INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

eurostat

Statistics Portugal Survey Management System Architecture

NTTS 2013
Brussels

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Survey Management System
Business Statistics

- Objectives
  - Implement an integrated and consistent approach to survey management systems
  - Integrate, harmonize and reuse processes
  - Increase coherence and comparability by using the same updated population
  - Reduce statistical burden on data providers

Survey Management System Subsystems

Integrated Information System

Survey Management System

Fue Sigua Gresp GPap Webreg webinq SICC

- Business Register
  - Statistical Unit Registers System for business
    - Business; Local Unit; Road Vehicle; Periodical
  - Refreshed via administrative sources and surveys
  - Online shared data (access and update)
  - Definition of updating rules for statistical units

Survey Management System

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- Population and Sample Management
  - Population, sampling frame and sample central database
  - Focus on sample design and management
  - Trace down the statistical units life cycle
  - Create conditions to facilitate burden measurement

Survey Management System

- Respondents Management
  - Optimize cooperation and encourage participation of respondents
  - Respondents database (Webinq members and non members)
  - Online shared data (access and update)
  - Definition of updating rules for respondents data

Survey Management System

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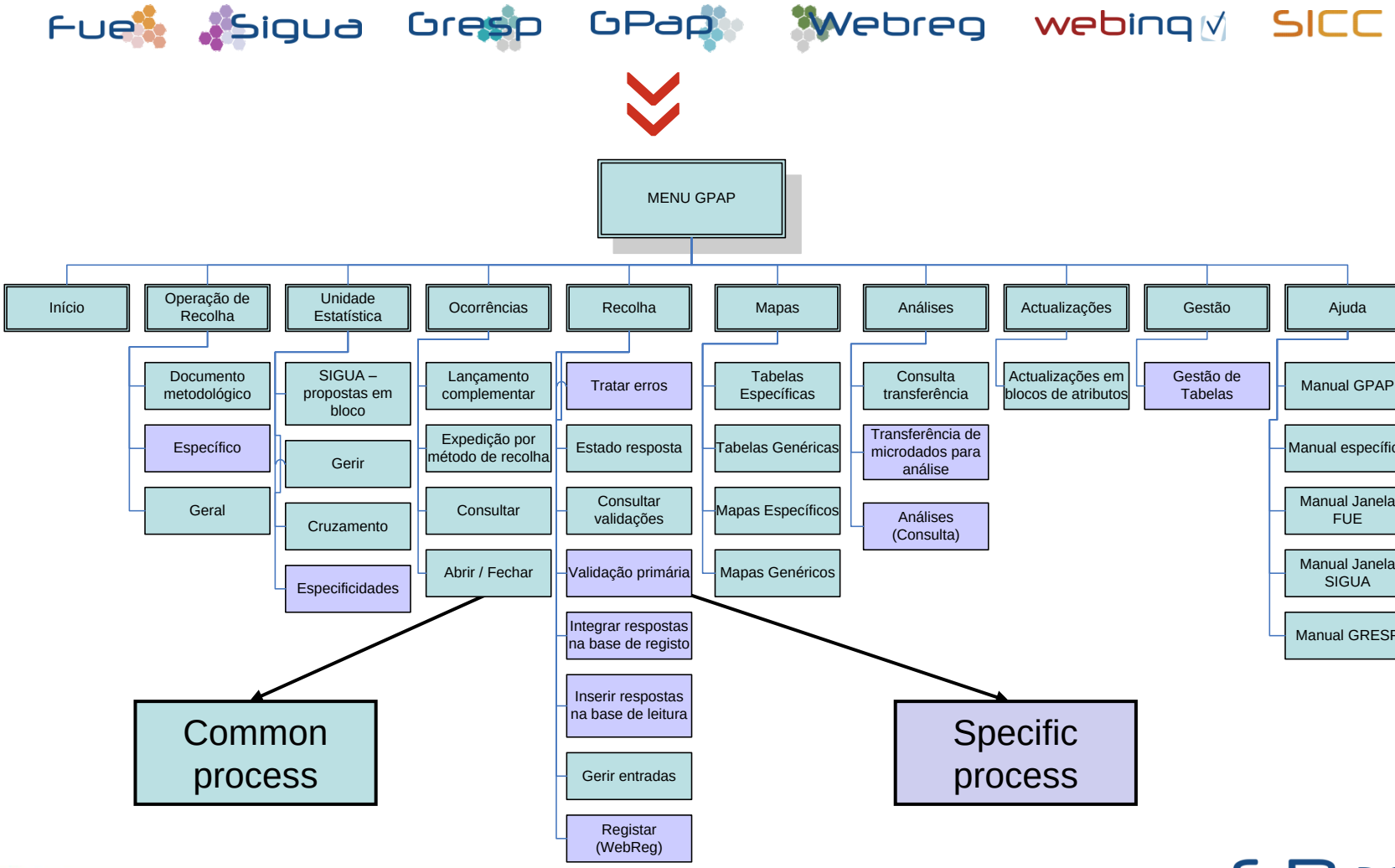
- Data Collection Process Management
  - Intercommunication with:
    - Business Register (FUE)
    - Samples (SIGUA)
    - Respondents (GRESP)
  - Execution and management of:
    - Common and standardized processes
    - Specific processes - according to each survey characteristics
  - Transmission of validated microdata to the Data Warehouse

