

Statistical Business Registers as Backbone

Issues regarding quality



Centraal Bureau
voor de Statistiek

Economic Business Statistics & National Accounts

Compilation of statistical data

STS



Int. trade

QNA

NA

Oth.sources

Surveys

Admin. Data

SBS



Challenge

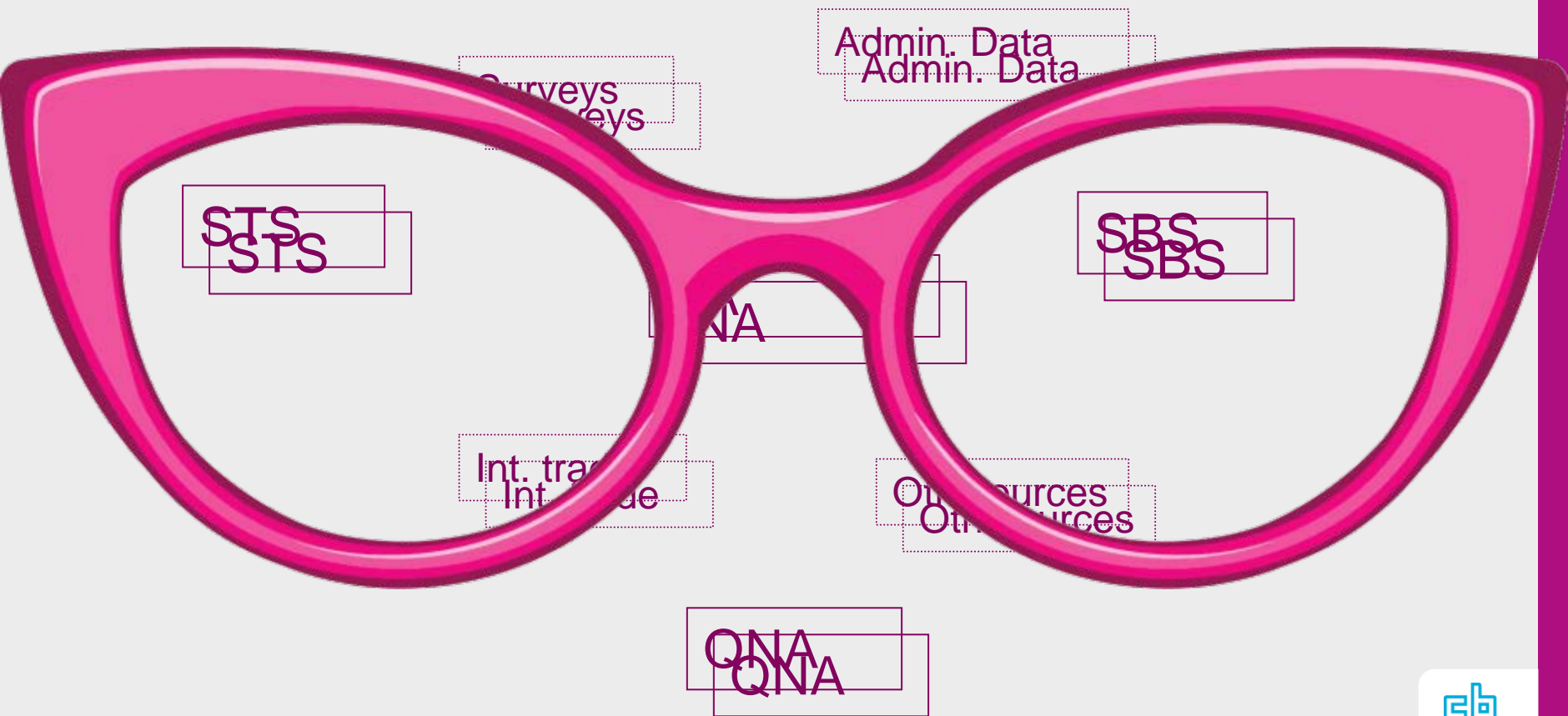
Demand for:

- Integrated, consistent & coherent statistical information

Reality:

- Ever increasing complexity of organization of global/large/complex Enterprise Groups
- Difficulties to retrieve statistical data from them
- Various entry points for various Business Statistics
- Increased availability & use of administrative sources
- Complexity concerning small Enterprises; outsourcing & the self employed

Economic Business Statistics & NA; complex system of dependencies



Disadvantages of a stovepipe approach

Affects the quality of statistical output negatively

- Accuracy of individual business statistics output
- Comparability within domains
- Timeliness
- Consistency between statistics

