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## **TOOLS FOR AUTOMATING METADATA-DRIVEN PROCESSES IN STATISTICS POLAND**

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### ***Abstract***

In order to improve the effectiveness of public statistics, work was carried out on the optimization, redesign and standardization of statistics production processes in accordance with the locally developed Model of Production Processes for Statistics (MPPS).

MPPS is the Polish implementation of GSBPM. The MPPS model in relation to GSBPM has been supplemented, for example, with geospatial sub-processes, quality verification and assessment, and planning.

MPPS provides a holistic approach to statistical production that uses multiple interconnected IT systems to provide comprehensive support for the execution of statistical production processes - from the needs determination phase to the evaluation phase.

Vital elements of the new MPPS based architecture are data repositories for collect, process, analyse and disseminate phases, which will store the current "states" of the processed data. This approach facilitates access to statistical data for subsequent "states". Subsequent "states" of data result from the successive steps of their processing in the successive phases of the statistical production process.

An important element of the IT solutions landscape is the metadata system. Metadata play a key role in defining the flow of statistical production processes. Scheduling of statistical production is achieved by preparation of appropriate metadata. Metadata describe inputs, outputs and processing details. Metadata orchestrate production processes by defining the sequence of production activities. Status of execution of production activities as well as relevant quality indicators is further reflected in metadata. Developed solutions enable automation of business processes increasing manageability, efficiency and repeatability of statistical production.

The basis of MPPS solutions were the ModernStats standards, in particular GSBPM and GSIM, the ideas of which were incorporated into the implemented production workflow and information models of business and IT systems.