, Switzerland, South Korea, Poland and the US. In 2017, a number of additional thirdparty CCPs were named, bringing the total to 32.

EMIR 1.5

In accordance with Article 85 of EMIR, the European Commission launched a review of the legislation in May 2015.

The purpose of these activities was to get feedback from stakeholders on their experiences of the implementation of EMIR and provide the European Commission with guidance to prepare a final report. The European Commission submitted a final report to the European Parliament and Council, together with appropriate proposals for change, in late 2016.

The Commission concluded that, although there was no need for a fundamental change to the nature of the core requirements in EMIR, the legislation imposed disproportionate burdens and overly complex requirements on non-financial counterparties, small financial counterparties and pension funds.

In January 2017, EMIR 1.5 was adopted in a delegated regulation and implementing regulation. Banks and buy-side firms within the scope of EMIR were required to comply with the 1.5 updates from November 2017.

A key change was an extension of the EMIR trade reporting template so that it aligns with Markets in Financial Instruments Directive



II (MiFID II) reporting templates. This means EMIR 1.5 covers OTC derivatives trading across all asset classes. In particular, market participants are required to report complex derivatives contracts composed of a combination of several other derivatives contracts. EMIR 1.5 also brought OTC derivatives contracts derived from credit instruments into scope.

EMIR 2.1/REFIT

As a result of the 2015 consultation, EMIR was included within the European Commission's 2016 Regulatory Fitness and Performance (REFIT) programme.

In May 2017, this resulted in a proposal to amend EMIR based on problems in the regulation identified after four years of observation and two consultations with market participants. The proposal noted the need to make further changes to the regulation to remove unnecessary costs and burdens for certain types of market participants, particularly non-financial counterparties that only trade derivative contracts to reduce risk directly related to their main activities.

Regulation (EU) 2019/834 of the European Parliament and of the Council was published in the EU Official Journal on May 28, 2019, with the bulk of the provisions coming into force on June 17, 2019. The amendments simplify certain requirements for smaller firms, taking a more proportionate approach. They also address issues around compliance costs, transparency issues and insufficient access to clearing for certain counterparties.

EMIR 2.2

In parallel to the REFIT, in June 2017 the Commission also proposed a second set of amendments to EMIR to enhance the supervision of third country clearing counterparties (CCPs), to make the supervision of EU CCPs more coherent and to introduce a fee system for CCPs to fund the relevant activities. A political agreement between the European Parliament and member states was reached in March 2019 to upgrade the supervision of EU and third-country CCPs and give greater regulatory powers to the European Central Bank.

On 15 October 2019, the European Parliament and Council adopted several amendments to the regime for the authorisation, recognition and supervision of CCPs, through a new regulation amending EMIR, essentially EMIR 2.2. The final act was signed into law on 23 October 2019 and entered into force on 1 January 2020.

A key element of EMIR 2.2 is ESMA's role in determining whether a third-country CCP is systemically

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important or likely to become systematically important for the financial stability of the EU or one or more of its Member States.

CCPs which are determined not to be systemically important (Tier 1 CCPs) will carry on, in large part, as usual. Third-country CCPs which are deemed to be systemically important or likely to become systemically important (Tier 2 CCPs) will be subject to additional requirements, including compliance with all CCP requirements under EMIR, and to ESMA direct supervision.

When the Brexit implementation period ended at the end of 2020, the EMIR regime ceased to apply directly in the UK. Instead, EMIR and related legislation was transposed into national law, as part of retained EU law under the European Union (Withdrawal) Act 2018.

UK EMIR is largely identical to EU law that was in force at the end of the implementation period, although some changes were made as a result of Brexit. Some of the key changes in UK EMIR include:

- The UK Treasury performs functions that were previously performed by the European Commission under EMIR. Similarly, the role of ESMA is split between the FCA and the Bank of England.
- The regulation is focused on UK counterparties, while

third-country counterparties (and their UK branches) are outside its scope. This means that the relevant regime for EU counterparties will generally continue to be EMIR.

- Only the requirements of the EMIR regime in force at the end of the implementation period became part of UK law. This means there could be divergence between the UK and EU regimes over time, although it is expected that the UK government will legislate to mirror EU developments in the context of the EMIR regime, at least in the short term.
- Derivatives subject to clearing under UK EMIR must be cleared through an FCA authorised CCP, either established in the UK or a recognised third country.
- Derivatives subject to clearing under EMIR must be cleared through an ESMA authorised CCP, either established in the EU or a recognised third country. On 21 September 2020, the European Commission said the UK's framework for the supervision of CCPs is equivalent. In accordance with this, ESMA has recognised three UK CCPs – LCH, ICE, and LME Clear – for an initial 18 months.
- Transactions subject to UK EMIR must be reported to an FCA registered, UK established TR or



recognised third-country trade repository.

- Transactions subject to EMIR must be reported to an ESMA registered, EU established trade repository or recognised thirdcountry trade repository.
- There is currently no equivalence decision that would allow EU authorities to access UK EMIR data from trade repositories, or UK authorities to access EMIR data from trade repositories.

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Key Links

EMIR Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX%3A32012R0648

EMIR Refit Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=celex%3A32019R0834

Q&A: https://www.esma.europa.eu/sites/default/files/library/esma70-1861941480-52_qa_on_emir_implementation.pdf



ESG Regulation

At a Glance

Regulation:

Environmental, Social and Governance (ESG) Regulation

Regulatory Regime: EU

Target Market Segment: Global financial institutions

Core Requirements:

Data collection, analysis, disclosure

Significant Milestones

March 8, 2018: EU Commission publishes action plan for sustainable finance

May 24, 2018: EU Commission publishes proposals for Taxonomy Regulation, Disclosure Regulation and amendments to Benchmark Regulation

November 27, 2019: Sustainable Financial Disclosure Regulation (SFDR) published

November 27, 2019: Low Carbon Benchmarks Regulation published **April 15, 2020:** EU Council adopts draft Taxonomy Regulation

Description and Data Requirements

Increasing public interest in environmental, social and governance (ESG) issues, and growing demand for sustainable finance has, necessarily, raised questions about regulation. The EU's emerging ESG regime originates, in great part, from its commitment to the United Nations 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), as well as the Paris Agreement on climate change.



Regulation aims to provide clarity in a market fragmented by a large body of voluntary measures, such as the Financial Stability Board's Task Force on climaterelated financial disclosures that has published voluntary recommendations for climaterelated financial reporting; government initiatives such as the UK's 2050 net zero target that aims to bring all greenhouse gas emissions to net zero by 2050; and commercial solutions such as ESG standards, scores and methodologies.

In such a fragmented landscape, regulation should also counter greenwashing that threatens to undermine ESG-related political commitments and the goal of channelling private investment into genuinely sustainable economic activities.

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Key EU ESG regulations to date include:

Sustainable Finance Disclosure Regulation (SFDR)

SFDR requires investment firms and asset owners to make disclosures on the integration of ESG risks and consider adverse impacts on their investment processes and remuneration policies. Firms are also required to disclose ESG factors and impacts on their products.

Taxonomy Regulation

The regulation sets out a common classification system for economic activities that are considered to be environmentally sustainable. The focus is on sectors with a key role in climate change mitigation and adaptation. The regulation also requires that economic activities do not do significant harm to other environmental objectives.

Low Carbon Benchmark Regulation

The regulation extends EU

Alveo addresses ESG data requirements across the entire investment management process, from research, asset allocation, portfolio construction to performance analysis and externa reporting. Alveo's data management includes complete transparency on lineage, business logic to infer missing values and easy integration into client workflows. We provide optimized data sourcing and aggregation, quality monitoring and business user enablement in the sense of easy provisioning quality data to users across the investment process.





Benchmarks Regulation to provide two new benchmarks – EU Climate Transition and EU Paris-Aligned – to help increase transparency and prevent greenwashing.

In addition to these regulations, suitability rules have been amended to require a client's ESG preferences to be taken into account by investment advisers. These amendments take effect with the disclosures regulation.

The Commission is developing tools and mechanisms to integrate ESG factors into the EU banking prudential framework, banks' business strategies, investment policies, and risk management processes. It is also preparing proposals for an eco-label for certain financial products such as 'sustainability funds' and 'green bonds'. Sustainability amendments to regulations such as MIFID II, AIFMD, UCITS and Solvency II are also in the making.

While ESG regulation should ultimately be beneficial on a global scale, it adds a number of high-level tasks that investment firms must integrate into existing processes. These include data collection and analysis to calculate the risks ESG factors pose to a portfolio, and to the firm from a prudential perspective. In turn, firms must evaluate the risks a portfolio poses to ESG factors. Suitable ESG-related

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indices must also be selected for portfolio analysis, performance benchmarking, reporting, and disclosures.

At this stage, the provision of ESG products and regulatory compliance is an ongoing journey into relatively unknown territory for investment firms, but as always, the race is on, with those leading the way likely to commandeer competitive advantage in a fast growing market.

More information on these ESG regulations can be found in individual entries in the handbook.

Key Links

SFDR text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32019R2088#ntr1-L_2019317EN.01000101-E0001

Low Carbon Benchmarks Regulation text: https://eur-lex.europa. eu/legal-content/EN/TXT/?uri=celex:32019R2089

Taxonomy Regulation text: https://data.consilium.europa.eu/doc/ document/ST-5639-2020-INIT/en/pdf





FATCA and GATCA

At a Glance

Regulation: Foreign Account Tax Compliance Act (FATCA)

Regulatory Regime:

US Inland Revenue Service

Target Market Segment: Global financial institutions

Core Requirements:

Client identification, data maintenance, reporting

Significant Milestones

March 18, 2010: FATCA is enacted as part of the US Hiring Incentives to Restore Employment Act

July 1, 2014: Effective date

December 31, 2014: Compliance deadline

March 31, 2015: First reporting deadline

March 31, 2019: Reporting deadline for FFIs in non-IGA jurisdictions and FFIs in Model 2 IGA jurisdictions

September 30, 2019: Reporting deadline for FFIs in Model 1 IGA jurisdictions

April 29, 2020: IRS extends date to December 15, 2020 for FATCA certification submissions

Description and Data Requirements

The Foreign Account Tax Compliance Act (FATCA) is a US Government regulation that requires foreign financial institutions (FFIs) with US clients to carry the burden of tax reporting for those clients to the US Internal Revenue Service (IRS). FFIs must enter contracts with the IRS 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, can be penalised.

To enforce FATCA regulation, the US Government makes Intergovernmental Agreements (IGAs) with governments in other countries. Model 1 agreements require FFIs to report all FATCA information to their own governmental agencies that then report to the IRS. Model 2 agreements require FFIs to report directly to the IRS.

FFIs could register with the IRS and gain a GIIN after the official opening of the registration portal on January 1, 2014. The first list of registered FFIs was published on June 2, 2014 and updated monthly thereafter. Withholding tax of 30% on US source income, such as dividends, interest and insurance premiums, was introduced as the regulation became effective on July 1, 2014.

For many firms, FATCA compliance is not an easy task and requires significant investment in data

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management. FFIs must classify clients using US indicia and determine any Specified US Persons that need to be identified as US taxpayers. As the regulation calls for sensitive client data, such as tax, residency, citizenship and account status information, to be gathered, the data management requirements of compliance include client onboarding, maintaining client data over time and supplementing existing data for reporting. These requirements are best met by integrating FATCA applications with Know Your Customer (KYC), client onboarding and tax systems.

From a data management perspective, dealing with complexities such as grandfathered obligations and material modifications adds to the burden. Grandfathered obligations, essentially obligations that were outstanding on June 30, 2014, are exempt from withholding, but material modifications may mean these obligations lose their exempt status. The data management problem is understanding what constitutes a material modification. While the IRS offers a list of material modifications, it is far from exhaustive and banks must review changes and consider what counts as a material modification

Updates to the FATCA regime were made in July 2018, when

the IRS updated the regulation's registration system to incorporate the certification of pre-existing accounts and a periodic certification process. It also updated its list of FATCA classifications that entities within the scope of the regulation must review and then update their classifications where necessary.

In September 2019 the European Union published an updated list of accounts to be treated as excepted accounts, and an updated list of entities to be treated as nonreporting financial institutions.

In April 2020, the IRS extended the due date to December 15, 2020 for an entity with a FATCA certification due date of July 1, 2020 to submit a FATCA certification. The extension was made as a relief measure in response to the coronavirus pandemic. On the same grounds, reporting under FATCA was delayed until June 30, 2021.

In February 2021, the Commissioner for Revenue published a new version of the Guidelines for FATCA. These changes included a list of participating jurisdictions, including Maldives and Peru, as well as updating the list of non-reporting jurisdictions to include Costa Rica, Curacao and Peru for 2020, and updates regarding submission of reports in XML format. A deadline of April 30th 2021 was given for the submission of XML reports.



GATCA

GATCA is a global version of FATCA, Global FATCA. GATCA is based on the Convention on Mutual Administrative Assistance in Tax Matters developed in 1988 by the Organisation for Economic Co-operation and Development (OECD).

GATCA uses a model agreement similar to the FATCA Model 1 IGA and the OECD's Common Reporting Standard for the automatic exchange of tax information between countries. All G20 countries, most OECD countries and a growing number of developing countries have signed the convention. Many countries started the exchange of information in 2017 and others followed in 2018.

Unlike FATCA, GATCA does not impose withholding tax on financial institutions that fail to comply, but it does add to the data management challenge already presented by FATCA.

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Key Links

Overview: www.irs.gov/businesses/corporations/foreign-account-tax-compliance-act-fatca?_ga=1.6517492.797144261.1474889109

Guidance for FFIs: www.irs.gov/businesses/corporations/fatcaregulations-and-other-guidance?_ga=1.206869845.797144261.147488 9109

Updated FAQs: https://www.irs.gov/businesses/corporations/ frequently-asked-questions-faqs-fatca-compliance-legal



FINREP

At a Glance

Regulation: Financial Reporting (FINREP)

Regulatory Authority: EBA

Target Market Segment: European financial institutions

Core Data Requirements:

Financial accounting data, capital positions, reporting

Significant Milestones

July 26, 2013: Final draft of requirements published July 1, 2014: Effective date August 28, 2018: EBA proposes changes to Finrep December 7, 2018: Consultation on changes closed July 16, 2019: EBA amends ITS on supervisory reporting with regard to FINREP

June 30, 2020: First reporting reference date

Description and Data Requirements

Financial Reporting (Finrep) forms part of the European Banking Authority's (EBA) supervisory reporting framework and provides a standardised EU-wide framework for reporting financial accounting data. The framework includes several templates, which set out how firms should report data from income statements and balance sheets, and divides the templates into four groups. The groups cover data that must be reported on a quarterly, quarterly with a threshold, semiannual or annual basis

In total, Finrep includes more than 50 templates and 6,500 data fields that must be populated with core and non-core quantitative financial data. The data management challenges include sourcing and processing more granular reporting data than has previously been required for reports mandated by local regulators, and reporting more frequently. Under the regulation, firms must be able to show the workings that lead to final capital positions. They must also consider the dimensions of data. For example, some credit risk returns need to be divided according to geographic areas, counterparties and the like to provide a clear picture of a firm's activities in Finrep reports. In response to this, firms need to conduct a thorough gap analysis, assessing what data is required and how it can be accessed. They also need systems that can convert the data into the XBRL reporting format required by Finrep, a focus on data governance and the oversight that regulators increasingly demand as part of compliance.

Finrep, like Common Reporting (Corep), was introduced in 2014 as part of the Capital Requirements Directive IV (CRD IV), which aims to harmonise reporting across the EU. Finrep provides financial reporting and Corep capital reporting, although

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Corep is broader than Finrep covering both entity-by-entity and consolidated reporting, while Finrep applies only at the consolidated group level of credit institutions. Despite this, firms in the scope of the regulation must manage a larger reporting burden than in the past and report more frequently.

In August 2018, the EBA proposed changes to the Implementing Technical Standards (ITS) of Finrep aimed at amending and adding new reporting of non-performing loans (NPLs) and forborne exposures, amending the reporting of profit or loss items, in particular on expenses, and reporting on leases.

A consultation on the proposed changes closed on December 7, 2018 and in July 2019 the EBA published final amendments to the ITS. The amendments concern the reporting requirements on non-performing exposures (NPE) and forbearance to allow monitoring of reporting institutions' NPE strategies, the reporting requirements on profit and loss items and the implementation of the new International Financial Reporting Standard on leases (IFRS 16). Notably, only institutions with a NPL ratio equal to or greater than 5% are required to report more granular information on NPE and forbearance.

The EBA has since introduced framework 3.2, expected to apply from September 2022. It outlines amended reporting requirements including new proportionality measures for small and non-complex institutions, changes to COREP and securitisations to align with Capital Markets Recovery Package in response to the Covid-19 crisis, as well as revisions to the definition of the asset encumbrance level, changes to the ITS on supervisory benchmarking and changes to resolution planning reporting.

Key Links

Reporting Framework: https://eba.europa.eu/risk-analysis-and-data/ reporting-frameworks/reporting-framework-2.9

ITS: https://eba.europa.eu/regulation-and-policy/supervisory-reporting/its-on-supervisory-reporting-amendments-with-regards-to-finrep







At a Glance

Regulation: Fundamental Review of the Trading Book (FRTB)

Regulatory Authority: BCBS

Target Market Segment: Financial institutions

Core Data Requirements:

Market data, risk data, capital requirements calculations, reporting

Significant Milestones

May 2012: First consultation paper October 2013: Second consultation paper December 2014: Third consultation paper January 15, 2016: Text published March 22, 2018: Fourth consultation paper January 2019: Publication by BCBS of a revised and final FRTB standard March 27, 2020: EBA publishes draft standards for FRTB, defers EU implementation to January 1, 2023 January 1, 2023: EU implementation deadline

Description and Data Requirements

The Basel Committee on Banking Supervision (BCBS) introduced the Fundamental Review of the Trading Book (FRTB) in a May 2012 consultation paper that set out a revised market risk framework and proposals to improve trading book capital requirements.