Lack of re-use of data in and between processes

- Administrative burden
- Redundant data storage
- Various “single points of truth”

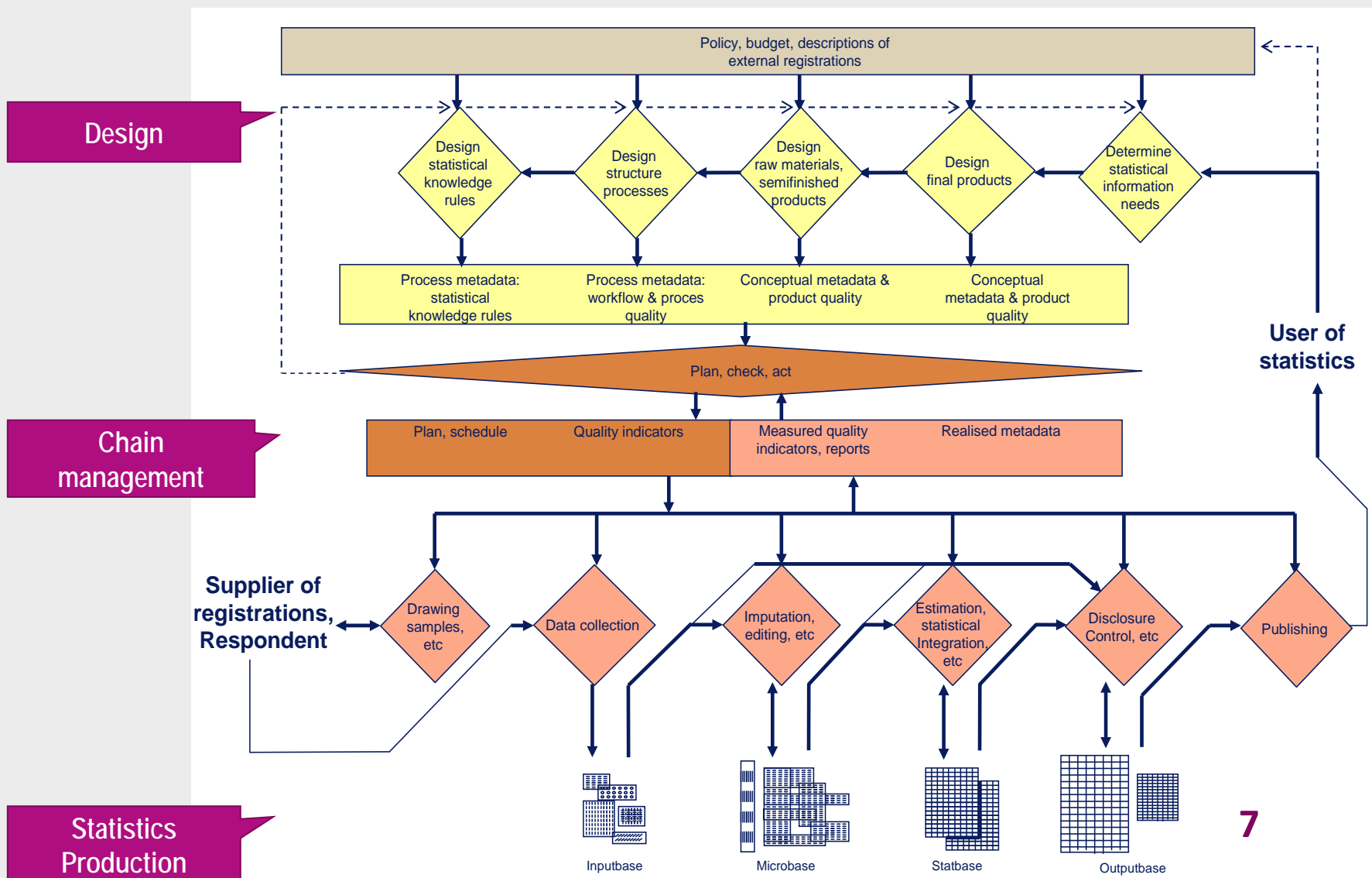


Chain management

Coordination of the various statistical processes by:

- Processing and designing statistical products from the perspective of the whole chain
- Chain as a set of links between processes, a link is a so called steady state defined in the BA
- Set of management and operating activities aiming for improving cooperation of all actors in the chain

