Unlocking the potential of machine readable and executable reporting

28th Eurofiling Workshop – ECB Supervisory technologies innovations Presentation by Fayaaz Adalat





Agenda

- 1. Why machine readable and executable reporting?
- 2. MRER Proof-of-Concept: Bringing MRER to reality
- 3. Current way of working under EMIR Refit and the effect of MRER
- 4. Benefits and costs of MRER implementation for the various parties
- 5. MRER as an evolution: various degrees of adoption
- 6. Results from the feasibility study: Recommendations and next steps
- 7. How are regulators and reporting entities able to get ready?
- 8. Questions

Why machine readable and executable reporting (MRER)?

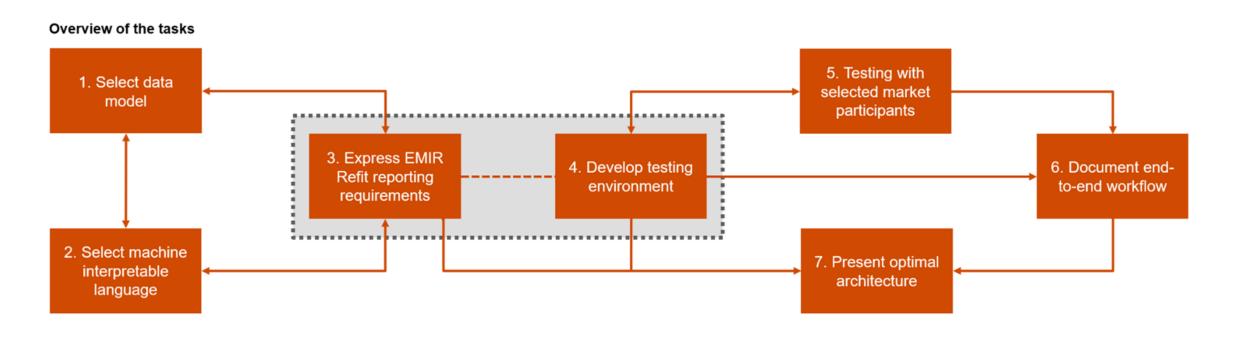
Strategy on supervisory data in EU financial services

The objective of the strategy is to modernise and simplify EU supervisory reporting and put in place a system that delivers accurate, consistent, and timely data to supervisory authorities at EU and national level, while minimising the aggregate reporting burden for all relevant parties.

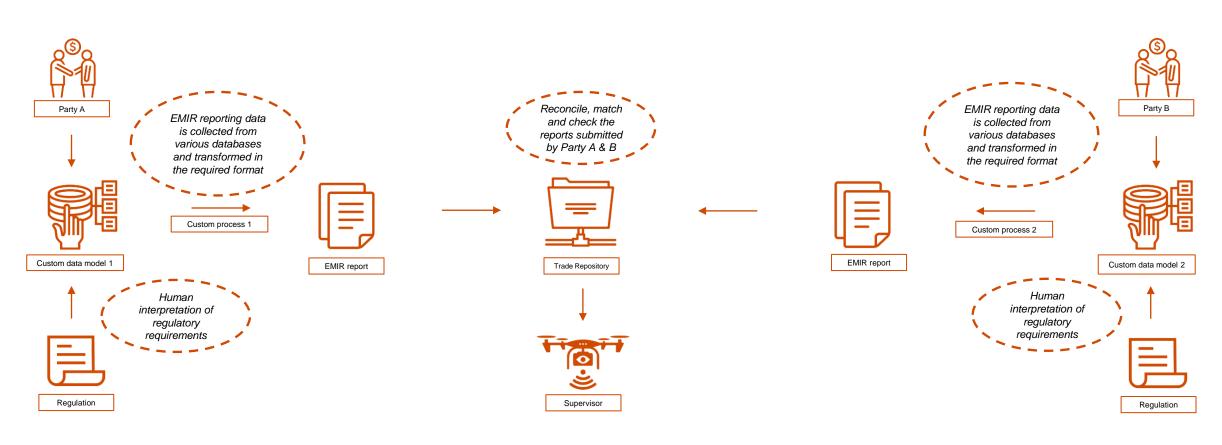
- Stakeholders call for standardised terminology and more consistent and unambiguous drafting of reporting requirements
- Natural language currently used to write legislation is very flexible but can be vague and ambiguous
- Using machine executable language for reporting requirements provides:
 - Standardised terminology
 - No ambiguity
 - Straight-through processing from the reporting requirement to reported data

MRER Proof-of-Concept (PoC)

