



OESTERREICHISCHE NATIONALBANK
EUROSYSTEM

New Ways in Reporting for Austrian Banks

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Why new ways in data reporting?

- In the field of central banks' statistics and supervision user and hence **data reporting** requirements have **grown** significantly
- They are getting more **granular** and **complex**
- Traditionally, each body used to devise its **own approach to data collection**
- This often leads to **redundant** data collection schemes and a **lack of data consistency**
- Internal and external reporting often **diverge**
- Need for **high-quality, comparable** and **timely data** on the one hand (**BCBS 239**) and **cost efficiency** on the other-hand motivate for
- **New ways** in data reporting

Components of the Austrian integrated data model

„BasicCube“
(input layer)

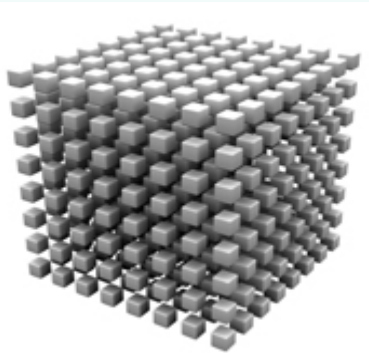
transmission
release through
credit institutions

„SmartCubes“
(primary reporting)

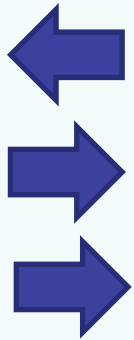
transmission in
OeNB

Secondary statistics
and templates

physically implemented



Interfaces operational systems



Basic Cube is mainly based on single business cases

- Loans
- Derivatives
- Off-balance sheet
- Securities

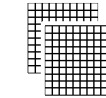
Transformation rules

Selection, Aggregation

ISIN, Loan Cube
(micro data) &
aggregated
cubes

Aggregation

Supervisory
(EBA-ITS)



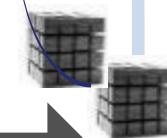
Statistics



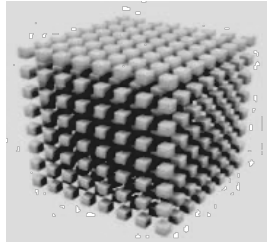
National
Needs



Reference data



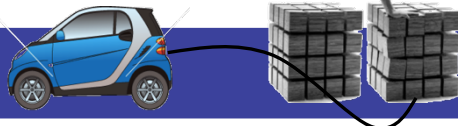
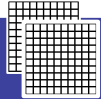
Meldewesen Wiki: Joint data model documentation



