



MIFID II/MIFIR – LESSONS LEARNED

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MARKETS IN FINANCIAL INSTRUMENTS REGULATION – MIFIR

Regulation that is set to increase transparency in EU/EEA financial markets

Directive Level I (MiFID I) applicable since 2007

Directive Level II (MiFID II) – Revision proposal in 2011 with new rules and new reporting obligations

From January 2018: Reporting of transaction data to National Competent Authorities (NCAs)

Affected entities:

- Investment firms
- Domestic subsidiaries
- Branches of overseas EU investment firms



MARKETS IN FINANCIAL INSTRUMENTS REGULATION – MIFIR

Collected data: Detailed information about financial transactions, daily

Container: XML messages based on ISO 20022

Validation:

- Set of rules defined by ESMA
- Validation against data changing on daily/weekly basis

Distribution:

- To other Relevant CAs (RCA)
- Based on rules
- ESMA Hub as distribution system



MARKETS IN FINANCIAL INSTRUMENTS REGULATION – MIFIR

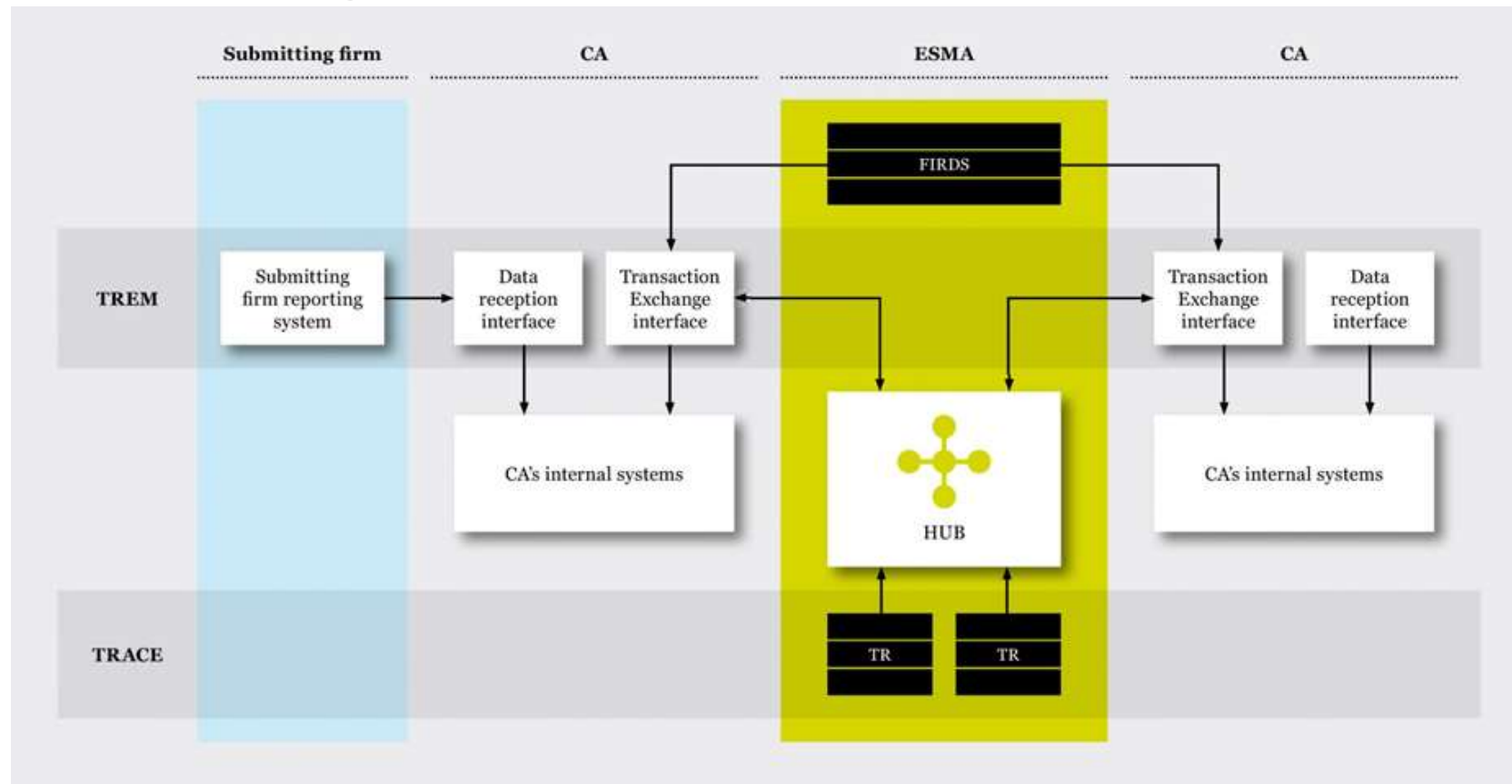
Feedback on submitted transactions:

- As XML files
- Containing breached rule(s) and transaction id
- To national entities
- To and from other NCAs

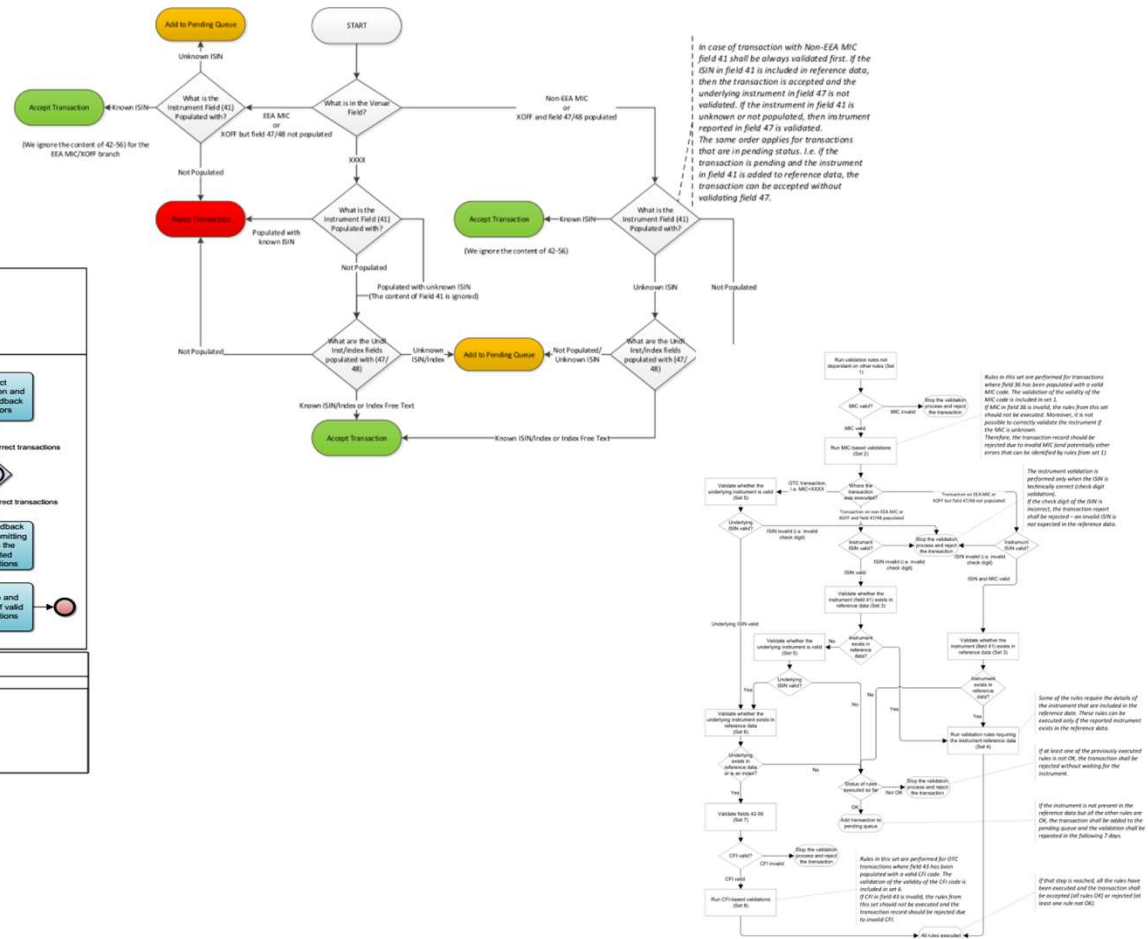
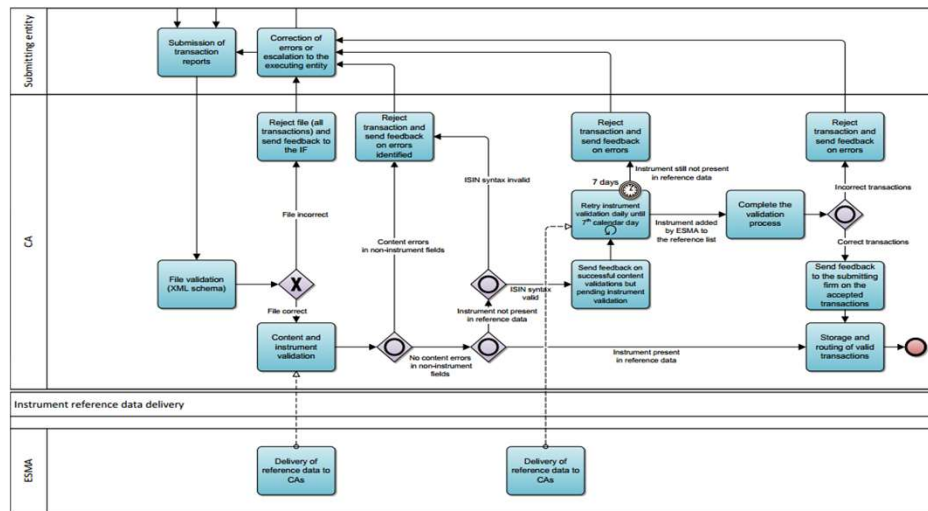
Implementation:

- Each NCA's own responsibility
- Based on detailed Technical Reporting Instructions

TRANSACTION REPORTING EXCHANGE MECHANISM – TREM



VALIDATION



Source: Technical Reporting Instructions, ESMA

VALIDATION - II

115+ Rules with textual description

Executed in ordered sets

To be implemented by each National CA

Supplemented by official test cases

Sometimes ambiguous description – interpretations differ

Provision of feedback to filers (and NCAs)

Rule ID	Field No	FIELD	Validation rule	Error code	Error text	Implementation remarks
220	41	Instrument identification code	The instrument should be present in reference data for the trading date for the following transactions: 1. The transaction is executed on a trading venue within EEA (MIC code in field 36 belongs to a trading venue within the EEA); 2. The transaction is an OTC transaction in instrument admitted to trading (field 36 populated with 'XOFF') and field 47 and 48 are not populated; 3. The transaction is executed on a SI or an organised trading platform outside EEA and field 47 and 48 are not populated.	CON-411	If no more than 7 days has passed after the transaction submission (i.e. it is the 7th day or before) the transaction shall be pending with the following message: Pending instrument validation	NCAs should check if the instrument appears on IRD after every new receipt of daily ESMA IRD for up to a maximum of 7 calendar days MIC reference data and instrument reference data should be used for the purpose of this rule
			In the case of transactions on EEA venues (point 1 above), the instrument should be valid on the particular trading venue where the transaction was executed. In the case of the other transactions (point 2 and 3), the instrument should be valid on any (at least one) EEA trading venue or SI.	CON-412	If at least 7 days has passed after the transaction submission (i.e. it is the 8th day after the submission) the transaction shall be rejected with the following error message: Instrument is not valid in reference data on transaction date	MIC reference data and instrument reference data should be used for the purpose of this rule In the case of transactions received from TREM (not from the submitting firms) CA shall not wait for 7 days and shall reject the transaction immediately after the missing instrument is identified. In any of the cases specified in this rule, a valid instrument must be populated either in FinInstrm\Id or FinInstrm\Oth\FinInstrmGnlAttrbts\Id.