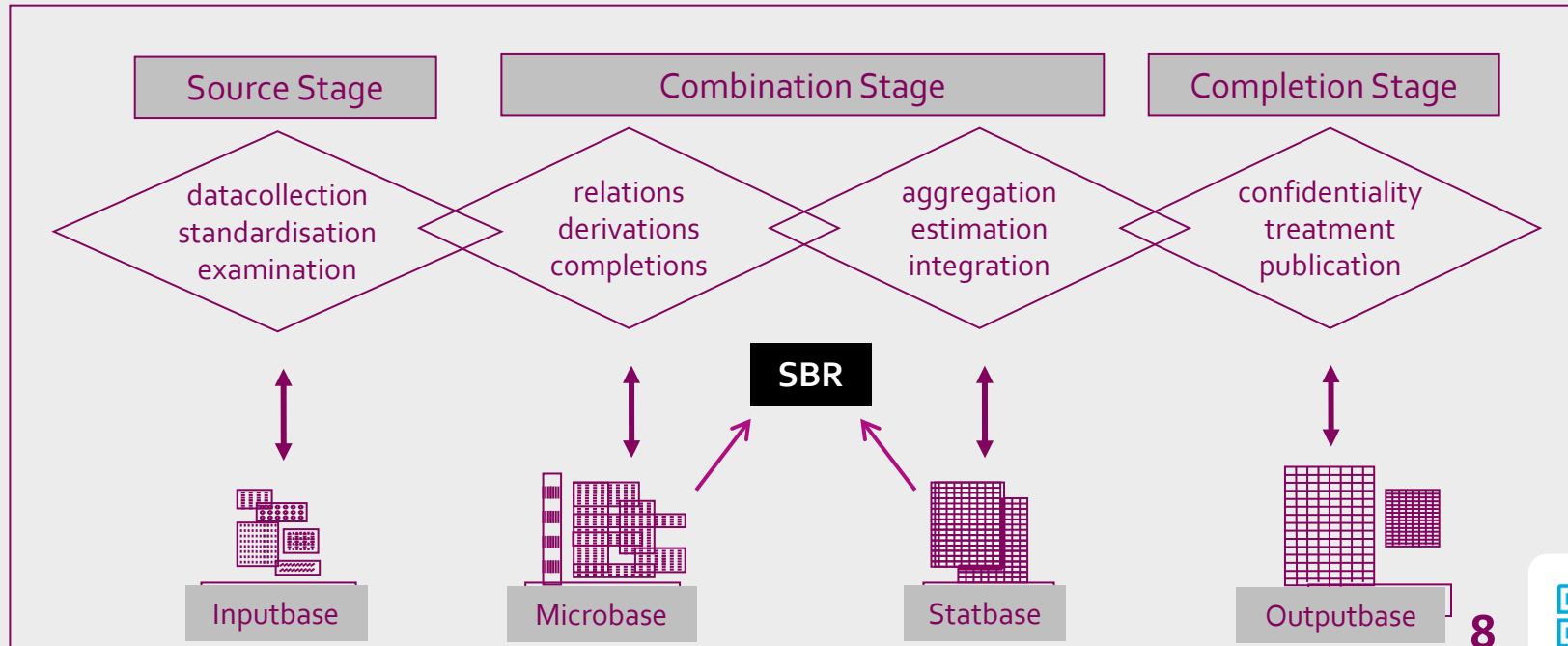
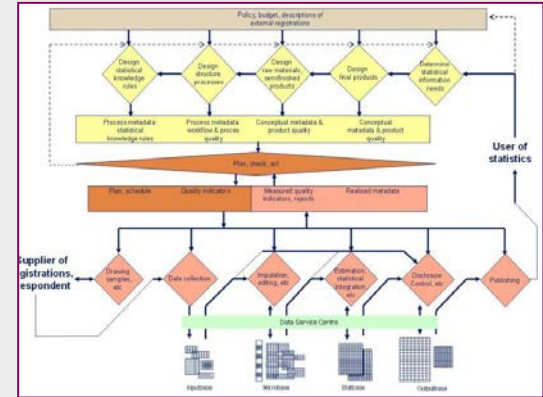
Business Architecture



