

Banking Risk & Regulatory Academy
2021

10 WEBINARS

DAY1 | 14-JUNE

- 1) What's new on the regulatory and supervisory agenda?
- 2) Capital management & stress testing in the post-COVID period

DAY2 | 15-JUNE

- 1) The post-COVID credit risk environment
- 2) The banking sector's NPL outlook

DAY3 | 16-JUNE

- 1) Strategic view on the BIRD
- 2) Cloud

DAY4 | 17-JUNE

- 1) ESG strategy for the banking sector
- 2) Deep dive in the cyber and IT security ecosystem

DAYS | 18-JUNE

- 1) All about AML: from EBA's expectations to recent innovations
- 2) RegTech insights – the future of compliance

35 DELOITTE SUBJECT MATTER EXPERTS



11 COUNTRIES



DAY 3 / SESSION 1

Strategic view on the BIRD

Agenda

1: It's been eight years since PERDARR

The current state of Finance & Risk data management

2: About The BIRD

What is it (not)

3: A bird's a view on The BIRD

Unpacking The BIRD and putting it to use

4: A strategic view on The BIRD

Incentivizing data management and reporting



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1: It's been eight years since PERDARR

The current state of data management

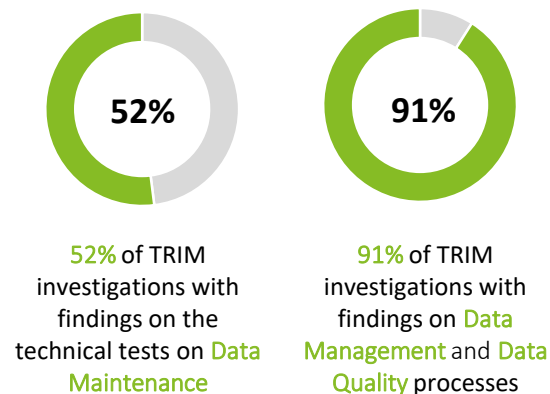
The current state of data management

As shared by our FSI clients from across the globe

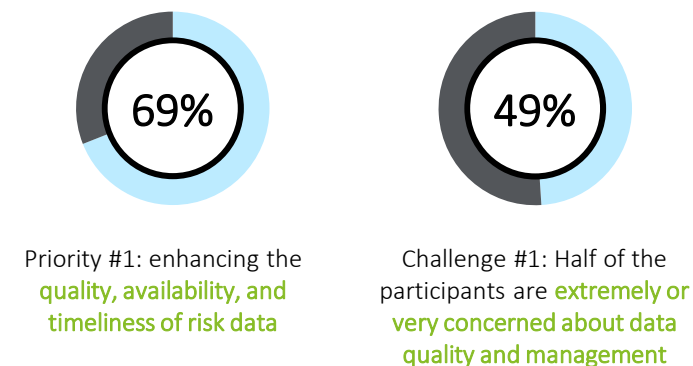
Regulatory Obligations

- **On-Site Inspections (OSI)** findings show that banks & insurers face challenges in managing their regulatory reporting processes centrally with sufficient controls;
- **TRIM** and the Joint Supervisory Teams (**JST**) focus increasingly on data consistency and data lineage; explicit obligations for having a **Data Quality Framework** in place;
- The new **Definition of Default** poses a huge challenge regarding the retrieval of historical data;
- Increasing number of ad hoc data requests (e.g. **SME loan tapes**, **ECB COVID-19 requests**) require difficult prioritization decision and high work loads;
- Supervisors expect to measure and monitor the accuracy and completeness of their finance and risk data by applying **BCBS #239 & Solvency II** principles.
- Supervision in the future will be more data driven, **ESG Pillar III disclosures** is only the beginning of what is to come

