

# Some features of the romanian strategy of harmonization with the *acquis communautaire* for glass quality.

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For a fast economic integration in EU, our institute initiated complex actions to appropriate the specific *acquis*.

Results:

- harmonization with EN - standards of indigene SR, giving priority to the fields of great economic interest;
- creation and accreditation of the infrastructure for evaluation/certification of quality in the glass industry:
  - 3 labs of testing - ISO 17025 (plate glass, glass yarns and fibers - including products -, both in accreditation, and physical-chemical analyses, accredited);
  - organism for glass products certification - EN 45011 - in accreditation;
  - organism of inspection third part for glass industry – EN 45004 – idem;
  - organism for quality system certification - ISO 9001:2000 - in development;
  - organism for personnel certification - EN 45013 - idem.
- insurance of quality and quality control by:
  - modern methods for glass defects control and monitoring, including the evaluation of their primary and secondary sources and future influences on production costs;
  - new methods to train the inspection/certification personnel, including a complex interactive data-basis for glass defects (in preparation);
  - implementation of quality system in glass plants.

## I. INTRODUCTION

As a future member of EU, Romania considers as priority the harmonization of national legislative and institutional frame with the Comunitary *acquis*. The implementation of the Directives of *New Approach* is a constitutive part of the assimilation of European *acquis*:

- Romanian organism of accreditation – RENAR – is a plenary member in European Accreditation.
- Romanian standardization organism – ASRO – advances in the policy of European standards harmonization;
- For the glass industry, the *acquis* was implemented by a Decision of the Romanian Government in May 2000 and by the Law of Evaluation of Products Conformity in November 2001;

In Fig. 1 is presented the National System of Quality Certification and Fig. 2 shows the organization diagram of the quality system in the Romanian glass industry:

