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# FinfraG: Learning from international efforts for implementing derivative regulation

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# International Regulations are forming a new market infrastructure for OTC derivatives

## Pittsburgh G20-Summit

“All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest.”

# USA

### United States:

The new rules are part of the **Dodd Frank Act**

The measures have been implemented or are currently implemented in the EU and the U.S.

Cross border rules are also part of the regulations. In some cases “substituted compliance” suffices

# EU

### European Union:

New regulations are covered in **EMIR** and **MiFID II / MiFIR**

# CH

### Switzerland:

To implement the G20 Commitment and to guarantee a level playing field, the new requirements are covered in **FinfraG**

# In addition to the general commitment of the Pittsburgh G20 summit, cross border rules of the EU make new regulations for derivatives necessary

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## Some regulation is forced on Swiss entities by international regulation

EMIR article 4 (1) states that the **clearing obligation** also **applies** to contracts „*between two entities established in one or more third countries that **would be subject to the clearing obligation if they were established in the Union*** “

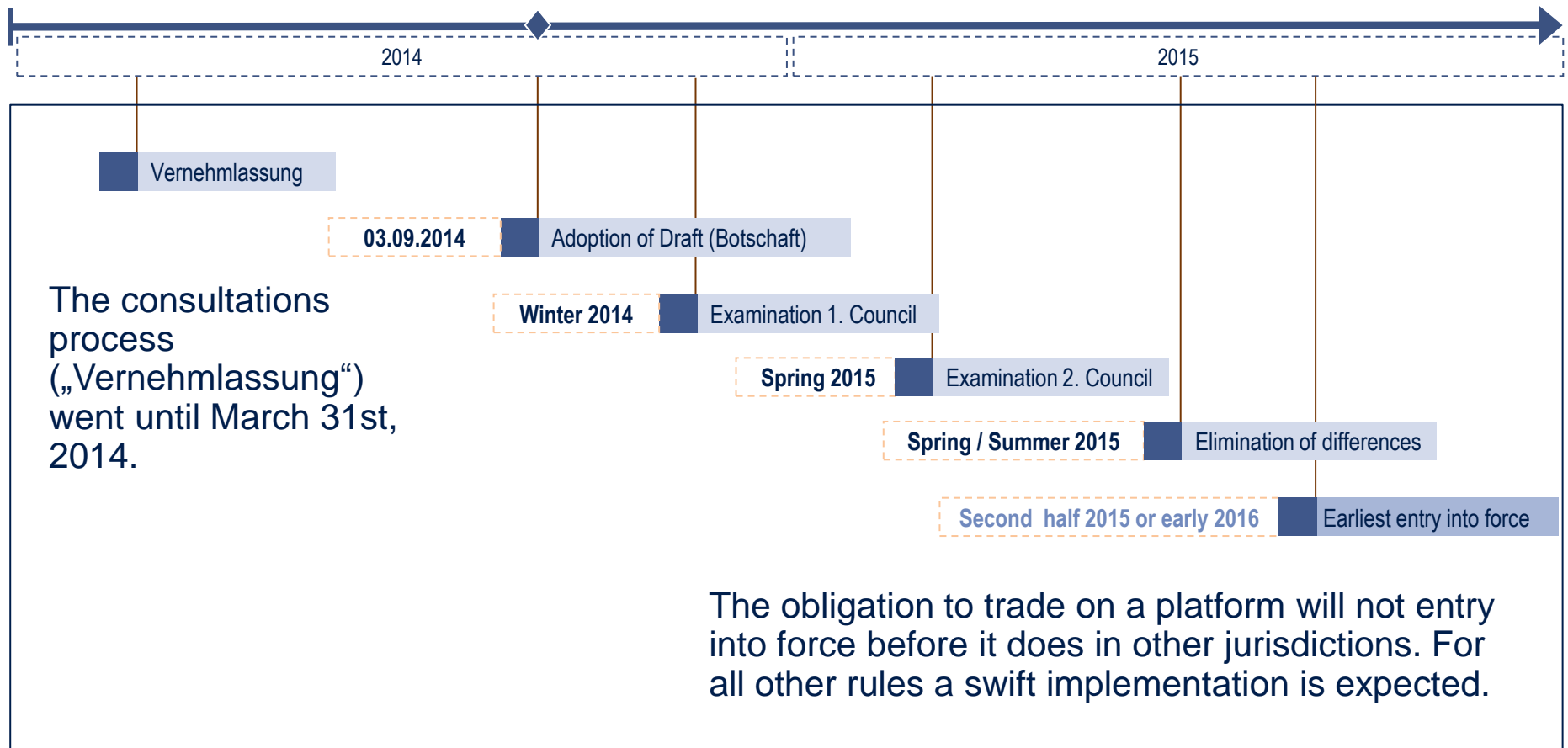
Similarly, **Dodd Frank** requires Swap Dealers and Major Swap Participants to satisfy **Transaction-Level Requirements like Clearing, Trade Execution via SEF** etc. even if the counterparty is a **non-U.S. person**.