The final FRTB paper was released on January 15, 2016, replacing existing capital requirements for market

Banks will need to upgrade their market data infrastructure to meet FRTB's market data, lineage, audit and volume requirements in a cost-effective manner. Alveo provides on-site tech and managed services for risk factor preparation including off-the-shelf integration with data providers, business rules to derive risk factors, proxy gaps, cross-reference to internal data and Basel taxonomies and test modellability. Alveo provides insight-driven data management through highly scalable, cloud-native technology for data exploration and processing.



www.alveotech.com/solutions/frtb-taking-the-risk-out-of-yourmarket-risk-data risk and suggesting a compliance deadline of January 1, 2019. The deadline for EU implementation has since been changed to January 2023.

The regulation is a response to the 2008 financial crisis, and focuses on a revised internal model approach (IMA) to market risk and capital requirements, a revised standardised approach (SA), a shift from value at risk (VaR) to an expected shortfall measure of risk, incorporation of the risk of market illiquidity, and reduced scope for arbitrage between regulatory banking and trading books.

The revised IMA introduces a more rigorous model approval process that enables regulators to remove internal modelling permission from individual trading desks and move them back to the SA.



The regulation also requires more consistent identification and capitalisation of material risk factors across banks, and adds more constraints to the capital reducing effects of hedging and diversification. There will also be a separate charge for non-modellable risk factors (NMRFs).

FRTB overhauls the SA that will be used for banks that want a simple and straightforward model and is also the fall back for banks that do not get regulatory approval for internal models. The major change to the SA is that it is based on risk sensitivities across asset classes. This should provide a consistent way to measure risk across geographies and regions, and allow regulators to compare risk and aggregate systemic risk.

The replacement of VaR with an expected shortfall measure of risk is expected to improve the capture of tail risk, essentially the risk of unforeseen events not factored into a bank's model, and understanding of capital adequacy during periods of significant market stress.

The risk of market illiquidity is managed by incorporating varying liquidity horizons in the revised models. These replace the static 10-day horizon assumed for all traded instruments under VaR in the current market risk framework and are designed to mitigate the risk of a sudden and severe impairment of market liquidity across asset classes.

To reduce arbitrage of regulatory capital between the banking book and the trading book, FRTB imposes a revised boundary between the books. There are also capital disincentives for transfers.

The data management challenges of FRTB include the sheer quantity of data required for compliance, including some data that is difficult to source. NMRFs are a case in point. Once banks have passed the P&L attribution and back testing requirements associated with using IMA, they need to identify whether their risk factors are either modellable or non-modellable.

If a risk factor does not have at least 24 'real' prices with no more than one month between each observation over a year it is classified as nonmodellable. Real prices include executed trades and committed quotes. For OTC markets with little transparency, the process of collecting real price data becomes a significant challenge.

A consultation paper issued by the BCBS on March 22, 2018 – Revisions to the Minimum Capital Requirements for Market Risk – aimed to address issues that the Basel Committee identified in the course of monitoring the implementation and impact of the market risk standard issued in 2016, Minimum Capital Requirements for Market Risk, or FRTB.

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The consultation resulted in the BCBS endorsing revisions published in January 2019 and designed to enhance FRTB.

The revisions include:

- A simplified SA for banks with small or non-complex trading portfolios
- Clarity of the scope of exposures that are subject to market risk capital requirements
- Enhancing the risk sensitivity of the SA
- Revising some SA risk weights
- Revamping the assessment process to determine whether a bank's internal risk management models appropriately reflect the risks of individual trading desks, essentially the profit and loss attribution test
- Easing the requirements for identifying risk factors that are eligible for internal modelling and the capital requirement applicable

to risk factors that are deemed non-modellable

In March 2020, the European Banking Authority (EBA) published final draft Regulatory Technical Standards (RTS) on the revised IMA.

These RTS cover 11 mandates and have been grouped in three different documents: the final RTS on liquidity horizons for the IMA; the final draft RTS on back-testing and profit and loss attribution requirements; and the final draft RTS on criteria for assessing the modellability of risk factors under the IMA.

In light of the coronavirus pandemic, the EBA welcomed the decision by the Group of Central Bank Governors and Heads of Supervision (GHOS) to defer the implementation date of the revised market risk framework by one year to January 1, 2023.

Key Links

Text: https://www.bis.org/bcbs/publ/d457.pdf Q&As: https://www.bis.org/bcbs/publ/d437.pdf 2019 Revisions: https://www.bis.org/bcbs/publ/d457.htm Final Draft Standards: https://www.eba.europa.eu/eba-publishesfinal-draft-standards-key-areas-eu-implementation-frtb





GDPR

At a Glance

Regulation: General Data Protection Regulation (GDPR)

Regulatory Regime: EU

Target Market Segment: Financial services sector

Core Data Requirements: Data privacy policies and processes, managing personal data

Significant Milestones

January 25, 2012: European Commission proposes updated data protection regulation

December 15, 2015: European Parliament and Council of the EU agree final text

April 8, 2016: GDPR adopted by Council of the EU April 18, 2016: GDPR adopted by European Parliament May 25, 2018: Compliance deadline

Description and Data Requirements

General Data Protection Regulation (GDPR) is an EU regulation replacing Data Protection Directive 95/46/EC that was established in 1995. The regulation is designed to harmonise data privacy laws across Europe, protect EU citizens' personal information and reshape the way organisations across the region approach data privacy.

While GDPR sustains the key principles of data privacy established by the 1995 directive, it extends many of these and clarifies ambiguous territorial applicability set down

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The regulation extends data protection requirements to include not only controllers, which are in the scope of the 1995 directive and determine the purposes, conditions and means of processing personal data, but also processors that process personal data on behalf of controllers.

GDPR does not make distinctions between industries and sectors, but its extensive demands have a major impact on the financial services sector and require financial firms

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to reconsider how they build data management systems and manage personal data. Those that do this well and take a proactive approach to compliance should benefit from improved customer communication, strategic data management and a higher level of trust in the market. For those that breach compliance, the stakes are high – reputational damage and fines of up to 4% of annual group turnover or €20 million.

The challenges presented by GDPR include gaining consent to process personal data, building data privacy by design, notifying authorities and individuals of data breaches, ensuring data portability, and giving individuals the right to have data deleted provided there are no legitimate grounds for keeping it.

Financial institutions processing large volumes of sensitive data may need to appoint a data protection officer and will have to carry out privacy impact assessments to identify risks, minimise potential data breaches and implement data protection strategy.

While financial firms subject to the 1995 directive already have data protection policies and practices in place, it is the detail of GDPR that adds complexity and must be addressed to achieve compliance. For example, general contractual terms are no longer sufficient to provide proof of consent from individuals to process personal data. Instead, consent must be unambiguous, freely given, informed and refer explicitly to each processing purpose. Consent for processing sensitive data held by banks and financial institutions must be explicit.

The data management requirement here is to consider how customer data is collected, managed and shared with third parties, and develop appropriate consent management policies. Financial institutions must also respond to the regulation's enhanced rights for individuals to access, transfer and delete data by amending privacy policies and procedures, and the way in which they manage data access requests.

The data privacy by design element requires financial institutions to promote privacy and data protection compliance in new system builds.

Data breaches that are likely to cause significant damage to customers must be reported to the Data Protection Authority within 72 hours and customers must be notified without undue delay.

GDPR took effect in all member states on May 25, 2018. In 2020, the EC issued a communication from the commission to the European Parliament and the Council entitled "Data protection as a pillar of

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citizens' empowerment and the EU's approach to the digital transition - two years of application of the General Data Protection Regulation".

The main findings of the communication outlined the importance of enforcement of GDPR and the ongoing challenge of developing a data protection culture among authorities, as well as stressing the obligation for member states to allocate sufficient human. financial and technical resources. to data protection. The paper also discussed the success of harmonised rules but indicated that there is still a degree of fragmentation and diverging approaches to implementation, emphasised that individuals are increasingly aware of their data protection rights but that there is a need to facilitate their exercise and full enforcement. The communication also addressed the lack of data standards that would enable the provision of data in a machine-readable format, which

would potentially increase the effective use of the right to data portability.

Further discussion included opportunities and challenges for organisation, in particular small and medium-sized enterprises, how GDPR was conceived in a technology neutral way, designed to cover new technologies as they develop; noting that the framework proved its importance and flexibility during the covid-19 crisis.

While GDPR has made tremendous strides in data protection, three years later, GDPR violations are rampant, coming from businesses, municipalities, individuals and other data controllers. Nearly 1000 fines have been issued, with sums of more than \in 1,200,000,000.

Although GDPR rules were initially passed by the EU, Brexit led to UK GDPR, which mirrors the EU version of the regulation and came into force on January 1, 2021.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ ALL/?uri=CELEX%3A32016R0679

Guide to GDPR: https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/

EU Note on Brexit and Data Protection: https://ico.org.uk/fororganisations/data-protection-and-brexit/data-protection-if-theresno-brexit-deal/







At a glance

Regulation: Granular Data Repository (GDR)

Regulatory Regime: Hong Kong

Target Market Segment: Financial institutions

Core Requirements:

Granular data submission on mortgages and corporate loans Significant Milestones

Q1 2019: GDR pilot launched

Q4 2020: GDR pilot complete

Q4 2021: Finalised GDR requirements expected

Description and Data Requirements

Like many Asian jurisdictions, fintech has been a key priority for the Hong Kong Monetary Authority (HKMA) in recent years.

In 2021, the regulator set up a new Digitalisation Office to oversee its entire digital transformation process and formulate a long-term digital development strategy The regulator has also introduced numerous new initiatives: including its Faster Payment System, the virtual bank licensing regime... and its latest project, the Granular Data Repository (GDR).

The GDR is a pilot scheme first launched at the start of 2019 and designed to collect more granular data from Hong Kong's banks in order to give a fuller picture of their operations. Over the long-term, the project is designed to reduce the regulatory reporting burden on banks by replacing the current system of template-based, manually submitted regulatory reports.

During the pilot, 19 participating banks submitted data across a broad range of around 250 fields, focusing on monthly transaction reports for residential mortgage loans and corporate loans conducted out of their Hong Kong offices, along with any mainland China branches.

According to HKMA, as of May 2020 the reporting banks accounted for around 40% of total corporate loans in the Hong Kong banking sector. For each transaction, the banks were required to submit data points on the characteristics of the loan: including pricing, borrower details, contract details, collateral value, and repayment schedules. The dataset contained, according to HKMA, over 50 million data points.

The final version of GDR is currently under development, and is expected to be released around the end of 2021. It is likely to include more comprehensive dataset requirements, along with the introduction of new standards of data quality, which could place a significant extra burden on banks' reporting systems.

Reporting firms will need to ensure that they can meet the requirements for data quality and completeness, as well as deliver the data on time

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and in the right format. While the use of legacy systems may initially be possible, it is likely that system and process upgrades will eventually be needed in order to meet the substantially increased granularity of requirements and the expanded set of transaction data fields, and consolidate this data into a common repository for management, maintenance, validation, and submission.

While larger banks could achieve this in-house, smaller banks are likely to have to turn to third-party vendors, which may bring an added cost burden, so this should be factored in early.

Key Links

Research memorandum: https://www.hkma.gov.hk/media/eng/ publication-and-research/research/research-memorandums/2020/ RM02-2020.pdf



IFD/IFR

At a Glance

Regulation:

Investment Firms Directive and Regulation (IFD/IFR)

Regulatory Regime: EU

Target Market Segment: EU investment firms

Core Requirements:

Changes to regulatory capital, liquidity arrangements and remuneration policies

Significant Milestones

2015: EBA Report on Investment Firms notes deficiencies in investment management regime

December 5, 2019: IFD and IFR published in the Official Journal of the EU

June 26, 2021: EU regulation takes effect in Europe January 1, 2022: UK regulation takes effect

Description and Data Requirements

The EU's Investment Firms Directive (IFD) and Investment Firms Regulation (IFR) put in place a new prudential framework for MiFIDauthorised investment firms. The framework aims to ensure the safe functioning of investment firms and correct management of customer and market risk.

Previously, EU investment firms were subject to the same capital, liquidity and risk management rules as banks. The new regulation and directive introduce a bespoke regulatory framework for investment firms, differentiated according to an individual firm's risk profile and business model.

IFD was transposed into local law and applied by EU member states from June 26, 2021, at which time IFR also applied. A small number of investment firms will be subject to the same prudential requirements as banks. Remaining firms will be subject to a harmonised, and for some an enhanced, set of prudential requirements.

Compliance with IFD and IFR is a major challenge and change for a number of investment firms. Implementation requires firms to project plan, identify which classification they will fall into, engage with the Central Bank for reauthorisation or treatment as a credit institution where necessary, and identify any changes that they need to make to their regulatory capital, liquidity arrangements and remuneration policies.

Investment firms will be categorised into one of four classes.

Class 1: Systemically important investment firms dealing on own account and/or underwriting or placing financial instruments on a firm commitment basis and with an average of monthly total assets exceeding €30 billion.

These firms must be reauthorised as credit institutions, supervised under the single supervisory mechanism,

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and regulated under the latest versions of the Capital Requirements Regulation (CRR) and Capital Requirements Directive (CRD). The Initial capital requirement will be €5 million.

Class 1 minus: Firms in this category are described as those in Class 1 but have an average of monthly total assets exceeding €15 billion.

These firms do not need to be reauthorised as credit institutions, but will be regulated under CRR and CRD. The Initial capital requirement is equal to the initial capital requirement for authorisation to conduct the relevant investment services set by the IFD.

Class 2: Large firms that are not systemically important, but hold own funds at certain thresholds based on the higher of their permanent minimum requirement, fixed overhead requirement, or K-factor calculation – a new requirement that provides the means to calculate a directly proportional capital requirement for each firm's risk profile. This is the default categorisation for investment firms.

These firms are subject to IFD supervisory and IFD/IFR remuneration requirements. They must publish reports on environmental, social and governance (ESG) risks, physical risks and transition risks related to the transition into a more sustainable economy over a three-year phase in period. They must also establish internal capital assessment processes, liquidity adequacy assessment processes, and are subject to the new K-factor. The initial capital requirement will be €750,000, €150,000 or €75,000 depending on a firm's activities.

Class 3: Small investment firms that are not interconnected with other investment firms and do not undertake any high risk activities and fall below a range of size-related thresholds and criteria. These firms are subject to a relatively lighter prudential framework, but will still need to assess the changes they need to make.

Firms in Class 3 must not hold client money or securities, are subject to the MiFID II remuneration framework and not the remuneration framework in IFD/IFR, and must meet K-factor requirements. The initial capital requirement will be €750,000, €150,000 or €75,000 depending on a firm's activities.

The European Banking Authority (EBA) has published a roadmap that sets out its workplan for implementing the new framework. It includes six key areas:

- Thresholds and criteria
- Capital requirements and composition
- Reporting and disclosure
- Remuneration and governance

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- Supervisory convergence and Supervisory Review and Evaluation Process (SREP)
- ESG factors and risks: The EBA has launched a number of public consultations on regulatory deliverables that are part of the roadmap. The results of these are expected to influence final decisions on the requirements of IFD and IFR.

The implementation of IFD/IFR is phased in four segments; Phase one by December 2020, Phase two by June 2021, Phase three by December 2021 and Phase four completed by June 2025.

As the requirements of IFD/IFR took effect post-Brexit, the UK sought consultation from December 2020 through May 2021. A policy statement on June 29, 2021 introduced the UK Investment Firms Prudential Regime (IFPR), expected to take effect in January 2022, subject to progress and amendments to the Financial Services (FS) bill. The UK Financial Conduct Authority (FCA) had significant involvement in policy discussions about the new EU regime and has made it clear that it will look to achieve similar intended outcomes as the IFD/IFR, while taking into consideration UK market specifics. Specifically, the aim is a single prudential regime for all FCA investment firms, simplifying the approach for globally active systemically important banks, the reduction of barriers to entry and allowance for better competition between investment firms as well as introducing meaningful capital and liquidity requirements for the first time, adequate with the potential harm they can cause.

Key Links

IFD Text: https://data.consilium.europa.eu/doc/document/PE-79-2019-INIT/en/pdf

IRF Text: https://data.consilium.europa.eu/doc/document/PE-80-2019-INIT/en/pdf

EBA roadmap: https://eba.europa.eu/sites/default/documents/files/ document_library/Regulation%20and%20Policy/Investment%20 firms/884436/EBA%20Roadmap%20on%20Investment%20Firms.pdf





IFRS

At a Glance

Regulation:

International Financial Reporting Standards (IFRS)

Regulatory Authority: IASB

Target Market Segment: Financial institutions

Core Requirements:

Asset classification, measurement, fair value determination

Significant Milestones

January 1, 2013: IFRS 13 takes effect January 1, 2018: IFRS 9 takes effect September 30, 2021: IASB requests feedback on IFRS 9. Comments to be submitted by January 28, 2022

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 support transparency, accountability and efficiency across financial markets. IFRS comprises 15 published standards. IFRS 1 to IFRS 15, that set out obligations firms must fulfil when issuing financial statements. The obligations cover many aspects of financial reporting including 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 for generating 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 covering the measurement, classification, declassification and hedge accounting of financial assets and liabilities. These requirements can cause a sizeable workload as firms may need to perform impact analyses to identify any changes.

IFRS 13 focuses on the definition of 'fair value' and includes guidelines on how firms should conduct asset valuations, determine fair value and submit corresponding reports. Fair value is defined by IFRS 13 as the exit price, essentially the price that would be received if selling an asset or paid to transfer a liability between market participants on the measurement date.

On September 30, 2021, the IASB issued a request for feedback as part of the post-implementation review of IFRS 9, related to financial instruments. It seeks information on the classification and measurement requirements in IFRS 9 and related disclosures. It is open for comment until January 28, 2022.