Survey of TRIM Findings

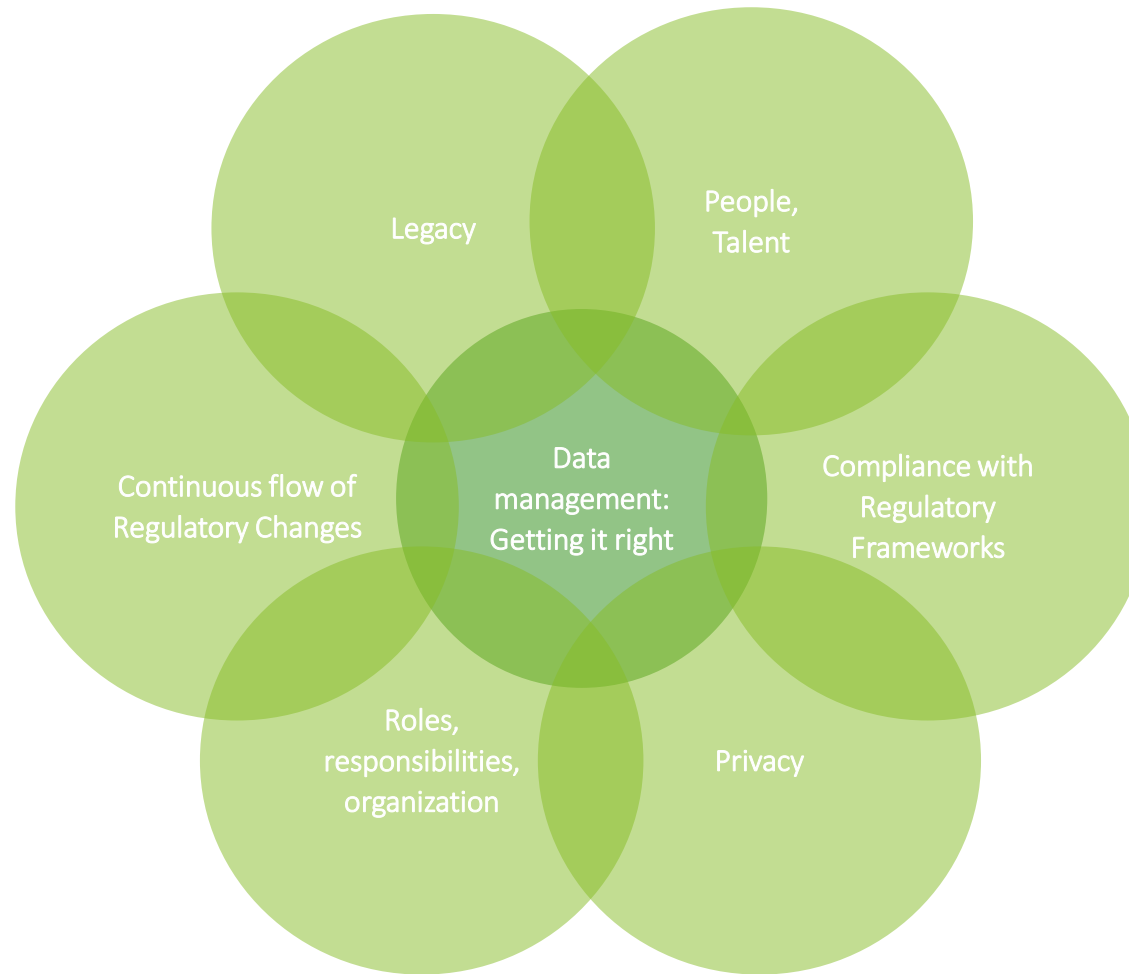


Data Quality is a top priority



The current state of data management

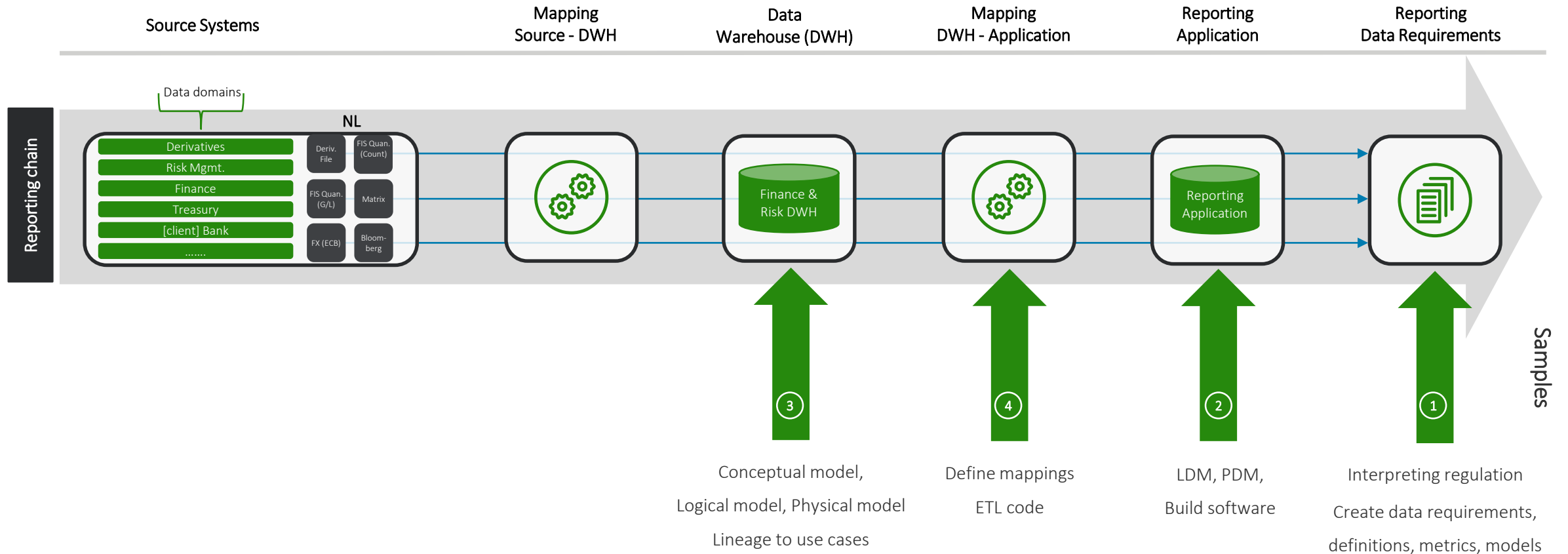
Why is it so difficult to “get it right”?



The multifaceted challenge of data management
(selection of facets)

The current state of data management

Getting it right requires a broad focus and many talents



A silhouette of a fluffy bird, possibly a chick, stands on a dark, rocky ledge. The bird is facing left. The background is a bright, orange and yellow sky, suggesting a sunset or sunrise. The sky is filled with soft, wispy clouds. The overall mood is serene and contemplative.

