



UNDERSTANDING ISO17025 CLAUSE 8.6 – IMPROVEMENT

Why Continual Improvement Matters – Adaptation, Strengthening and System Growth

Clause 8.6 is the clause that ensures the laboratory does not remain static. It requires continual improvement — intentional, evidence-driven and aligned with the management system. Improvement protects competence, impartiality and reliability. It ensures that laboratories adapt to changing conditions, strengthen their controls and refine their operations.

Continual improvement is not optional. Laboratories operate in dynamic environments: equipment ages, methods evolve, workloads shift, risks emerge and client expectations change. Clause 8.6 ensures that laboratories respond to these changes with structured, meaningful improvements.

Improvement supports competence. It strengthens training, workflows, equipment performance and data integrity. It ensures that personnel remain capable and confident.

Improvement supports impartiality. It strengthens transparency, consistency and decision-making. It reduces vulnerabilities and protects credibility.

Improvement supports reliability. It strengthens processes, controls, documentation and oversight. It ensures that results remain accurate, consistent and defensible.

The core principle: **Improvement is not a project — it is a culture.** Clause 8.6 ensures that the management system grows, adapts and strengthens continuously.

Sources of Improvement – Where Improvement Opportunities Come From

Clause 8.6 requires laboratories to identify opportunities for improvement. These opportunities may arise from any part of the management system or technical operations. Improvement must be intentional, evidence-driven and aligned with daily work.

Internal Sources of Improvement

- Internal audits
- Management reviews
- Technician feedback
- Workflow observations
- Equipment performance trends
- Data analysis
- Training outcomes
- Resource constraints

These sources reveal gaps, inefficiencies, risks and opportunities.



External Sources of Improvement

- Client feedback
- Supplier performance
- Accreditation body findings
- Industry developments
- New technology
- Regulatory changes
- Method updates

These sources reveal expectations, innovations and external pressures.

System-Level Sources of Improvement

- Risk assessments
- Corrective actions
- Non-conforming work investigations
- Complaints
- Improvement actions
- Strategic decisions

These sources reveal vulnerabilities, strengths and long-term opportunities. Clause 8.6 ensures that improvement is not accidental — it must be intentional, structured and aligned with the management system. Opportunities must be recognised, evaluated and implemented.

Types of Improvement – Process, Technical, Managerial and System-Level

Clause 8.6 allows laboratories to implement improvements across all areas of their operations. Improvement is not limited to technical processes — it includes managerial, procedural (processes and technical) and system-level enhancements.

Process Improvements

These strengthen workflows and efficiency. Examples include:

- Reducing bottlenecks
- Improving communication
- Streamlining sampling or reporting
- Enhancing co-ordination between teams

Technical Improvements

These strengthen methods, equipment and data integrity. Examples include:

- Updating methods
- Improving calibration practices
- Enhancing environmental controls
- Introducing new technology



Managerial Improvements

These strengthen oversight, competence and leadership. Examples include:

- Improving training programs
- Strengthening supervision
- Enhancing resource allocation
- Refining communication channels

System-Level Improvements

These strengthen documentation, controls and strategic direction. Examples include:

- Updating procedures
- Improving document control
- Strengthening risk-based thinking
- Enhancing record protection

Clause 8.6 ensures that improvement is holistic — it must strengthen the entire management system, not just isolated components.

Implementing Improvements – Planning, Action and Verification

Clause 8.6 requires laboratories to implement improvements in a structured, intentional and effective manner. Improvements must be planned, executed, evaluated and integrated into the management system.

Planning Improvements

Planning includes:

- Defining the opportunity
- Determining the required action
- Allocating resources
- Setting timelines
- Assigning responsibilities

Planning ensures that improvements are intentional and achievable.

Implementing Improvements

Implementation includes:

- Updating procedures
- Training personnel
- Adjusting workflows
- Upgrading equipment
- Strengthening controls

Implementation ensures that improvements are applied consistently and correctly.

Verifying Improvements

Verification includes:

- Reviewing effectiveness
- Monitoring performance



- Evaluating outcomes
- Adjusting actions if needed
- Integrating improvements into the management system

Verification ensures that improvements deliver the intended results.

Clause 8.6 ensures that improvement is not theoretical — it must be implemented, evaluated and sustained.

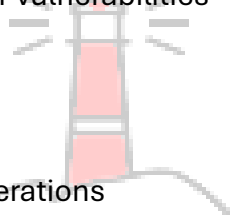
Technician and Management Responsibilities – Insight, Leadership and System Growth

Technicians and management play critical roles in ensuring that improvement is identified, implemented and sustained. Clause 8.6 emphasises that improvement is not the responsibility of one person — it is shared across the laboratory.

Technician Responsibilities

Technicians must:

- Identify opportunities during daily work
- Report issues, inefficiencies or vulnerabilities
- Suggest improvements
- Support implementation
- Follow updated procedures
- Participate in training
- Maintain discipline in daily operations



Technicians are the frontline observers of improvement opportunities.

Management Responsibilities

Management must:

- Evaluate opportunities
- Approve improvement actions
- Allocate resources
- Monitor effectiveness
- Integrate improvements into the management system
- Communicate updates
- Lead continual improvement



Management provides the oversight that keeps improvement structured, strategic and effective.

Together, technicians and management form an **improvement structure** that strengthens capability, reliability and long-term stability. Clause 8.6 ensures that improvement is owned, implemented and sustained at every level.

Continual Improvement, System Growth and Evidence-Driven Progress

Clause 8.6 – Improvement is clear: **continual improvement is the heartbeat of a living management system**. Clause 8.6 transforms observations, feedback, risks and



opportunities into structured actions that enhance competence, impartiality and reliability.

Why Continual Improvement Matters – Adaptation, Strengthening and System Growth

Equipment ages, methods evolve, workloads shift, risks emerge and client expectations change. Clause 8.6 ensures that laboratories respond to these changes with intentional, evidence-driven improvements. Improvement protects competence, strengthens impartiality and enhances reliability. It ensures that the management system grows, adapts and remains effective.

Sources of Improvement – Where Opportunities Come From

Improvement opportunities arise across the management system and technical operations, from internal audits, management reviews, technician feedback, workflow observations, equipment performance, data trends, client feedback, supplier performance, accreditation findings and new technology. Improvement must be recognised, evaluated and implemented.

Types of Improvement – Process, Technical, Managerial and System-Level

Process improvements strengthen workflows and efficiency. **Technical improvements** enhance methods, equipment and data integrity. **Managerial improvements** strengthen oversight, communication and competence. **System-level improvements** refine documentation, controls and strategic direction.

Implementing Improvements – Planning, Action and Verification

Improvements must be implemented intentionally and evaluated for effectiveness. Clause 8.6 requires laboratories to plan actions, allocate resources, implement changes, train personnel, adjust workflows, upgrade equipment and strengthen controls. **Verification** ensures that improvements deliver the intended results and are integrated into the management system.

Technician and Management Responsibilities – Insight, Leadership and System Growth

Technicians identify opportunities during daily work, report issues, suggest improvements and support implementation. **Management** evaluates opportunities, approves actions, allocates resources, monitors effectiveness and leads continual improvement.

Laboratories that improve continuously remain competent, impartial and resilient.