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Key Links

IFRS 9: www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/

IFRS 13: www.ifrs.org/issued-standards/list-of-standards/ifrs-13-fair-value-measurement/







At a Glance

Regulation: Know Your Customer (KYC)

Regulatory Regime: Multiple

Target Market Segment: Global financial institutions

Core Data Requirements:

Client identification and classification, customer data due diligence

Significant Milestones

December 15, 2007: UK Money Laundering Regulations 2007 came into force

June 26, 2017: UK Money Laundering, Terrorist Financing and Transfer of Funds came into force

January 10, 2020: Money Laundering and Terrorist Financing (Amendment) Regulations 2019 come into force

Description and Data Requirements

Know Your Customer (KYC) refers to the process companies must go through to identify and understand clients before conducting financial business with them. It also requires the process to be revisited frequently to ensure information is up to date, complete and correct throughout the lifecycle of a client.

From a regulatory perspective, KYC is an essential element of due diligence and financial regulatory legislation such as anti-money laundering (AML) and countering the financing of terrorism. The process is also part of client onboarding and screening

ACA's award-winning AML KYC/CIP Solution is a full-service, single-vendor offering that is provided and supported by our team of technology and compliance experts, which includes Certified Anti-Money Laundering Specialist (CAMS) consultants. Our solution helps firms meet their data screening, ongoing monitoring, remediation, and reporting needs so they can more effectively and efficiently adhere to industry best practices and comply with applicable laws and regulations.





client information against sanctions, politically exposed persons (PEPs) lists and other watch lists.

KYC is not a single regulation, but the term used to describe regulatory requirements around client due diligence that are made and enforced in different jurisdictions with different legislative regimes. For example, in the US, the Patriot Act has made KYC mandatory for all banks since 2001. In the EU, the first AML Directive was adopted in 1990 and the legislation has since undergone multiple revisions. In May 2018, the EU Council approved the fifth AML Directive, AMLD5, which came into force on January 10, 2020.

AMLD5 was swiftly followed by AMLD6, which must be transposed by member states into law by December 3, 2020. Implementation is due by June 3, 2021.

In the UK, the AML regime including KYC is set out in the Proceeds of Crime Act 2002, the Money Laundering Regulations 2007 and



RegTech DataManagement ESG the Terrorism Act 2000. The Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 was introduced to ensure the UK's AML regime complied with the EU's fourth AML Directive and the Financial Action Task Force's (FATF) standards and recommendations. This required a number of new obligations including a written firm-wide risk assessment and substantially more comprehensive client due diligence including the requirement to identify the beneficial owner of a client.

The Money Laundering and Terrorist Financing (Amendment) Regulations 2019 that were enforced in January 2020, transposed the EU's fifth AML Directive into UK law.

The 2019 regulatory amendments also incorporate international standards set by FATF and bolster AML regulations following high profile issues such as the Panama Papers exposure and terrorist activities in the past few years.

Key amendments include:

 Extended customer due diligence that adds an explicit requirement to understand the ownership and control structure of the customer as part of due diligence obligations. Also, an explicit requirement to determine the constitution and full names of the board of directors and the senior persons of a body corporate when the beneficial owner cannot be identified. Firms will now have to cease transactions and consider filing a Suspicious Activity Report where they cannot apply the necessary due diligence obligations.

- A new requirement for firms to report any discrepancies they find between the information they hold on their customers and that in the Companies House Register, including differences in ownership structure, beneficial owners and directors.
- Enhanced due diligence procedures for high-risk situations such as transactions between parties based in high-risk third countries; non-face to face business relationships or transactions without certain safeguards; and transactions related to oil, arms, precious metals, tobacco products, cultural artefacts, ivory or other items related to protected species, or archaeological, historical, cultural and religious significance.
- Transparency of beneficial ownership of corporates that requires firms to update their records relating to beneficial ownership and must ensure information on beneficial owners of corporate and other legal entities is stored in a central registry and is up to date. Firms also need to understand the

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ownership and control structure of their corporate customers, and record any difficulties encountered in identifying beneficial ownership.

KYC presents financial institutions with significant data management challenges, but also opportunities such as standardisation of customer information across an organisation, consistency in the quality of client records, improved customer service and the ability to accelerate client on boarding. It can also deliver significant cost savings through data standardisation, the ability to generate and manage one view of a customer across an organisation, and the efficient management of KYC documentation for purposes such as on boarding.

The data management process requires banks to gather information from clients, often using paper documents, and then identify and correctly classify the 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.

This information needs to be kept up to date and must be submitted to regulators on a frequent basis, meaning banks need to continually reassess their KYC procedures and increase the automation of their processes.

Following the 2019 regulations, firms need to do more than keep

a central repository of entity data and track audit trails. They may need to link KYC to customer data due diligence, enhanced due diligence and entity hierarchy data to gain an understanding of clients' relationships with other entities and ensure compliance and effective risk management.

The Legal Entity Identifier (LEI) and hierarchy data provided by the Global LEI Foundation(GLEIF) are essential here to support an understanding of relationships between entities.

In an increasingly hostile environment, client screening is an important part of KYC. It requires client data to be checked against financial sanctions, trade embargoes, PEPs and other watch lists to detect whether an order has been made to prohibit clients from carrying out particular transactions

KYC also plays a role in client on boarding, a process that was traditionally manual and suboptimal for both clients and banks, but which is now being automated.

Solutions available for KYC include managed services and utilities. From a technology perspective, machine learning and AI solutions are easing the burden of KYC and on boarding.

As well as addressing local AML requirements, improvements in KYC processes can help firms comply with international regulations such



as Dodd-Frank and the US Foreign Account Tax Compliance Act (FATCA). KYC compliance is also central to Markets in Financial Instruments Directive II (MIFID II). client onboarding can be integrated with account and settlement data. If an holistic approach is taken to on boarding a client and managing the client's account and settlement data, firms can move quickly from initiating clients to trade readiness.

Beyond compliance requirements, a further consideration is how KYC and

Key Links

US Patriot Act: www.gpo.gov/fdsys/pkg/PLAW-107publ56/html/PLAW-107publ56.htm

UK Proceeds of Crime Act: www.legislation.gov.uk/ukpga/2002/29/ contents

UK Money Laundering Regulations 2007: https://www.legislation.gov.uk/ uksi/2007/2157/contents/made

UK Money Laundering, Terrorist Financing and Transfer of Funds Regulations 2017: https://www.legislation.gov.uk/uksi/2017/692/contents/ made

Money Laundering and Terrorist Financing (Amendment) Regulations 2019: https://www.legislation.gov.uk/uksi/2019/1511/made/data.pdf UK Terrorism Act: http://www.legislation.gov.uk/ukpga/2000/11/contents





Low Carbon Benchmark Regulation

At a Glance

Regulation: Low Carbon Benchmark Regulation

Regulatory Regime: FU

Target Market Sector: Benchmark administrators

Core Requirements: Disclosure of benchmark

methodology

Significant milestones

December 10, 2019: Regulation takes effect April 20, 2020: Most obligations apply December 31, 2022: Additional obligations apply

Description and Data Requirements

The Low Carbon Benchmark Regulation came into effect on December 10, 2019. It amends Regulation (EU) 2016/1011, the Benchmarks Regulation, with the aim of increasing transparency and consistency in the use of low carbon indices. Most obligations apply from April 20, 2020, although certain additional obligations apply from December 31, 2022.

It introduces two new categories of benchmark, EU Climate Transition Benchmarks and EU Paris-Aligned Benchmarks, with the goal of helping investors easily compare low carbon benchmark methodologies by obliging benchmark administrators to make significant disclosures regarding their methodology.

EU Climate Transition Benchmarks consist of underlying assets that are selected, weighted or excluded in such a way that the resulting benchmark portfolio is on a decarbonisation trajectory in line with the long-term global warming targets laid out in the Paris Agreement.

EU Paris-Aligned Benchmarks are more ambitious and must contain only elements that already actively contribute to the achievement of the 2°C temperature reduction target set out in the Paris Agreement, Benchmark administrators must indicate within the benchmark statement for every benchmark that they offer (except those related to interest rates and foreign exchange) whether or not that benchmark follows ESG objectives and whether or not the wider offering includes other ESG-focused benchmarks

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX%3A32019R2089







At a Glance

Regulation: Market Abuse Regulation (MAR) and Directive on Criminal Sanctions for Market Abuse (or MAD)

Regulatory Regime: EU

Target Market Segment: Global financial institutions

Core Requirements:

Data surveillance and transparency to detect and prevent market abuse

Significant Milestones

July 1, 2005: MAD implemented December 12, 2012: MAR text approved by the European Council September 10, 2013: MAR endorsed by European Parliament July 2, 2014: MAR effective date July 3, 2016: Compliance deadline February 18, 2019: UK government introduces Market Abuse (Amendment) (EU Exit) Regulations 2019 (UK MAR) March 29, 2019: ESMA updates MAR Q&A

December 31, 2020: UK MAR is fully effective, coinciding with Brexit

Description and Data Requirements

Market Abuse Regulation (MAR) strengthens EU rules on market integrity and investor protection that were first adopted in the 2003 Market Abuse Directive (MAD).

The regulation aims to challenge insider dealing and market manipulation in Europe's financial markets and is part of an updated EU rulebook that also includes the Directive on Criminal Sanctions for Market Abuse (also known as Market

ACA's ComplianceAlpha® Market Abuse Surveillance Solution provides indepth trade surveillance to help firms optimize their firm-wide surveillance testing from a single platform. Our solution uses proprietary search algorithms to automate testing and efficiently identify potential insider trading, market abuse, and other areas of non-compliant trading and investment activity. Our clients can receive extra support from our expert managed services team to eliminate false positives and improve outcomes.





Abuse Directive, or MAD). MAR has been applicable since July 3, 2016.

Many of the provisions in MAR are the same as those in the initial MAD directive, but the regulation extends the scope of previous rules to include new trading platforms and technologies, and commodity and related derivatives markets.

It also bans the manipulation of benchmarks and reinforces the investigative and sanctioning powers of regulators.

Where MAD applied to financial instruments admitted to trading on an EU regulated market, MAR includes instruments traded on a multilateral trading facility (MTF) or organised trading facility (OTF). Market manipulation is extended to cover any behaviour, not just transactions and orders to trade, that may give a false or misleading signal, while the



RegTech DataManagement ESG regulation also adds attempted market manipulation in the sense of trying to manipulate the market without trading.

Market manipulation provisions are extended to instruments with values related to traded instruments and to spot commodity contracts related to financial or derivatives markets.

MAR expands the definition of insider dealing, which MAD described as non-public information likely to have a serious impact on an instrument's price, to include information that a reasonable investor is likely to use as the basis for investment decisions.

In terms of extended coverage, MAR includes benchmarks and emission allowances, as well as algorithmic and high frequency trading that is undertaken without an intention to trade, but with an intention to disrupt or delay a trading system.

From a data management perspective, MAR requires firms to review policies and processes to ensure instruments, trading platforms and technologies within its scope are compliant To avoid sanctions for trading on inside information or spreading false rumours in the market, both individual investors and firms need documentation to verify that they are adhering to the regulation and prove that any transgressions are not intentional.

The Directive on Criminal Sanctions for Market Abuse (or MAD) complements MAR by requiring member states to introduce common definitions of criminal offences of insider dealing and market manipulation, and to impose criminal penalties for market abuse offences.

MAR is also closely linked to Markets in Financial Instruments Directive II (MiFID II). Both regulations are designed to strengthen investor protection, maximise market transparency and reduce market abuse. Their requirement overlaps are intentional.

These include the need for surveillance systems and controls to monitor for behaviour that may constitute market abuse and to help monitor for and deliver best execution; record keeping of all trade communications including telephone calls; a review of remuneration policies to phase out remuneration that may cause conflicts of interest; and comprehensive reviews of compliance functions to ensure staff can meet all requirements.

In February 2019, among concerns about a no-deal Brexit, the UK government introduced Market Abuse (Amendment) (EU Exit) Regulations 2019 (UK MAR), which took effect on 1 January 2021 at the end of the Brexit transition period.

The Financial Services Bill 2019-21, which was introduced into Parliament on 21 October 2020, included changes that were made to UK MAR after the end of the transition period. These reflect certain changes to EU MAR that took effect on 1 January 2021, but not all of them, so there will be a



divergence in practice between the UK and the EU.

Among the divergences are scope and issuer notification obligations:

- EU MAR continues to apply to financial instruments admitted to trading or traded on an EU trading venue. It also applies to financial instruments admitted to trading or traded elsewhere, where the price or value of those instruments depends on, or has an effect on, the price or value of a financial instrument admitted to trading or traded on an EU trading venue. It no longer applies to UK trading venues.
- UK MAR applies to financial instruments admitted to trading or traded on both UK and EU trading venues. UK or non-UK issuers with securities admitted to trading only on UK regulated markets, MTFs and OTFs only need to comply with UK MAR. But certain issuers must

now comply with both EU MAR and UK MAR.

- Under EU MAR an issuer has to make certain notifications to the relevant competent authority, including any delay in the disclosure of inside information, providing insider lists, if requested and reporting persons discharging managerial responsibility (PDMR) transactions.
- Under UK MAR, issuers with financial instruments admitted to trading or traded on UK venues must make these notifications to the FCA. So, issuers that must comply with both EU MAR and UK MAR must now make notifications to two regulatory authorities, the FCA and one in an EU member state.

The FCA has been designated as the UK regulator for the purposes of UK MAR.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=celex%3A32014R0596

UK MAR: https://www.fca.org.uk/markets/market-abuse/regulation





Margin Requirements

At a Glance

Regulation: Margin requirements for non-centrally cleared and uncleared derivatives

Regulatory Authorities: BCBS and IOSCO

Target Market Segment: Global financial institutions

Core Requirements: Margin calculation

Significant Milestones

September 2, 2013: Initial framework
March 18, 2015: Revised framework
September 1, 2016: Initial and variation margin deadline for large firms
March 1, 2017: Variation margin deadline for firms that are not large
March 5, 2019: Statement on final implementation phases
July 23, 2019: Final implementation extended
April 3, 2020: Final implementation extended
September 1, 2022: Final implementation phase expected

Description and Data Requirements

Non-centrally cleared derivatives

The framework for margin requirements for non-centrally cleared derivatives was developed by the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO). The framework sets out international policy on minimum standards for margin requirements for noncentrally cleared derivatives and

UMR require firms using OTC derivatives to post margin daily to cover market and credit risk which could result in fails and bottlenecks. DTCC's Margin Transit Utility (MTU) tackles this challenge by eliminating many manual touchpoints experienced in the collateral processing workflow and allows clients to validate, enrich, settle, report and monitor matched collateral calls globally while easily connecting to and sharing information with multiple counterparties.



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www.dtcc.com/institutional-trade-processing/itp/margin-transit-utility

provides a global benchmark for local regulatory requirements. It was initially released in September 2013 and later revised in March 2015.

The framework is designed to reduce systemic risk related to over-thecounter (OTC) derivatives markets and provide firms with incentives for central clearing, while managing the overall liquidity impact of the margin requirements. Standards within the framework align with collateral requirements for noncentrally cleared derivatives set out in European Market Infrastructure Regulation (EMIR) and require all financial firms and systemically important non-financial entities that engage in non-centrally cleared derivatives transactions to exchange initial and variation margin in line with the counterparty risks arising from the transactions.

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The liquidity impact of the margin requirements is addressed through the introduction of a universal initial margin threshold of \in 50 million, below which a firm has the option of not collecting initial margin.

From a data management perspective, the requirements go beyond existing market practice on margining and mean firms must make significant changes to infrastructure, systems and processes, particularly in areas that support initial margin calculations, the exchange of collateral, and risk management.

Uncleared derivatives

After being narrowed in scope and delayed in implementation, new rules surrounding initial margin in uncleared OTC transactions are on the horizon and will affect a large number of managers' funds and other buy-side firms.

While the US rules will not typically regulate funds directly, funds will be indirectly regulated by the rules via their swap dealers, who will require their counterparties to comply with the rules.

The new uncleared margin rules (UMR) will effect funds in two main ways:

- Swap dealers and funds will both be required to post initial margin to one another
- · Initial margin can no longer

be transferred directly between counterparties and re-hypothecated, it must be held in segregated accounts with an unaffiliated third party custodian where it cannot be rehypothecated, insulating it from the risk of counterparty default.

Requirements for how initial margin is to be calculated and the types of collateral that can be used are also prescribed by the rules.

Managers need to act now to:

- Determine whether they are in scope of the rules
- Determine their initial margin requirements; and
- Choose service providers in the areas of custody, monitoring, technology, and legal services.

In March 2019, BCBS and IOSCO made a statement on the final implementation phases of the margin requirements. The statement noted that market participants may need to amend derivatives contracts in response to interest rate benchmark reforms.

Also in the final phases of implementation, initial margin requirements will apply to a large number of entities for the first time, potentially involving documentation, custodial and operational arrangements.

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In July 2019, the BCBS and IOSCO revised the framework. Relative to the 2015 framework, the revisions extended by one year the final implementation of the margin requirements. With this extension, the final implementation phase would take place on September 1, 2021. To facilitate this extension, the Basel Committee and IOSCO also introduced an additional implementation phase that began on September 1, 2020.

In light of the challenges posed by Covid-19, on April 3, 2020, BCBS and IOSCO agreed to extend the deadline for completing the final implementation phases of the margin requirements by one year. The final implementation phase will now take place on September 1, 2022.

