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***Modern trends of training
of specialists in Metrology***

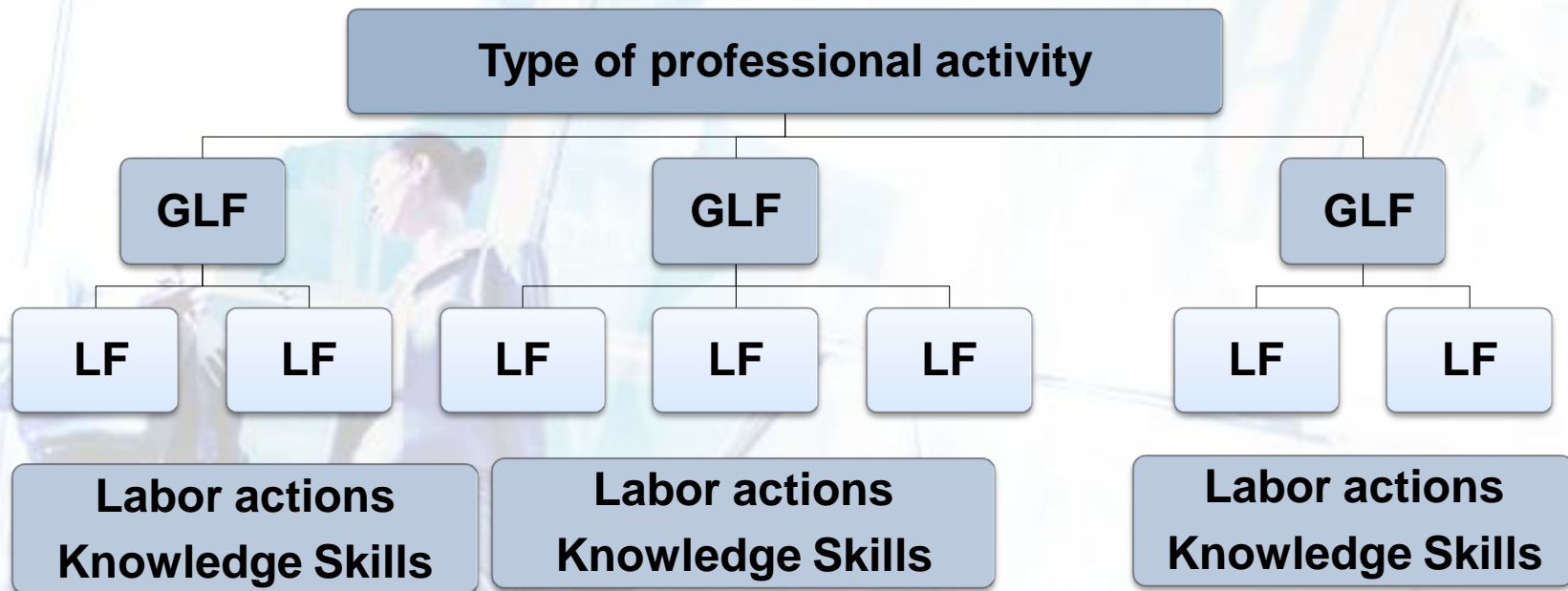
Effective implementation of metrological activities is impossible without qualified specialists

Nowadays, we are moving to a new generation of Federal state educational standards for institutions of higher education. It is focused on "competence-based approach" that means that graduates ought to be ready for real-life situations.

The transition to professional standards has been implemented In order to determine the competence of employees. Standards contain a description of the qualifications necessary for an employee to perform a certain type of professional activity, including performing a certain job function. Therefore, in modern conditions educational programs should be based on the requirements of professional standards and reflect the relationship of education with a specific segment of the labor market.