## EU / ESMA Risk Mitigation requirements for derivative contracts with **entities in third countries**

*„**Article 11 of EMIR**, which provides the basis of these requirements, applies wherever **at least one counterparty** is established within the EU. Therefore, where an EU counterparty is transacting with a third country entity, the **EU counterparty would be required to ensure** that the requirements for portfolio reconciliation, dispute resolution, timely confirmation and portfolio compression are met for the relevant portfolio and/or transactions **even though the third country entity would not itself be subject to EMIR**. However, if the third country entity is established in a jurisdiction for which the Commission has adopted an implementing act under Article 13 of EMIR, the counterparties could comply with equivalent rules in the third country. “*

# The legislative procedure for FinfraG is in full swing

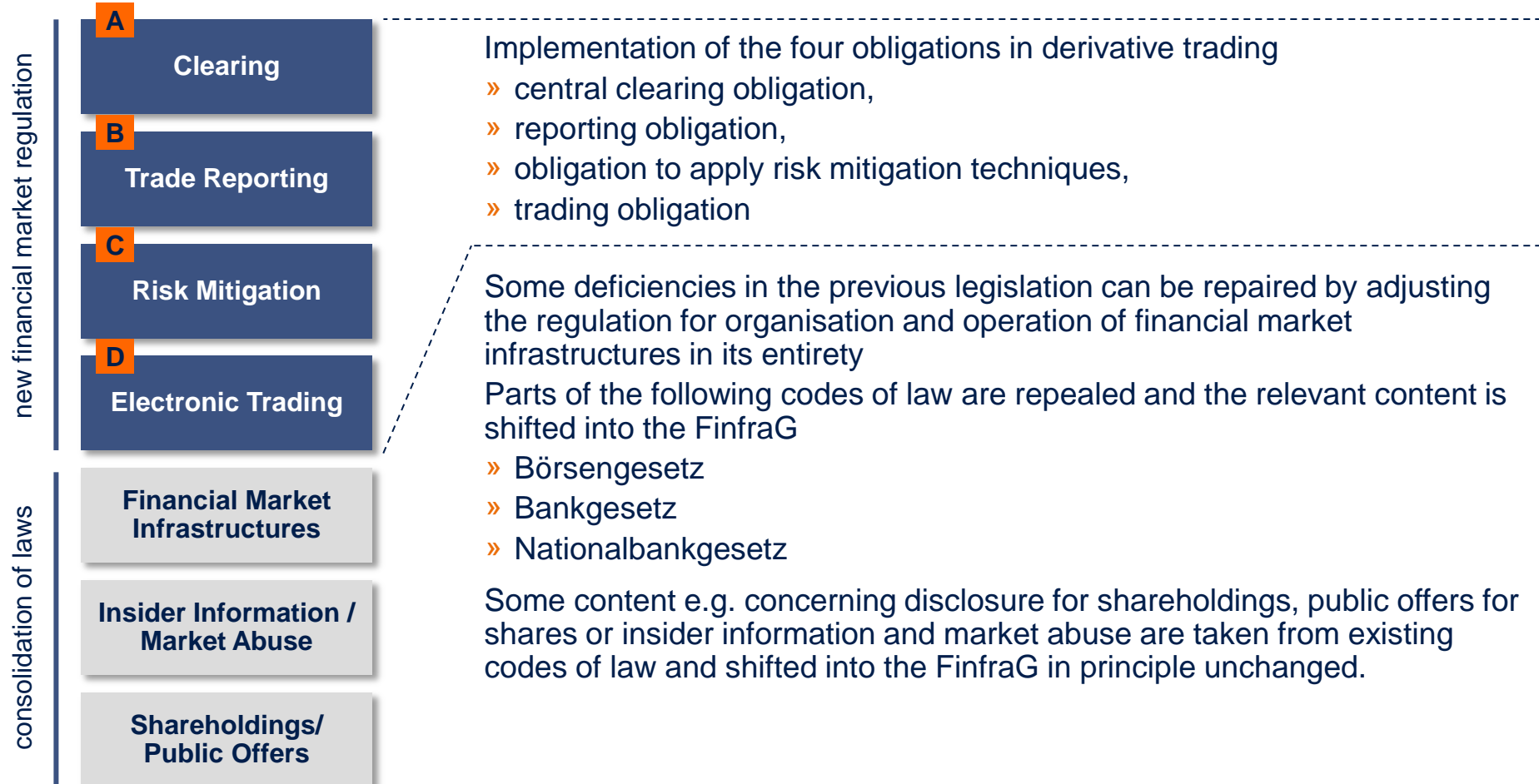
## Estimated time frame for FinfraG



# FinfraG aims to consolidate the various aspects of organisation and operating a financial market infrastructure in one code of law

		EU-Equivalent	
new financial market regulation	<b>A</b> Clearing	<ul style="list-style-type: none"> <li>» Obligation to clear „standardised“ OTC-derivatives through a CCP</li> <li>» Small corporates as well as small financial counterparties are exempted from the clearing obligation</li> </ul>	EMIR
	<b>B</b> Trade Reporting	<ul style="list-style-type: none"> <li>» The reporting obligation for all derivative contracts (OTC, ETD) is introduced</li> <li>» Reports have to be sent to an approved trade repository (TR)</li> </ul>	EMIR
	<b>C</b> Risk Mitigation	<ul style="list-style-type: none"> <li>» Appropriate procedures for portfolio reconciliation, risk management, identification and resolution of disputes, daily valuation of derivatives and exchange of collateral for uncleared derivatives are required</li> </ul>	EMIR
	<b>D</b> Electronic Trading	<ul style="list-style-type: none"> <li>» An obligation to trade standardised derivatives on trading platforms (exchange, multilateral or organised trading facilities) is introduced</li> </ul>	MiFIR
consolidation of laws	Financial Market Infrastructures	<ul style="list-style-type: none"> <li>» Rules for the approval and supervision of trading platforms, CCPs, TRs and Central Securities Depositories (CSDs) are given</li> </ul>	EMIR MiFID2/MiFIR CSDR
	Insider Information / Market Abuse	<ul style="list-style-type: none"> <li>» It is prohibited to exploit insider information or to execute some form of market manipulation. Rules for an adequate use of information and acceptable behaviour will be given by the Bundesrat</li> </ul>	MAR / MAD2
	Shareholdings/ Public Offers	<ul style="list-style-type: none"> <li>» If thresholds for shares are exceeded or undercut, this must be reported</li> <li>» Specific rules like to publish a prospectus etc. are mandatory if public offers for shares are made</li> </ul>	MiFID2/ MiFIR