Key Links

March 2015 Text: www.bis.org/bcbs/publ/d317.pdf Summary of Revisions: www.bis.org/bcbs/publ/d317_ summarytable.pdf

March 2019 final implementation statement: https://www.bis.org/ press/p190305a.htm



MiFID II

At a Glance

Regulation: Markets in Financial Instruments Directive II (MiFID II)

Regulatory Regime: EU

Target Market Segment: Global financial institutions

Core Requirements:

Data transparency, investor protection, pre-trade pricing, trade and transaction reporting, client and counterparty identification

Significant Milestones

November 1, 2007: MiFID takes effect

October 20, 2011: European Commission publishes draft proposals for a directive and regulation to revise MiFID

October 26, 2012: European Parliament approves MiFID II

May 13, 2014: EU Council adopts Level 1 text

July 2, 2014: MiFID II enters into force

September 28, 2015: ESMA publishes final report on Regulatory and Implementing Technical Standards

February 10, 2016: European Commission proposes one-year implementation delay

June 7, 2016: European Parliament confirms delay

July 3, 2017: Deadline for EU countries to implement directive in local legislation

January 3, 2018: Compliance deadline

June 5, 2020: ESMA 2020 guidance on MiFID II compliance

February 26, 2021: Quick Fix directive published in OJ of EU

Description and Data Requirements

Markets in Financial Instruments Directive II (MiFID II) came into force on January 3, 2018, representing one of the biggest changes in regulatory oversight of financial

SmartStream delivers all reference data for pre-trade price transparency, post-trade reporting and transaction reporting, either as a simple file or through a set of APIs. It will determine ToTV, interact with ANNA DSB, reconcile ESMA, ANNA and CFI classifications. In addition, the reference data solution provides the most complete record of Systematic Internaliser (SI) services - essential to determine the MIFID II status of any chosen counterparty.



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markets for a decade. The regulation extends the remit and scope of its predecessor, the original MiFID that was introduced in 2007, and aims to improve the competitiveness of European markets by creating a single transparent market for investment services and activities, and ensuring harmonised investor protection across Europe.

MiFID rules that were limited to equities trading on regulated platforms are extended to equity-like and non-equity instruments traded on any trading platform, including multilateral trading facilities (MTFs)





and organised trading facilities (OTFs), with a view to ensuring that all trading takes place on regulated platforms. Systematic internalisers that trade OTC derivatives are subject to expanded transparency obligations.

With transparency a key objective of MiFID II, the regulation makes changes to pre- and post-trade transparency, requiring trading venues to make pre-trade bid and offer prices public, and retaining the requirement for trading venues to make public the price, volume and time of transactions as close to realtime as is possible.

In MiFID II, the European Securities and Markets Authority (ESMA) proposes a maximum permissible delay for publication that should ultimately be reduced to one minute in respect of equities and equity-like instruments, and five minutes for non-equities. The regulation also includes exacting best execution rules, requiring firms to prove to



regulators that they have achieved best execution for their individual clients.

The regulation includes several new mechanisms, particularly around preand post-trade reporting and including ESMA's Financial Instruments Reference Data System (FIRDS), Approved Publication Arrangements (APAs) and Approved Reporting Mechanisms (ARMs).

It also details a framework for market data that includes standards, such as International Securities Identification Numbers (ISINs) to identify securities and, for the first time, OTC derivatives, and Legal Entity Identifiers (LEIs) to identify issuers and counterparties to transactions.

The MiFID II mandate introduces controls for algorithmic trading that are designed to provide safeguards and reduce systemic risk, and includes regulation of algorithmic traders, including high frequency algorithmic traders, and their market making strategies.

Another key element is the unbundling of research services provided by sell-side institutions to their buy-side clients and execution fees. This clarifies the cost of research, avoids the offer of research as an inducement to trade with the research provider, and lists direct costs as line items, thereby improving transparency.

The regulation's proposal to introduce

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a consolidated tape that pulls together trade data of financial instruments from regulated markets, MTFs, OTFs and APAs, has yet to be realised.

In December 2019, ESMA published a first review report on the development of prices for market data and the consolidated tape for equity. The review found MiFID II had not delivered on its objective to reduce the cost of market data and that a consolidated tape had not materialised. It recommended the establishment of an EU wide real-time consolidated tape for equity instruments.

The European Commission has consulted on the review but has yet to make any formal comments on the price of market data or the consolidated tape.

From a data management perspective, the challenges of MiFID II implementation have been huge in terms of sourcing and integrating data, managing data quality, accuracy and timeliness, and adjusting to an evolving

The GMEI® utility is DTCC's GLEIF accredited legal entity identifier (LEI) solution designed to create and apply a single, universal standard identifier to any organization or firm involved in a financialtransaction globally – helping clients comply with MiFID II's mandate for all legal entities involved in atrade supply their LEIs in their trade reporting.



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In early June 2020, ESMA published final guidelines on certain aspects of the compliance function under MiFID II. The 2020 guidelines leave the principles set out in 2012 guidelines unchanged and aim to provide further clarity about compliance obligations. The guidelines took effect on September 5, 2020.

A European Commission consultation on MiFID II from February to May 2020 – two years after implementation and designed to assess the regulation's functionality – has yet to yield results.

On June 1, 2021, ESMA published final guidelines on MiFID II/MiFIR market data obligations. While nonbinding, the guidelines seek to ensure more harmonised and consistent application across member states of the relevant MiFID II and MiFIR provisions concerning market data, and in particular the requirement to provide market data on a reasonable commercial basis and the requirement to provide market data 15 minutes after publication free of charge.

The guidelines will be applicable from January 1, 2022.

Separately, the European Commission is expected to address the provisions on market data in the upcoming MiFID II and MiFIR review, with legislative



proposals expected to be published in Q4 2021. In the course of this review, the Commission might take into account recommendations put forward by ESMA in its December 2019 report on the development of prices in preand post-trade market data.

On September 28, 2021, ESMA published its final MiFID II/MiFIR review report on algorithmic trading. The report covers a comprehensive range of topics, including high frequency trading and high intraday message rates, Direct Electronic Access, third-country firms, organisational requirements for investment firms and for trading venues, as well as tick sizes, market making, asymmetric speedbumps and trade feeds. While the overall conclusion of the report is that the regulatory framework for algorithmic trading as set out by MiFID II and MiFIR has delivered its objectives, ESMA makes some recommendations for targeted amendments to the regime.

These will be submitted to the European Commission for its consideration in the context of a broader upcoming MiFID II and MiFIR review.

ESMA will provide its last report to the Commission on aspects of MiFID II/MiFIR in January 2022. These include the transparency regime for non-equity instruments, transaction reporting, algorithmic trading, the trading obligation for derivatives, SME growth markets and the functioning of organised trading facilities.

Addressing the challenges of the covid pandemic, on February, 26 2021, the EU published EU Directive 2021/338, the 'Quick Fix Directive' to amend MiFID II in direct response to the pandemic and associated disruptions. In particular, the amendment significantly simplified reporting requirements allowing phase-out of paper-based communication, exemption from ex ante costs and charges, temporary suspension of best execution reports, exemptions from product governance requirements, a costs and charges disclosure exemption and a cost/ benefits analysis opt out.

EU member states must implement the 'Quick Fix' amendments into their national laws and apply them by February 28, 2022. The suspensions will apply until February 27, 2023.

On April 28, 2021, the FCA published a consultation paper setting out a number of potential changes to MiFID II derived rules in the UK, specifically in relation to investment research and best execution reporting requirements.

The amendments represent the UK's response to the EU's 'quick fix' package that was approved in March 2021.

The UK approach essentially mirrors the objectives of the EU's reforms, while seeking to address the perceived deficiencies in the EU's rule changes.

On investment research and unbundling, the FCA proposed to



loosen unbundling requirements in different parts of the market where it is perceived that a 're-bundling' of transaction charges and research charges are low risk and might yield benefits to market participants.

The FCA also proposed changes that would ease best execution reporting, and ultimately, remove all obligations under RTS 27 and RTS 28, particularly challenging aspects of MiFID II best execution reporting.

These, and other proposals, were set in law in The Markets in Financial Instruments (Capital Markets) (Amendment) Regulations 2021 (the 'UK Quick Fix'), with most taking effect from July 26, 2021, and others from December 31, 2021.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32014L0065

FAQs: https://www.esma.europa.eu/sites/default/files/library/esma35-43-349_mifid_ii_qas_on_investor_protection_topics.pdf





MIFIR

At a Glance

Regulation: Markets in Financial Instruments Regulation (MiFIR)

Regulatory Regime: EU

Target Market Segment: Global financial institutions

Core Requirements:

Pre- and post-trade data transparency, transaction reporting

Significant Milestones

July 2, 2014: MiFIR enters into force

January 3, 2018: Compliance deadline

September 26, 2018: ESMA updates Q&A on MiFIR reporting July 11, 2019: ESMA updates Q&A on MiFIR and MiFID II investor protection and intermediaries

March 30, 2021: ESMA publishes final report on MiFIR transaction reporting, proposes amendments to EU

May 12, 2021: ESMA launches consultation seeking input on MiFIDII/ MiFIR Annual Review Report

Description and Data Requirements

Markets in Financial Instruments Regulation (MiFIR) is an EU regulation associated with the Markets in Financial Instruments Directive II (MiFID II) that aims to harmonise the trading of securities and improve investor protection across the EU.

While MiFID II focuses on market infrastructure, MiFIR builds out transaction reporting requirements by setting out a number of new reporting obligations, and complements the directive's

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commitment to trading data transparency.

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 multilateral 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 designed to identify the individual or program executing a transaction.

The European Securities and Markets Authority (ESMA) has stipulated that



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From a trader's perspective, MiFIR has extensive implications for disclosure practices. Relevant data to include in a report might involve the bid and offer prices and the extent to which the parties invested in the trade, the volume and time of the trade execution, and any systemic issues.

The public and regulatory authorities must be made aware of this information on instruments such as equities, over-the-counter (OTC) and exchange-traded derivatives (ETD) on a continuous basis for transparency purposes. MiFIR does have exemptions relating mainly to the volume of a trade. For example, there are exemptions on regulating block trades and trades exceeding a specific size regarding certain instruments.

MiFIR's transparency requirements are around post-trade data processes, but also cover some pre-trade transparency

SmartStream delivers all reference data for pre-trade price transparency, post-trade reporting and transaction reporting, either as a simple file or through a set of APIs. It will determine ToTV, interact with ANNA DSB, reconcile ESMA, ANNA and CFI classifications. In addition, the reference data solution provides the most complete record of Systematic Internaliser (SI) services - essential to determine the MIFID II status of any chosen counterparty.



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In October 2019, ESMA updated its Q&A on data reporting under MiFIR. Importantly, the Q&A provides clarification of the requirements for submission of reference data and transactions under MiFIR.

On 30 March 2021, ESMA published its final report following a 24 September 2020 consultation paper. Of interest to asset management firms, ESMA proposed an extension to the reporting requirements under MiFIR article 26 to include AIFM/UCITS management companies providing MiFID services, adding another element to buy-side reporting.

However, it is clear that ESMA is taking an approach to consolidating reporting regimes as much as possible. This final report aligns with aspects of EMIR, MAR and Benchmark Regulations. Additionally, the report suggests including the Systematic



Internaliser (SI) approach to OTC derivatives trading. This would allow SI traded OTC derivatives to be in scope for transaction reporting. While this may mean a larger burden for the sell-side, some complex checks of the OTC derivative would ideally be abolished.

ESMA expects the European Commission to adopt the legislative proposals laid out in the final report imminently.

In terms of Brexit, MiFIR reporting obligations for UK firms will continue to be similar to the current requirements, but firms will need to report twice in certain circumstances. When an EU investment firm has executed a transaction via a UK branch or vice versa, the entity will have a dual reporting obligation. The investment firm will need to be contracted to both a UK ARM and an EU ARM to allow the functionality of dual reporting.

To take over the management of the transaction reporting regime in the UK, the FCA has built its own Financial Instruments Reference Data System (FIRDS) and Financial Instruments Transparency System (FITRS) to replace ESMA's original data collection and transparency systems.

Key Links

Text: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014R0600





MMFR

At a Glance:

Regulation:

European Money Market Funds Regulation (MMFR)

Regulatory Regime: EU

Target Market Segment: Fund managers

Core Data Requirements:

Customer identity, biannual stress testing, daily asset valuation, secondary pricing, market data

Significant Milestones:

September 4, 2013: Proposal on MMFR presented to European Commission

November 14, 2016: Agreement on draft regulation reached between EU Council and European Parliament

April 5, 2017: EU Parliament approves regulation
May 16, 2017: EU Council formally adopts regulation
July 21, 2018: Regulation comes into force for new funds
January 21, 2019: Regulation comes into force for existing MMFs
October 2019: Asset managers report to their national competent authority
O1 2020: MME managers start quarterly reports of stress testing

Q1 2020: MMF managers start quarterly reports of stress testing **March 26 2021:** ESMA consultation on MMFR begins

Description and Data Requirements

In 2013, the European Commission proposed legislation to regulate money market funds (MMFs) in response to G20 comments following the financial crisis. An MMF invests in short-term debt, such as treasury bills, commercial paper and certificates of deposit, and is an important short-term financing instrument for financial institutions and a short-term cash management channel for corporations.

The regulation aims to preserve the integrity and stability of the EU market by making MMFs more resilient, while protecting investors by reducing the disadvantages for late redeemers in stressed market conditions.

European Money Market Funds

Regulation (MMFR) came into force on July 21, 2018 for all fund launches. Existing MMFs were given an additional six months to comply with a final implementation deadline of January 21, 2019. On June 11, 2018

Her Majesty's Treasury published the UK Regulations, which came into force on July 18, giving the Financial Conduct Authority (FCA) power to investigate and enforce MMFR breaches.

The MMFR applies to all MMFs managed and/or marketed in the EU: including variable net asset value (VNAV) funds, constant net asset value (CNAV) funds, and low volatility net asset value (LVNAV) funds. It requires MMF managers to



report information to the authorities on a quarterly basis, which is then made available to the European Securities and Markets Authority (ESMA) for the purposes of creating a central database.

The regulation introduces new liquidity management requirements to ensure all MMFs maintain sufficient liquid assets to meet any sudden withdrawal of investment. LVNAVs and CNAVs must hold at least 10% of assets that mature within one day and 30% that mature within one week; while VNAVs are required to hold at least 7.5% of assets that mature within one day and 15% within one week.

It also introduces rules on portfolio diversification and valuation of assets. Funds are allowed to invest no more than 5% of assets in money market instruments issued by the same body, no more than 10% of assets in deposits made with the same credit institutions, and no more than 17.5% of assets in other MMFs.

Investment requirements limit eligible assets and prohibit the use of techniques such as short-selling, securities lending and borrowing, while new valuation rules limit the use of amortised cost methods. Risk management requirements impose biannual stress testing and internal assessment procedures to determine credit quality, while MMF managers must implement Know Your Customer (KYC) policies and supply surveillance information to the authorities.

In March 2018, ESMA released draft guidelines for MMF stress testing, which are to be updated on an annual basis. On September 28, 2018 ESMA launched a public consultation. Guidelines resulting from this consultation were issued on July 19, 2019.

Guidelines on stress testing establish common reference parameters of the stress test scenarios MMFs or managers of MMFs should include in their stress scenarios. Guidelines on reporting provide guidance on how to fill in the reporting template on MMFs that managers of MMFs had to transmit to competent authorities as of Q1 2020.

On March 26 2021, ESMA published a consultation document inviting comments on the adequacy of the regulation, particularly in response to the stress experienced by MMFs during the March 2020 covid-19 crisis. Comments were open until 30 June 2021, and the commission is expected to publish the review by July 21 2022.

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Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32017R1131

FAQs: https://ec.europa.eu/commission/presscorner/detail/en/ MEMO_13_764

July 2019: ESMA guidelines on stress testing: https://www.esma. europa.eu/press-news/esma-news/esma-readies-stress-testingrequirements-money-market-funds/

July 2019: ESMA guidelines on reporting: https://www.esma. europa.eu/sites/default/files/library/esma34-49-168_final_report_on_ mmf_reporting.pdf





Non-Financial Reporting Directive (NFRD)

At a Glance

Regulation: Non-Financial Reporting Directive (NFRD)

Regulatory Regime: EU

Target Market Sector: Public interest entities

Core Requirements: Sustainability reporting

Significant milestones

2014: NFDR adopted by European Commission
January 2018: NFDR Reporting starts
December 2019: Commission commits to review the directive
January 30, 2020: Commission publishes consultation about changes to NFRD
February 27, 2020: Consultation closes making three suggestions

February 20, 2020: Second consultation runs to June 11, 2020 covering more detail

April 26, 2021: Commission proposes Corporate Sustainability Reporting Directive (CSRD) to replace NFDR

Description and Data Requirements

Sustainable Finance Disclosure Regulation (SFDR) lays down the law for financial market participants. The upcoming revision to the Non-Financial Reporting Directive (NFRD) aims to do the same for corporate sustainability reporting, by requiring enhanced reporting from portfolio companies.

The European Commission committed to reviewing NFRD 2014/95/EU in December 2019 as part of the European Green Deal, with the twin goals of improving the disclosure of ESG data by portfolio companies to better inform investors about the sustainability levels of their investments, and to support changes being implemented by the new Taxonomy Regulation and SFDR.

The Commission admitted that as it currently stands, the non-financial

information disclosed by companies does not meet the needs of investors, primarily because reported information is not comparable or reliable, some companies don't report everything that users want, some companies don't report at all, others don't make it easy to find, and the companies themselves face uncertainty around what to report and how.

On January 30, 2020 the Commission published a roadmap for consultation about possible changes to NFRD, which closed on February 27, 2020. The roadmap proposed three options:

- Continue with the current approach of non-binding guidelines, but update them
- Develop a new standard on nonfinancial reporting, which would



remain voluntary

 Revise and strengthen existing NFRD provisions by adding more detail, creating a harmonised reporting standard, modifying the scope to cover more companies, strengthening enforcement and supervision, and clarifying when and how non-financial information should be reported.

On February 20, 2020, the Commission published a second, more detailed consultation, which

closed on June 11, 2020. The proposal to be consulted on consisted of one directive that would amend four existing pieces of legislation. In the first place, it would amend the Accounting Directive, revising some exiting provisions and adding certain new provisions about sustainability reporting.

In addition, it would amend the Audit Directive and the Audit Regulation, to cover the audit of sustainability information. Finally, it would amend the Transparency Directive to extend the scope of the sustainability reporting requirements to companies with securities listed on regulated markets, and to clarify the supervisory regime for sustainability reporting by these companies.