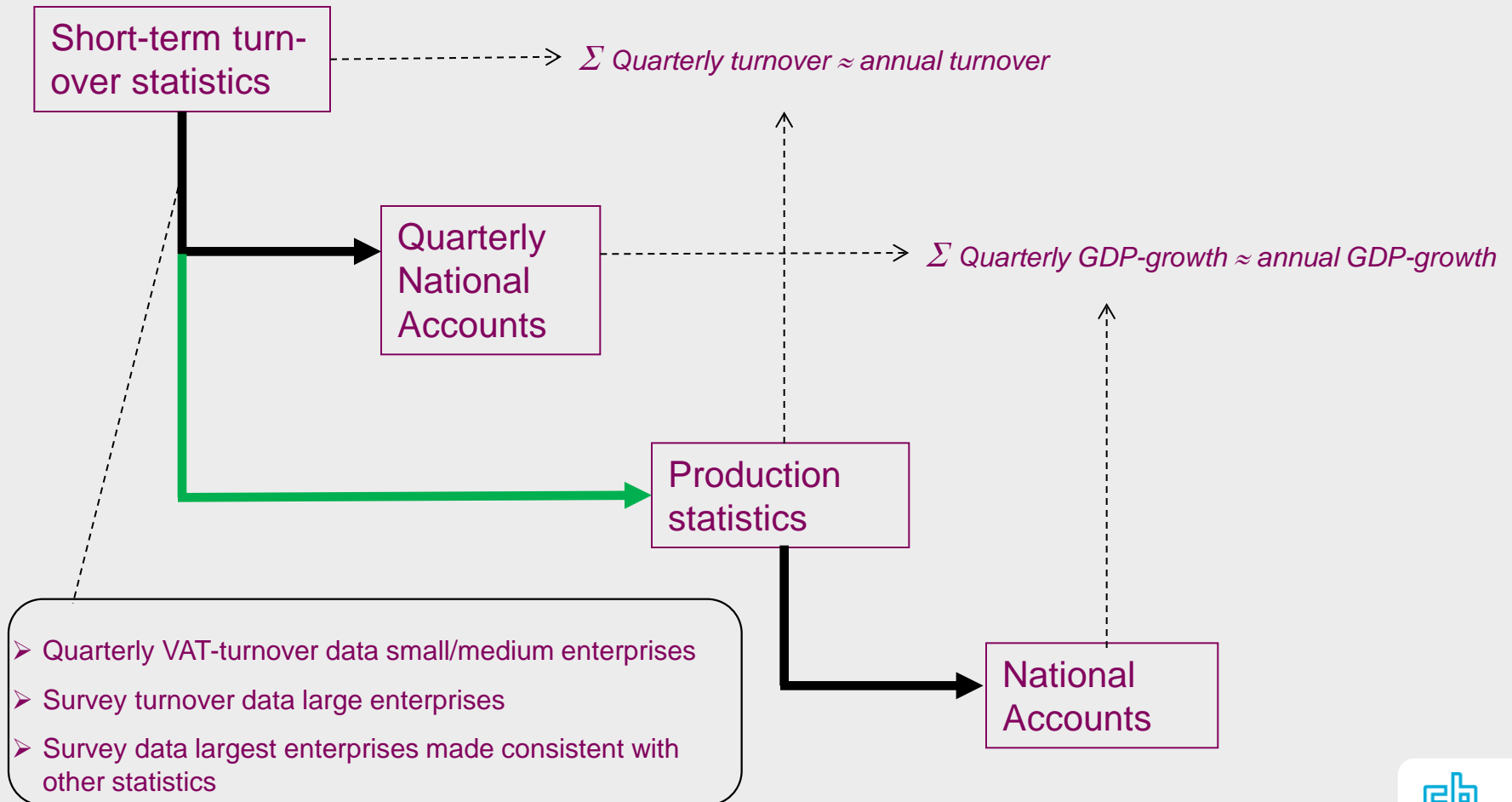
Business Architecture

Design and production are output driven
Steady states;

- Accessed by generic services/tools
- Play crucial role in (re)design and production of statistics
- Contain data and metadata