# Besides the introduction of the new topics, FinfraG also aims for the concentration of all market infrastructure topics in one code of law



The obligations for market participants differ for financial and non-financial counterparties as well as based on scope and volume of business

	Financial CP	Small* Financial CP	Non-Financial CP above Threshold	Non-Financial CP below Threshold
<b>Clearing</b>	Yes	No	Yes	No
<b>Trade Reporting</b>	Yes	Yes	Yes	Yes
<b>Risk Mitigation</b>				
<b>Operational Risk</b>	Yes	Yes	Yes	Yes
<b>Evaluation of Open Positions</b>	Yes	No	Yes	No
<b>Exchange of Collateral</b>	Yes	Yes	Yes	No
<b>Electronic Trading</b>	Yes	No	Yes	No

.\*: “Small financial CPs” have open positions in OTC-derivatives with a volume below an as yet unspecified threshold.



# The international rules for OTC derivatives share many features but also differ in some regards (1/2)

Topic	Differences and Similarities
<b>A</b>  <b>Clearing</b>	<ul style="list-style-type: none"><li>» All jurisdiction require clearing using a form of central counterparty: CCPs in CH and EU, DCOs or Clearing Agencies in the U.S.</li><li>» In the EU, exemptions only apply to small non-financials, CH and the U.S. have exemptions for small financials as well</li></ul>
<b>B</b>  <b>Trade Reporting</b>	<ul style="list-style-type: none"><li>» The details of the trade reporting process differ substantially:<ul style="list-style-type: none"><li>› In the EU, both parties in a trade need to report, in the U.S. one side suffices</li><li>› ETD trades do not fall under the reporting obligation in the U.S.</li></ul></li><li>» The FinfraG follows the U.S. with a one-sided reporting obligation and a cascade system to determine the reporting party. ETDs are not exempted</li></ul>

# The international rules for OTC derivatives share many features but also differ in some regards (2/2)

Topic	Differences and Similarities
<b>C</b>  <b>Risk Mitigation</b>	<ul style="list-style-type: none"><li>» The basic elements (confirmation timeframe, portfolio reconciliation, compression, dispute resolution) are the same.</li><li>» The implementation differ in details, e.g. a focus on SD / MSP in the U.S., differences in the timeframes for dispute resolution etc.</li></ul>
<b>D</b>  <b>Electronic Trading</b>	<ul style="list-style-type: none"><li>» The U.S. requires trading of standardised OTC-derivatives via the newly introduced Swap Execution Facilities (SEFs)</li><li>» In the EU and in CH, the trading obligation requires trading on a regular market / exchange, Multilateral Trading Facilities (MTFs) or the newly introduced Ordinary Trading Facilities (OTFs)</li></ul>

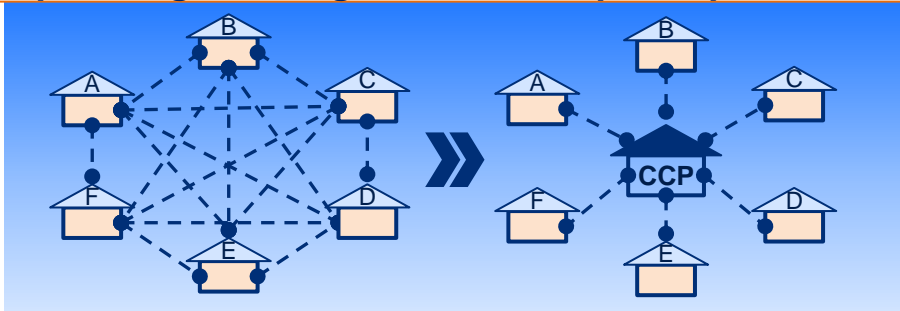
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# New Financial Markets Regulation – The Basics

# The implementation of processes regarding the clearing of OTC derivatives via a Central Counterparty requires integration of many departments.

A

## Upcoming challenges for market participants



### Connection to a new market infrastructure

- » Implementation of processes and systemic extensions for central clearing, e. g. business lifecycle, collateral management, onboarding as a client or member
- » Connection to confirmation platforms, e. g. MarkitWire, DTCC DSMATCH
- » Implementation of processes and infrastructure connected to electronic commerce

### Automation of settlement processes

- » Improvement of STP capability in the settlement of derivatives: checking of transactions, (electronic) confirmations, payment transactions and delivery of securities, generation of accounting records
- » Consolidation of the system landscape of the back office in order to reduce costs

## Legal requirements

### FinfraG Article 96-02

- » Obligation to clear via a recognised CCP if both parties are not considered “small” and if the derivative is required to be cleared on a CCP acc. to FINMA
- » „Small“ financial and non-financial counterparties are defined by the kind of their transactions and by threshold values (c. f. Article 97–99)
- » Cross border transactions must also be cleared on a CCP. It is possible to use recognised CCPs in other countries.
- » Intragroup transactions are not required to be cleared on a CCP. The term „intragroup“ is defined in Article 102.