Source: MiFIR transaction reporting validation rules, ESMA

CROSS VALIDATION

Transaction routing to Relevant Competent Authorities based on set of rules

Daily creation of consolidated reports for each Relevant CA

Relevant CAs use same set of validation rules for cross validation

Create and distribute feedback based on validation results to other National CAs

-> Adjustment of validation rule implementation based on feedback

Transaction report	
Field	Format
Instrument identification code (field 41)	ISIN code

↕

Instrument reference data	
Field	Format
Instrument identification code	ISIN code
Relevant Competent Authority of the instrument	2-alpha ISO country code

Source: Technical Reporting Instructions, ESMA

VALIDATION – WHY NOT USE XBRL?

Formula: Standardized business validation rules – perfect fit?

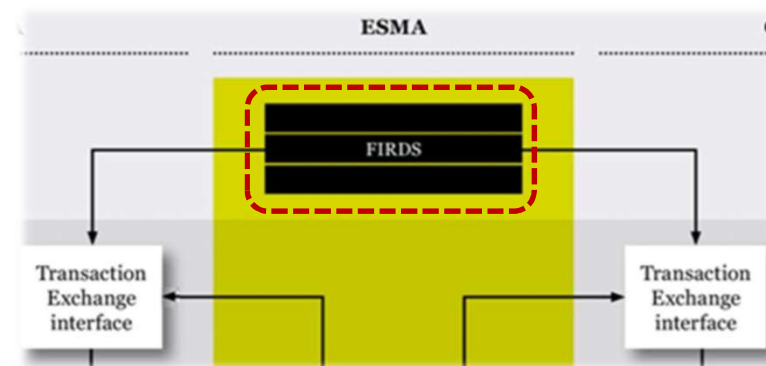
Complex Financial market, variables changing daily

MiFIR: Validation against changing meta data

- Trade Places
- Financial Instruments
- Legal Entity Identifiers
- ...

Financial Instruments Reference Data System - FIRDS

- Provision of daily updates for validation purposes
- Growing amount of data to be stored locally
- Only NCAs provided with direct access



DATA CONTAINER – XML

XML messages based on ISO 20022 (financial communication)

Potentially big amount of transactions due to Approved Reporting Mechanisms (ARM)

Up to 500 000 transactions per file when distributing to National Competent Authorities

Different XML schema used for feedback information

Files need to be compressed, encrypted and signed

ESMA cannot access contents due to encryption

```
<OrdTrnsmssn>
  <TrnsmssnInd>false</TrnsmssnInd>
</OrdTrnsmssn>
<Tx>
  <TradDt>2018-11-29T09:35:47Z</TradDt>
  <TradgCpcty>AOTC</TradgCpcty>
  <Qty>
    <Unit>1</Unit>
  </Qty>
  <Pric>
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      <MntryVal>
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      </MntryVal>
    </Pric>
  </Pric>
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</Tx>
<FinInstrm>
  <Othr>
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      <NtnlCcy>EUR</NtnlCcy>
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    <DerivInstrmAttrbts>
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      <UndrlygInstrm>
        <Othr>
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          </Sngl>
        </Othr>
      </UndrlygInstrm>
      <DlvryTp>PHYS</DlvryTp>
    </DerivInstrmAttrbts>
  </Othr>
</FinInstrm>
<ExctgPrsn>
  <Algo>ABC123</Algo>
</ExctgPrsn>
```

DATA CONTAINER – XBRL-CSV?

Still PWD

Total of 65 „business“ fields per transaction

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<Sellr>
  <AcctOwnr>
    <Id>
      <LEI>315700UE1D1NLAOSVU79</LEI>
    </Id>
  </AcctOwnr>
  <DcsnMakr>
    <LEI>815600DACB788FBA1392</LEI>
  </DcsnMakr>
</Sellr>
```

