

Is the ISO 9001:2015 a risk or an opportunity for a microbial Biological Resource Centre? The experience of Mycotheca Universitatis Taurinensis – MUT

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The ISO 9001 defines the requirements for a quality management system for an organization. The requirements are generic and can be applicable to any type of organization, including public microbial Biological Resource Centres (mBRCs). Indeed according to ISO provided products and services are not relevant.

The ISO 9001 quality management standards help who would like to subject their production process to quality control in a cyclical manner, starting from the definition of the customer's requirements and ending with monitoring of all phases of the production process.

The quality management system, according to ISO 9001:2015 can support the organization using the process approach, based on the "Plan - Do - Check - Act" (PDCA) and risk-based thinking.

The Mycotheca Universitatis Taurinensis (MUT) is the fungal collection of the Department of Life Sciences and Systems Biology of the University of Turin (Italy). The MUT is one of the most important banks of fungal biodiversity in Italy, and it has a great value from the systematic, ecological and applications point of views. Microorganisms are an untapped source for innovation able to provide solutions to some of today's global challenges and the aims of the MUT are the acquisition, identification, characterization, preservation and distribution of fungi to boost academic research and bioeconomy. The MUT is the first structure, among the Italian collections, which has operated according to the standards of ISO 9001. The decision to undertake the ISO certification already from 2006 has been favoured of the willingness to achieve the standardization of the processes in order become reliable providers of biological resources and services.

Waiting the end of activities of ISO Committee 276 on Biotechnology and the establishment of a new standard on Biobanks, ISO/DIS 20387, in the last year MUT, worked on the transition from ISO 9001:2008 to the new ISO 9001:2015 focusing on the risk analysis of all processes. This process lead to the identification of the strengths and weaknesses of the system. The regular monitoring of internal and external factors are indeed fundamental to improve the quality of services and of the biological material provided to customers.

The experience led to the awareness that MUT, as a mBRC, can consider the ISO 9001:2015 an important opportunity that allow the continuous improvement of the management of the collection to enhance customer satisfaction.