The chain of economic statistics



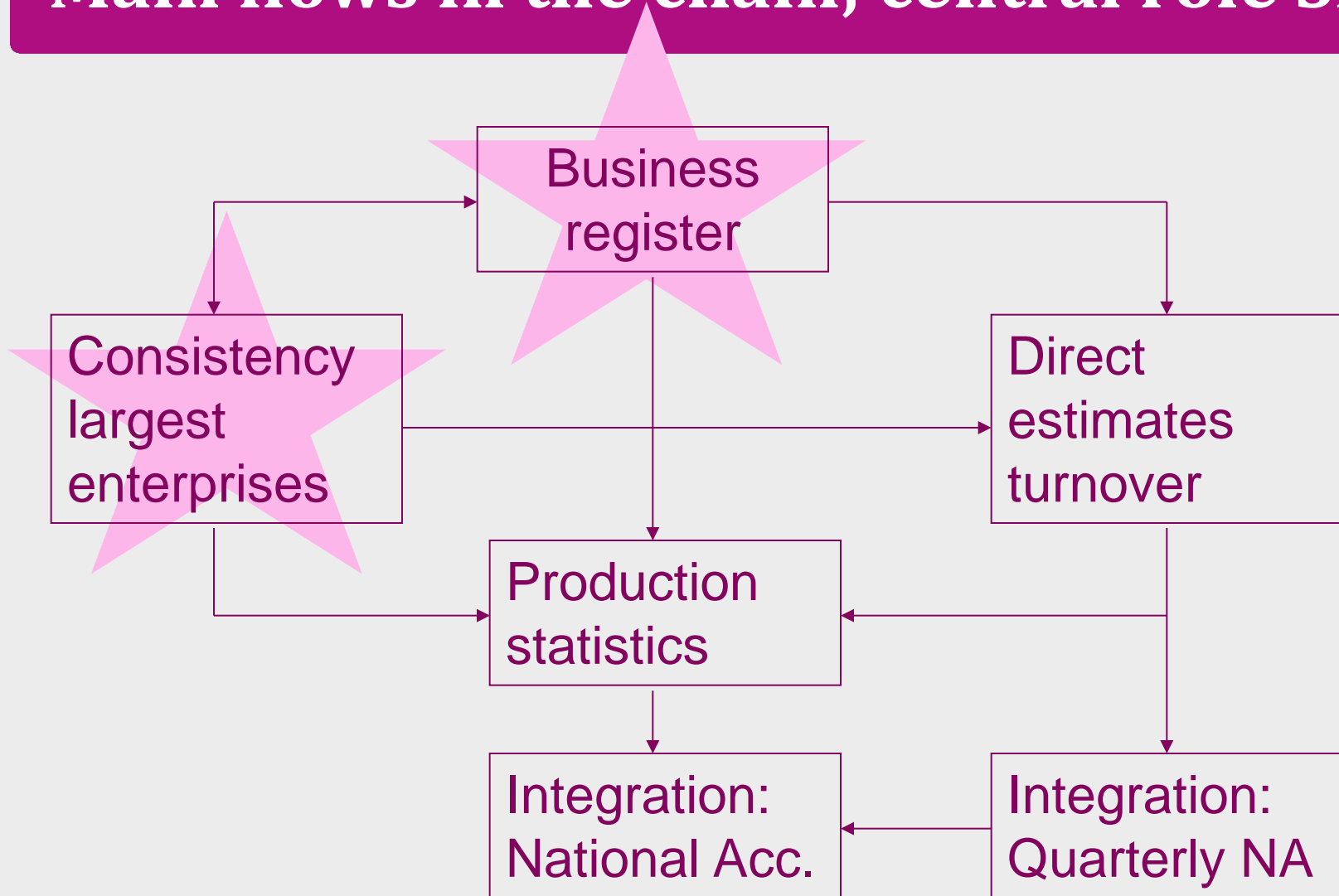
Chain management; procedures

- Detailed and binding agreements on deliveries in the chain
- Use of statistical business register for **all** statistics involved
- Co-ordinated approach to changes in units, correction of errors et cetera
- Detailed procedures for handling changes, incidents et cetera
- Chain manager and Chain management group in the lead

Main benefits of the integrated chain approach

- Structural underestimation of quarterly GDP was solved
- In general less and smaller revisions
- Consistency between statistics & more methodological coherence
- Better use of administrative sources & reduction in administrative burden
- Redundancy in data processing is prevented
- Issues solved in joint consideration and at most cost efficient place in the chain

Main flows in the chain; central role SBR



Governance of quality management

Procedures to maintain Statistical Business Register

- Trade Register & other sources used to daily update SU
- Snapshots and macro validation for output (frozen frame)
- Feedback information from surveys
- Process of profiling