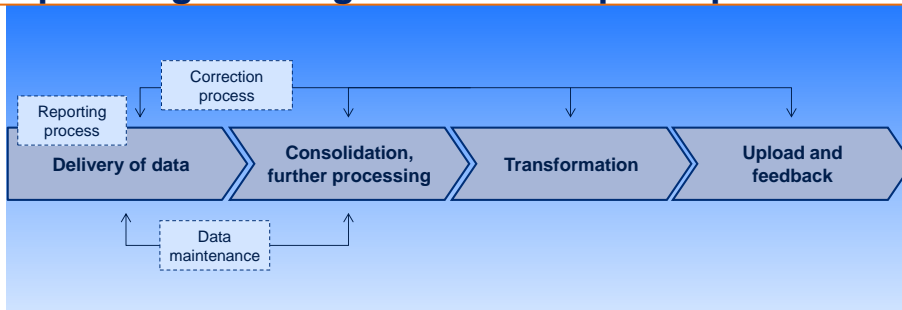
### Key experiences from EMIR realisations

- » Onboarding to a CCP or a Clearing Broker takes a very long time and should be initiated early.
- » Legal discussions have proven to be the most time consuming topics
- » The new processes regarding the mapping of clearing transactions and the correct recording of margin calls require the integration of many departments and the adjustment of many systems.

# Procedural and technical issues play important roles in the onboarding to a trade repository

## B

### Upcoming challenges for market participants



#### Establishing of a reporting process

- » Determination of responsibilities, e.g. reporting party
- » Identification of triggers for reports for all products
- » Determination and consolidation of required data from source systems (FO, BO, Collateral Management etc.)
- » Preparation of data for upload to the repository
- » Processing of feedback and realisation of amendments

#### Implementation of connection to repository

- » Selection of a trade repository
- » Connection to the repository either via a separate interface or employing commercial solutions
- » Integration of selected solution into the internal IT and process landscape

### Legal requirements

#### FinfraG Article 103-105

- » Financial and non-financial counterparties and CCPs must ensure that their derivatives are reported to a trading repository recognised by the FINMA.
- » Only one side needs to report, delegation is possible.
- » The report must be delivered on the day after finalisation, change or termination of a transaction at the latest.
- » The Bundesrat still has to determine the level of details and the format of reports.

#### Key experiences from EMIR realisations

- » Imprecise requirements by regulators and different interpretations of requirements by market participants had a strong impact on the projects.
- » The coordination regarding the reporting data between counterparties required by the supervision did not work sufficiently. This especially applies to the exchange of essential information like UTI, LEI.
- » There are no signs of an agreement among market participants on a consistent delivery or content of reports.

# Processes aiming at risk reduction can be very challenging for institutes

C

## Upcoming challenges for market participants



- » A number of formalised processes regarding communication with counterparties are necessary
- » Internal processes have to be extended

### Installation and / or extension of communication with cpty

- » Extension of bilateral master agreements covering the new topics portfolio reconciliation, dispute resolution etc. with all counterparties, financial as well as non-financial
- » Establishing and formalisation of internal processes to satisfy the new requirements incorporating all involved departments

### Extension of internal processes

- » Setup or extension of a daily mark-to-market or mark-to-model valuation for all derivatives
- » Checking of the confirmation process regarding compliance of deadlines, analysis of electronic confirmation platforms as an additional tool
- » Clarification of responsibilities for the different processes

## Legal requirement

### FinfraG Article 106-108

- » Derivatives that are not cleared via a recognised CCP are subject to additional obligations regarding the reduction of operational risks and the valuation of outstanding transactions
- » The operational risk shall be reduced by a swift confirmation process and the setup of adequate processes about portfolio reconciliation, control of risks, and early recognition and resolution of disputes between parties
- » Financial and non-financial counterparties that are not considered „small“ have to value derivatives with current market prices or adequate models on a daily basis

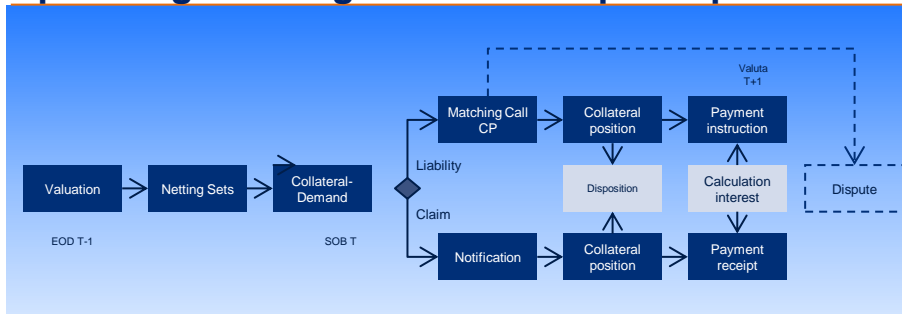
### Key experiences from EMIR realisations

- » Formalised processes regarding portfolio reconciliation and elimination of disagreements were usually regulated by EMIR annexes for the German Master Agreement or the ISDA protocol on Portfolio Reconciliation, Dispute Resolution and Disclosure
- » For the processing of portfolio reconciliation, the use commercial reconciliation services became a standard solution
- » Daily valuation processes are challenging, especially for institutes with multiple systems

# Due to regulatory requirements, the adjustment of processes of collateral management becomes an increasingly important issue for market participants

## C

### Upcoming challenges for market participants



### Process consolidation collateral management

- » Adjustment of collateral-management processes: shift of responsibilities to the front office
- » Centralisation of collateral management for groups of companies
- » Implementation of an organisation structure across asset classes (derivatives and repo)
- » Integrated process for bilateral and centrally cleared transactions

### Management

- » Economic management of collateral utilisation
- » Optimisation of regulatory figures: RWA, LCR, etc.
- » Increase of coverage at clients and management of received collateral