```
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    <Id>
      <LEI>315700INN443RWEPPWR12</LEI>
    </Id>
  </AcctOwnr>
  <AcctOwnr>
    <Id>
      <Prsn>
        <FrstNm>ARMĪNS!</FrstNm>
        <Nm>SILINŠ</Nm>
        <BirthDt>1980-01-01</BirthDt>
        <Othr>
          <Id>LV19800101SILINARMIN</Id>
          <SchmeNm>
            <Prtry>CONCAT</Prtry>
          </SchmeNm>
        </Othr>
      </Prsn>
    </Id>
  </AcctOwnr>
</Buyr>
```

DATA CONTAINER – XBRL-CSV?

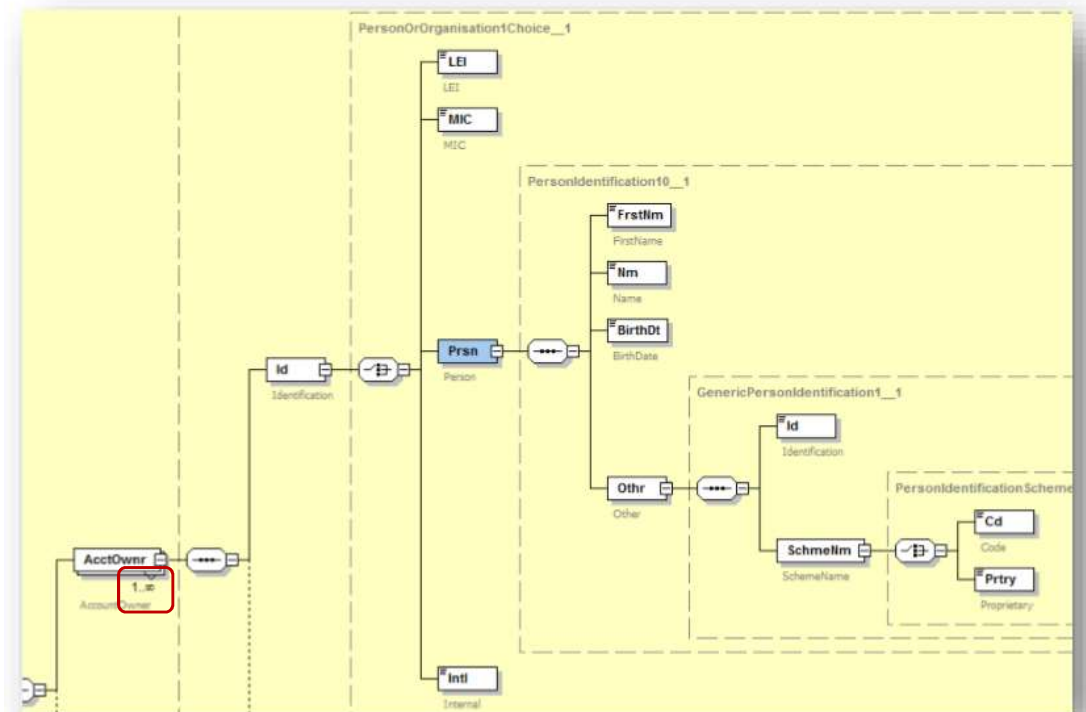
Reality: Indefinite number of columns

Multiple CSV files necessary

Depending on actual report

Some entities just report one transaction per month

Usage of XML templates





IMPLEMENTATION

Individual implementation for each NCA (some joined forces)

Challenge for small authorities (budget, manpower)

Incomplete test cases

Test phases with lack of participants (Cross validation issues)

Late participation of national entities

Increase of both file size and volume



NATIONAL ENTITIES

Reporting through Bank and/or ARM (like Deutsche Börse / UnaVista)

ARMs need to connect to all NCAs, each with different reporting system

Direct reporting: issue for small investment companies

A lot of negative validation feedback in the beginning

Processing of feedback backlog for ARMs takes time

Large amount of resubmissions (and cancellations)



LESSONS LEARNED - I

ESMA has done a great conceptual job regarding the requirements

- Daily submission
- Validation against daily changing meta data
- Complex message content
- Europewide distribution to relevant parties
- Usage of existing standards

xBRL not (yet?) an option

As always: Timeframe

Enforcement of test participation for national entities



LESSONS LEARNED - II

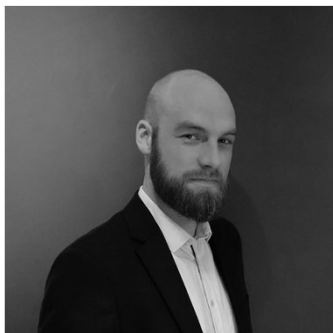
Joint testing is important for a distributed system

Possibility of prevalidation on entity side for small direct reporters?

Expect and plan for changes in year one (and onwards)



QUESTIONS?



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