

Nordea

Harnessing the Power of the BIRD Data Model: Lessons from Implementation

Eurofiling 2023

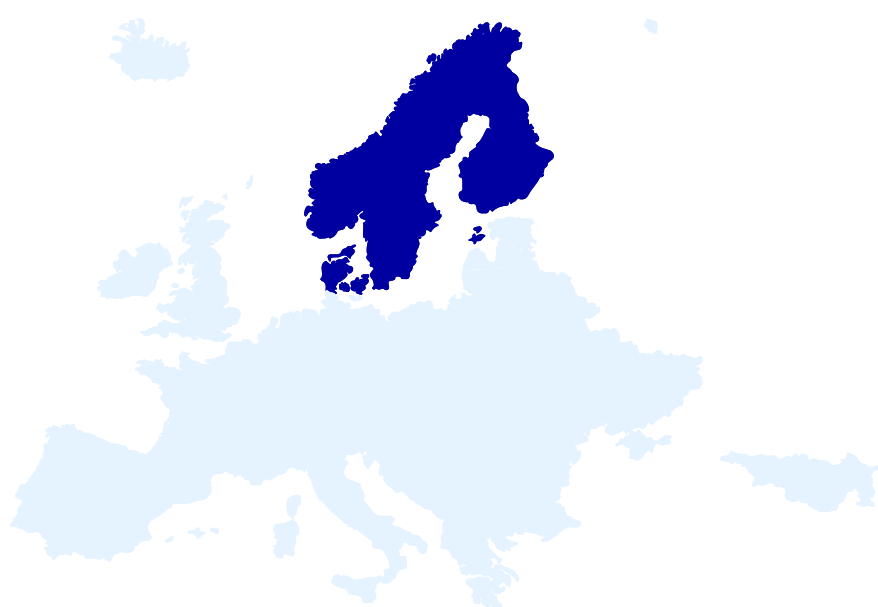
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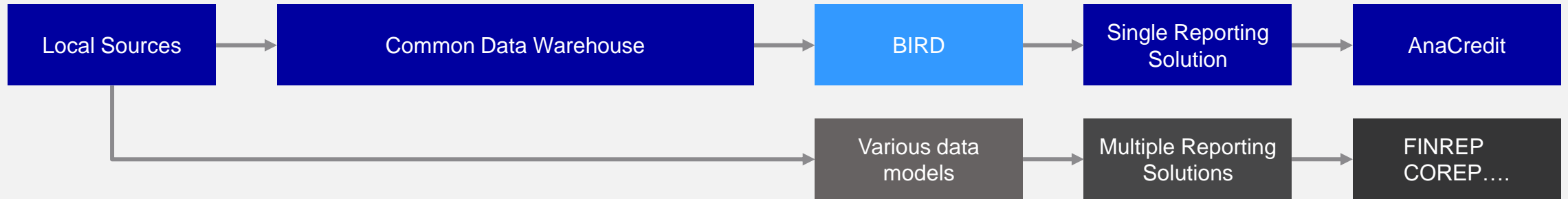
Overview of Nordea



- Largest financial services group in the Nordics
- Home markets included Norway, Denmark, Sweden & Finland
- Domiciled in Finland and under SSM
- Balance Sheet Size ~ EUR 625bn
- Main business lines
 - Personal Banking
 - Business Banking
 - Large Corporates & Institutions
 - Wealth
- Divided into 10 main legal entities and 4 branches

Use of BIRD in Nordea – Current

Simplified illustration of reporting data flow (as is)



Background

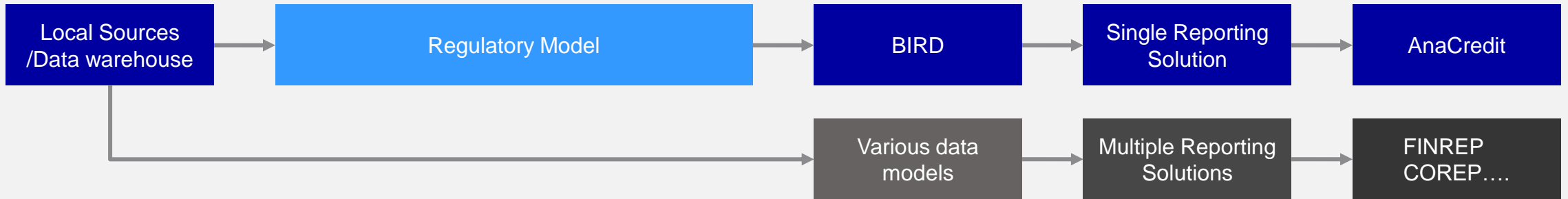
- Started BIRD implementation in Jan 2022
- Anacredit to be sourced from BIRD in Q4 2022
- New reporting solution implemented at the same time
- FINREP and COREP to follow

Why BIRD?