In April 2021, the European Commission proposed a Corporate Sustainability Reporting Directive (CSRD), which will replace and build on NFDR by introducing more detailed reporting requirements and expanding the number of companies that have to comply.

The proposal aims to ensure that the reporting requirements for companies are consistent with the EU Taxonomy, through new sustainability reporting standards added to the NFRD. These would take into account the indicators companies have to disclose about the extent to which their activities are environmentally sustainable according to the Taxonomy, and the screening criteria and do-nosignificant-harm thresholds of the Taxonomy.

New elements are expected to include:

- Extending the scope of the reporting requirements to additional companies, including all large companies and listed companies
- Requiring assurance of sustainability information
- Specifying in more detail the information that companies should report, and requiring them to report in line with mandatory EU sustainability reporting standards
- Ensuring all information is published as part of companies' management reports, and disclosed in a digital, machinereadable format.

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It is also notable that the NFRD has adopted the principle of 'double materiality' with respect to reporting climate-related information, meaning firms must consider both the sustainability impact on a company's development and performance, and the impact of that company's own activities on the environment and society.

Key Links

Overview: https://ec.europa.eu/info/business-economy-euro/ company-reporting-and-auditing/company-reporting/corporatesustainability-reporting_en

January 2020 consultation: https://ec.europa.eu/info/law/betterregulation/have-your-say/initiatives/12129-Non-financial-report- ingby-large-companies-updated-rules-_en

CSRD Q&A: https://ec.europa.eu/commission/presscorner/detail/en/ QANDA_21_1806







At a Glance

Regulation: Network and Information Security (NIS) Directive

Regulatory Regime: EU

Target Market Sector: Global financial institutions

Core Requirements: Security, reporting Significant Milestones February 7, 2013: Initial European Commission proposal on cybersecurity July 6, 2016: European Parliament adopts directive August 2016: Enters into force May 9, 2018: Deadline for directive to be transposed into national legislation June 2018: Compliance deadline November 9, 2018: Deadline to identify operators of essential services June 27, 2019: European Cybersecurity Act enters into force February 26, 2021: EC proposes NIS2 June 23, 2021: EC issues report on implementation of NIS2

Description and Requirements

The Network and Information Security (NIS) Directive was the first piece of European legislation on cybersecurity. Its provisions aim to make the online environment more trustworthy and better able to support the smooth functioning of the EU Digital Single Market.

The directive is based on proposals put forward by the European Commission in 2013 and designed to ensure a high, common level of network and information security. In 2015, the European Parliament and Council agreed measures to boost cybersecurity. The European Parliament adopted the NIS Directive on July 6, 2016 and it took effect in August 2016.

Member states had to transpose the directive into national legislation by

May 9, 2018 and identify operators of essential services by November 9, 2018. These include operators of essential services in the banking, financial market infrastructure, energy, transport, healthcare and digital infrastructure sectors, as well as providers of key digital services, such as cloud computing, search engines and online marketplaces. The directive requires them to take appropriate security measures and report serious incidents.

As cybersecurity threats are evolving fast, the Commission encouraged swift implementation of the directive and in September 2017 adopted a communication that aimed to support member states and provided an NIS toolkit offering advice, sharing best practice by member states and



interpreting specific provisions of the directive to explain how it should work in practice.

The rules of the directive aim to improve cybersecurity capabilities in member states and improve member states' cooperation on cybersecurity. To facilitate an improvement in national cybersecurity capabilities, the directive requires a minimum level of NIS capabilities based on member states adopting a national NIS strategy that defines strategic objectives, appropriate policy and regulatory measures.

Member states must designate a national competent authority for the implementation and enforcement of the directive, as well as Computer Security Incident Response Teams (CSIRTs) that are responsible for handling incidents and risks.

To improve cooperation on cybersecurity, the directive creates a group between member states to facilitate strategic cooperation, exchange of information and development of trust and confidence. The group also networks national CSIRTs to promote swift and effective operational cooperation on cybersecurity incidents and to share information on risks.

Since it was established under the NIS directive, the cooperation group has published five working documents, which result from its first biennial work programme running from 2018 to 2020. The first focuses on security measures for operators of essential services and the second on incident notification for operators of essential services. The other three documents include a reference document on the identification of operators of essential services, a compendium on cybersecurity of election technology, and a cybersecurity incident taxonomy.

Reinforcing EU cybersecurity, in June 2019, the European Commission implemeted the EU Cybersecurity Act to strengthen the EU Agency for cybersecurity (ENISA) and establish an EU-wide cybersecurity certification framework for digital products, services and processes.

A new mandate for ENISA under the act grants a permanent mandate to the agency, more resources and new tasks. In particular, ENISA will have a key role in setting up and maintaining the European cybersecurity certification framework.

As growing threats posed with digitalisation and the surge in cyber attacks, in February 2021, the EU commission submitted a proposal to replace the NIS Directive with NIS2 in an effort to strengthen the security requirements, address the security of supply chains, streamline reporting requirements, including harmonised sanctions across the EU. The NIS2 proposal has three general objectives:

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- Increase the level of cyberresilience by establishing rules that ensure all public and private entities across the interal market are required to take adequate cybersecurity measures.
- Reduce inconsistencies in resilience across the internal market sectors already covered by aligning the defacto scope, the security and incident reporting requirements, the provisions governing national supervision and enforcement, and the capabilities of the Member States' relevant competent authorities
- Improve the level of joint situational awareness and the

collective capability to prepare and respond by taking measures to increase the level of trust between competent authorities, sharing more information and setting rules and procedures in the event of a large-scale crisis.

The deadline for opinions ended on March 17, 2021. On April 13, 2021, the EC presented the NIS2 proposal to the European Parliament and invited a report on implementation by June 2021. A report was published on June 23, 2021 on the implementation of the EU's Cybersecurity Strategy for the Digital Decade.

Key Links

Text: https://eur-lex.europa.eu/eli/dir/2016/1148/oj NIS Q&A: http://europa.eu/rapid/press-release_MEMO-18-3651_ en.htm

NIS2 Directive: https://www.europarl.europa.eu/RegData/etudes/ BRIE/2021/689333/EPRS_BRI(2021)689333_EN.pdf

Report on Implemtation of NIS2: https://eur-lex.europa.eu/ legal-content/EN/TXT/?uri=CELEX%3A52021JC0014R%2801%29&q id=1635343010026

Cybersecurity Act: https://eur-lex.europa.eu/eli/reg/2019/881/oj





PRIIPs

At a Glance

Regulation: Packaged Retail and Insurance-based Investment Products (PRIIPs)

Regulatory Regime: EU

Target Market

Segment: Providers of retail investment and insurance products

Core Requirements:

Data aggregation, maintenance, distribution Significant Milestones

July 3, 2012: European Commission proposes legislation November 26, 2014: European Council publishes regulation March 31, 2016: Final RTS published June 30, 2016: RTS adopted by European Commission September, 2016: RTS rejected by European Parliament November 16, 2016: European Commission postpones compliance deadline March 8, 2017: Revised RTS published April 3, 2017: European Council and Parliament approve revised RTS January 1, 2018: PRIIPs comes into effect July 2022: Application date of revised RTS December 31, 2024: Extension of New PRIIPs

Description and Data Requirements

Packaged Retail and Insurance-based Investment Products (PRIIPs) is an EU regulation designed to avoid the sale of unsuitable investment and insurance products to consumers and, instead, provide them with clear product information they can use to understand and compare products before they invest.

This information is contained in a Key Information Document (KID) that must be provided by PRIIP manufacturers for all products within the scope of the regulation.

The regulation covers firms manufacturing PRIIPs, which include investment funds, insurance investment products and structured products such as deposits and securities, but not general insurance and protection-based life insurance policies, deposits exposed only to an interest rate and other products that carry no investment risk, directly held shares and bonds, and pensions.

Although Undertakings for Collective Investment in Transferable Securities (UCITS) meets the definition of PRIIPs, the existing UCITS Directive contains a requirement for Key Investor Information Documents that are similar to KIDs. On this basis, the regulation gives UCITS providers a transitional period up to December 31, 2021, during which they will be exempt from PRIIPs.

The KID must be created before the PRIIP is made available to retail

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investors and must be published on the product manufacturer's website and provided on paper in face-to-face PRIIP sales. The document is limited in length to three A4 pages, must be presented in a way that is fair, clear and not misleading, and must contain only information needed by investors. It must promote comparability of products, explain the purpose of the KID, detail the product manufacturer and its regulator, and include mandatory sections such as 'What is the product?', 'What are the risks and what could I get in return', 'What are the costs?', and 'How long should I hold it and can I take money out early?'.

For PRIIPs manufacturers that must produce a KID for every product they promote, the data management requirement is considerable, leading some firms to review their range of products and many to consider working with third-party service providers to support the production and distribution of KIDs. Penalties for non-compliance include liability for damages if investors lose money.

The PRIIPs compliance deadline was initially slated for December 31, 2016, but in November 2016, the European Commission postponed the deadline by a year, moving it to January 1, 2018 and aligning compliance with that of Markets in Financial Instruments Directive II (MiFID II). The Commission's decision to postpone PRIIPs, and the creation of associated KIDS, was driven by a European Parliament vote in September 2016 against the Level 2 Regulatory Technical Standards (RTS) on the KIDs element of the regulation. The Economic and Monetary Affairs (ECON) Committee of the European Parliament rejected the RTS ahead of the European Parliament vote.

After a review of the RTS, the Commission published a final iteration in March 2017. The European Council approved the revised version on 3 April 2017, along with the European Parliament, ensuring the January 1, 2018 PRIIPs compliance deadline.

Since then, the European Supervisory Authorities (ESAs) and European Securities and Markets Authority (ESMA) have issued numerous consultations on PRIIPs, particularly PRIIPs KIDs, and reported their responses.

In July 2020, ESMA and the EBA adopted proposals to amend PRIIPs regulation. The new draft RTS are expected to be validated by the EC, with the new application date pushed to July 1, 2022. The main changes to the RTS were designed to solve some of the regulation's flaws. Of note, the current 5-year performance data requirement will be amended to a maximum of 10 years or 5 years more than the

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product's recommended RHP. It will also break away from simulations based on daily returns by taking the worst, median and best evolution of the product's real performance in a sub-interval of the time corresponding to the RHP. Further, the "New PRIIPs" will be extended by 3 years until December 31, 2024.

This migration could be challenging. Organisations should consider a well thought out data management framework to ensure these changes are properly reflected.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX: 32014R1286&from=EN

Annexes to RTS: https://ec.europa.eu/finance/docs/level-2-measures/ priips-rts-2021-6325-annex_en.pdf

Q&A on PRIIPS KID: https://esas-joint-committee.europa.eu/ Publications/Consultations/Questions%20and%20answers%20 on%20the%20PRIIPs%20KID.pdf







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SEC CAT

At a Glance

Regulation: Consolidated Audit Trail (CAT)

Regulatory Regime: SEC

Target Market Sector: National securities exchanges, broker-dealers

Core Requirements: Securities reporting

Significant Milestones

July 11, 2012: SEC adopts Rule 631 February 26, 2013: SEC issues RFP for the CAT November 15, 2016: SEC approves NMS CAT plan January 2017: Thesys Technologies selected as CAT plan processor Early March 2019: Thesys Technologies replaced by FINRA July 20, 2020: Initial options reporting for large broker-dealers November 30, 2020: SEC approved FINRA's filing to eliminate the OATS rules once members are reporting to CAT

December 13, 2021: Compliance deadline for small firms handling CAT reportable securities to report to CAT

Description and Data Requirements

The US consolidated audit trail (CAT) results from the SEC's July 2012 adoption of Rule 613 of Regulation National Market System (NMS). The rule required selfregulatory organisations (SROs) to submit a plan – the NMS plan – to create, implement and maintain a CAT.

The rule mandated that the NMS plan should require national securities exchanges and the Financial Industry Regulatory Authority (FINRA) to provide detailed information to a central repository – the CAT – covering each quote and order in an NMS security, and each reportable event with respect to each quote and order, such as origination, modification, cancellation, routing and execution. The rule allowed the SROs to determine the specifics of how market participants report data to the repository and to select a plan processor to create and operate the CAT. The SEC posted a request for proposal (RFP) for the CAT in February 2013. In January 2017, the SROs selected Thesys Technologies to build the CAT, despite expectations that FINRA, operator of the predecessor to the CAT, the Order Audit Trail System (OATS), would win the bid.

The Thesys build did not make good progress and in a statement on February 1, 2019, the CAT NMS noted that the project would transition to a new plan processor. Early in March 2019, the CAT NMS selected FINRA as plan processor for the CAT and released



updated technology and technical specifications.

The task of reporting to the CAT is huge, with about 58 billion data points being collected every day when the system is in full operation. Data management challenges include the requirement for broker-dealers and national securities exchanges to report data to the CAT repository by 8 am Eastern Time the following trading day for analysis by regulators. SROs and their members must synchronise clocks to record the date and time of reportable events and timestamp the events.

While first phase reporting to the CAT – covering SROs – was initially due to begin on November 15, 2017, the late development of the solution and replacement of the plan processor pushed reporting deadlines back. Reporting was pushed back again this year due to the coronavirus pandemic.

Recent amendments to the CAT cover transparency and the use of personal customer data in submissions to the CAT.

On May 15, 2020, the SEC voted to adopt amendments to the NMS plan to bring additional transparency, governance, oversight, and financial accountability to its implementation. The amendments require FINRA, exchanges, and SROs party to the plan to publish and file with the SEC a complete implementation plan for the CAT and quarterly progress reports.

On August 21, 2020, the SEC proposed amendments to the NMS plan designed to improve the security and confidentiality of data submitted to the CAT. The proposals would remove sensitive personally identifiable information (PII) to significantly reduce the amount of sensitive data collected without affecting the operational effectiveness of the CAT.

The commission urges firms to be compliant with deadlines, as repeated delays in CAT implementation 'have resulted in uncertainty and - potentially - increased cost for Industry Members and other market participants'.

Compliance requires that the Implementation Plan be filed with the Commission and published publicly on each participants' website or the CAT NMS Plan website. Phase 2 will continue to roll out through 2021, with a 13 December deadline for small non-OATS reporters and Large Industry Member firms to go live. Despite timeline changes, it is crucial for firms to increase intensity in preparing for the demands of the CAT. Focusing on enhancing reporting capabilities including



technology and reporting models, the impact of data security and data quality of increased customer data reporting and the implications on existing frameworks is essential.

Key Links

Text: https://www.sec.gov/divisions/marketreg/rule613-info. htm Exemptive Relief Order: https://www.sec.gov/rules/ exorders/2020/34-88702.pdf CAT plan website: https://catnmsplan.com/





SEC CECL

At a Glance

Regulation: Current Expected Credit Loss (CECL)

Regulatory Regime: SEC

Target Market Sector: Financial institutions

Core Data Requirements:

Accounting data including past events, current conditions, reasonable and supportable forecasts

Significant Milestones

June 2016: FASB introduces CECL model

July 17, 2019: FASB proposes to extend implementation date for all firms except large SEC filers to January 2023

April 3, 2020: New stimulus law, the CARES law, gives banks option to delay CECL reporting until December 31, 2020 or until federal authorities declare the COVID-19 national state of emergency over, whichever is earlier

Description and Data Requirements

The Current Expected Credit Loss model (CECL) is an accounting model the Financial Accounting Standards Board (FASB) issued for the recognition and measurement of credit losses for loans and debt securities. It is designed to help investors understand managers' estimates of expected credit losses.

CECL is expected to have far-reaching implications and play a role in supporting business decisions. Its anticipated impact is driving financial institutions to consider replacing traditional spreadsheets and legacy systems with a more responsive, configurable platform with enabling tools and credit model options to sustain a CECL framework. 'incurred loss' accounting model with the CECL 'expected loss' model, and requires banks to record amounts they do not expect to collect in the allowance for loan and lease losses (ALLL) and in an allowance for credit losses on held-to-maturity debt securities.

Banking regulators have referred to CECL as 'the biggest change ever to bank accounting', as the standard is expected to have a huge impact on the costs to prepare and audit the ALLL, how investors analyse the ALLL, and how banks manage their capital.

Most recently, the impact of the coronavirus pandemic has led to an option for banks to delay reporting under CECL.

The FASB change replaces the

Key Links

CECL FAQs: https://www.federalreserve.gov/supervisionreg/ srletters/sr1908a1.pdf **Impact:** www.federalreserve.gov/econres/feds/files/2018020pap.pdf





SEC Forms N-PORT and N-CEN

At a Glance

Regulation: Forms N-PORT and N-CEN

Regulatory Regime: SEC

Target Market Sector: Registered investment companies

Core Requirements:

Risk metrics, exchange-traded funds and securities lending data

Significant Milestones

October 13, 2016: SEC adopts new rules and forms June 1, 2018: N-PORT compliance for larger funds groups with net assets of \$1 billion or more June 1, 2018: N-CEN compliance

April 30, 2019: N-PORT reporting for larger funds groups April 30, 2020: N-PORT reporting smaller funds groups

Description and Data Requirements

The Securities and Exchange Commission (SEC) Forms N-PORT (portfolio) and N-CEN (census) are designed to modernise the reporting and disclosure of information by registered investment companies. Form N-PORT requires certain registered investment companies to report information about their monthly portfolio holdings to the SEC in a structured data format. Form N-CEN requires registered investment companies, other than face-amount certificate companies, to report annually certain census-type information to the SEC in a structured data format.

The forms came into effect in Janaury 2017 and were accompanied by amendments to Regulation S-X, which requires standardised, enhanced disclosure about derivatives in investment company financial statements; amendments to Forms N-1A, N-3 and N-CSR to require certain disclosures regarding securities lending activities; and the recision of Forms N-Q and N-SAR.

Collectively, the new forms and amendments are part of the SEC's modernisation plan and designed to improve the information the SEC receives from investment companies and help it to better fulfil its mission of protecting investors, maintaining fair, orderly and efficient markets, and facilitating capital formation.