Coordination of adjustments of statistical estimates

- Frame error procedure
- Correct frame errors in SBR for coordinated variables

Prevention of inconsistencies

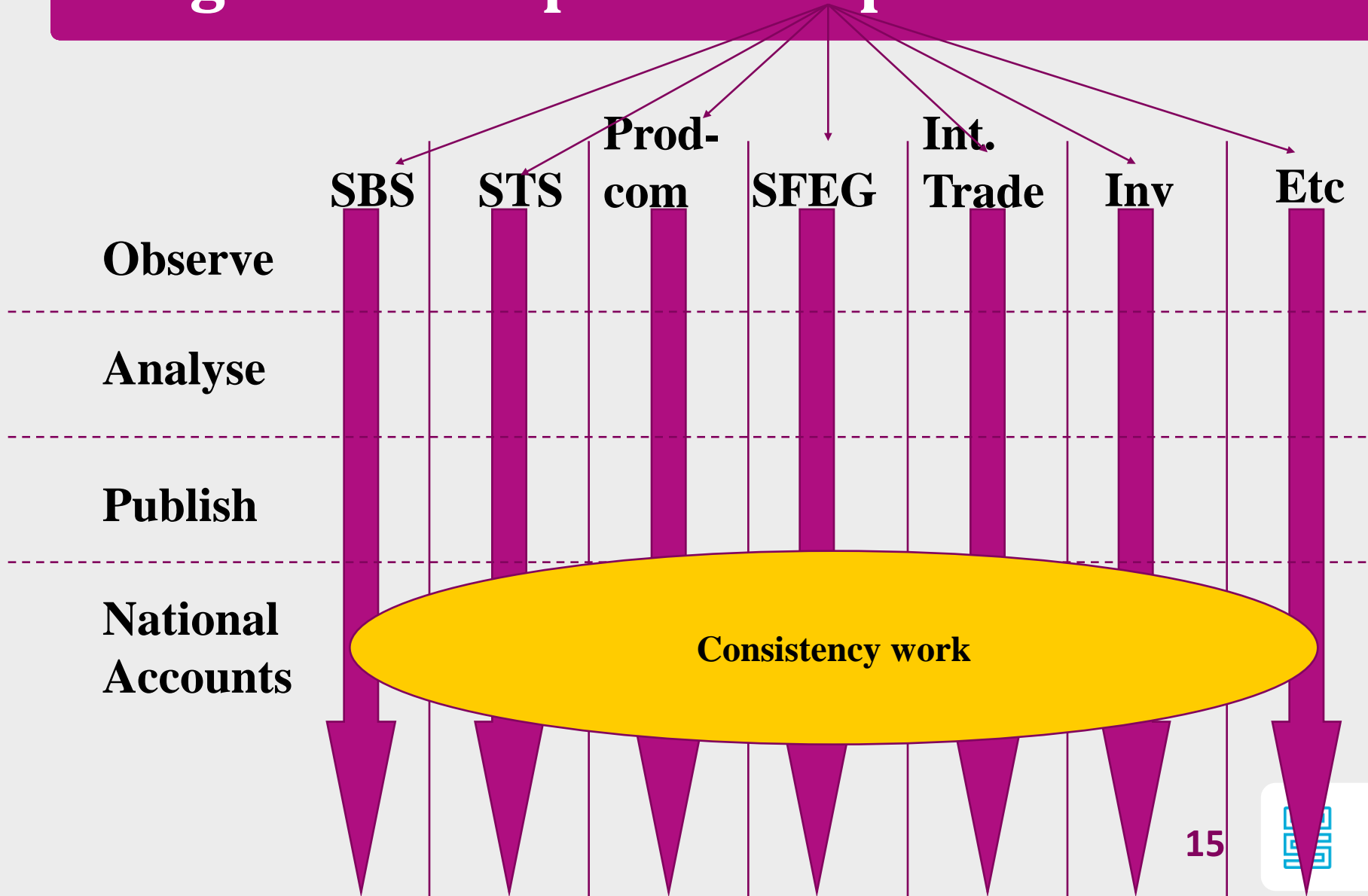
- Deal with large and complex Enterprise Groups in a separate process
- Deliver consistent data for direct use in statistics including National Accounts

Large and complex enterprises

- Organized in a dedicated unit close but aside SBR dept.
- EG selected by size and complexity – CSI factor
- Early detection of inconsistencies at micro level
- Consistency rules formulated in collaboration with NA
- Consistent micro data for 15 variables from 10 different statistics
- Becoming increasingly important and complex



