

INTERNATIONAL CONFERENCE  
St Petersburg, RUSSIA  
04 March 20120



# «Metrological Support of Innovative Technologies» ICMSIT-2020

## «DEVELOPMENT OF THE MANAGEMENT SYSTEM FOR METROLOGICAL ASSURANCE OF MEASUREMENTS»

O A Leonov, N Zh Shkaruba



**ICMSIT-2020**  
Metrological Support  
of Innovative Technologies

# Problem statement

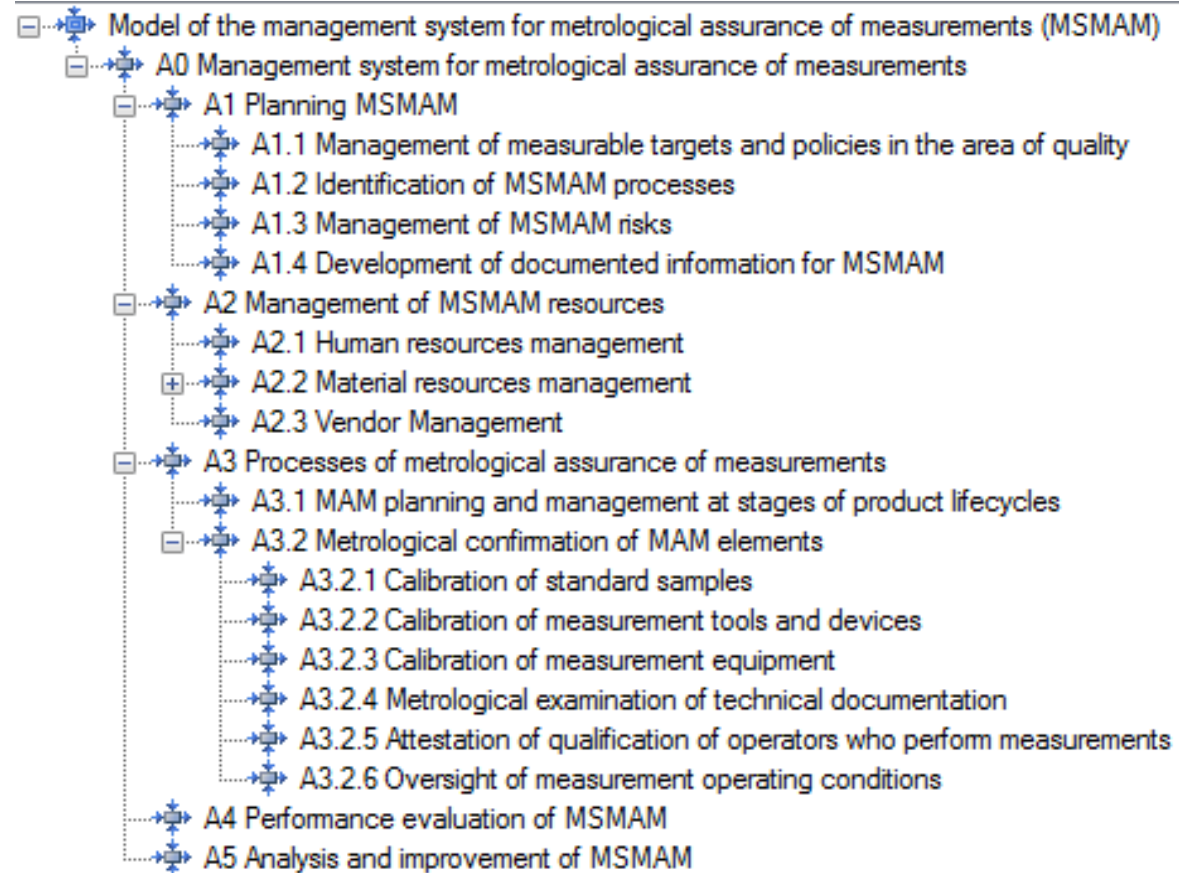
In order to solve the problems relating with setting up and managing MSMAM at machinery manufacturing plants a number of tasks must be tackled:

- Review the process of metrological assurance from the standpoint of Deming Cycle (PDCA);
- Identify and classify processes relating with MSMAM;
- Form a string of metrological processes (register of processes) as part of the operating structure and taking into account ISO 9001 requirements;
- Develop a standard functional model for MSMAM.