Basic Cube

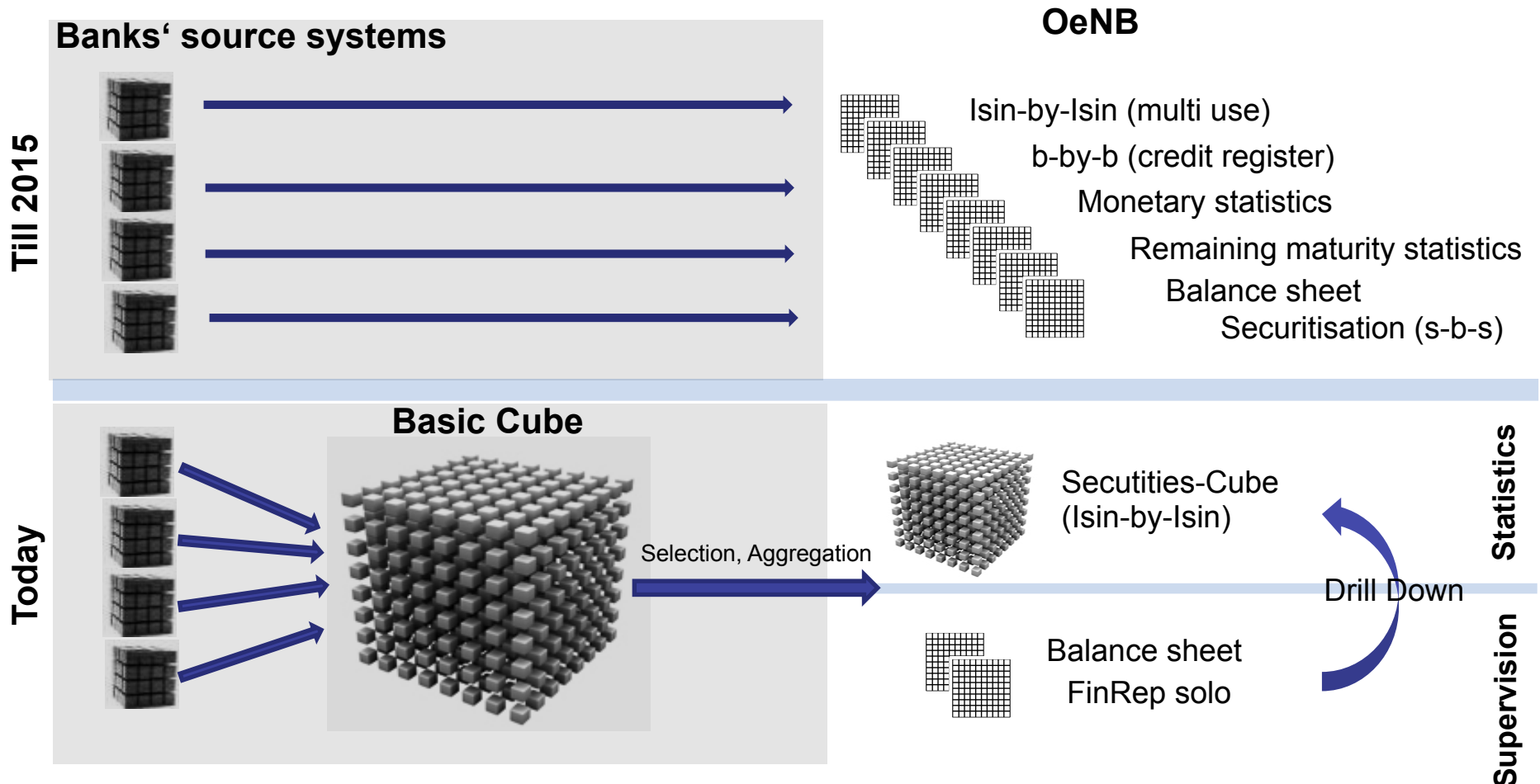
- ... Provides an exact, **standardised**, unique and hence unambiguous definition of individual business transactions and their attributes
- ... Establishes a **harmonised** database model at a very **granular** level
- **Consistency**, the **absence of redundancy** and ease of **expandability** are key features of the Basic Cube
- ... Has been **developed jointly** by banks and the OeNB, but OeNB staff will not be allowed to access the Basic Cube
- ... Will be the **basis for** (almost) all **reporting obligations** and it is the harmonised basis for additional data requests
- ... **Is not a legally binding** but banks committed to its implementation in a cooperation agreement

Main differences between Smart Cubes and “Templates”

Smart Cubes 	Templates 
Multidimensional → Minimising of redundancies	Max. 3 dimensions in one table →
Integration of different requirements in one cube	Silo solution (Templates of different areas are independent from each other)
More flexibility in analysis	Less flexible in analysis
Higher granularity due to combination of dimensions	Less granularity
Risk of data combinations which will never be analysed	1:1 picture of current user requirements
More complex in data processing	„Easy“ data processing

Evolution of data collection in the OeNB

Using the example of unconsolidated securities assets of banks



Smart Cubes – Integrating EBA/SSM requirements

- **Current situation:** Granular data respectively “statistical” data are collected in **parallel** to some EBA/SSM requirements, e.g.
 - FinRep vs. SHS(Group) – SHSG contains a lot of FinRep securities’ data at a sec-by-sec level
 - Asset encumbrance vs. AnaCredit/SHS(G) – both contain information about encumbered assets
 - FinRep “solo” vs. AnaCredit – AnaCredit contains a lot of FinRep loans’ data at a loan-by-loan level

In case of extension of AnaCredit to risk (phase 2) and consolidated data (phase 3)

 - CoRep (incl. Large Exposure) vs. AnaCredit
 - FinRep (incl. non-performing and forbearance) vs. AnaCredit
- To **alleviate reporting burden** and **foster consistency**, granular data and/or statistical data could be used in future to **reduce dimensions** in EBA/SSM templates