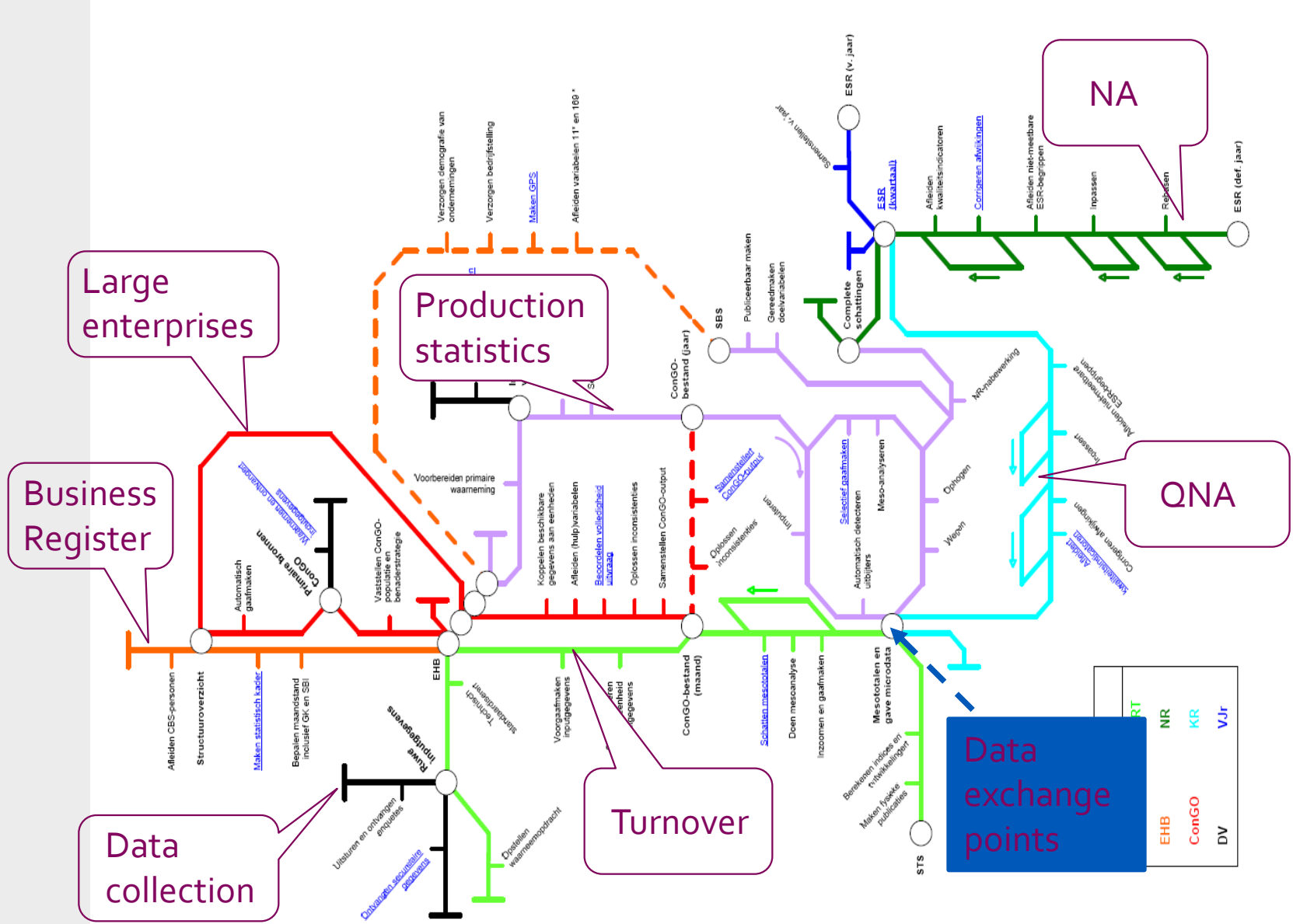
Large and complex enterprises



Quality management of the whole chain

Tuning SBR maintenance with statistical processes

- Derive maintenance subgroups
- Consult statisticians before final frame is derived
- Store changes which affect the structure or the characteristics of a SU (events)
- Check quality of administrative sources in advance (reporting facilities)
- Select 'frozen units frame' from the SBR Live Environment
- Use 'application dates' instead of 'event dates' to determine the reference period for the SUs in the frozen frame for all business statistics involved