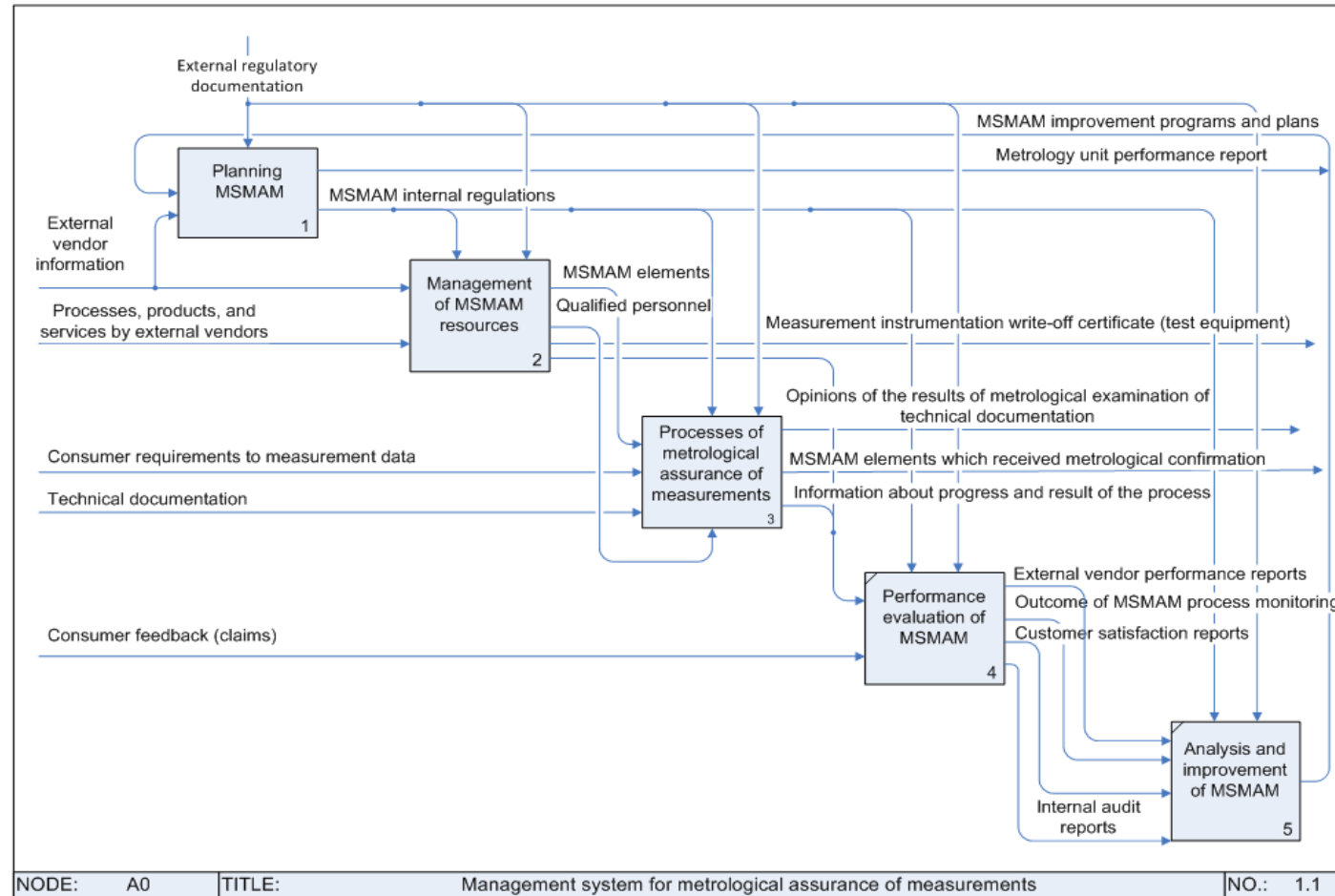
# Solution methods

## Process tree (register) for the management system for metrological assurance of measurements



# Solution methods

## Functional model of the management system for metrological assurance of measurements (MSMAM)



# Conclusions

## Results, implementation

The system for managing metrological assurance of measurements allows solving a number of problems at once: First, it ensures better controllability of processes; second, it mitigates the risk of probability that measurement instrumentation and measurement processes yield incorrect results which may, in turn, affect product quality.

Implementation of the system of management of metrological assurance of measurements allows to:

- Improve the quality of metrological assurance of measurements by way of improving resources, methods, techniques, and materials;
- Establish clear responsibilities for core activities in terms of metrological assurance of measurements;
- Analyze and measure capabilities of key types of activities in terms of metrological assurance of measurements;
- Determine interaction of the core activity in terms of metrological assurance of measurements as part of the metrology unit (department) and with other business units and departments of a business entity;
- Assess risks, consequences, and impact of various levels of metrological assurance of measurements on consumers, vendors, and other stakeholders.

# Contacts

O A Leonov, N Zh Shkaruba

Department of Metrology, standardization and quality management, Russian  
State Agrarian University – Moscow Timiryazev Agricultural Academy,  
Timiryazevskaya, 49, Moscow, 127550, Russia

E-mail: [metr@rgau-msha.ru](mailto:metr@rgau-msha.ru)

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