Expectations on the new data model



Multi-dimensional cubes allow the **re-use of data** for different needs



More **flexibility** in reporting and analysis



Consistency of input- and output data (**internal, external reporting**)

Quality

More **clarity** regarding definitions and “automatically” higher **quality** through Basic Cube



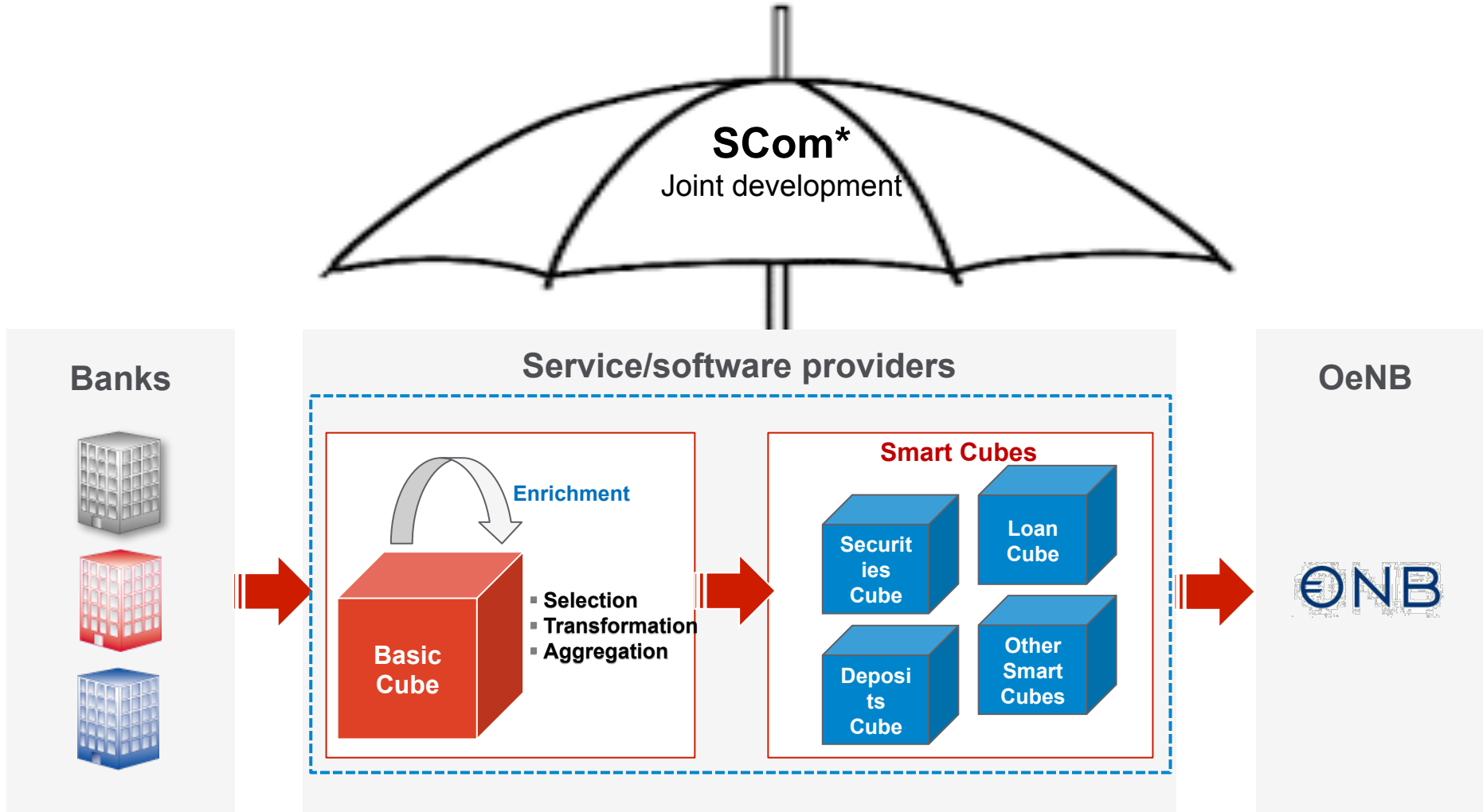
Reduction of costs for the whole market (i) to apply new requirements and (ii) for quality assurance



Passive data – less burdensome for both sides and better response times in case of ad hoc requests