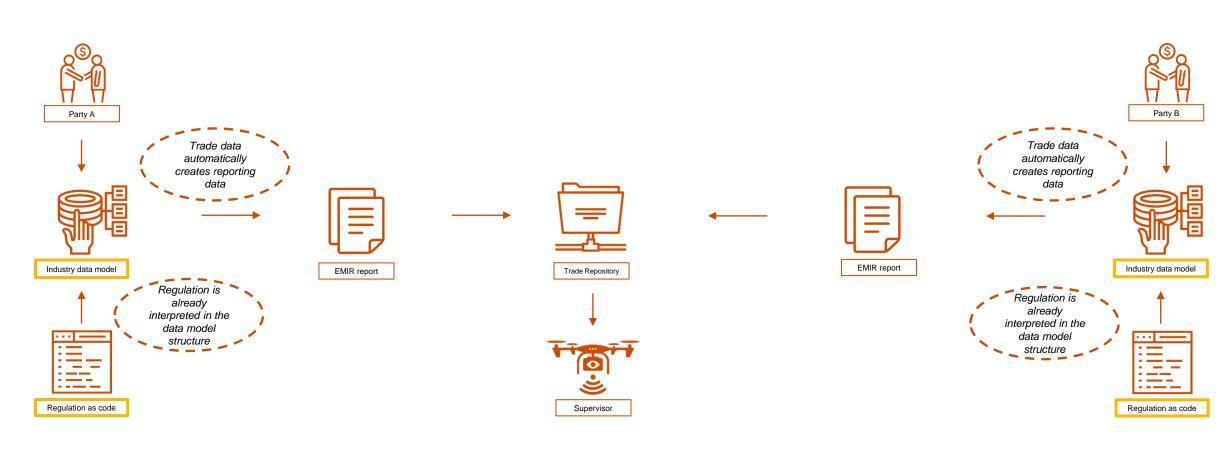
Assessing the feasibility of machine readable and executable reporting for EMIR Refit



The parties report their transactions to the trade repository on a daily basis



The regulatory reporting requirements and trade data are translated into the industry data model structure, optimising the reporting quality



Benefits and costs of MRER implementation for the various parties

Regulator

- Less effort for guidelines and Q&As
- Reduction of implementation time due to earlier detection of inconsistencies between output message standard and regulation
- Better data quality due to limitation of misunderstandings between market participants

Higher initial costs for development and maintenance of MRER-code

Trade repositories

- Better data quality due to limitation of misunderstandings between market participants
- Less validation need as schema and business validations obsolete plus reduction of logical validations
- Reduced implementation time due to reduced testing effort

The role of trade repositories might change depending on the chosen architecture (discussion following on next slides)

Reporting entities

- Limitation of misunderstandings between software engineers and business analysts
- Cost reduction for future updates
- + A common data model can provide additional functionalities throughout the lifecycle of a transaction
- Reduced costs related to specific services of third party vendors
- + Less resources due to reduced number of mismatched fields and trades

- Implementation of adapter to required trade records data model
- Running costs for MRER reporting system
- Initial implementation costs for comprehensive data set for trade records

Supervisor (ESMA)

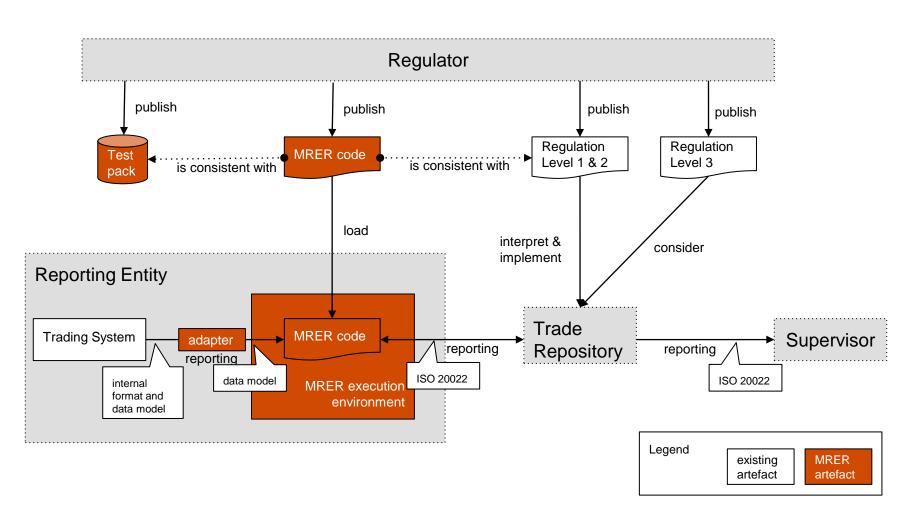
- + Reduction of implementation time due to earlier detection of inconsistencies between output message standard and regulation
- + Limitation of misunderstandings between market participants
- + Higher data quality due to standardised reporting
- + Shorter update time of regulation