From a data perspective, Form N-PORT requires more portfolio level information than its predecessor Form N-Q. The additional reporting data is expected to improve risk analyses and other oversight by the SEC. It includes certain risk metric calculations that measure a fund's exposure and sensitivity to changing market conditions, such as changes in asset prices, interest rates, or credit spreads. Reporting of a fund's complete portfolio holdings on a position-by-position basis must be made on a trade date plus one day (T+1) basis.

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Form N-CEN replaces the form previously used to report fund census information, Form N-SAR. Funds report at the registrant level and reports must be filed annually within 75 days of the end of a fund's fiscal year, rather than semi-annually as required by Form N-SAR. Form N-CEN includes many of the same data elements as Form N-SAR, but to improve the quality and usability of information reported, replaces outdated items with items the SEC believes to be of greater relevance today.

Form N-CEN also streamlines and updates information reported to the SEC to reflect current information needs, such as requiring more information on exchange-traded funds and securities lending. Where possible, Form N-CEN eliminates items that are reported on other SEC forms, or are available elsewhere.

Funds must report on Forms N-PORT and N-CEN using an XML structured data format.

In light of the coronavirus pandemic, on June 26, 2020, the SEC extended filing deadlines for Form N-PORT and Form N-CEN due between March 13, 2020 and June 30, 2020 by up to 45 days. It concluded that no further extensions of the deadlines were necessary.

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Key Links

SEC reporting modernisation: www.sec.gov/rules/ final/2016/33-10231.pdf SEC final rules: https://www.sec.gov/rules/final/2016/33-10231.pdf

Updated FAQs: https://www.sec.gov/investment/investmentcompany-reporting-modernization-faq



SEC Form PF

At a Glance

Regulation: Form Private Fund (Form PF)

Regulatory Regime: SEC

Target Market Segment: Private funds

Core Requirements:

Fund assets, 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 firms with more than \$150 million AUM

Description and Data Requirements

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 (AUM) 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 fund. Large private fund advisers are classified as those with more than \$1.5 billion 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 essential 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. Form PF also includes a number of stress tests that must be reported and requires firms 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, risk profiles and due diligence efforts, meaning firms must determine how they gather and present information for both investors and regulators.

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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.

The SEC cracked down on fund advisers that failed to submit Form PF for the first time in 2018, reporting in June 2018 that it had made settlements with 13 registered investment advisers that repeatedly failed to provide required information that the SEC uses to monitor risk.

On March 13, 2020, the SEC, recognising that disruption caused by the coronavirus outbreak may limit investment advisers' access to facilities, personnel, and third-party service providers, issued temporary exemptive relief from Form PF filing and reporting obligations for deadlines between March 13, 2020 and April 30, 2020. The filing and delivery deadline was extended by 45 days. The SEC has since taken no further action on Form PF.

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Key Links

Text: www.sec.gov/rules/final/2011/ia-3308-formpf.pdf FAQs: www.sec.gov/divisions/investment/pfrd/pfrdfaq.shtml



SEC Rules 15c3-1, 15c3-3 and 17a-5

At a Glance

Regulation: Rules 15c3-1,15c3-3 and 17a-5

Regulatory Regime: SEC

Target Market Sector: Brokerdealers

Core Requirements:

Net capital calculations

Significant Milestones

July 30, 2013: SEC finalises amendments to broker-dealer financial responsibility requirements and financial reporting rules

July 2021: FINRA announces updates to the Interpretations of Financial and Operational Rules related to SEC Rules 15c3-1 and 15c3-3

Description and Data Requirements

SEC Rules 15c3-1,15c3-3, and 17a-5 are integral to the Commission's Customer Protection Rule that seeks to avoid, in the event of a brokerdealer failure, a delay in returning customer securities or a shortfall in which customers are not made whole. This is done by requiring broker-dealers to safeguard both the cash and securities of their customers, and eliminating the use of customer funds and securities to finance broker-dealers' overheads and certain other activities.

Rule 15c3-1 sets capital requirements for brokers and dealers. Under the rule, a broker or dealer must have sufficient liquidity to cover its most pressing obligations. This is defined as having a certain amount of liquidity as a percentage of the broker-dealer's total obligations.

For customer cash, Rule 15c3-3 requires a broker-dealer to maintain a reserve of funds or qualified securities in an account at a bank that is at least equal in value to the net cash owed to customers. The rule also requires a broker-dealer to maintain physical possession or control over customers' fully paid and excess margin securities.

Rule 17a-5 requires broker-dealers to file monthly Financial and Operational Combined Uniform Single (FOCUS) reports concerning customer reserve account requirements and the proper segregation of customer securities. It also requires broker-dealers to file compliance reports annually that contain a description of 'each material weakness in the internal control over compliance of the broker-dealers', and to notify the SEC when there is a material weakness that could result in a violation of Rule 15c3-3.

Broker-dealers must provide accurate information to the SEC on their compliance with the Customer Protection Rule, and must selfreport certain failures to comply, or material weaknesses in controls that hinder compliance efforts.

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In July 2021, FINRA published updates to interpretations of Financial and Operational Rules to assist firms in complying with the SEC rules.

Key Links

SEC Customer Protection Rule Initiative: www.sec.gov/divisions/ enforce/customer-protection-rule-initiative.shtml

Rule 17a-5 FAQs: https://www.sec.gov/divisions/marketreg/ amendments-to-broker-dealer-reporting-rule-faq.htm

FINRA Regulatory Notice 21-27: https://www.finra.org/rulesguidance/notices/21-27





SEC Rule 22e-4

At a Glance

Regulation: Rule 22e-4

Regulatory Regime: SEC

Target Market Sector: Registered open-end investment companies

Core Requirements: Liquidity risk management

Significant Milestones

September 22, 2015: SEC proposes reform of liquidity risk management

October 13, 2016: SEC issues final rule

January 17, 2017: Effective data

February 2, 2018: SEC pushes out compliance deadline by six months **June 28, 2018:** SEC adopts a final rule on risk management programmes

June 1, 2019: Compliance deadline for larger entities to implement a liquidity risk management programme

December 1, 2019: Compliance deadline for smaller entities to implement a liquidity risk management programme

Description and Data Requirements

The Securities and Exchange Commission (SEC) voted to propose reforms that would enhance liquidity risk management at open-end funds, including mutual funds and exchange-traded funds (ETFs), in September 2015.

The resultant rule, Rule 22e-4, creates a regulatory framework to help funds design robust liquidity risk management programmes.

The SEC's goal is to reduce the risk of a fund being unable to meet its redemption obligations and to minimise dilution of shareholder interests by promoting stronger and more effective liquidity risk management across open-end funds. Put simply, the rule aims to ensure investors can redeem shares and receive assets in a timely manner. After an industry comment period, the SEC adopted a final Rule 22e-4 in October 2016. The rule emphasises the need for mutual funds and ETFs to implement liquidity risk management programmes and details disclosure regarding fund liquidity and redemption practices.

Mutual funds and ETFs must classify their portfolios as highly liquid, moderately liquid, less liquid or illiquid, and only 15% of a fund's assets are permitted to be classified as illiquid.

This is a potential challenge, particularly in fixed income markets where only a small minority of securities trade regularly, but also an opportunity for mutual funds to improve operational procedures, reduce trading costs, and better

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understand their portfolios by elevating liquidity to a risk factor.

The initial Rule 22e-4 timeline, required all registered open-end investment companies, including open-end ETFs but not smaller entities, to adopt the rule and implement a written liquidity risk management programme, approved by a fund's board of directors, by December 1, 2018.

Smaller entities, defined as funds with less than \$1 billion in net assets, would follow six months later and implement liquidity risk management programmes by June 1, 2019. Money market funds are exempt from all the requirements of the rule and 'in-kind ETFs' are exempt from some requirements. On February 22, 2018 the SEC adopted an interim final rule that revised the compliance date of rule 22e-4 by six months and provided further guidance for firms within the scope of the rule.

The revised compliance date requires larger entities to be compliant on June 1, 2019, and smaller entities on December 1, 2019.

In addition to pushing forward Rule 22e-4 compliance, on June 28, 2018, the SEC adopted a final rule that requires funds to disclose information about their liquidity risk management programme in reports to shareholders. The SEC also amended Form N-PORT to enhance the liquidity information reported to the Commission.

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Key Links

SEC Rule Proposal: www.sec.gov/news/pressrelease/2015-201.html SEC Final Rule: www.sec.gov/rules/final/2016/33-10233.pdf



SEC Rule 606

At a Glance

Regulation: Rule 606 (a) and (b) of the Regulation National Market System (NMS)

Regulatory Regime: SEC

Target Market Segment: Brokerdealers

Core Requirements:

Data transparency, data consolidation, data lineage, trade and transaction reporting

Significant Milestones

November 17, 2000: SEC adopts Rules 605 & 606

November 2, 2018: SEC adopts amendments to Rule 606, with a deadline of May 2019

April 30, 2019: SEC extends the compliance date for Rule 606 amendments

August 2019: SEC issues new guidance on amendments to Rule 606 September 4, 2019: SEC grants delay to compliance reporting deadline

January 1, 2020: Compliance deadline for Rule 606(a) for all brokerdealers

January 1, 2020: Compliance deadline for Rule 606(b) for brokerdealers engaging in self-routing

April 1, 2020: Compliance deadline for broker-dealers that outsource routing

Description and Data Requirements

In November 2000, the Securities and Exchange Commission (SEC) adopted two rules to standardise and improve public disclosure of execution and routing practices, as part of the Regulation National Market System (Regulation NMS), a set of rules designed to improve the US exchanges through improved fairness in price execution. Rule 605 required that all 'market centres' trading NMS securities make available standardised, monthly reports containing statistical information about 'covered order' executions. Rule 606 required broker-dealers routing customer orders in equities and option securities to publish quarterly reports providing a general overview of their routing practices.

In November 2018, the SEC adopted a set of amendments to Rule 606, requiring broker-dealers to provide enhanced disclosure of their routing practices – in part to encourage effective and competitive order handling and routing services, and in part (from a regulatory perspective) to better investigate the relationship between exchange and trading venue rebates and routing decisions.

The amendment separates orders into 'held' (which must be executed immediately) and 'not held' (which give the broker some level of time and price discretion) with different disclosure obligations for each. Upon customer request, the new Rule 606(b)3 requires broker-dealers to provide specific disclosures, within seven days, for the



past six months regarding not held orders.

Rule 606(a)(1) for held orders requires less detail, but enhances the order routing disclosures that broker-dealers must make publicly available on a quarterly basis.

Firms must now publish both 606(a) and new 606(b)3 reports on a bi-annual and quarterly basis, respectively, in place of the lengthy legacy 606 report. And unlike the previous incarnation, which was accepted in almost any format, the SEC will only accept the reports in XML or PDF.

Originally due for implementation in May 2019 along with the rest of the amendments to Reg NMS, the SEC in April delayed the compliance deadline until September 30, 2019 in response to a request from the Financial Information Forum (FIF) for further clarification. In August, the SEC released new guidance, clarifying issues such as the definitions of 'discretion' and 'venues'.

However, on August 2, 2019, prior to the release of the SEC guidance, FIF and the Security Traders Association (STA) filed a joint letter with the SEC requesting a further delay in implementation, and particularly warning that a lack of clarity around the process of reporting

'look-through data' (data that indicates where the destinations are routing flow and the fees/rebates paid to those destinations) was preventing stakeholders from moving forward with the implementation of Rule 606 in a manner that would 'provide end-customers with consistent and accurate data.'

On September 4, 2019 the SEC acquiesced, extending the compliance deadline to January 1, 2020 for all broker-dealers for Rule 606(a) and for self-routing broker-dealers for Rule 606(b), and to April 1, 2020 for brokerdealers who outsource routing activity.

The onus of Rule 606 compliance falls heavily on the sell-side, and the delays to implementation have primarily been due to concerns over data availability. The SEC indicated in its initial 2018 amendment that much of this data was already available, but in fact the wider breadth of data combined with a lack of clarity on certain key issues has made compliance a serious concern for sell-side firms.

On March 25, 2020, and in light of the challenges posed by the coronavirus pandemic, the SEC granted temporary exemptive relief from some of the reporting requirements of Rule 606.

Key Links

Text: https://www.sec.gov/rules/final/2018/34-84528.pdf FAQs: https://www.sec.gov/tm/faq-rule-606-regulation-nms





Section 871(m)

At a Glance

Regulation: Section 871(m) of the Internal Revenue Code

Regulatory Authority: US Internal Revenue Service

Target Market Sector: Global financial institutions

Core Requirements:

Identifying dividend equivalents, tax withholding, reporting

Significant Milestones

2012: IRS issues temporary and proposed regulations

September 17, 2015: IRS issues final regulations

December 2, 2016: IRS notice on guidance and clarification

January 1, 2017: IRS sets effective dates for the regulations within 871(m)

January 19, 2017: IRS issues further final, temporary and proposed regulations

September 21, 2018: IRS defers the effective dates of several aspects of 871(m)

December 17, 2019: IRS issues final regulations that take effect the same day and withdraw temporary regulations

Description and Data Requirements

Section 871(m) of the Internal Revenue Code is a set of regulations drawn up by the US Treasury Department and Internal Revenue Service (IRS). It governs withholding on certain notional principal contracts, derivatives and other equity-linked instruments (ELIs) with payments that reference (or are deemed to reference) dividends on US equity securities.

The regulations, which generally apply to transactions issued on or after January 1, 2017, impose up to 30% withholding tax on certain amounts arising in derivative transactions over US equities when those amounts are paid to non-US persons.

The regulations are a response to concerns about non-US persons

dodging withholding tax on US securities' dividend payouts by using carefully timed swaps and other equity derivatives. These result in a dividend equivalent.

A dividend equivalent is defined in the regulations as: any substitute dividend made pursuant to a securities lending or a salerepurchase transaction that directly or indirectly is contingent upon, or determined by reference to, the payment of a dividend from sources within the US; any payment made pursuant to a specified notional principal contract (specified NPC) that directly or indirectly is contingent upon, or determined by reference to, the payment of a dividend from sources within the US; and any other payment determined by the IRS to be substantially similar.

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A specified NPC is defined to include any NPC if: in connection with entering into such contract, any long party to the contract transfers the underlying security to any short party to the contract; in connection with the termination of such contract, any short party to the contract transfers the underlying security to any long party to the contract; the underlying security is not readily tradable on an established securities market; in connection with entering into such contract, the underlying security is posted as collateral by any short party to the contract with any long party to the contract; or such contract is identified by the IRS as a specified NPC.

Equity-linked investments (ELIs) that fall within the scope of the regulations include swaps, options, futures, convertible debt, structured notes and other customised derivative products.

The IRS issued temporary 871(m) regulations in 2012, provided amended proposed regulations in 2013 and issued final regulations on September 17, 2015. In December 2016, the IRS issued Notice 201676, aiming to provide taxpayers with guidance and additional clarifications on the administration of, and compliance with, section 871(m) regulations.

On January 19, 2017, and having

reviewed the final regulations of 2015, the IRS issued final and temporary regulations under Section 871(m). The 2017 regulations broaden the range of payments that are considered US source payments and are subject to US withholding and reporting rules.

On September 21, 2018, the US IRS issued a notice announcing their intention to defer the effective dates of several aspects of the section 871(m) regulations, and extend certain related phase-in periods and transition rules.

On December 17, 2019, the IRS issued final regulations that took effect on the same day. These define the term broker for purposes of section 871(m) of the Internal Revenue Code. They also provide guidance relating to when the delta of an option that is listed on a foreign regulated exchange may be calculated based on the delta of that option at the close of business on the business day before the date of issuance. The final regulations also provide guidance identifying which party to a potential section 871(m) transaction is responsible for determining whether a transaction is a section 871(m) transaction when multiple brokers or dealers are involved in the transaction. These final regulations withdrew previous temporary regulations regarding these matters.



Key Links

Text: https://www.federalregister.gov/ documents/2012/01/23/2012-1231/dividend-equivalents-fromsources-withinthe-united-states





Sustainable Finance Disclosure Regulation

At a glance

Regulation: Sustainable Finance Disclosure Regulation (SFDR)

Regulatory Regime: EU

Target Market Segment: Fund managers and advisors

Core Requirements: Sustainability disclosures

Significant Milestones

December 2019: SFDR Level 1 published in EU Official Journal. **October 2020:** Level 2 (RTS) delayed

February 4, 2021: Final report with draft RTS for Level 2.

March 10, 2021: Effective date of SFDR, firms must start to consider principal adverse impacts (PAIS)

June 30, 2021: Latest date by which FMPs and FAs with more than 500 employees must start considering PAIS and start data collection

June 30, 2022: Latest date FMPs and FAs must report for the first time through the adverse sustainability impacts statement.

January 1, 2022: Expected implementation date of Level 2 (RTS). June 30, 2023: Final date by which FMPs and FAs need to report for the second time

Description and Data Requirements

One of the most important regulations of the decade (along with the EU Taxonomy and NFDR), the EU Sustainable Finance Disclosure Regulation is pivotal in the European drive towards a sustainable financial market, and is likely to have one of the biggest impacts on firms in terms of reporting obligations,

Aggregate and harmonize ESG data from multiple sources and vendors in an SFDR compliant data model, with Alveo's ESG Data Master Platform. Our vendor agnostic solution works out of the box with packaged integration with familiar data providers. Link any data source with an existing security data master, or choose Alveo's full Market Data Management Platform. Be SFDR ready and integrate your in-house ESG research with data from an increasing range of vendors.



data requirements, and resource allocation.

The goal of the regulation, which came into effect on March 10, 2021, is to make the sustainability factors of funds easily understandable and immediately comparable for investors, by categorising investments into specific types of product and imposing specific metrics for assessing the ESG and sustainability impact of each investment process. Financial market participants (FMPs) and financial advisors are required to disclose detailed and consistent information on all pre-contractual, contractual, and in all subsequent stages of the investment process to their end investors, with mandatory



RegTech DataManagement ESG reporting requirements.