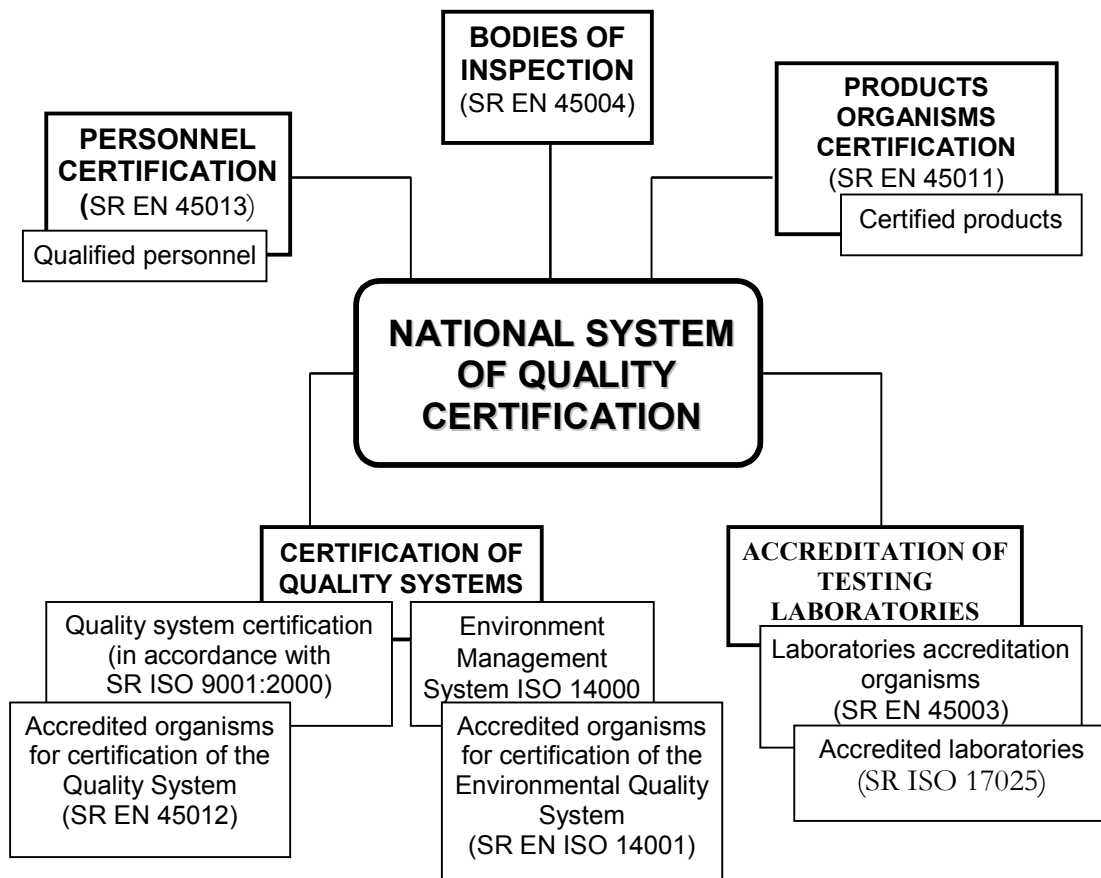


Fig. 1 National System of Quality Certification

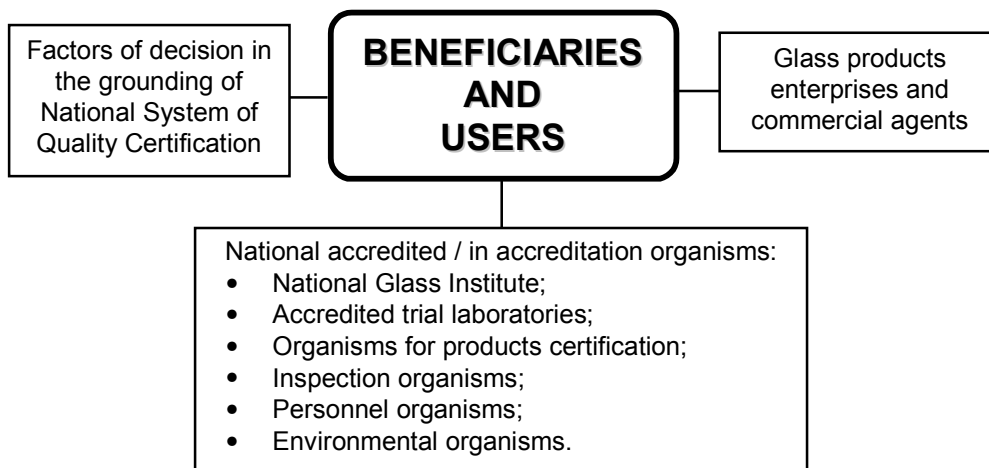


Fig. 2 Diagram of the quality system activity in the Romanian glass industry

## II. STANDARDIZATION ACTIVITY IN THE GLASS FIELD

In National Glass Institute exist three technical committees for standardization, which harmonize the national standards by assumption of:

### A. **European Norms (EN)** for the following fields:

- ☞ Glass products for buildings: float, wire window-glass (including polished type), pulled window-glass, ornamental window-glass, glass profiles (wire or non-wire), ceramic glass, frosted (including wire), unsplinterable, multiplex.
- ☞ Aerospace glass: proofing methods for transparent materials for aeronautic windows.
- ☞ Road vehicles: safety windows and testing methods.
- ☞ Household and packing glassware, containers, bottles.
- ☞ Apparatuses and laboratory glassware.
- ☞ Glass yarns and fibers and products made from them.
- ☞ High efficiency air filters.

### B. **ISO:**

- ☞ Technical and special glass: testing methods, quality technical features.
- ☞ Products made from glass and glass-ceramics: chemical reactions at the interface with food, emissions of Pb and Cd – maximum admissible limits.
- ☞ Glass containers and bottles.
- ☞ Laboratory glassware.
- ☞ Pharmaceutical glass ampoules.

## III. QUALITY INFRASTRUCTURE FOR CONFORMITY EVALUATION IN THE GLASS INDUSTRY

- Testing laboratories (SR ISO 17025) for:
  - Plate glass (in accreditation).
  - Glass yarns and fibers and products made from them (in accreditation).
  - Household and packing glassware, technical and special glass, laboratory glassware (accredited laboratory).
- Third party inspection body (SR EN 45004), in accreditation.
- Products certification organism (SR EN 45011), in accreditation.
- Quality system certification organism in glass factories (SR EN 45012), as prospective.
- Personnel certification organism (SR EN 45013), as prospective.
- Organism for environmental management system certification (SR EN ISO 14001), as prospective.