Survey parameterization



Survey parameterization

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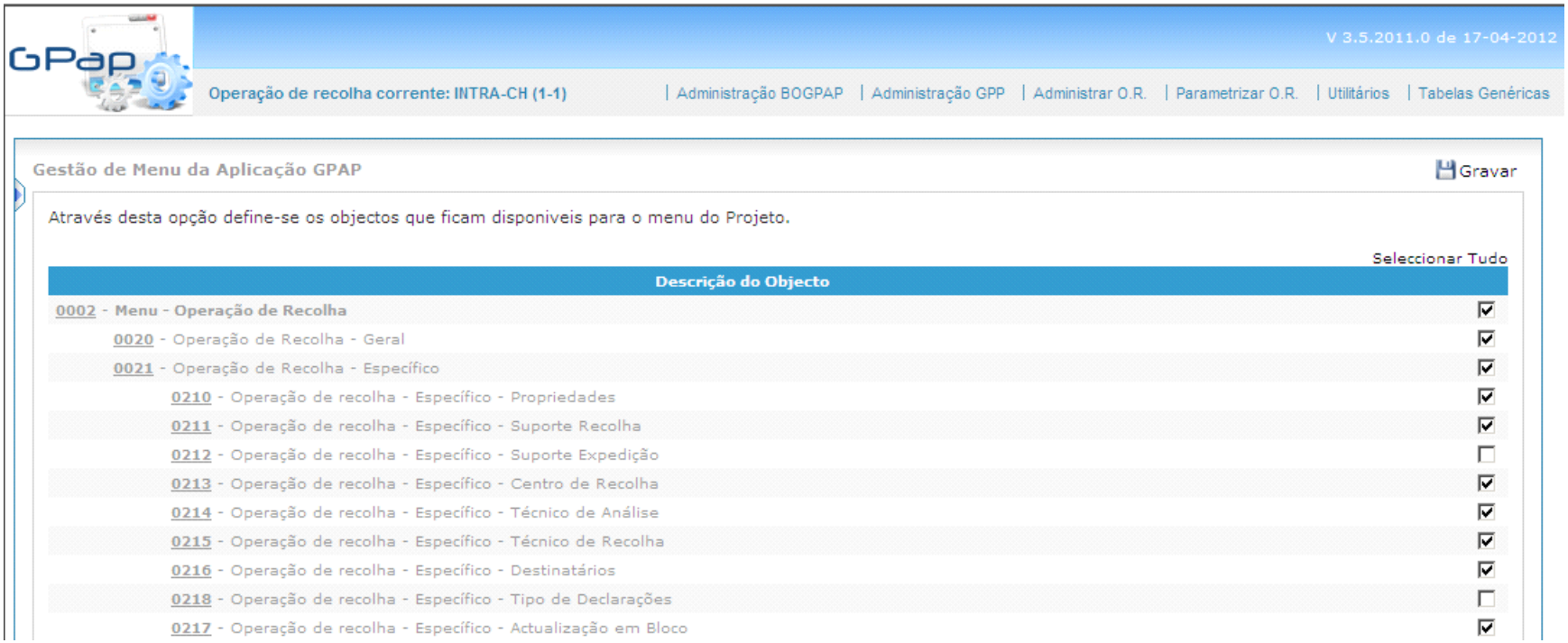