- It's **too early** to judge whether all expectations can be fulfilled
- However, first cube-based reporting as well as AnaCredit modelling meetings give evidence that we are on the **right way**

Key factor cooperation with banks/software firms



*Standing Committee with regard to reporting

Reporting documentation system

- **Purpose:** Joint documentation of SmartCubes, BasicCube and other related objects (e.g. algorithms, transformation)
- **Benefit:** simple and uncomplicated collaboration of OeNB's and banks' staff on a joint document; advanced software skills are not required
- Nominated staff members have a reading, some even more a writing **access**
- Parts of Wiki are summarised to a single pdf-document, which is (i) a **reporting guideline** and (ii) a **business specification** for software providers
- Updated **full** and **tracked versions** of this documentation are published several times a year based on an agreed road map at the OeNB homepage (<https://www.oenb.at/Statistik/Meldewesen/gemeinsames-meldewesen-datenmodell.html>)

Advantages/Challenges for banks

- Precise, consistent specifications → **easier implementation**
- Less redundancies → **less comparisons** and inquiries from OeNB
- No **burdensome ex-post corrections** of aggregated reporting templates
- **Higher flexibility** in case of new requirements
- **Higher efficiency** regarding the implementation of ad hoc requests
- **Consistency** between internal and external (management) reporting



- **Rethinking in organisation and processes** of reporting
- Not the aggregated final reporting template (e.g.: FinRep, BSI) but the **single business case** is in focus
- **Less degrees of freedom** in implementation



Data quality

- Medium- to long term **improvement of data quality with less costs/ efforts for the whole market** is expected, because ...
- the use of reporting data for internal purposes will increase banks' **own interest in high quality reporting data**
- precise definitions und clear specifications lead to **less inquiries** from banks and to **better results**
- a central implementation **concentrates efforts** and leads to **unique solutions** → simplifies the **communication** between banks and OeNB
- the data model requires better quality at the level of a single business case, whereby quality problems are **solved at the root**
- redundancy-free collections **minimise the efforts of burdensome ex post comparisons**

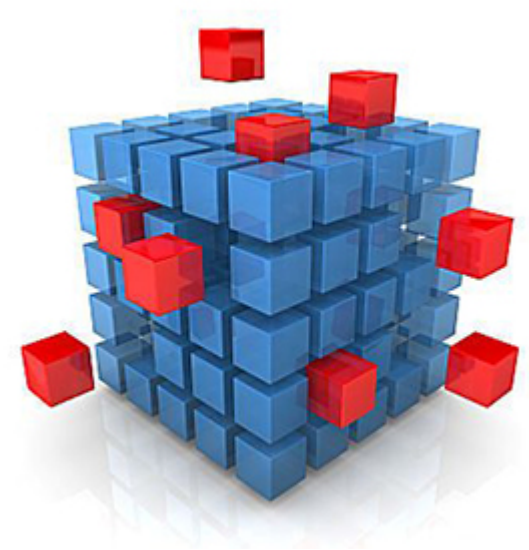
Specific challenges - OeNB

- Higher **compilation efforts** in the OeNB
- **Dependencies** between processes due to integration
- **Increasing data volume**
- Higher **complexity** of processes, acknowledgement messages, analysis
- **Maintenance** of the data model documentation
- Higher **responsibility** due to precise data model and mapping rules
- New **quality assurance** methods
- Higher **Know How** needs with regard to the banking business
- **Legal** boundaries with regard to integration of different requirements
- **Initial costs**



Components of a successful paradigm change

- **Integration of all organisational units with standardised data collection tasks as a first step**
- **Top management support**
- **Integration of contents and detailed definition of requirements**
- **Transparent communication**
- **Inclusion of banks concerning the development**
- **Stepwise approach and a well planned transition period with a parallel testing phase**



Conclusions

- Integrative data model of OeNB represents a **paradigm shift** in bank supervision and statistical **data remittance**
- It requires on both sides (OeNB, reporting banks) a **rethinking** with regard to existing reporting processes and ...
- ... jointly developed **innovative solutions** in the areas of data processing and quality assurance
- It fosters two-way **understanding** und **transparency** of the reporting process
- Finally, it will lead to
 - higher **data quality**
 - **less redundant** data deliveries, and to
 - higher **flexibility** in case of new requirements
 - expected **lower costs**