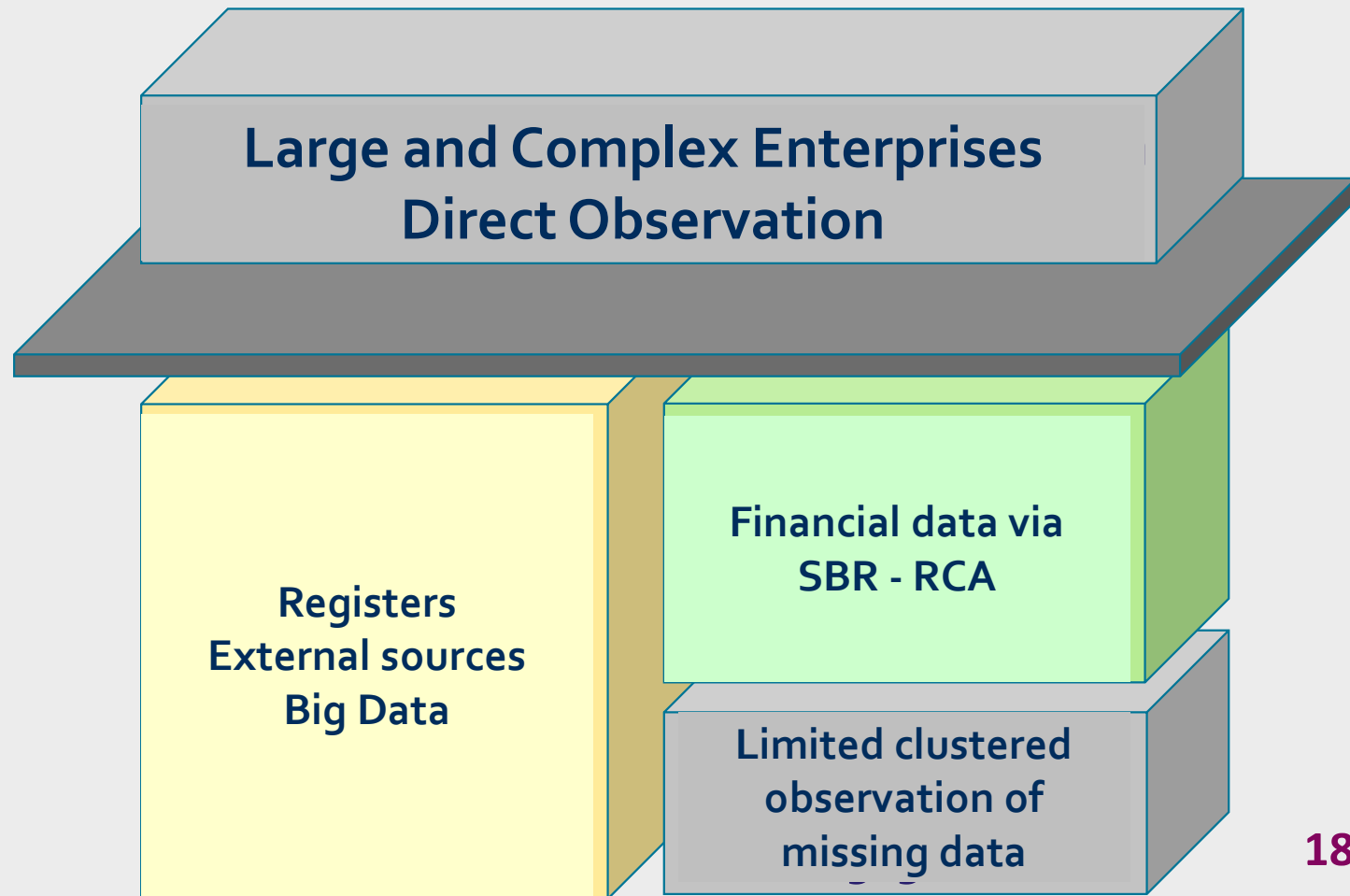


Data exchange points

EHB	ConGO	DV	NR	KR	VJr	RT
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Challenge; mixed mode multisource approach



Concluding remarks

- Compilation of business statistics and NA becomes increasingly complex
- SBR as backbone can play powerful coordinating role within and between statistics
- Beneficial to tune SBR maintenance with statistical processes
- SBR quality effect chain of statistics and vice versa
- Chain management helps to oversee the effect and impact of SBR events
- Chain management is the art of working together
- Multiple sources and various modes will further complicate the compilation of statistics
- Benefits are to be expected from the increased use and availability of administrative sources



Thank You!

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