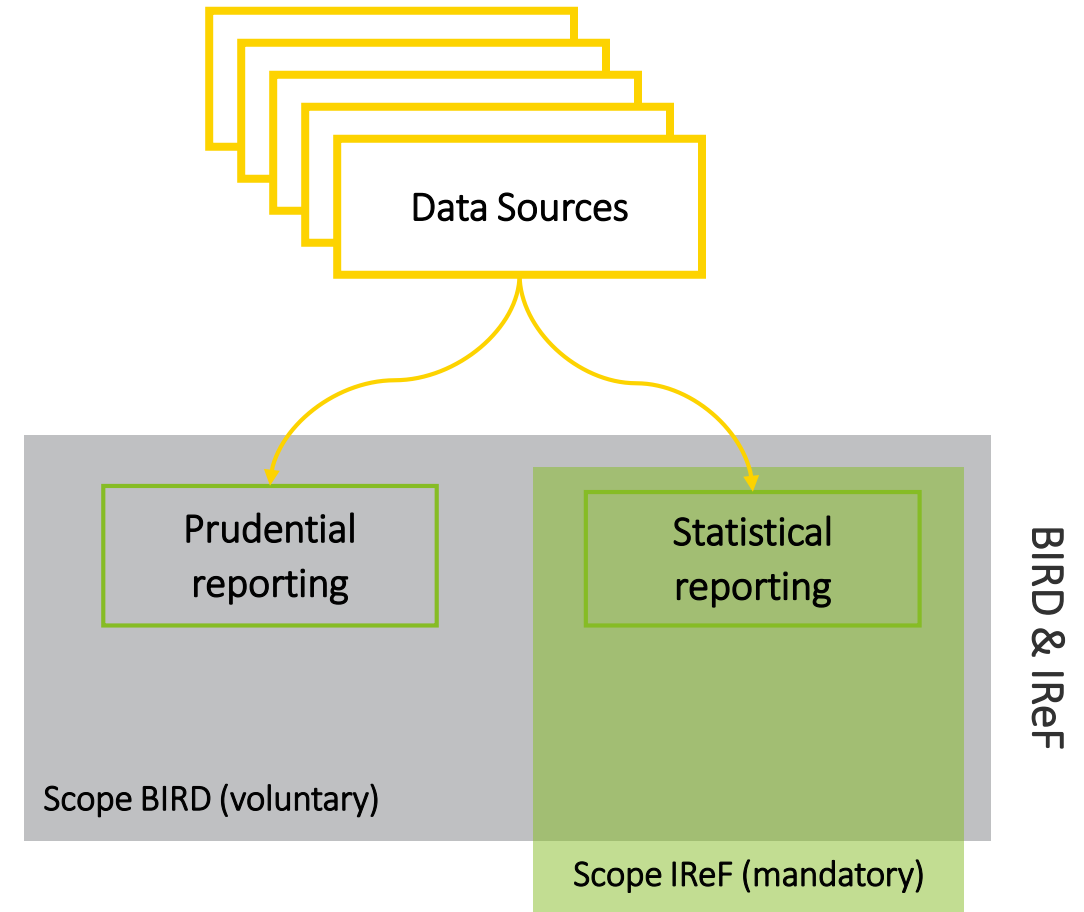
2: About the BIRD

The European System of Central Banks (ESCB) long-term approach to banks' reporting

The Integrated Reporting Framework (IReF)

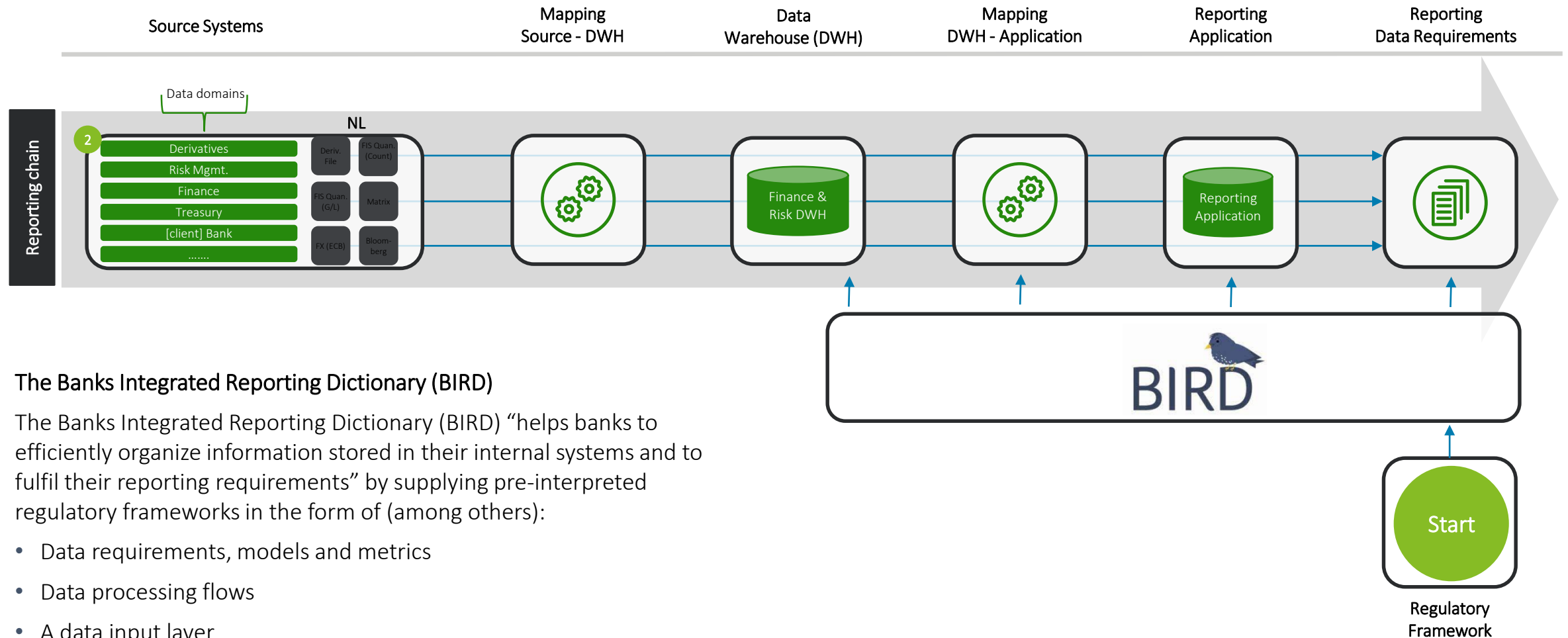
The Integrated Reporting Framework (IReF)