The regulation introduces three new concepts:

- Sustainable investment an investment that contributes to an environmental or social objective, does not do significant harm, and where the investee follows good governance practice
- Sustainability risk an ESG event or condition that could cause a material negative impact on the value of an investment
- Sustainability factors environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters.

In theory, SFDR will enable investors to quickly and easily evaluate investments based on consistent and harmonised ESG disclosures, which should in theory reduce the risk of greenwashing. It applies to managers and advisors of UCITS, AIFs, European venture capital funds, European structural and investment funds, insurers, and pension products providers operating within the EU.

The first phase of the regulation, which came into effect in March 2021, required participants to implement Level 1 legislation, which classified funds and mandates into three categories, as laid out by Articles 8 and 9, along with those funds not defined by either article, referred to as 'neutral'. They must also adjust all documentation, marketing materials, websites and reporting procedures to reflect the new classifications.

Level 2 legislation, which includes the Regulatory Technical Standards, provides further detail on the content, methodologies and presentation of disclosures set out in Level 1. The European Supervisory Authorities' (ESAs) final report with the more detailed draft level 2 requirements was published on February 4, 2021 and is expected to be approved and subsequently implemented on January 1, 2022.

As it currently stands, SFDR sets out information on sustainability risks that participants must disclose on their websites, pre-contractual disclosures and periodic reports.

Firms must publish and maintain on their websites:

- Information about their policies on the integration of sustainability risks in their investment decisionmaking process
- A statement on the due diligence policies with respect to the principal adverse impacts of investment decisions on sustainability factors (PAIS), where relevant, taking due account of the size, nature and scale of

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their activities and the types of financial products that they make available. Where the firm does not consider the adverse impacts of investment decisions on sustainability factors, it must publish clear reasons for why it does not do so

- A brief summary of their engagement policies
- A reference to their business conduct codes and international standards for due diligence and reporting, and the extent of their alignment with the objectives of the Paris Agreement
- Information on how their remuneration policies are aligned with the integration of sustainability risks.

Pre-contractual disclosures, firms must include the following descriptions:

- How sustainability risks are integrated into investment decisions or advice and the possible impact of those risks on potential returns
- Information on how ESG characteristics are met, following good governance practices
- The methodology used to assess and measure the impact of sustainable investment including data and screening
- For indices designed as a reference benchmark, information on how

they are consistent with ESG characteristics as well as how this index is aligned with the objective from a broad market index

 Where these risks are deemed not to be relevant, the firm must provide an explanation as to why not.

Periodic reports, firms must disclose:

- The overall sustainability-related impact of the financial product
- If an index is designated as a reference benchmark, a comparison between the overall impact of the financial product with the designated index and a broad market index in terms of weighting, constituents and sustainability indicators.

Firms needed to consider the principle adverse impacts (PAIS) of their investments from June 30, 2021. By 2022, they are expected to report the mandatory information on an annual basis.

SFDR raises significant data challenges as firms must use data from multiple sources and vendors, which will require robust data management systems in order to collate and align the data and organise it into the correct classifications. Firms are likely to have to source data from both fund accounting and portfolio management systems, and combine

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it with data from external sources in order to calculate the correct metrics for compliance.

SFDR also requires insight into the data collection process, asking firms to report on specific measures they have taken to ensure coverage and to provide information about their sources within their SFDR reports.

As a result of Brexit, the UK has not on shored SFDR or the Taxonomy Regulation. Instead, in November 2020, the Chancellor set out his ambition for the future of UK financial services and made it clear that he would be positioning the UK at the forefront of green finance. In particular, he announced the introduction of more robust environmental disclosure standards so investors and businesses can better understand the material financial impacts of their exposure to climate change, price climaterelated risks more accurately and support the greening of the UK economy.

On June 22, 2021, the FCA published a consultation paper on new climate-related disclosure requirements for asset managers, life insurers and FCA-regulated pension providers, with a phasedin approach starting 1 January 2022 for the largest firms. The new disclosures are based on the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD).

The FCA rules will be implemented through a 'Environmental, Social and Governance (ESG) Sourcebook' in the FCA Handbook. Over time, the FCA envisages the expansion of the ESG Sourcebook to cover more ESGrelated topics.

Key Links

Text: https://eur-lex.europa.eu/eli/reg/2019/2088/oj

Q&A: https://www.esma.europa.eu/document/ec-qa-sustainability-related-disclosures

FCA consultation paper: https://www.fca.org.uk/publication/ consultation/cp21-17.pdf





SFTR

At a Glance

Regulation: Securities Financing Transactions Regulation (SFTR)

Regulatory Regime/ Authority: EU

Target Market Segment: Investment fund managers

Core Data Requirements:

Client, counterparty and trade identification, reporting

Significant Milestones

January 2014: European Commission proposes SFT regulation January 12, 2016: Effective date March 31, 2017: Final ESMA report on implementing SFTR March 22, 2019: SFTR legally binding April 14, 2020: Reporting go-live for banks and investment firms July 11, 2020: Reporting go-live for phase 2 - CSDs and CCPs September 11, 2020: Reporting go-live for phase 3 - all other financial counterparties December 31, 2020: UK SFTR becomes applicable January 11, 2021: Reporting go-live for all non-financial

counterparties

Description and Data Requirements

The Regulation on Transparency of Securities Financing Transactions and of Reuse—more commonly known as Securities Financing Transactions Regulations (SFTR) — is designed to highlight transactions that could pose a significant level of systemic risk. The regulation sets out requirements to improve market transparency of securities

SFTR aims to bring transparency to the securities financing markets by requiring both parties to an SFT to report new, modified or terminated SFTs to a registered trade repository. Each SFT trade report must include specific details about the security being traded and SmartStream's reference data simplifies the sourcing of the essential security reference data required to enrich each SFT report.



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financing transactions (SFTs), which are transactions that use securities as collateral to borrow cash or vice versa.

As such, SFTR is a critical element of the EU's plan to reform shadow banking practices in the wake of the 2007-2008 financial crisis. SFTR was published in the Official Journal of the European Union and enacted on December 23, 2015.

SFTR's scope includes securities finance transactions conducted by EU or third-party counterparties that touch an EU issuer or EU branch. The regulation also includes UCITS and AIFM funds as within its parameters.

The foundational points on which the SFTR rests include transparency in securities and commodities

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lending, repurchasing transactions, margin loans and specific collateral arrangements. To achieve improved transparency, SFTR requires all SFTs and associated collateral to be reported to an EU-registered trade repository, making the transactions visible to relevant EU regulators.

This creates a challenge for affected firms, which need to generate, manage and submit the required trade data. Firms may also find it challenging to update accounting methods in order to precisely identify SFTs. The Commission requires that firms store records of SFTs for up to five years following their termination and maintain a schedule in which they report no later than the following working day.

Under Article 12, trade repositories must regularly publish aggregate positions according to which SFTs were reported while ensuring that the relevant regulatory authorities have direct access to this information. When a trade repository is not readily available, these disclosure reports should be delivered to ESMA instead. Each report should include details of each SFT that has just been concluded, modified, or terminated. Reports should be delivered no later than the next working day.

Transactions reports for SFTs must include, at the minimum, the following: identities party to the transaction; principal amount; currency; assets used as collateral and their type, quality, and value; whether collateral is available for reuse and whether it has been reused; repurchase rate; value date; maturity date; any haircuts; any substitution of collateral; lending fee or margin lending rate; first callable date; and market segment.

The consequences for breaches and reporting for infringements of the SFTR can be found in Articles 4, 15, and 22. Counterparties must confirm internal mechanisms that enable employees to report actual or even potential violations of the SFTR. Should it be found that a counterparty is culpable in a noncompliance situation, regulators can apply a cease and desist order, a public warning and either temporary or permanent bans.

The European Securities and Markets Authority (ESMA) issued its final **Regulatory Technical Standards** (RTS) on implementing SFTR in March 2017, detailing the rules for reporting SFTs to approved trade repositories. Broadly, the details of the report remain consistent with previous drafts, but there are changes in the final standards covering elements of the regulation including the generation of Unique Trade Identifiers (UTIs), collateral reporting timing, margin lending, use of the Legal Entity Identifier (LEI) and reportable fields.

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Following publication, ESMA sent the final standards to the European Commission for endorsement. A year later, In the summer of 2018, the Commission informed ESMA of its intention to endorse the RTS published in March 2017 but only if ESMA would make certain changes. In early September, ESMA declined to do this, pushing the decision on the adoption of SFTR back to the Commission.

After the Commission and ESMA agreed to the RTS, the seven delegated regulations and three implementing regulations comprising SFTR legislation were published in the Official Journal of the EU on March 22, 2019, making the regime legally binding. The reporting obligations were also set.

In May 2019, ESMA opened a public consultation on draft guidelines on how to report SFTs. On the basis of

the consultation, it published final guidelines on reporting on January 6, 2020.

Reporting was later temporarily amended as a result of COVID-19. On March 26, 2020, ESMA put out a statement expecting competent authorities not to prioritise supervisory actions on counterparties and entities responsible for reporting under SFTR regarding SFTs concluded between April 13, 2020 and July 13, 2020. The statement also offered a delay in registering trade repositories, but required registration by July 13, 2020.

As of 31 December 2020, EU SFTR was onshored as UK SFTR. This has resulted in the need for double reporting of some transactions to both EU and UK authorities. UK SFTR differs from EU SFTR in excluding the need for non-financial counterparties to report under the regulation.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=C ELEX:32015R2365&from=EN

FAQs: http://europa.eu/rapid/press-release_MEMO-15-5931_en.htm Final Guidelines: esma70-151-2703_final_report_-_guidelines_on_ reporting_under_sftr.pdf (europa.eu)





SMCR

At a Glance

Regulation: Senior Managers and Certification Regime (SMCR)

Regime/Authority:

UK Government/ Financial Conduct Authority (FCA)

Target Market Segment: UK regulated financial services firms

Core data requirements: Accountability

Significant Milestones

December 2013: Parliament passes legislation **March 7, 2016:** SMCR comes into force for PRA and FCA regulated firms

May 2016: Regime extended to all FSMA-authorised firms December 9, 2019: SMCR replaces APR for solo-regulated firms March 31, 2021: Deadline for solo-regulated firms for first assessment of the fitness and propriety of Certified Persons (extended from 9 December due to Covid-19 pandemic)

Description and Data Requirements

A replacement of the UK Approved Persons Regime (APR) following the 2008 financial crisis, the Senior Managers and Certification Regime (SMCR) focuses on senior managers and individual responsibility. Entered into force in March 2019, the aim is to "reduce harm to consumers and strengthen market integrity by making individuals more accountable for their conduct and competence".

By raising standards of conduct for those in financial services, particularly shifting responsibility to

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Leverage regulatory spend to construct a dynamic digital blueprint of your business. Provide assessment bodies with every piece of the puzzle. 100% Gartner reviews Would recommend' Solidatus senior level management in firms, the objective of the regime is to increase confidence in the financial services industry, raise standards of governance, guarantee teams can exhibit a clear understanding of their responsibilities and cultivate a cultural change within firms.

Divided into three categories by size and profile; Core, Enhanced or Limited Scope, SMCR will apply differently to each firm.

The Core Regime applies to the majority of firms. It includes the Senior Managers Regime (SMR), Certification Regime (CR), and Conduct Rules.

SMR applies to the most senior management function (SMF). The regulator has determined that these function roles pose the greatest risk to market integrity and therefore individuals must be pre-approved to hold an SMF position. Additionally,

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they are subject to Regular Assessment of Fitness and Propriety, Statements of Responsibility, Prescribed Responsibilities and Responsibility Maps. As there is no territory limitation on SMR, senior managers working in roles outside of the UK will still be subject to the regime.

The Certification Regime applies to individuals that are not in senior management roles, but are in positions that could potentially cause harm to the firm. These roles include, but are not limited to significant management functions, proprietary traders, client dealing functions, anyone who manages a Certified Function, and algorithmic trading. Unlike SMR, CR only applies to individuals working within the UK. Firms will be required to annually certify that staff are suitable for their functions.

The conduct rules apply to all 'conduct staff'. This typically includes almost all employees in a firm.

ACA's ComplianceAlpha® enables firms to meet and manage the requirements of the FCA's Senior Managers and Certification Regime (SM&CR). Firms can define and document the roles and responsibilities of Senior Management, record roles, responsibilities, trainings, assessments and drive greater accountability across organizations, all from a single platform.





Conduct Staff must comply with all Conduct Rules laid out in the FCA Handbook.

The Enhanced category only applies to the largest, most complex firms. These firms are identified based on FCA guidelines including type of firm and total assets and revenue. These firms are subject to all elements of the Core Regime with additional requirements for overall responsibility.

Limited Scope firms will be exempt from some baseline requirements and generally have fewer senior management functions.

An Evaluation of the senior managers and certification regime conducted by PRA in December 2020 indicates that the regime has helped senior managers be held accountable for their actions. The survey of a range of 140 PRA-regulated firms and individual senior managers sought to review whether the regime was working as intended and examine any unintended consequences. Despite upfront costs to implement, 'around 95% of the firms surveyed said that the SMCR was having a positive effect on individual behavior'.

While SMCR has had a positive start, the evaluation outlined nine key areas in which firms need to improve compliance. Of note, firms need to spend time engaging within the industry to ensure misconduct reporting in regulatory references is

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completed appropriately.

Additionally, Supervisory Statements need to be more relevant in terms of remuneration and the quality of Statements of Responsibility needs to increase. Diversity, collective accountability and interim appointments are all areas in which firms need to seek options for improving data collection.

Lastly, while SMCR provides a 'flexible tool that can be used across a range of different firms and business models', firms are struggling with the allocation of senior management responsibilities and identification of evolving risks that apply to those specific functions. Firms may want to 'explore options for making time-limited and conditional approvals more readily used in the appointment of senior managers'.

It is vital for all FCA-authorised firms' staff to understand the aspects of SMCR that apply to them personally. According to the PRA's evaluation, '97% of firms report integrating the regime in their business-as-usual practices in ways beyond simple regulatory compliance to some degree'.

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Key Links

Text: https://www.fca.org.uk/firms/senior-managers-certificationregime

Stocktake Report: https://www.fca.org.uk/publications/multifirmreviews/senior-managers-and-certification-regime-bankingstocktakereport

Evaluation: https://www.bankofengland.co.uk/prudentialregulation/publication/2020/evaluation-of-the-senior-managers-andcertification-regime



Solvency II

At a Glance

Regulation: Solvency

Regulatory Regime: EU and EIOPA

Target Market Segment: Insurance companies and their service providers

Core Requirements:

Solvency capital calculation, risk management, governance, reporting Significant Milestones

January 18, 2015: Solvency II enters into force January 31, 2015: Deadline for transposing Solvency II rules into national law

January 1, 2016: Effective date March 2019: European Commission adopts new rules July 8, 2019: Fourth amending regulation comes into force

January 1, 2020: Amendments take effect

March 31, 2021: Revised deadline for first assessment and propriety of certified persons, and to submit data to the FCA

September 22, 2021: EC adopts comprehensive set of new Solvency II rules

Description and Data Requirements

Solvency II is an EU directive that aims to harmonise European insurance regulation and create a unified and stable industry driven by risk and solvency requirements. It is designed to protect consumers, improve regulatory supervision and increase the competitiveness of European insurers in international markets.

The regulation is principles based,

High quality reference data and the ability to accurately evaluate exposure to asset types across the organisation is key to Solvency II. SmartStream's reference data is a managed service that delivers complete, accurate and timely reference data for use in critical regulatory reporting and risk management operations. A simple and cost-effective source of reference data that you can rely on.



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While insurers bear the greatest burden of data management under Solvency II and must manage both existing and new data, such as the Complementary Identification Code (CIC) for asset classification, Nomenclature Statistique des Activités Economiques dans la



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Under the regulation's 'look through' component, asset managers and servicers must provide transparency on the investments they hold on behalf of insurance company clients in accordance with technical standards outlined by the European Insurance and Occupational Pensions Authority (EIOPA). The standards, which cover both asset data and risk data, include quality requirements of complete, timely, accurate and appropriate data.

Asset managers and servicers must also provide granular information on entities issuing securities and the component elements of derivative instruments.

With data management requirements running through the principles and pillars of Solvency II, insurers are likely to source data for compliance purposes from both internal and external sources, often consolidating data from a number of data vendors to generate required datasets.

Easing the burden of 'look through' data flow between insurers and asset managers is a tripartite template, developed by the Investment Association in the UK, BVI in Germany and Club Ampere in France, and providing a common template to support the exchange of data. The compliance deadline for Solvency II was January 1, 2016. Firms with successful implementations of the regulation can not only deliver compliance, but also gain opportunities to reduce capital requirements, improve risk management and achieve a clearer link between capital and risk to support better business decisions.

Following the Solvency II deadline, EIOPA collected evidence and experiences of the application of Solvency II and submitted two sets of technical advice in response to calls from the European Commission.

The first set of advice focused on the solvency capital requirements standard formula by putting forward evidence based changes. The aim was to reduce the complexity of the standard formula where needed while retaining a proportionate, technically robust, risk-sensitive and consistent supervisory regime for the insurance sector. Essentially, the advice covers proposals regarding simplified calculations requiring less data input.

The second set of advice addressed remaining technical issues including risk margin, catastrophe risks, non-life and life underwriting risks, nonproportional reinsurance covers, unrated debt and unlisted equity and own funds.

On the basis of this advice, on March 8, 2019, the European Commission adopted new rules that take the form of a delegated act and aim to improve



the balance between burden and risk and ensure that Solvency II remains up-to-date.

