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## Using SAS to improve data quality of short-term business statistics: the experience of Romanian National Institute of Statistics

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## **ABSTRACT**

Ensuring statistical data quality in a transparent and effective manner is a key objective of any national statistical office, and major efforts are devoted to produce and provide accurate data at the proper time for the proper users. It is, after all, the foundation of official statistics credibility.

In the production process of short-term business statistics—STS, specialists have to carefully judge the trade-off between data quality and usefulness: More accurate data means time and resources, but it is no longer of interest for users if the results are released too late.

Bearing in mind the tight requirements, the Romanian National Institute of Statistics (RNIS) undertook several actions to reform the production process of STS. One step was to redefine the entire data collection and capturing process; the second one was to modernize the data processing instruments. In this second step, SAS® Enterprise Guide® is heavily used in several departments for data editing, imputation, grossing-up, and tabulation, in order to reduce the time till the release of official results and to secure their overall quality.

The paper gives a picture of the SAS® applications used in RNIS, implementing the recommended methods for data control and editing, total and item-non-response treatment, using for the latter one different imputation methods, including mean value, hot-deck, historical data and, more seldom, cold-deck imputation. Specifications on the SAS tables' structure required for complete processing, on the SAS-EG tasks sequences and results are presented.

No paper was submitted for publication.

## **CONTACT INFORMATION**

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