- integrate the Eurosystem's statistical reporting requirements addressed at banks (timeframe 2024-2027).
- directly applicable to banks resident in the euro area
- would not have to be incorporated into national collection frameworks.
- requirements that are not covered under the IReF scheme will either be discontinued or preserved under the IReF as country-specific requirements
- an extended IReF technical layer will be developed to model country-specific requirements and describe them from a technical and methodological perspective, overlapping requirements across two or more countries will be described in a uniform way that is consistent with IReF requirements
- IReF will replace existing regulations on BSI, MIR, SHS and AnaCredit (for deposit taking institutions)



The European System of Central Banks (ESCB) long-term approach to banks' reporting

The Banks Integrated Reporting Dictionary (BIRD)



The Banks Integrated Reporting Dictionary (BIRD)

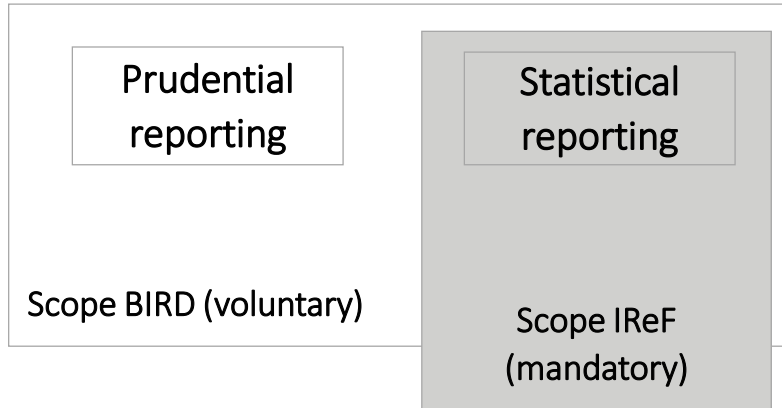
The Banks Integrated Reporting Dictionary (BIRD) “helps banks to efficiently organize information stored in their internal systems and to fulfil their reporting requirements” by supplying pre-interpreted regulatory frameworks in the form of (among others):

- Data requirements, models and metrics
- Data processing flows
- A data input layer

The European System of Central Banks (ESCB) long-term approach to banks' reporting

The Banks Integrated Reporting Dictionary (BIRD)

Scope



Which statistical and supervisory regulatory frameworks are (or will be) covered by the BIRD?

- AnaCredit, Securities Holdings Statistics (SHS), Balance Sheet Items (BSI) Statistics, Interest Rate (MIR) Statistics, the balance of payments and national accounts
- The additional requirements under the Single Supervisory Mechanism;
- The EBA's Implementing Technical Standards (ITS), including Common Reporting (COREP) and Financial Reporting (FINREP)

Advantages for banks (as per BIRD Steering Group)

- Different reports can be produced from a single input layer by applying harmonized algorithms. This **reduces the reporting burden for the banks**, improves the consistency and quality of their data and removes the need for them to manage each mandatory data collection separately.
- There are well-defined transformation rules, which include the calculations used to obtain certain regulatory figures. These provide a univocal interpretation of regulations and greater clarity, while also **increasing compliance with the regulatory requirements**
- **Less time and effort** is needed to analyze and comply with new reporting requirements, which increases efficiency and reduces costs
- The banks develop a better understanding of and a greater interest in what the data include and how they are produced. This means that the **banks can manage and use their data more effectively**.