- Single source of truth from harmonised data model
- Reduction in redundancies and overlaps in the reporting process
- Lower anticipated cost on future reporting requirements
- Lower maintenance cost

Use of BIRD in Nordea – 2024

Simplified illustration of reporting data flow (2024)



Need for change

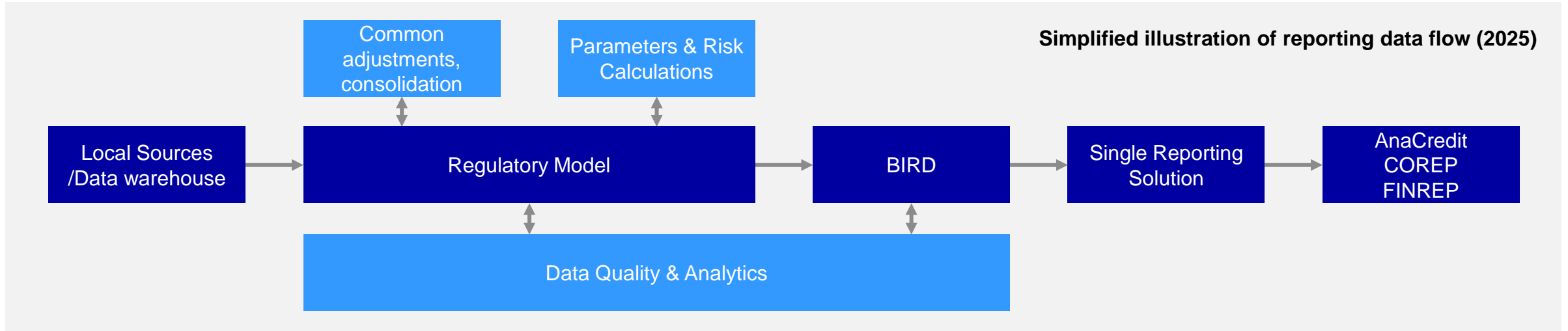
Nordea identified a broader need to have a comprehensive data model that can support both

- regulatory reporting requirement,
- capital calculations and other calculation scenarios
- analytics

Regulatory Model

- Complete granular and reconciled Nordea Balance Sheet and Income Statement
- Solo to Consolidated levels
- Other needed datasets
- Common data centric processes
- BIRD is a projection of Regulatory Model
- Build upon existing Data Warehouse

Use of BIRD in Nordea – 2025



Support functions

Regulatory model is supported by

- Automated rule-based corrections and enhancements
- Adjustments capabilities
- Group consolidation
- Automated reconciliations