### Legal requirement

#### FinfraG Article 109 - 110

- » Financial counterparties and non-financial counterparties (except for small non-financial counterparties) have to exchange adequate collateral.
- » The counterparties must be able to adequately segregate the collateral from their own assets
- » No collateral has to be exchanged if the conditions for intragroup transactions are met, i.e., full consolidation, appropriate risk monitoring, no impediments for immediate transaction of equity capital or repayment of liabilities, and if the transactions are not made to circumvent the obligation to exchange collateral

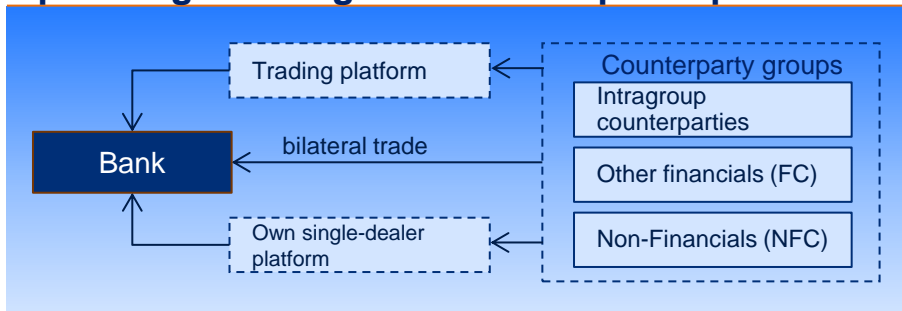
#### Next steps for market participants in CH and EU

- » The regulatory standards of the EU for the realisation of the obligation to exchange collateral are still in the consultation phase.
- » The key principles of the Basler committee (bcbs261) are the basis for the standards in the EU.
- » Switzerland will follow the further decisions of the international standards and especially those of the EU and will regulate the requirement for the exchange of collateral for bilateral transactions by ordinances.

# The obligation to trade via platforms changes the trading process, introduces new systems and requires organisational measures for clearing

## D

### Upcoming challenges for market participants



### Electronic trade

- » Adequate trading platforms must be identified and incorporated
- » Provision of an own platform and positioning at different platforms as a client, or dealer etc. has to be discussed
- » The internal IT architecture and the monitoring processes have to be adapted to the additional requirements

### Counterparty-specific processes

- » Processes with the different counterparties and especially customers have to be developed and realised
- » Differentiation is necessary for cross border transactions, intragroup transactions, transactions with small financial and non-financial counterparties and others

### Legal requirement

#### FinfraG Article 111-114

- » Financial and non-financial counterparties (except for small counterparties) have to trade all specified derivatives via a platform of a trading venue recognised by the FINMA
- » The specification of derivatives is based on standardisation, liquidity, trading volume, availability of pricing information and the counterparty risks connected to the transactions. FINMA can decide to phase in these obligations for different categories of derivatives
- » The obligation to trade via platforms also applies for cross border transactions but not for intragroup transactions.

#### Next steps for market participants in CH and EU

- » MiFID II / MiFIR entered into force on July 3<sup>rd</sup>, 2014 and will take effect on January 3<sup>rd</sup>, 2017
- » The development of regulatory standards will occur in the course of 2014
- » FinfraG plans the obligation to trade on electronic platforms to take effect only once appropriate according to the international development (EU, USA).



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# New Financial Markets Regulation – Details

# Implementation of the reporting obligation by onboarding to a trading repository requires to consider different topics

## B

<b>Regulatory framework</b>	<ul style="list-style-type: none"><li>» Analysis of regulatory details of FinfraG/EMIR, technical standards</li><li>» Monitoring of regulatory adjustments, account of dependencies</li></ul>
<b>Reporting process</b>	<ul style="list-style-type: none"><li>» Conception of reporting process including responsibilities</li><li>» Detailed conception of reporting architecture for OTC, maybe not for ETD</li></ul>
<b>Reporting data</b>	<ul style="list-style-type: none"><li>» Analysis of source systems for reporting data</li><li>» Representation and process for data maintenance of new data like LEI, UTI, UPI</li></ul>
<b>External provider</b>	<ul style="list-style-type: none"><li>» Conception of inclusion of external providers for LEI (e.g. WM) and daily updated market data (e.g. Bloomberg, Reuters)</li></ul>
<b>Reconciliation</b>	<ul style="list-style-type: none"><li>» Conception reconciliation</li><li>» Separation of different reporting channels</li></ul>
<b>Selection of trade repository</b>	<ul style="list-style-type: none"><li>» Analysis of providers of trade repositories (DTCC, RegisTR, SIX etc.)</li><li>» Catalogue of criteria, evaluation of the cost model</li></ul>
<b>Onboarding TR</b>	<ul style="list-style-type: none"><li>» Tests, execution of onboarding process</li><li>» Arrangement and conclusion of contracts</li></ul>
<b>Dependencies</b>	<ul style="list-style-type: none"><li>» Coordination of group solutions (subsidiaries, branches)</li><li>» Coordination with other ongoing projects, e.g. CCP, MiFID II/ FIDLEG, Basel III</li></ul>

# FinfraG defines crucial aspects of reporting obligation – affected market participants, products, recipient and reporting deadline

## B

### Parties with reporting obligation

- › The reporting obligation from FinfraG Article 103-105 applies for:
  - › financial counterparties
  - › non-financial counterparties
  - › central counterparties
- › Both parties of derivative relation presumably are affected by the reporting obligation. Transactions have to be reported even if the counterparty is not affected by the reporting obligation.