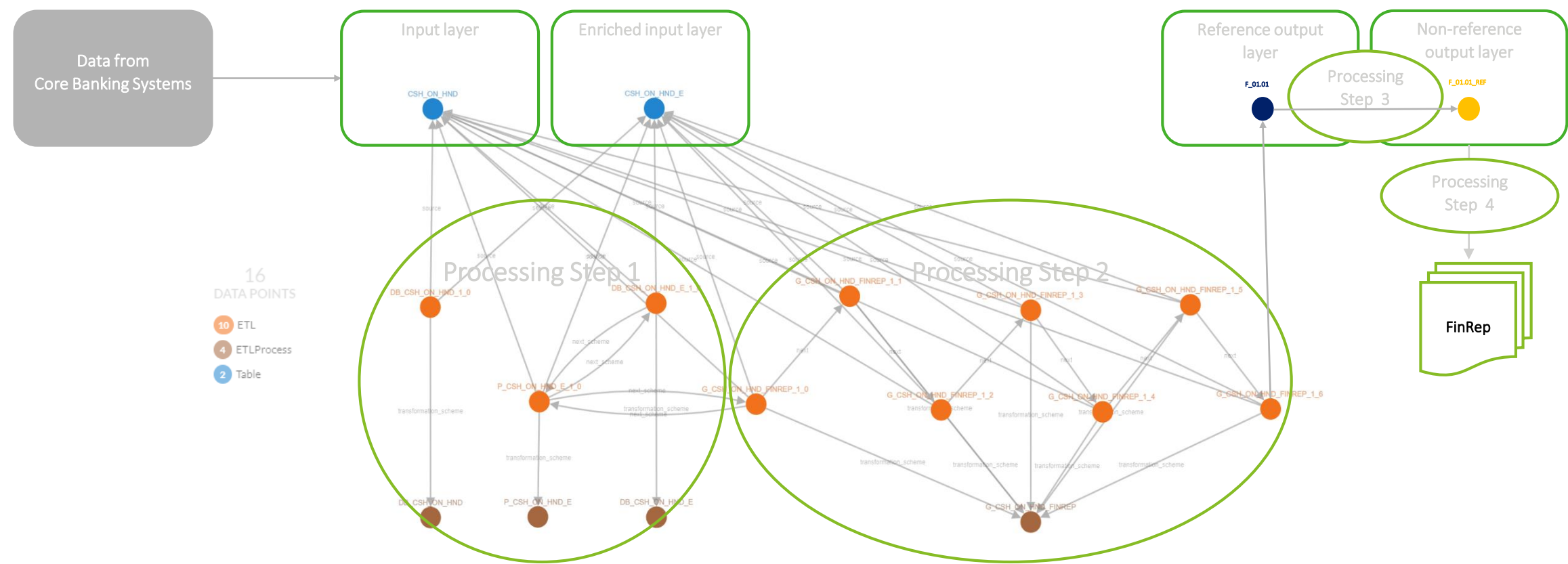
3: A bird's eye view on the BIRD



Unpacking The BIRD

BIRD describes which data should be extracted from bank's internal systems and comes with a set of defined rules for transforming this data to comply with reporting requirements

An example: subset of cubes and rules based on Cash on Hand



But... how can we put BIRD to use?

BIRD application viewed through two perspectives: 1) BIRD to support changing the reporting process and 2) BIRD enabled reporting production

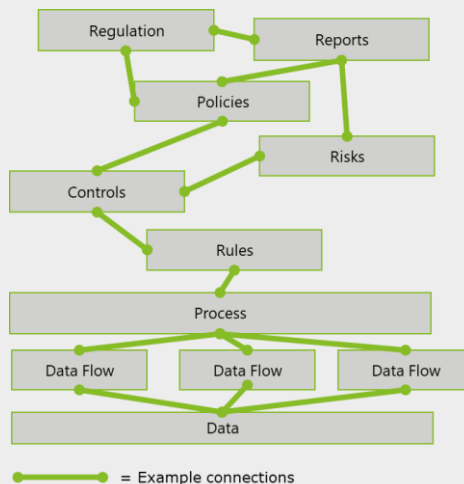
The BIRD lens

A: Support changes

*BIRD provides conditions that combine into an outlook on design.
BIRD serves as a guiding principle in designing the reporting process
covering documentation, regulatory requirements, data definitions
etc.*

Typical challenges:

- *Impact of changes: which layer, which domain, how are they connected?*
- *Redundancies (data flow)*
- *Dependencies*
- *Are we compliant?*