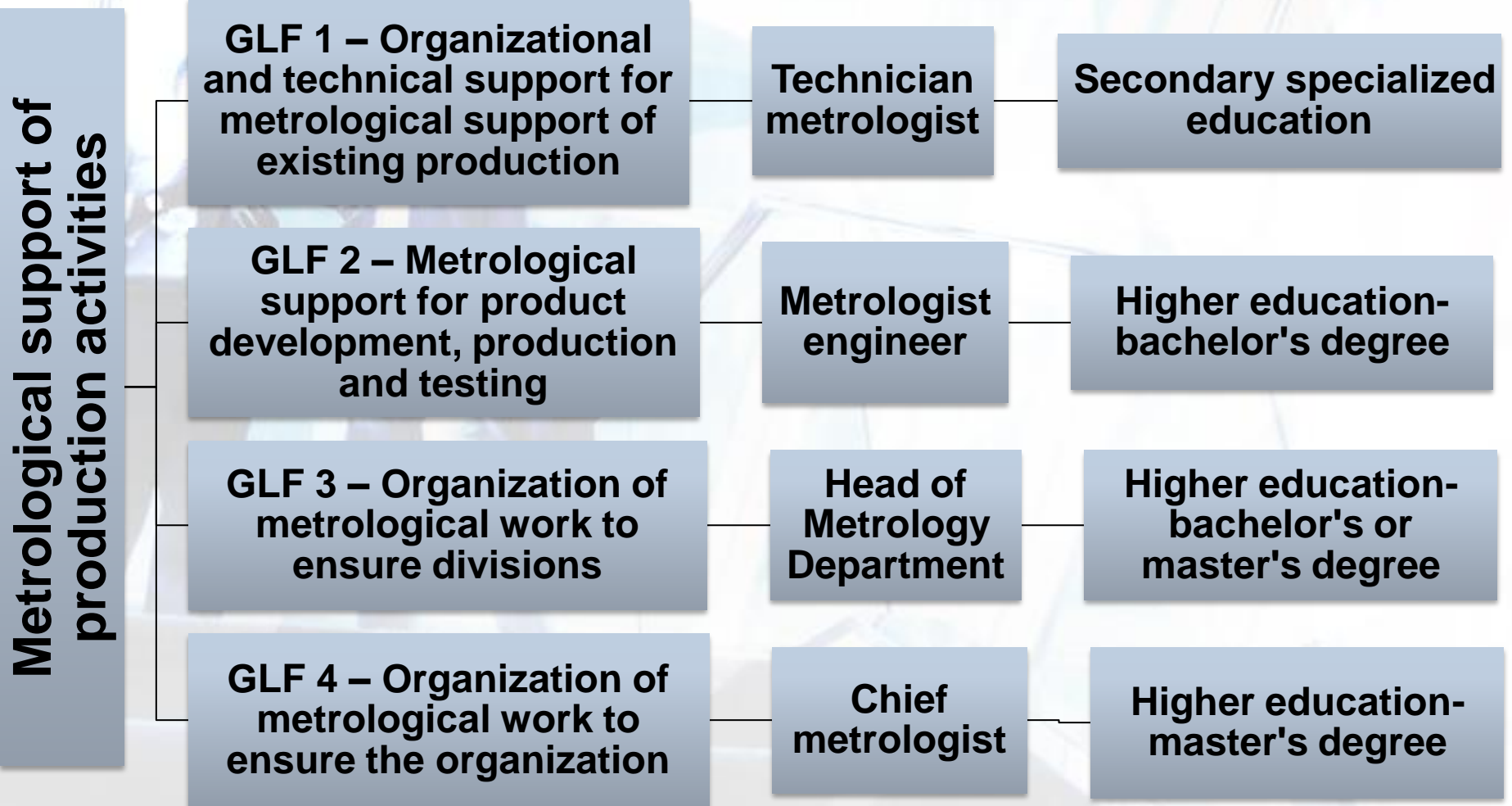
Sequential decomposition of the type of professional activity within the professional standard



The Central concepts used by professional standards are employee qualification and labor function. Employee qualification – the level of knowledge, professional skills and work experience of the employee. Labor function (LF) – work according to the position in accordance with the schedule, profession, specialty with the indication of qualification; specific type of work assigned to the employee.

Professional standards are developed according to the scheme of sequential decomposition of professional activity through generalized labor functions (GLF) and labor functions to direct labor actions related to the necessary knowledge and skills.

Names of positions and requirements for the education of specialists in Metrology in the framework of a specific generalized labor



Description of labor functions included in the professional standard of the " Metrology Specialist»

Code	Generalized labor function	Labour function
B	Metrological support for product development, production and testing	B/01 - Performing particularly accurate measurements to determine the actual values of the monitored indicators
		B/02 - Metrological supervision of compliance with the rules and standards for ensuring the unity of measurements, the state and use of measuring instruments
		B/03 - Monitoring and updating of the reference base for calibration of equipment and measuring instruments
		B/04 - Verification (calibration) of complex measuring instruments
		B/05 - Development of calendar plans and schedules for verification of measuring instruments
		B/06 - Metrological examination of technical documentation
		B/07 - Development of measurement and test methods
		B/08 - Certification of test equipment and special measuring instruments
		B/09 - Development and implementation of special measuring instruments
		B/10 - Development and implementation of normative documents of the organization in the field of metrological support
		B/11 - Certification, testing and approval of measuring instruments
		B/12 - Preparation of local verification schemes by type of measurement

Description of labor functions included in the professional standard of the " Metrology Specialist»

Code	Generalized labor function	Labour function
C	Organization of work on metrological support of divisions	C/01 - Organization of works on verification (calibration) of measuring instruments in the division
		C/02 - Organization of works on updating of the reference base for calibration of equipment and measuring instruments
		C/03 - Analysis of the state of metrological support in the metrological service division of the organization
		C/04 - Preparation of the metrological service division of the organization for accreditation in the field of ensuring the unity of measurements
		C/05 - Organization of employment in the metrological service division of the organization.
		C/06 - Organization of work on metrological examination of technical documentation