### Products with reporting obligation

- › All derivative transactions have to be reported. There is no differentiation with regard to trading venue (exchange trade, OTC trade bilateral with or without clearing) or asset class (IR, credit, equity, commodity and FX derivate) in FinfraG
- › Derivatives are defined in the FinfraG draft as financial contracts the value of which depends on an underlying and which is not a spot contract

### Recipient

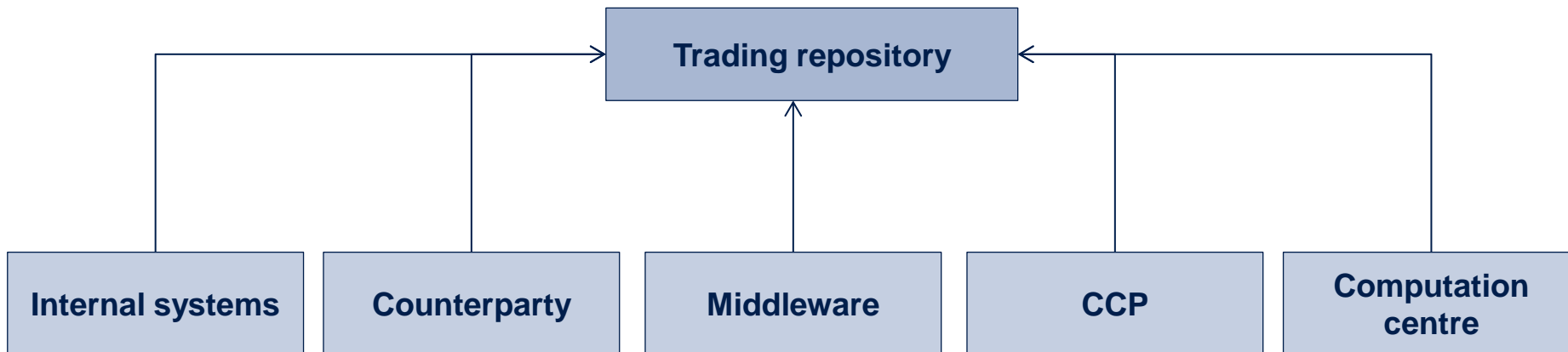
- › The report has to be delivered to a trading repository approved by the FINMA
- › Foreign trading repositories can apply for FINMA-approval

### Reporting deadline

- › The reporting of derivative transactions (conclusions, changes and terminations) have to be reported until the next trading day
- › A report of daily updated mark-to-market or mark-to-modell-valuations is not explicitly contained in the FinfraG draft, additional reporting information can still be demanded

# Data can be delivered to a trading repository in different ways, delegation is permitted

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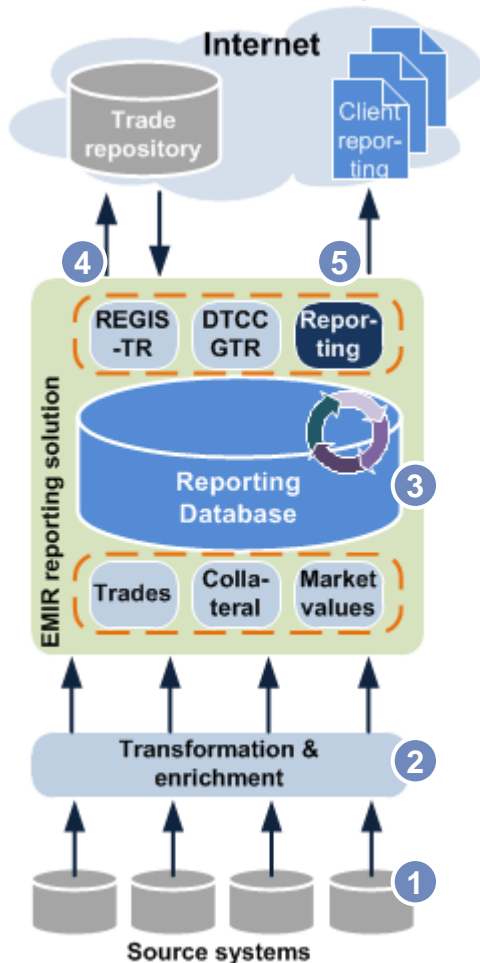
Central platforms like confirmation platforms (middleware) or CCPs involved in a transaction sometimes offer delegated reporting. This service is also offered by some counterparties for mutual transactions.

Delegation to a counterparty, individual reporting and third-party reporting are established procedures in the EU

# Satisfaction of reporting requirements acc. to EMIR and presumably also FinfraG requires the implementation of a complete reporting process.

## B

### Schematic reporting process based on a reporting database\*



- 1 Extraction of data from source systems**
  - » Reading of transaction, instrument, counterparty, and lifecycle-event data required for the report, including new data like UTI etc.
  - » Coverage of different transaction events, e.g. Cancel / New
- 2 Transformation and enrichment of source data**
  - » Transformation to the data model of the reporting software
  - » Addition of data missing in trading systems, e.g. collateral
- 3 Preparation of reporting datasets**
  - » Addition of repository-specific data, e.g. Message ID
  - » Doubling of data in reporting set for the delegation
  - » Transformation to the required data format, e.g. FpML
- 4 Communication with the trading repository**
  - » Uploading of messages
  - » Processing of feedback files of the trading repository
  - » Evaluation of reports provided by the repositories
- 5 Internal and external reporting of results**
  - » Preparation of feedback for internal and external reports
  - » Delivery of reports to clients
  - » Reconciliation of differences with counterparty

\*Alternative architectures exist and, e.g. direct connection of a trading system or employment of a service.