B: BIRD enabled report production

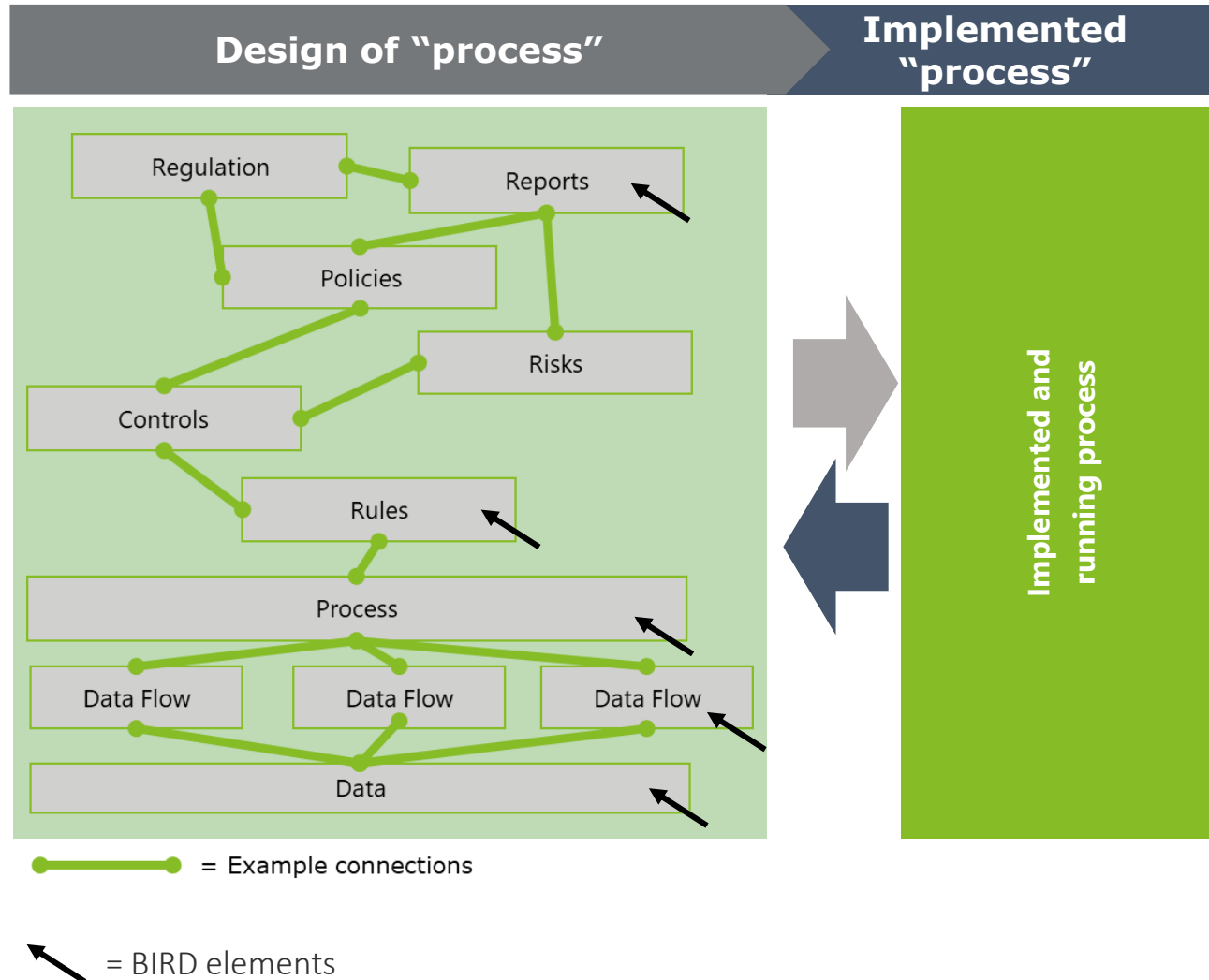
*Automatically using the BIRD rules and transformations
configure a working reporting engine*

Questions:

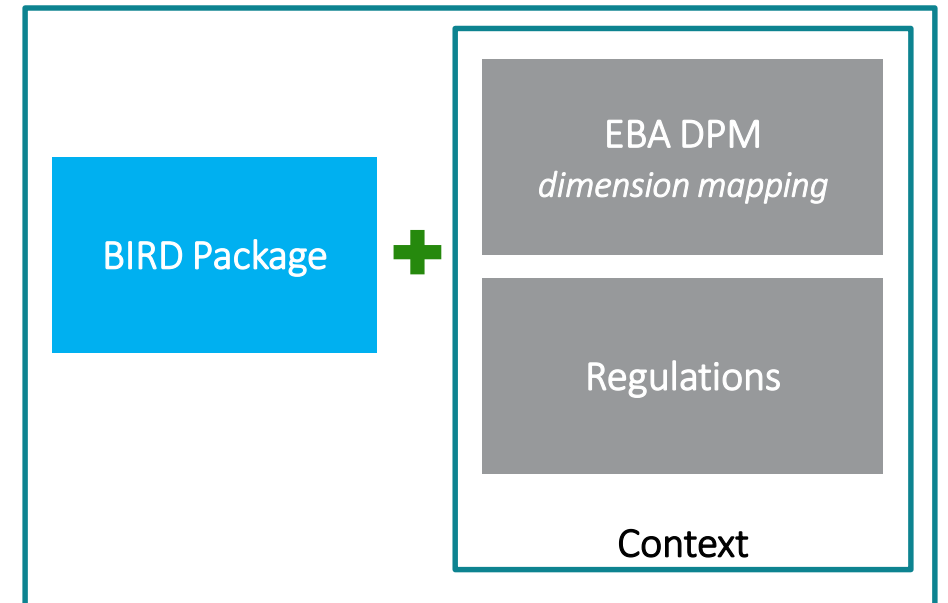
- **Can 'BIRD' procedure reports?** ✓
- *Can 'BIRD' be used to challenge the status quo of custom build/closed vendor solutions?*
- *Is BIRD a stepping-stone towards 'data driven' (machine interpretable) rules & regulations?*

Creating a BIRD Knowledge Graph

Connecting the different concepts in data-driven reporting using BIRD while integrating execution with design

