BANQUE DE FRANCE
EUROSYSTÈME

Directorate General Statistics

Economic and Financial Regulation in the Era of Big Data

Panel 1 : MEASURING

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Salient features of BigData for measurement

- **New age of statistics:**
  - Need for more granular data to address new / complex issues
  - High expectations : ever-increasing volumes of data as input for better forecasts, indepth analysis in a more compressed time frame

- **Achieve multiple targets:**
  - **Handle heterogeneity** : BigData are aggregated from multiple sources
  - **Hedge against the uneven quality** of the data and noise accumulation : BigData contain various types of measurement errors, outliers and missing values
  - **Manage data complexity** and data dependence : selection biais, incidental endogeneity
  - **Break down data silos** and develop data sharing
  - **Reconsider traditional computing infrastructures** :
    - Need for new systems that support massively parallel data storage and processing
    - Need to ensure high levels of security and data confidentiality

- **We need a new system to meet these objectives**

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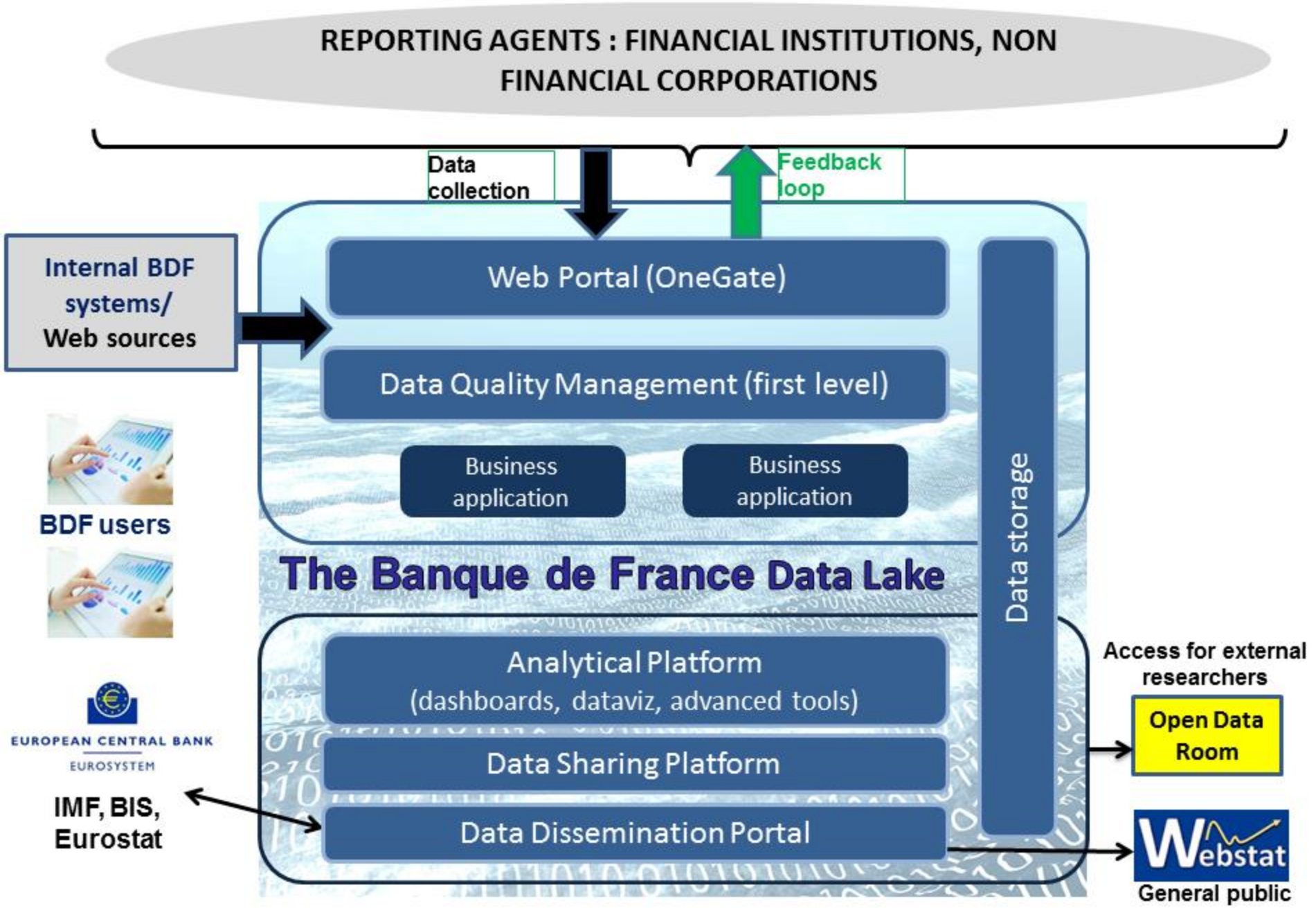
The Datalake project

- **A multidisciplinary granular data platform supplying flexible and innovative services to Banque de France internal users in the first place**

- The platform provides key services in the area of data management and analysis to the benefit of all business lines of the Banque de France :
  - Rethinking of data collection and storage to facilitate data processings and inference tools
  - Development of automated data quality management for first-level quality checks
  - Building of a common analytical platform covering a wide range of user needs
  - Fostering synergies between directorates by sharing datasets beyond organisational silos

- **The project is on track for full implementation by end 2018**
  - **A collaborative work** promoted by DG-Statistics with the IT Directorate and all business lines involved


REPORTING AGENTS : FINANCIAL INSTITUTIONS, NON FINANCIAL CORPORATIONS
Data collection
Feedback loop
Internal BDF systems/ Web sources
Web Portal (OneGate)
Data Quality Management (first level)
Business application
Business application
Data storage
BDF users
The Banque de France Data Lake
Analytical Platform (dashboards, dataviz, advanced tools)
Data Sharing Platform
Data Dissemination Portal
EUROPEAN CENTRAL BANK
EUROSYSTEM
IMF, BIS, Eurostat
Access for external researchers
Open Data Room
Webstat
General public

Datalake : a technical view