## FinfraG requires reporting to a trade repository. In the EU the following repositories are approved by ESMA

### B

There is no trade repository of the regulators or national authorities. **Trading repositories are private companies. Primarily, stock exchanges and depositories for securities** have established such data repositories. In **August 2014**, there are **six trade repositories approved** by ESMA:

Trade repository	Asset class	Effective date
DTCC Derivatives Repository Ltd. (DDRL)	all asset classes	14 November 2013
Krajowy Depozyt Papierów Wartościowych S.A. (KDPW)	all asset classes	14 November 2013
Regis-TR S.A.	all asset classes	14 November 2013
UnaVista Limited	all asset classes	14 November 2013
CME Trade Repository Ltd. (CME TR)	all asset classes	5 December 2013
ICE Trade Vault Europe Ltd. (ICE TVEL)	commodities, credit, equities, interest rates	5 December 2013

Media Release (June 5<sup>th</sup>, 2014): SIX is to establish a central trade repository for derivative transactions in cooperation with Swiss banks

# Processes aiming at risk reduction can be very challenging for institutes

## C

### Valuation of transactions

- » Daily mark-to-market (mark-to-model) valuation
- » Usually, processes are already established at financial institutes

### Timely confirmation

- » Stepwise introduction for T+1 confirmation, implementation of monitoring
- » Implementation of electronic media on demand

### Portfolio reconciliation

- » Portfolio reconciliation with counterparty happens daily (weekly, quarterly)
- » External vendors possible

### Dispute Resolution

- » Implementation of processes for the resolution of disputes: transactions, transaction data, collateral
- » Monitoring and reporting process for unresolved disputes

### Portfolio compression

- » Annual execution of portfolio compression if reasonable
- » Employment of external services,

### Bilateral collateralisation

- » Obligation to collateralise bilateral transactions
- » Provision of initial margin proposed

# Valuation – Counterparties must value their derivative transactions daily

## C

### › **FinfraG Article 108 (loose translation):**

Financial counterparties (except for small financial counterparties) [..] and non-financial counterparties (except for small non-financial counterparties) [..] have to value their derivatives daily based on current market data.

As far as market requirements do not allow for a valuation based on market prices, valuation models have to be used. The valuation models have to be adequate and practically approved.

### **Explanatory report about the FinfraG draft law**

- › The regulation shall enhance transparency by requiring a daily redetermination of mutual exposures between counterparties.
- › The daily valuation obligation can be delegated to the counterparty or to a third party.
- › In case of inactive markets, valuation has to occur employing models.
- › The counterparties have to specify their models according to internal regulations. They have to be documented sufficiently.
- › Detailed requirements for valuation models are defined by ordinances.

### **Analogous: EMIR regulatory standards**

Requirements for the models for a valuation with model prices

- › Consideration of all relevant factors and market-valuation information
- › Compliance with economic methods of model valuation
- › Calibration to market prices and validation of results
- › Qualitative requirements (valuation independent of trading, annual approval of models)
- › Documentation and regular approval by management body



# Timely confirmation— Examples for electronic confirmation platforms

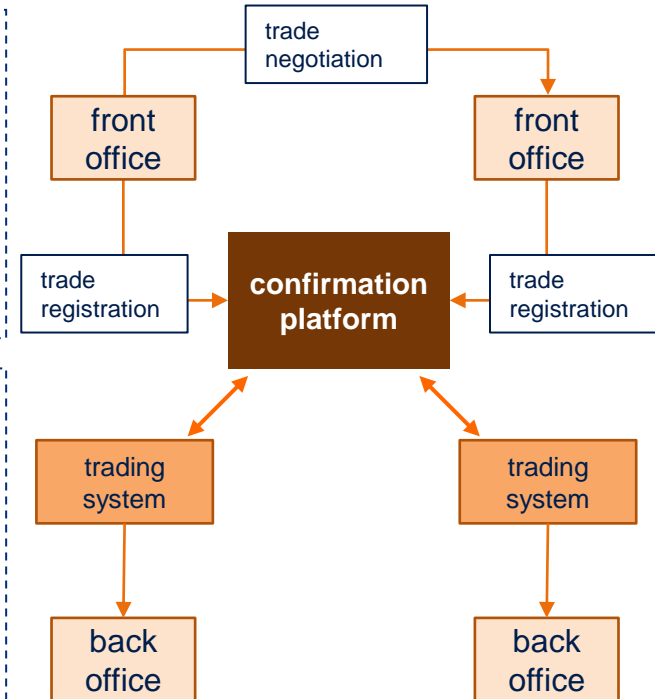
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- › Electronic confirmation of a multitude of credit, IR, equity and FX derivatives
- › Confirmation via matching or affirmation
- › Mapping of transactions in Fpml format



- › Standardised communication traffic of financial institutes
- › Confirmation notification for FX and IR derivatives e.g. via MISYS
- › Real time trade-affirmation service

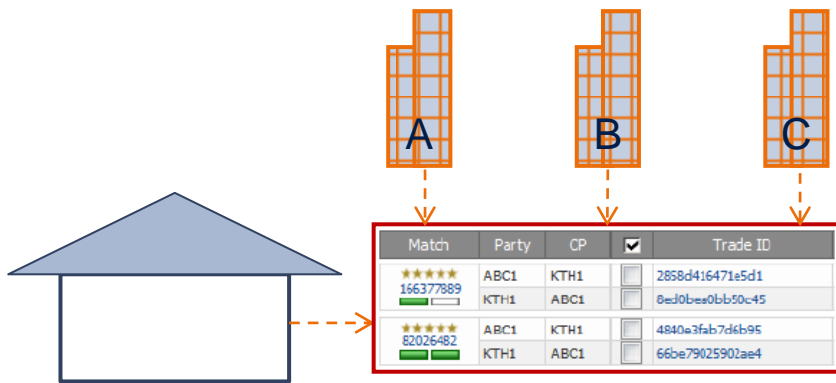


## Advantages of an electronic confirmation:

- › Reduction of operational risk for the trade confirmation
- › Enhanced efficiency through larger degree of automation
- › Improved accuracy through electronic matching