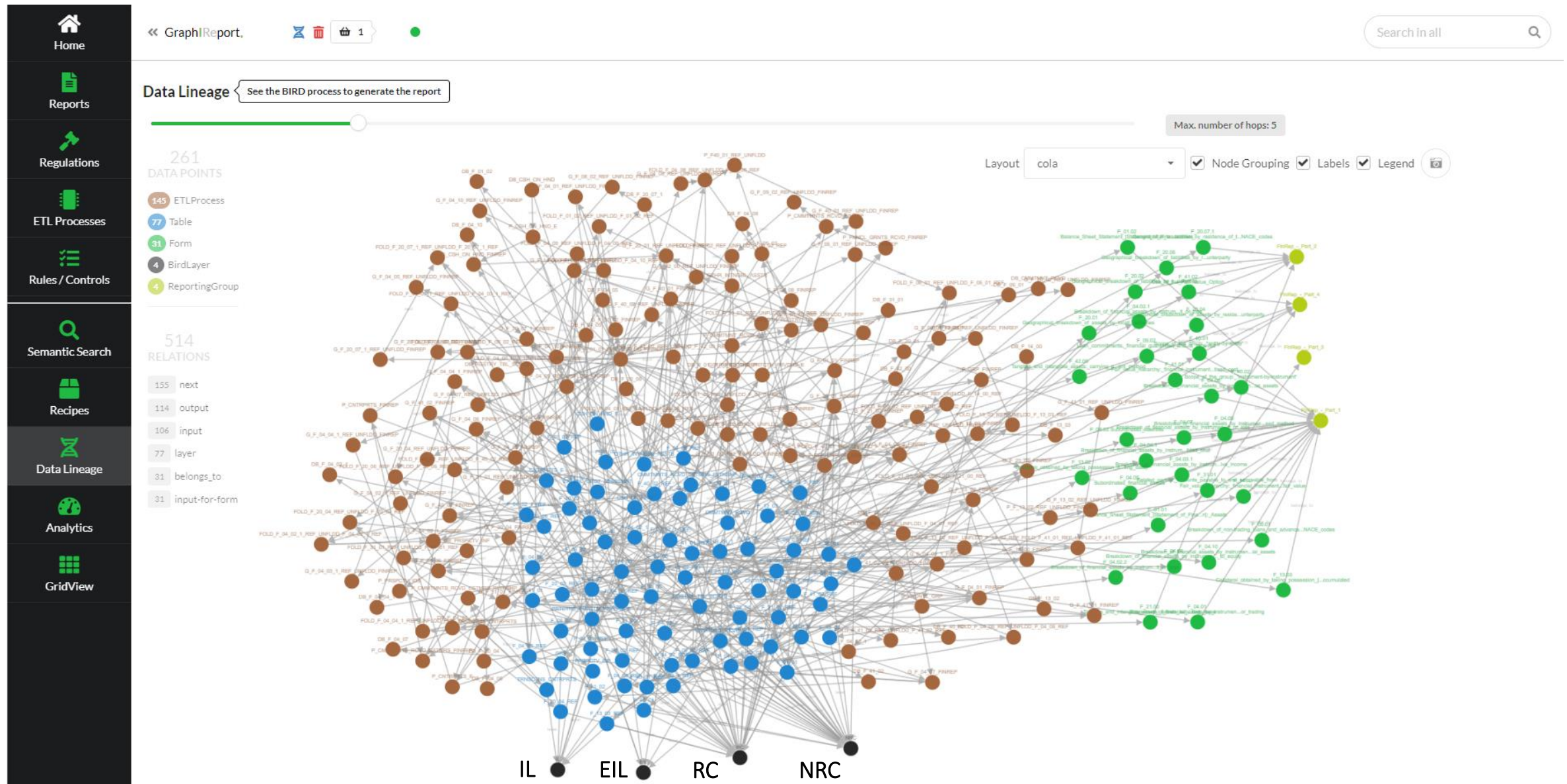


A knowledge graph is a means to represent **knowledge** in a domain of interest using a **graph** structure.



Creating a BIRD Knowledge Graph: Overview

Connecting the different concepts in data-driven reporting while integrating execution with design



Creating a BIRD Knowledge Graph: Demo 1

Connecting the different concepts in data-driven reporting while integrating execution with design



Creating a BIRD Knowledge Graph: Demo 2

Connecting the different concepts in data-driven reporting while integrating execution with design



4: A strategic view on the BIRD



Regulatory Lineage & Metadata Lineage – enabled by the BIRD

Data Lineage Show how data is transformed from source to report

136 DATA POINTS

Layout: fcose [x] Node Grouping [x] Labels [x] Legend [x]

136 RELATIONS

Count	Relation
46	row-of-form
31	next
24	refers_externally_to
13	childOf
9	column-of-form
7	check-on-table
2	data-out
1	input-for-form
1	legal_reference
1	legal_source
1	data-in

The diagram illustrates the data lineage for the 'FINREP_GENERAL_LEDGER'. It shows a central node 'FINREP_GENERAL_LEDGER' (blue) which is the source for various data points (orange and green). The data points are categorized into 'DATA POINTS' and 'RELATIONS'. The 'DATA POINTS' include 'FormRow', 'ETL', 'Document', 'DocumentSegment', 'FormColumn', 'Table', 'Form', 'LegalReference', and 'DocumentTree'. The 'RELATIONS' include 'row-of-form', 'next', 'refers_externally_to', 'childOf', 'column-of-form', 'check-on-table', 'data-out', 'input-for-form', 'legal_reference', 'legal_source', and 'data-in'. The diagram also shows a flow of data from various regulatory sources (red nodes) to the central ledger. These sources include 'EBA-R-European Banking Authority Regulation', 'AIFMD-Alternative Investment Fund Managers Directive', 'DPR-Data Protection Regulation', 'CRD IV-Capital Requirements Directive IV', 'Regulation (EC) No 1745/2003 of the European Central Bank (ECB) (Regulation (EC) No 1745/2003)', 'Commission Regulation (EC) No 2009/111/EC of the European Parliament and of the Council', 'ESMA-European Securities and Markets Authority Regulation', 'PD-Prospectus Directive', 'CRD I-Capital Requirements Directive I', 'BAD-Bank Accounts Directive', 'FICOD-Financial Conglomerates Directive', 'EMIR-European Market Infrastructure Regulation', 'UCITS-Undertakings for the Collective Investment in Transferable Securities Directive', 'CRR-Regulation (EU) No 1093/2010 of the European Parliament and of the Council', 'MIFID I-Markets in Financial Instruments Directive I', '390 Covered_bonds', '340 Deposits redeemable at notice', 'Current accounts / overnight deposits', '1000 Repurchase agreements', and '150 Non-convertible'. The flow is indicated by arrows and labels like 'check-on-table', 'data-out', and 'input-for-form'.