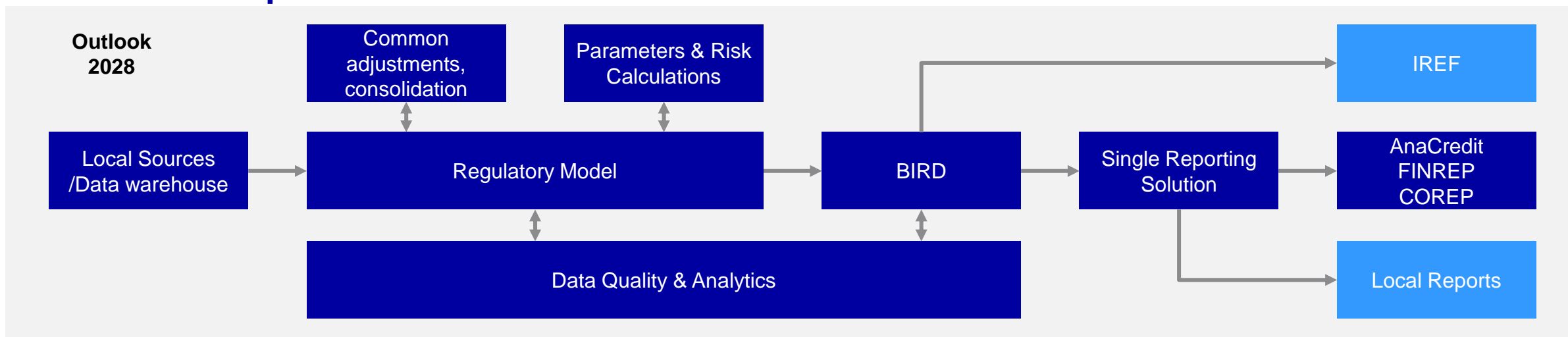
Calculation Engines

- Capital calculations incl. Basel IV
- Planned to include ESG calculations

Analytics

- Analytics both of regulatory model and BIRD

BIRD Roadmap



Ready for IREF

- It is expected that future evolvments of BIRD incl. IREF will be managed with the same setup
- Automatic utilization of published allocation and derivation rules

Local reports

- Expectation that BIRD will be ready for broader set of reporting regimes
- As a Nordic bank we expect substantial reporting beyond the official and supported scope for BIRD for local reports.
- Nordea expect to extend BIRD model to support local reports

Creating a Solid Foundation

- Before fully implementing the new BIRD-based reporting solution, it was essential **to create a prototype or small-scale functional** solution.
- This allowed to **identify potential issues and address them early in the process**, reducing the risk of encountering significant problems during the scaling-out phase.
- We were able to **fine-tune the implementation, validate its feasibility, and establish a solid foundation** for the subsequent full-scale deployment.
- We have **successfully implemented the BIRD model for AnaCredit reporting (version 6.0.0)**. The next step is to update the implementation to the most recent officially published version, 6.1.0, before proceeding with the development of the COREP solution.
- Once updated, we **will freeze the implementation until we start working on the FINREP reporting**. At that point, we will update the BIRD model to the newest version available, while ensuring that all necessary customizations to meet local requirements are preserved.
- This approach **allows us to keep stable foundation** during development phases.



Smooth Transition to BIRD-based Solution



Transitioning to the new reporting solution based on the BIRD Data Model required careful planning and synchronization. We chose to adopt a phased approach, transitioning reporting framework by reporting framework. This allowed us to manage the complexity of the implementation process and ensure a smooth migration from existing reporting solutions to the BIRD-based solution. Moreover, in the first phase (AnaCredit), we aligned our transition timeline with the work on reviewing BIRD IL and LDM in ECB BIRD expert subgroups, ensuring that our implementation remained up-to-date and aligned with any evolving standards.