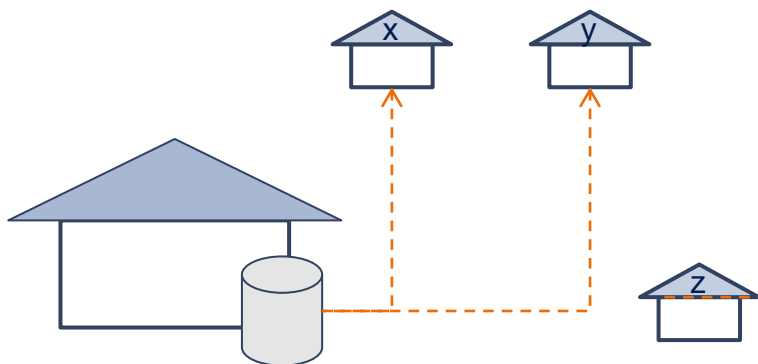
Standard providers for portfolio reconciliation offer solution for large portfolios; usually, customer business has to be reconciliated via a separate solution

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### External reconciliation via service provider

- » Portfolio reconciliation via external provider
- » Today very common in the interbank market
- » Direct connection to a trading repository planned



### Internal reconciliation

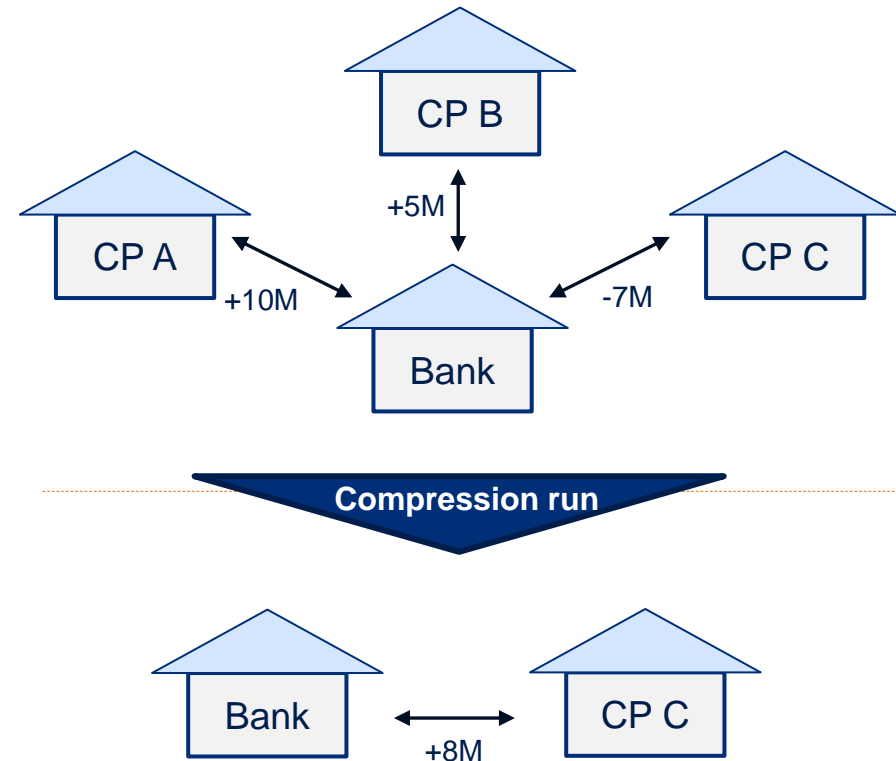
- » Portfolio reconciliation via internal application
- » Relevant for small counterparties or customers and for portfolios with small number of derivatives
- » Manually possible only for small number of counterparties
- » Sell side usually transmits the portfolio data

# Portfolio compression – Reduction of counterparty-default risk

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## Portfolio compression

- » Close-out of OTC positions via portfolio compression service
- » Unchanged portfolio nominal and risk profile
- » Interest rate: trade termination according to defined set of risk parameters
- » Credit: trilateral closure, high matching rate through standardised contracts



Employing portfolio compression services, institutes can achieve a significant reduction of default risk by eliminating surplus positions.

# BCBS 261: Margin requirements for derivatives that are not cleared centrally

## – Overview of the most important regulations

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### Scope: instruments

- » Safety requirements for the whole not centrally cleared derivative business.
- » IM exception: FX swaps und FX forwards; exchange of the nominal for cross-currency swaps.

### Scope: applicability

- » All “covered entities”: financial and systemically relevant non-financial counterparties.
- » Except for: Countries, central banks, multilateral development banks, BIS.

### Methodology

- » IM covers change in value over a 10-day horizon at a confidence level of 99%.
- » VM has to be exchanged in a sufficient frequency.

### Eligible collateral

- » Wide approach (e.g. corporate bonds and equities), application of haircuts.
- » Collateral must be highly liquid and has to retain its value even under stress scenarios.

### Regulations IM

- » Received IM has to be immediately accessible at default of the counterparty.
- » Provided collateral has to be protected against default of the counterparty.

### Intragroup transactions

- » Requirements about intragroup transactions are specified by regional jurisdiction and the corresponding regulatory framework.

### Cross Border Consistency

- » Regulators shall cooperate to guarantee consistent standards across borders.

### Transitional arrangement

- » Transitional arrangements consider liquidity costs and the reduction of systemic risk.
- » Realisation of IM to start on December 1<sup>st</sup>, 2015. VM regulations fully apply at this date.

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