Survey Management System

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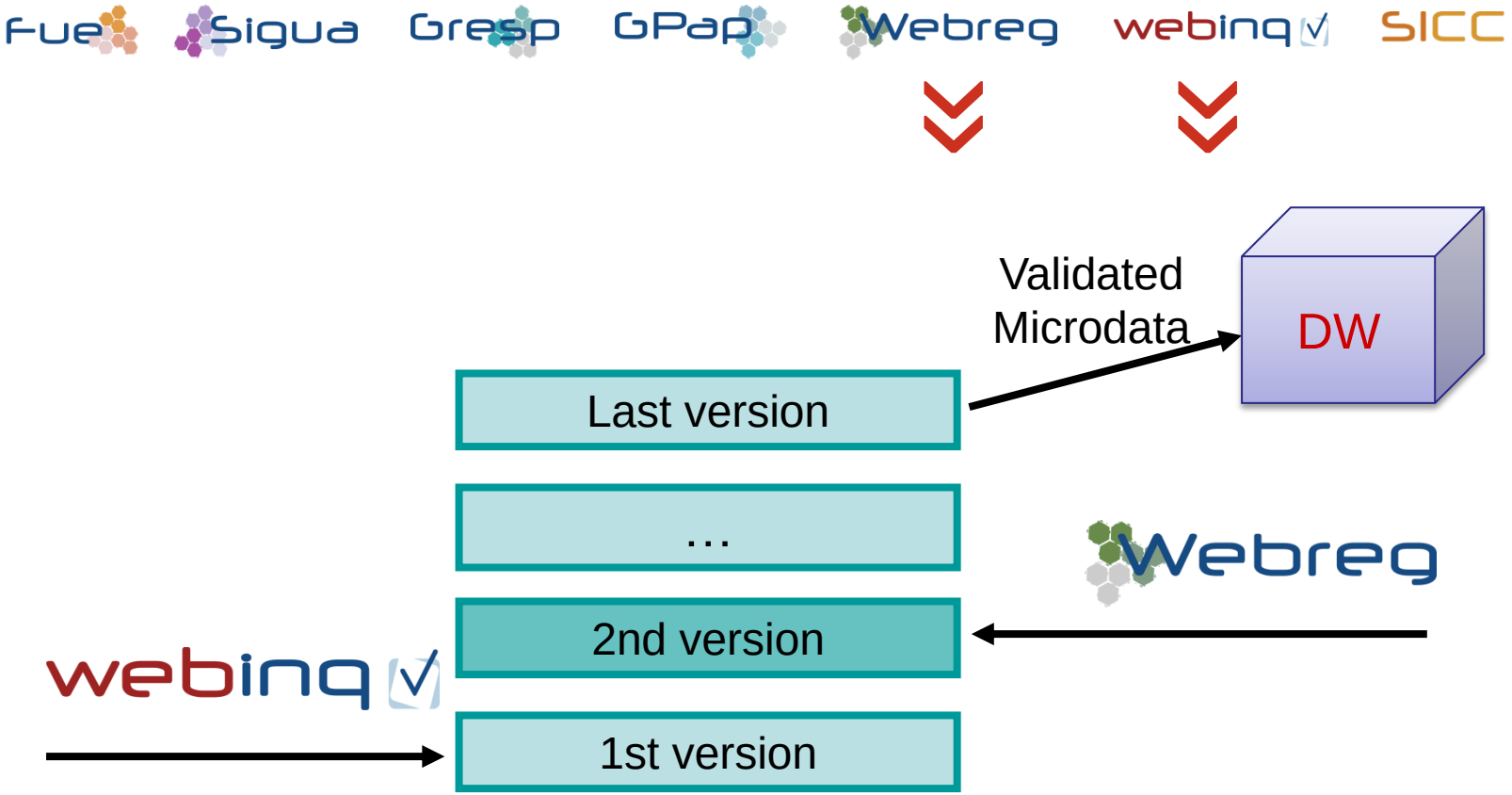
- Data Capture and Editing
  - Internet (Online responses)
  - Inside INE (Paper responses post-collection and editing)
  - Data Version Stack – Four main rules:
    - **Single** response for each tuple (survey, data reference period, statistical unit)
    - Data editing performs a **new** response version
    - **All** versions of the responses are saved
    - **Last** version goes to data warehouse.