## IV. INTERNATIONAL COOPERATION

1. Establishment of reference and standard materials for testing laboratories;
2. Initiation of inter-laboratory comparative testing programs;
3. Reciprocal recognition, by bilateral conventions with similar organisms, of national accredited testing laboratories and of certification and/or inspection organisms;

4. Personnel forming and certification (technical and quality experts, auditors), and participation to International Association for Training and Certification of Auditors (IATCA), including to the training courses;
5. Harmonization of Romanian Standards (SR) with ISO and EN;
6. Harmonization of certification/evaluation methodologies in conformity with ISO 9001:2000 and EN 45000-series;
7. Participation at international reunions of the organisms, dedicated to the establishment of the procedures for evaluation and establishment of conformity with standards/ specifications / technical settlements.

## V. PROSPECTIVE ACTIONS

- ➔ Establishment of the glass products and product groups in the reglemented/ unreglemented fields for the evaluation/ certification of conformity.
- ➔ Elaboration/ harmonization of national standards as technical referentials for certification.
- ➔ Establishment of the qualitative level of Romanian glass products comparatively with the similar EU products.
- ➔ Elaboration/ validation of testing methods, EN harmonized.
- ➔ Application of the modern methods in the products control and products inspection at the manufacturers.
- ➔ Forming/ evaluation/ certification of the personnel implied in the activity of production and quality control.
- ➔ Quality system implementation and administration in little and medium factories (Fig.3).

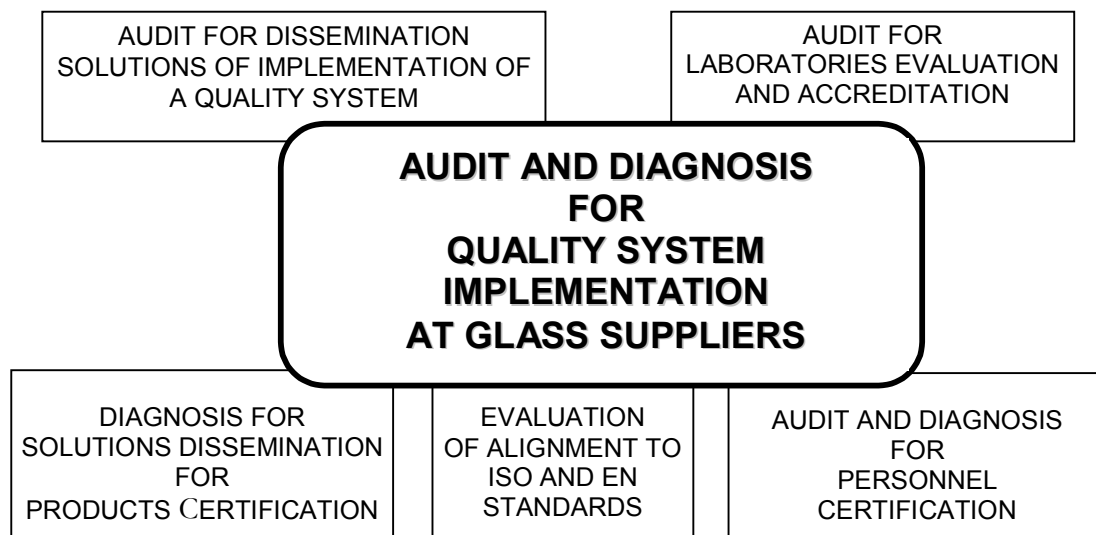


Fig. 3 The activity organization in the field of audit in the Romanian glass industry.

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1. EN 45 001: General criteria for the operation of testing laboratories.
  2. EN 45 002: General criteria for the assessment of testing laboratories.
  3. EN 45 003: General criteria for laboratories accreditation bodies.
  4. EN 45 004: General criteria for organization activity performing control through third party
  5. EN 45 011: General criteria for certification bodies operating product certification.
  6. EN 45 012: General criteria for bodies operating Quality System certification.
  7. EN 45 013: General criteria for certification bodies operating certification of personnel.
  8. ISO 14000: Environment Management System.
  9. ISO 14001: Environmental Management System certification.