BIRD enabled AI & Analytics

Providing insights on critical data elements, data hotspots and putting data quality issues into context

Data Lineage See the BIRD process to generate the report

Max. number of hops: 5

Layout: concentric ☒ Node Grouping ☒ Labels ☒ Legend

G_F_01_01_REF_UNFLDD_FINRE
 ETLProcess, TransformationScheme
 #100421

label Generation of the unfolded version of the cube '[[F_01_01_REF]]'

code G_F_01_01_REF_UNFLDD_FINREP

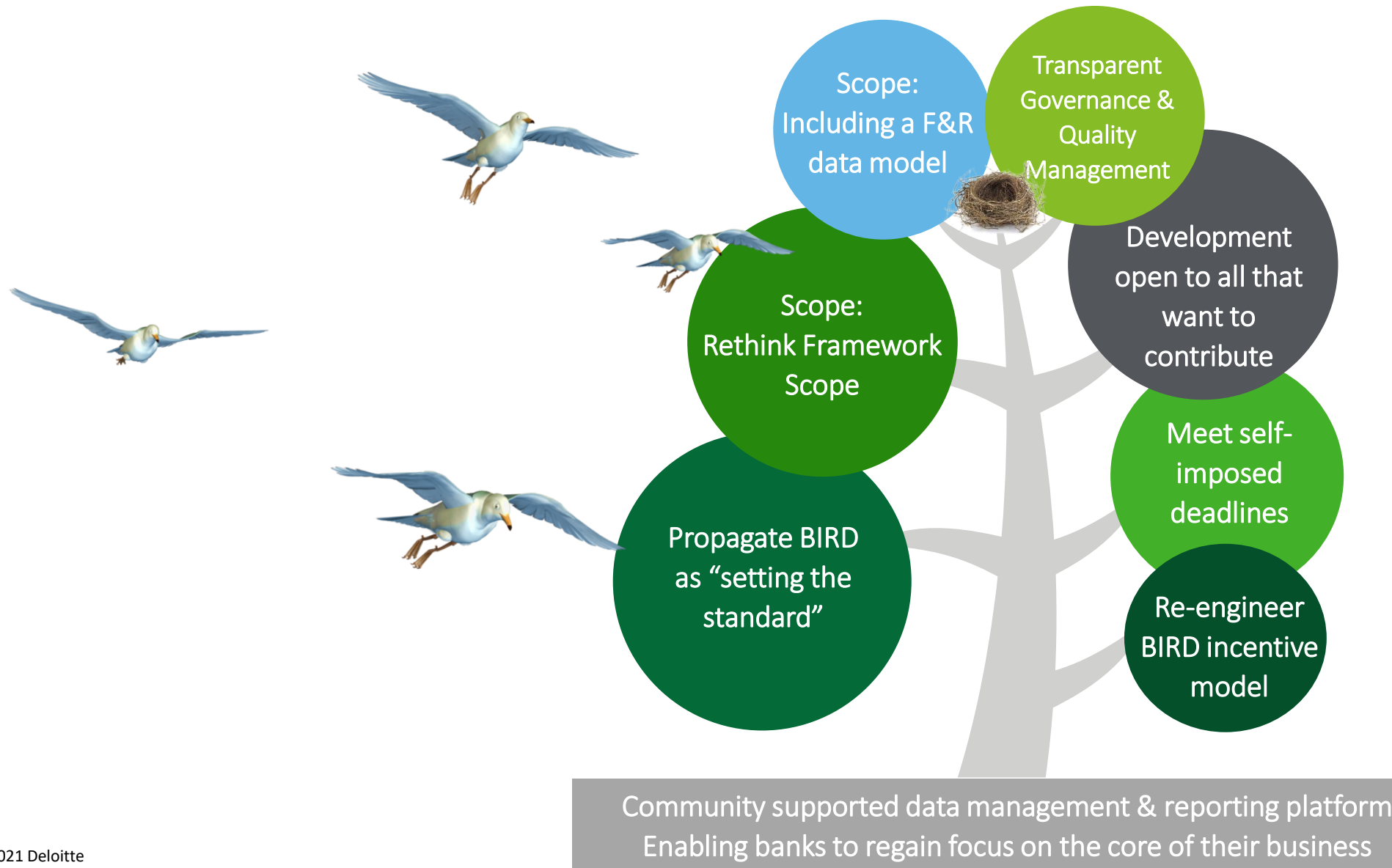
description Generates the unfolded version of the cube '[[F_01_01_REF]]' by (1) selecting relevant input data, (2) application of hierarchies and filters and (3) setting the dimensions (i.e. primary key(s)) of the cube

260 DATA POINTS

- 145 ETLProcess
- 77 Table
- 31 Form
- 4 BirdLayer
- 3 ReportingGroup

The business case for BIRD

Key challenges to solve for disrupting banks' data management and reporting





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