Data Version Stack



Survey Management System

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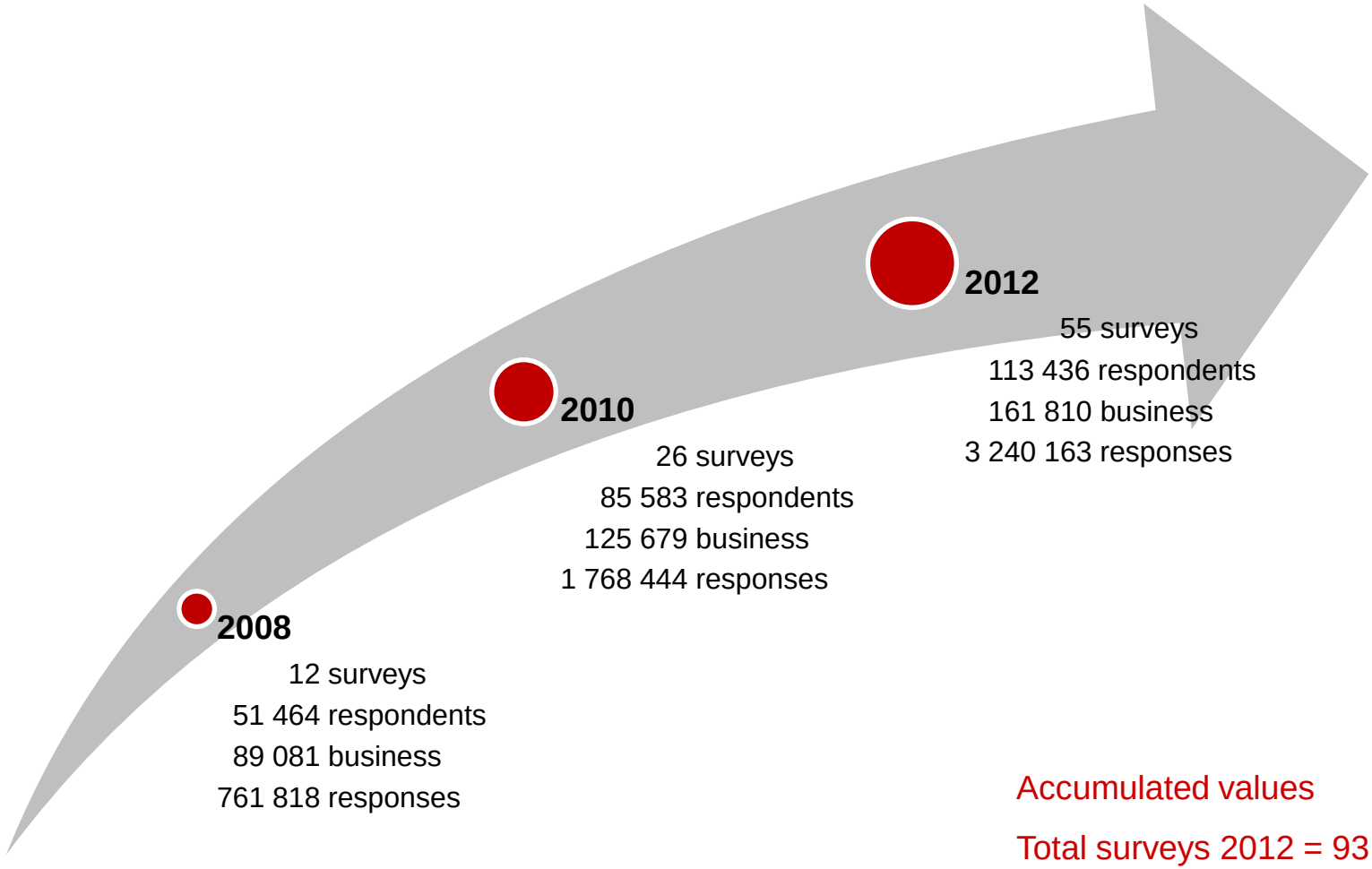
- Call Centre
  - Last system to be implemented
  - Integrated call center
    - Telephone
    - Mail
  - Management of respondents interactions
    - Inbound
    - Outbound
  - Interactions are context aware and tracked

Integrate a survey (Requirements)

- Create in Metadata System (SMI)
- Register data sampling method (SIGUA)
- Parameterization (SIGUA and GPAP)
- Identify common processes to be used
- Prepare specifications and code specific processes:
  - Data capture and editing (Electronic form and Validation rules)
  - Imputation
  - Specific reports
- Guide to integrate surveys

Survey Management System



Accumulated values

Total surveys 2012 = 93

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Merci!
Thank you!
Obrigado!

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