Legend

+ Benefit

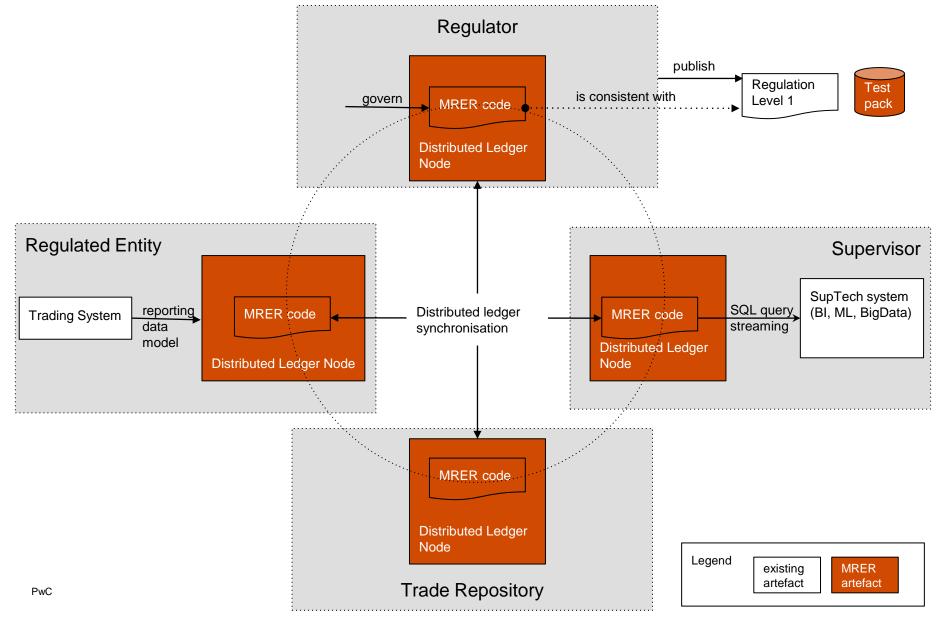
Cost

Top-down local reporting system



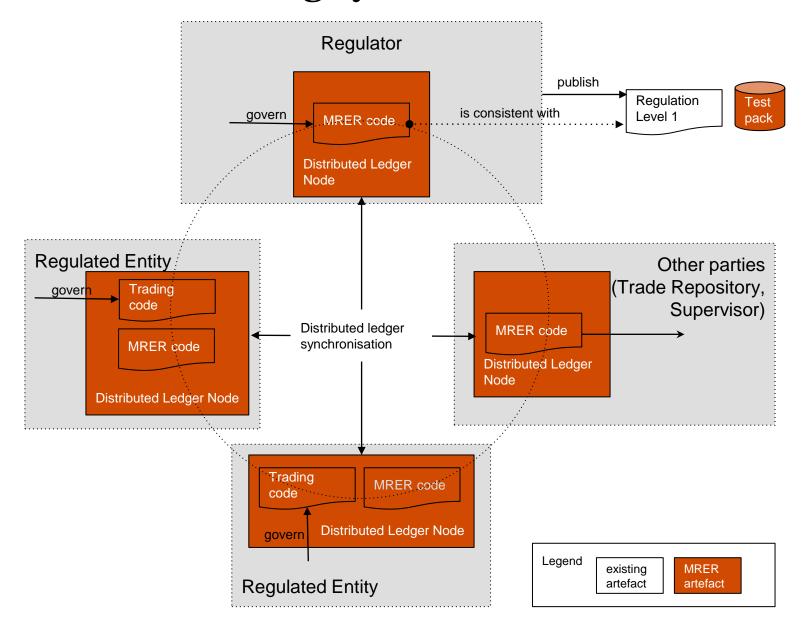
Basic architecture to realize benefits of MRER

End-to-end reporting system



Advanced architecture to realize more benefits of MRER

End-to-end trading system



High-end architecture to realize all benefits of MRER

Results from the feasibility study: Recommendations and next steps

Conclusion on project objectives:

- MRER leads to a more efficient and effective development, implementation and operation of reporting requirements;
- which is expected to reduce the reporting burden and significantly improve the quality of the reported data.
- The benefits of MRER and the architectural options available outweigh the cost in the long run, in relation to the current way of working.
- Additionally, an end-to-end MRER reporting/trading system would provide additional advantages and potentially a decrease in the operational compliance costs of the entire reporting process.



Continue with the MRER-code development and leverage on all developed components and learnings during this project



European regulatory, supervisory bodies and industry to align on a **shared vision** with regard to the adoption level for an optimal MRER architectural design in order to continue further development of MRER



The supervisors to take a leading role in guiding the industry in choosing a fit for purpose data model



Perform a detailed **legal assessment** to ensure a sound legal framework

How can regulators and reporting entities get ready?

Continuous effort improving "data" by both regulators and reporting entities is required in the coming years ahead...

Regulators

- Remove ambiguity on interpretation of data definitions as much as possible
- Increase the use of common standards, formats and identifiers across frameworks
- Build up required skills
 - Programming
 - Data modeling
- Take a leading role in guiding the industry in designing a fit-for-purpose data model for selected reporting frameworks
- Legal framework

Reporting entities

- Increase collaboration between regulatory specialists (in policy departments) and data analysts who prepare data definitions
- Stay critical on design, implementation and effectiveness of the control environment safeguarding data quality of regulatory reporting
- Increase efforts improving the data management framework (end-to-end)
- Keep focus on implementing data aggregation principles (e.g. through BCBS 239)
- "Data first" strategy

Learn more about the study and the MRER workshop?

https://finance.ec.europa.eu/events/workshop-unlocking-potential-machine-readable-and-executable-reporting-mrer-2022-10-18_en

Thank you!

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