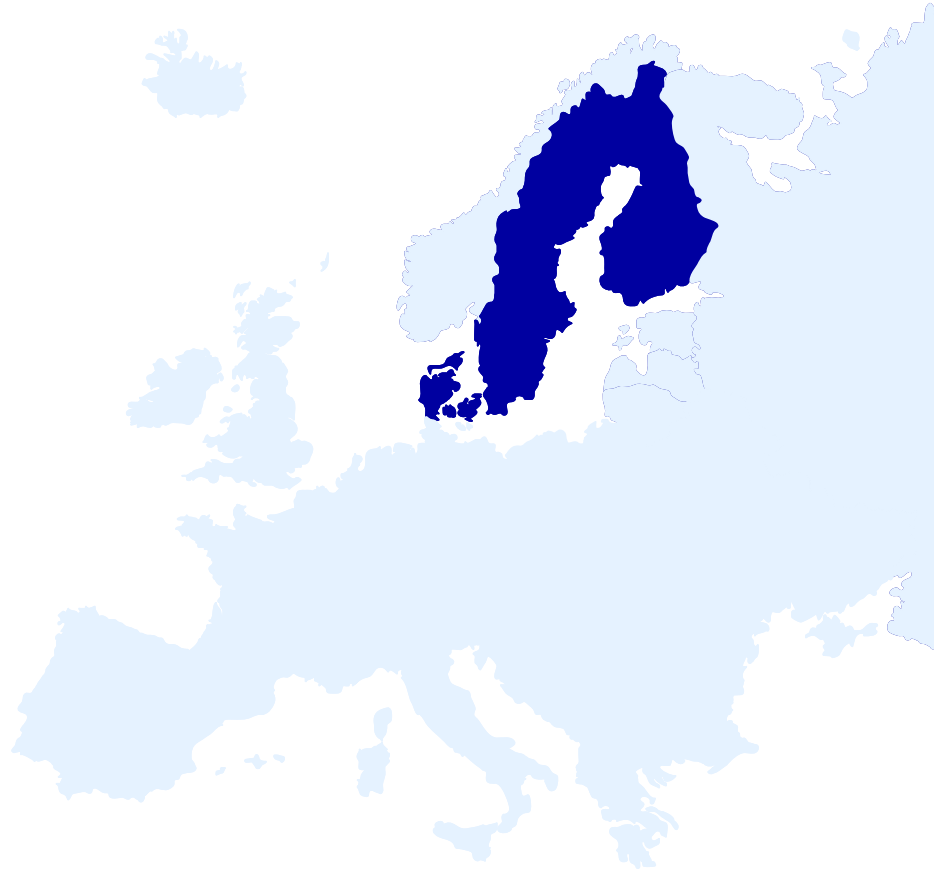


In our implementation of the BIRD Data Model, one of the key lessons we learned was the critical importance of close cooperation between our commercial bank and the European Central Bank (ECB). Implementing BIRD at an early stage of its review presented its own challenges, especially when it came to mapping between AnaCredit and BIRD, which was not yet fully ready. Through constant collaboration, communication, and feedback exchange with the ECB, we were able to navigate these challenges effectively and ensure a successful implementation.



In the second phase of our implementation, we decided to base COREP reporting on a BIRD-based solution, despite it not aligning with the ECB's plans for the review of the BIRD LDM. As COREP requirements will not be validated against BIRD this year, we need to customize the model to source the necessary data for COREP reporting. To maintain cooperation with the ECB and stay close to the original BIRD model, we will create a branch in the ECB GitLab repository. The resulting model will be proposed to the Work Stream on Data Modelling for discussion, finalization, and eventual merging into the official BIRD LDM. Through collaboration, we aim to meet COREP reporting needs while remaining within the broader BIRD framework and ECB's guidance.

Customizing BIRD for Local Compliance



While the BIRD Data Model provided a comprehensive framework for regulatory reporting, we recognized the need to incorporate local requirements defined by national central banks.

Adhering to the ECB design principles of BIRD, we modelled extensions to the BIRD Data Model to fulfil these local requirements.

In the case of AnaCredit reporting, we had to add 47 new attributes to the BIRD model to cater to the specific AnaCredit needs and regulations of Finland, Sweden, and Denmark. This customization ensured compliance with local reporting standards while maintaining alignment with the overarching BIRD framework.

Key Factors for Easier Implementation of the BIRD Model in Practice

Clear Roadmap for BIRD Review

- Having a clear roadmap outlining the order in which the BIRD model will be reviewed against the requirements of specific reporting frameworks is crucial.
- This roadmap enables synchronization of prototyping efforts in commercial banks with the ECB BIRD expert subgroups.
- Aligning implementation timelines with the BIRD review process ensures better collaboration and reduces the risk of potential misalignments.

Documentation of Transformation Rules / Mapping

- Comprehensive documentation of transformation rules / mapping is essential for a smooth data flow from the BIRD IL (Intermediate Layer) to the non-reference output layer of regulatory reports.
- Clear and well-defined transformation rules facilitate the mapping and conversion of data between BIRD and specific reporting frameworks.
- This documentation serves as a reference guide for developers and ensures accuracy in data transformation processes.

Validation Rules for BIRD IL

- Establishing validation rules for the BIRD IL layer is vital to maintain data integrity and quality.
- Validation rules should encompass referential integrity, completeness, and consistency checks.
- By defining these rules, potential errors or inconsistencies can be detected and addressed early in the implementation process, minimizing reporting inaccuracies.

Comprehensive BIRD Manuals

- BIRD manuals should provide detailed definitions for every subtype and attribute present in the BIRD LDM (Logical Data Model).
- These manuals should offer similar depth and clarity as the AnaCredit manuals, which are known for their thoroughness.
- Adequate explanations are essential to support a successful implementation in a commercial bank setting.
- This helps bridge the gap between the high-level introduction to the LDM document and the detailed understanding required during the implementation

Nordea

Thank you