The act lowers the capital requirements for insurers' investments in equity and private debt, aligning with rules applicable to banks and insurers. Other amendments to Solvency II include:

- New simplifications in the calculation of capital requirements
- Improved alignment between the insurance and banking prudential legislations
- Updated principles and standard parameters to better reflect developments in risk management

Based on these amendments, on July 8, 2019, a fourth amending regulation came into force including changes to the basic solvency capital requirement depending on a firm's activity, and changes to the loss absorbing capacity of deferred taxes. All the amendments came into force on January 1, 2020. During 2020, the European Commission carried out a review of Solvency II based on public consultation. On September 22 2021, the EC adopted a comprehensive 'review package' of Solvency II rules, aimed at ensuring insurers and reinsurers in the EU keep investing and support political priorities of the EU, particularly in relation to financing the post-Covid recovery, completing the capital markets union and channeling funds to implement the European green deal.

On the same date, the EC released a Q&A on proposals for amendments to Solvency II and the new Insurance Recovery and Resolution Directive, as an opportunity to reflect on the lessons learned from the covid-19 crisis. The European Parliament and the council are now in conversation on the EC's proposals and expect that stricter capital requirements will be implemented gradually through 2032.

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Key Links

Overview: https://ec.europa.eu/commission/presscorner/detail/en/ MEMO_15_3120

Text: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:0200 9L0138-20140523

Press Release: https://ec.europa.eu/commission/presscorner/detail/ en/ip_21_4783

2021 Proposal text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:52021PC0581

Q&A on proposal amendment: https://ec.europa.eu/commission/ presscorner/detail/en/qanda_21_4764



SRD II

At a Glance

Regulation:

Shareholders Rights Directive II (SRD II)

Regulatory Regime: EU

Target Market Segment:

Institutional investors, asset managers, issuers, proxy advisers, intermediaries

Core Requirements:

Corporate governance, shareholder engagement

Significant Milestones

September 3, 2018: EU publishes implementing regulations June 10, 2019: Member states transition majority of directive into national law

September 3, 2020: Member states complete transition, SRD II comes into force

Description and Data Requirements

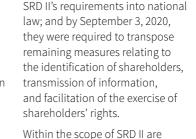
The Shareholder Rights Directive II (SRD II) is one of the biggest changes to European corporate governance in years. The directive sets out to strengthen the position of shareholders and reduce short termism and excessive risk taking by companies. It is also designed to encourage engagement between issuers and shareholders, and greater shareholder presence at annual general meetings.

The directive amends SRD I, which came into effect in 2007, and aims to improve corporate governance in companies whose securities are traded on EU regulated markets. It

The role of shareholder voting is now central to the investor communications chain and shareholder voting needs to be fast, accurate and transparent. SmartStream's Corporate Actions solution meets the SRD II requirements by delivering automation and proactive controls to support intermediaries and its participants.



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was implemented in two phases: by

June 10, 2019, member states were

required to transpose the majority of

Within the scope of SRD II are institutional investors, asset managers, issuers, proxy advisers, and intermediaries. This includes not only intermediaries located in the EU that are in scope, but also non-EEA firms that hold in scope shares.

SRD II establishes specific requirements to encourage shareholder engagement:

- The identification of shareholders
- Transmission of information to shareholders
- Facilitation of the exercise of shareholders rights
- Public disclosure of information

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by institutional investors, asset managers, life insurers and proxy advisors

- Transparency of costs
- Information on the remuneration
 of directors

The main change from SRD I to SRD II is in Article 3, which gives companies the right to identify their shareholders. This creates an obligation on intermediaries to transmit the necessary information to determine shareholder identity. Intermediaries also have to transmit relevant information from the company to the shareholder to facilitate the exercise of shareholder rights. And they must publicly disclose what they charge for these services, with costs being nondiscriminatory and proportionate.

Institutional investors and asset managers must fulfil additional requirements to publish an engagement policy and disclose annually how the main elements of their investment strategy contribute to the medium to long-term performance of their assets. Proxy advisors must adhere to a code of conduct and disclose information to show how their voting recommendations are accurate and reliable.

Shareholders are given the right to vote on the company's remuneration policy for directors and ensure directors are paid in accordance with the remuneration policy approved by a general meeting. The aim of this requirement is to create a better link between pay and performance of company directors.

The directive covers a minimum set of standards for member states, meaning individual member states could go beyond the requirements. Either way, the additions to SRD Il must be factored into securities servicing and based on ISO 20022 messaging, extending complexity and the compliance burden, and in turn, requiring firms to either increase investment in-house or partner with outsourced investor communications specialists.

Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX%3A32017L0828 Summary: https://eur-lex.europa.eu/legal-content/EN/

TXT/?uri=legissum%3Al33285



Taxonomy Regulation

At a glance

Regulation: Taxonomy Regulation

Regulatory Regime: EU

Target Market Segment: Investment firms

Core Requirements:

Measuring material impact of activities, outlining how taxonomy criteria are applied

Significant Milestones

December 2018: Report by Technical Expert Group on Sustainable Finance

June 22, 2020: Regulation published in Official Journal of the EU July 12, 2020: Regulation comes into force

April 21, 2021: First delegated act on sustainable activities for climate change adaptation

2022: Second delegated act for the remaining objectives

Description and Data Requirements

The EU Sustainable Finance Taxonomy sits under the EU Action Plan on Financing Sustainable Growth and is an integral pillar of the European Green Deal. In essence, the Taxonomy is a classification system that is designed to specify exactly what is considered a sustainable business activity or investment based on technical screening criteria designated by the Technical Expert Group (TEG) on Sustainable Finance. It aims to create a common language and a clear definition of sustainability.

The Taxonomy Regulation entered into force in July 2020 and was the first landmark piece of legislation from the European Green Deal that materially impacted the way financial institutions conducted their business. The new rules require firms to revise their methodologies and product development processes, and to measure the material impact of their activities. Institutional investors and asset managers that promote their products as sustainable are required to outline how the Taxonomy criteria have been applied and explain under which category they fall.

In December 2018, the TEG published an early feedback report containing the first set of climate change mitigation activities and their technical screening criteria, together with a call for feedback on the proposed criteria, which closed on January 9, 2019. The TEG also engaged with over 200 additional experts in the first half of 2019 to develop technical screening criteria for the second round of climate change mitigation and adaptation activities.

The Taxonomy Regulation was published in the Official Journal of the European Union on June 22, 2020 and entered into force on July 12, 2020.

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The Taxonomy defines three types of economic activity:

- Environmentally sustainable economy activities
- Transition activities
- Enabling activities.

The principal environmentally sustainable activities are at the heart of the framework, while the transition and enabling activities are designed to facilitate the transition to a sustainable economy. To be designated an environmentally sustainable activity, an activity must make a 'substantial contribution to one or more of the following six objectives:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems.

It must also do 'no significant harm' to any of the above objectives, it must avoid violation of minimum 'social safeguards', and it must comply with the technical screening criteria currently under development using delegate legislation.

The Taxonomy Regulation is supplemented by delegated acts containing detailed technical screening criteria. A first delegated act on sustainable activities for climate change adaptation and mitigation objectives was published on April 21, 2021. A second delegated act for the remaining objectives is scheduled for publication in 2022.

The Taxonomy applies to financial products as defined by Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainabilityrelated disclosures in the financial services sector (the Disclosure Regulation):

- A portfolio managed in accordance with MiFID II
- An alternative investment fund
- An insurance-based investment
 product
- A pension product
- A pension scheme
- A UCITS fund
- A pan-European personal pension product.

To give firms time to collect the data, familiarise themselves with the criteria, and prepare for their applications, the obligations for each environmental objective will become applicable 12 months after the relevant technical screening criteria are adopted, with a phased implementation.

From January 1, 2022 the climate change mitigation and adaptation



objectives come into force, and from January 1, 2023 the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystem objectives come into force.

Once a firm has acquired and processed the necessary data, undertaken the relevant analysis, and classified the sustainable nature of its investment products, it must then feed the analysis into its SFDR disclosures by way of Articles 5 and 6 of Taxonomy Regulation. These coincide with Articles 8 and 9 of the SFDR, adding the requirement for Taxonomy-specific pre-contractual and periodic reporting disclosures.

Finally, Taxonomy Regulation applies a boilerplate pre-contractual and periodic reporting disclosure to all 'otherwise in-scope' financial products that are not sustainable investments and do not promote their ESG characteristics, requiring the disclosure to state: "The investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities."

Investment firms must urgently determine what data they need, how they plan to analyse it, how they will record and classify it, how they will maintain and update it, and how they will report it. Investment managers should also consider how the new requirements will affect their marketing plans and future investment strategies. Once the above measures have been identified, firms will need to review their operational frameworks to ensure they have the resources, data management systems, personnel and technology to meet the requirements.

In the run up to Brexit, the UK government did not on shore the EU Taxonomy Regulation. Instead, in June 2020 it set up a working group, the Green Technical Advisory Group, to oversee the delivery of a green taxonomy in the UK. Ultimately, the UK Green Taxonomy will set out the criteria that specific economic activities must meet to be considered environmentally sustainable.

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Key Links

EU Taxonomy Regulation: https://ec.europa.eu/info/businesseconomy-euro/banking-and-finance/sustainable-finance/eutaxonomy-sustainable-activities_en

US Green Taxonomy: https://www.gov.uk/government/news/new-independent-group-to-help-tackle-greenwashing



UCITS

At a Glance

Regulation:

Undertakings for Collective Investment in Transferable Securities V (UCITS V)

Regulatory Regime: EU

Target Market

Segment: European fund managers and depositories

Core Requirements:

Asset management, reporting

Significant Milestones

1985: First UCITS Directive
July 1, 2011: UCITS IV takes effect
September 17, 2014: UCITS V implemented
March 18, 2016: UCITS V takes effect
April 30, 2019: ESMA report on integrating sustainability risks in UCITS

June 4, 2019: ESMA publishes latest Q&A on application of the UCITS Directive

June 8, 2020: European Commission draft proposals on sustainability July 15, 2021: EC publishes proposed amendments to UCITS

Description and Data Requirements

Undertakings for Collective Investment in Transferable Securities (UCITS) are investment funds regulated at EU level on the basis of regulations issued by the European Commission. UCITS V is the most recent UCITS directive and aims to increase the level of protection already offered to investors in UCITS and to improve investor confidence in them. It plans to do this by enhancing the rules covering the responsibilities of depositaries and by introducing remuneration policy requirements for UCITS fund managers.

The first UCITS directive was implemented in 1985 and has since been improved incrementally as well as by a major overhaul in 2009 that created UCITS IV, which came into effect in July 2011. The UCITS V directive was implemented in September 2014 and took effect in March 2016. In July 2012, the European Commission ran a consultation on a potential UCITS VI. The consultation made recommendations for changes to UCITS V, but UCITS VI has yet to materialise.

The changes made in UCITS V include:

- A requirement to appoint a single depositary for each UCITS
- Publication of a list of entities eligible to act as depositaries
- Harmonisation of the duties of a depositary to keep the assets of the UCITS safe
- Monitoring cash movements to and from the fund
- Overseeing the fund manager's performance of its key functions

To avoid financial loss, the directive requires member states to ensure that assets held in custody by a depositary are protected in the event of the depositary becoming insolvent.

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Similarly, the depositary is liable for the avoidable loss of a financial instrument held in custody.

A further requirement is the need for UCITS management companies to have transparent remuneration policies covering key staff. The directive also aims to harmonise different approaches to sanctioning across the EU by introducing a range of sanctions that can be imposed by EU regulators for breaches of the directive.

In terms of data management, UCITS V tightens the rules issued in previous directives and calls on depositories to improve their understanding and visibility of asset data, and ensure oversight of fund managers' performance. Data must also be managed for annual reports.

While UCITS VI has not yet materialised, and maybe never will, ESMA has continued to revise UCITS V, updating Q&As and in December 2018, issuing a consultation paper on its technical advice to the European Commission on integrating sustainability risks and factors in the UCITS Directive.

A final report published in April 2019 reviews responses to the consultation and covers topics on which the Commission requested ESMA to provide technical advice, namely organisational requirements, and operating conditions and risk management provisions set out in the UCITS Level 2 frameworks.

Following the technical advice published by ESMA in April 2019, the European Commission issued proposed amendments to UCITS V in June 2020. The amendments would require sustainability risks to be taken into account in organisational procedures, the management of conflicts of interest and risk management policies.

They would also place an obligation on UCITS management companies to consider sustainability risks and factors when undertaking investment due diligence. The Commission has not yet published final proposals for review by the European Council and Parliament.

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Key Links

Text: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32009L0065

ESMA Guidelines: https://www.esma.europa.eu/databases-library/ esma-library/UCITS?f[0]=im_esma_sections%3A18&f[1]=im_field_ document_type%3A45

ESMA FAQs: https://www.esma.europa.eu/databases-library/ esma-library/UCITS?f[0]=im_esma_sections%3A18&f[1]=im_field_ document_type%3A50





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Outlook

This edition of A-Team Group's Regulatory Data Handbook demonstrates the magnitude of capital markets regulation on a global scale, raising questions about compliance and how the regulatory regime will pan out over coming months and years. The handbook's sponsors address some of these questions in their introductions, citing control frameworks, data quality, standards, and exemplary data management. They also focus on the potential benefits of closer collaboration between regulators and capital markets participants.

Regulating ESG markets as they continue to grow at speed with little containment provides a case in point. While a handful of regulations are in place, there are more less formal approaches to ESG investment management, differences in global intentions, and varying interpretations of issues such as greenwashing. Regulated well on the basis of extensive collaboration, ESG will to be a vibrant market with a key role in supporting the United Nations' 17 sustainable development goals – a game changer not only in capital markets, but also for the world at large.

Collaboration is coupled to increasing regulatory interest in improving the efficiency, effectiveness and security of capital markets. The Bank of England, European Commission and US Securities and Exchange Commission have all noted the need to address the complexity of today's regulatory landscape, reduce the resources its consumes, and provide a more practical framework for compliance.

Technologies, too, such as cloud, machine learning, artificial intelligence, and natural language processing can help ease the pressure on compliance, but to reach their potential they also depend on collaboration between regulators and market participants.

As an industry sector, capital markets have a great understanding of the challenges of regulation. With more collaboration between regulators and financial institutions, increased commitment to a revised regulatory regime, and a focus on emerging ESG regulation, solutions to the challenges could be on the horizon.





Glossary

AIFMD – Alternative Investment Fund Management Directive

AMLD - Anti-Money Laundering Directive

APA – Approved Publishing Arrangement, an organisation offering publication of order data on a commercial basis

ARM – Approved Reporting Mechanism, an organisation to which firms must submit transaction reporting

AUM – Assets under management

BCBS – Basel Committee on Banking Supervision

BHC - Bank holding company

CAT - US consolidated audit trail

- CCAR Comprehensive Capital Analysis and Review
- **CCP** Central Counterparty

CECL – Current Expected Credit Loss

- CFI Classification of Financial Instruments
- CFTC Commodity Futures Trading Commission
- **CIC** Complementary Identification Code
- **Corep** Common Reporting
- **CRD** Capital Requirements Directive
- **CRR** Capital Requirements Regulation
- **CSDR** Central Securities Depositories Regulation

CSIRT – Computer Security Incident Response Team

- CTF Counter terrorist financing
- CVA Credit value adjustment
- D-FAST Dodd-Frank Act stress testing
- D-SIB Domestic systematically important bank
- EBA European Banking Authority

ECB – European Central Bank

EIOPA – European Insurance and Occupational Pensions Authority

- **ELI** Equity-linked investments
- EMIR European Market Infrastructure Regulation
- **ENISA** European Agency for Cybersecurity
- ESA European Supervisory Authority
- ESG Environmental, social & governance
- ESMA European Securities and Markets Authority
- ETD Exchange-traded derivatives
- ETF Exchange-traded fund
- Euribor Euro Interbank Offered Rate
- FASB Financial Accounting Standards Board
- FATF Financial Action Task Force
- FCA Financial Conduct Authority
- FDIC Federal Deposit Insurance Commission
- FIF Financial Information Forum
- FINRA Financial Industry Regulatory Authority
- Finrep Financial Reporting
- **FIRDS** Financial Instruments Reference Data System
- FIU Financial Information Unit

Form PF - Form Private Fund

- FRTB Fundamental Review of the Trading Book
- FSB Financial Stability Board
- FSMA Financial Services and Markets Act
- **GDPR** General Data Protection Regulation

GHOS – Group of Central Bank Governors and Heads of Supervision





- **G-SIB** Global systemically important bank
- IFD/IFR Investment Firms Directive/Regulation
- IFRS International Financial Reporting Standards
- IGA Intergovernmental Agreements
- IHC Intermediate bank holding company
- IMA Internal Model Approach

IOSCO - International Organisation of Securities Commissions

- IRS US Internal Revenue Service
- ITS Implementing Technical Standards
- ISO International Organisation for Standardisation
- KID Key Information Document
- KYC Know Your Customer
- LCR Liquidity coverage ratio
- LEI Legal Entity Identifier
- Libor London Interbank Offered Rate
- MAR Market Abuse Regulation

MIFID II – Markets in Financial Instruments Directive II

MIFIR – Markets in Financial Instruments Regulation

- MIC Market Identifier Code
- MMFR Money Market Funds Regulation
- MTF Multilateral trading facility
- NCA National Competent Authority
- NMS National Market System
- NPC National Principal Contract
- NSFR Net stable funding ratio
- NIS Network and Information Security Directive

- OTC Over-the-counter
- OTF Organised trading facility
- PEP Politically exposed person
- PRA Prudential Regulation Authority

PRIIPS – Packaged Retail and Insurance-based Investment Products

- **RTS** Regulatory Technical Standards
- RWA Risk weighted asset
- SA Standardised Approach
- SDGs Sustainable Development Goals
- SEC Securities and Exchange Commission

SFTR – Securities Financing Transactions Regulation

- SI Systematic internaliser
- SMCR Senior Managers and Certification Regime
- SRD Shareholders Rights Directive
- SRO Self-regulatory organisations
- STA Security Traders Association

UCITS – Undertakings for Collective Investment in Transferable Securities

- UPI Unique Product Identifier
- UTI Unique Transaction Identifier







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