How can ISO Standard, training, implementation and certification, assist companies in becoming more resilient to water supply disruptions?

F.M LABUSCHAGNE | 11 July 2024

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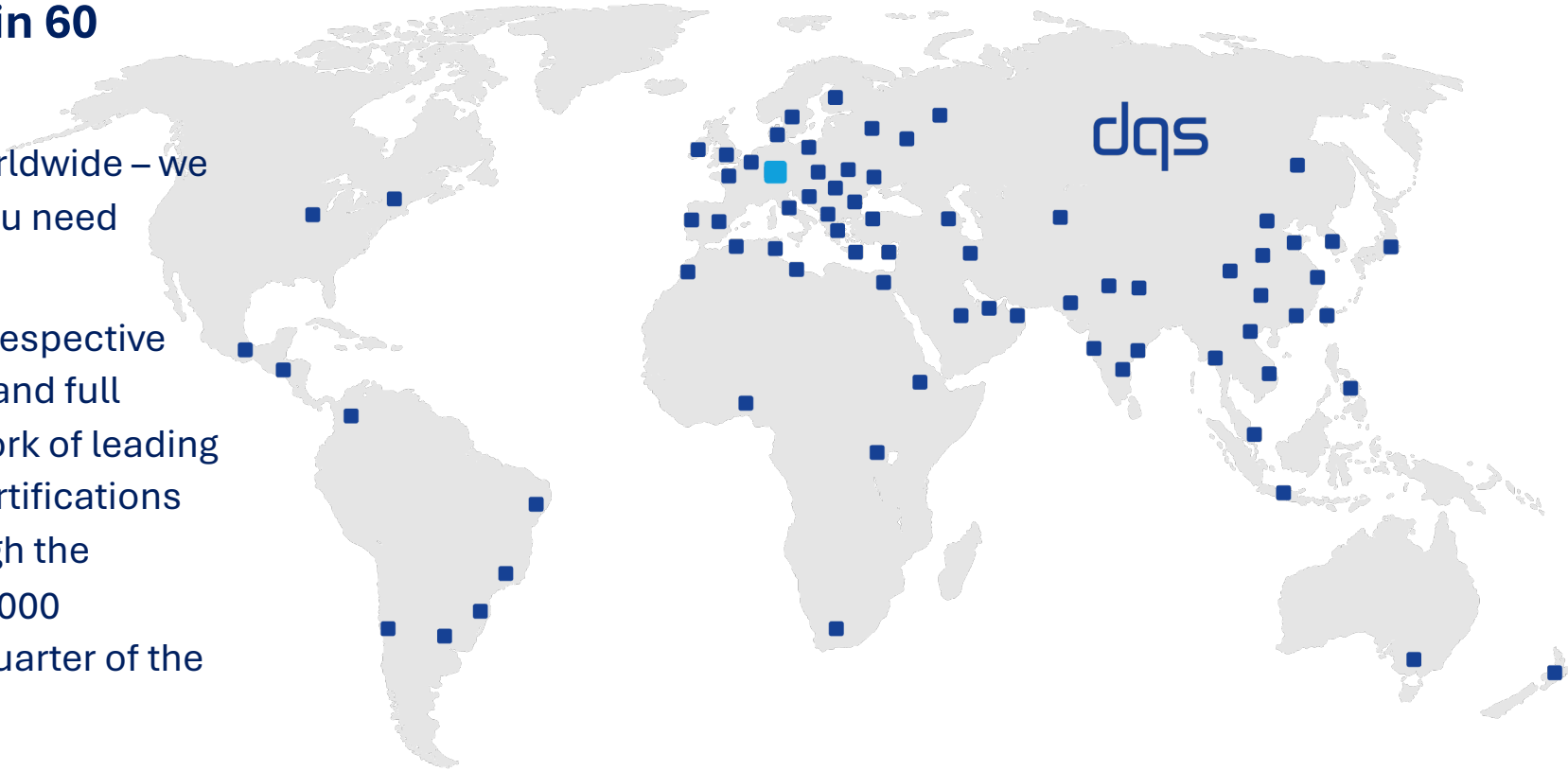

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ISO Standards are Internationally agreed by Experts

“Think of Standards as a formula that describes the best way of doing something”

25454

International Standards covering almost all aspects of technology, management and manufacturing.

172

Members representing ISO in their country. There is only one member per country.

839

Technical committees and subcommittees to take care of standards development.

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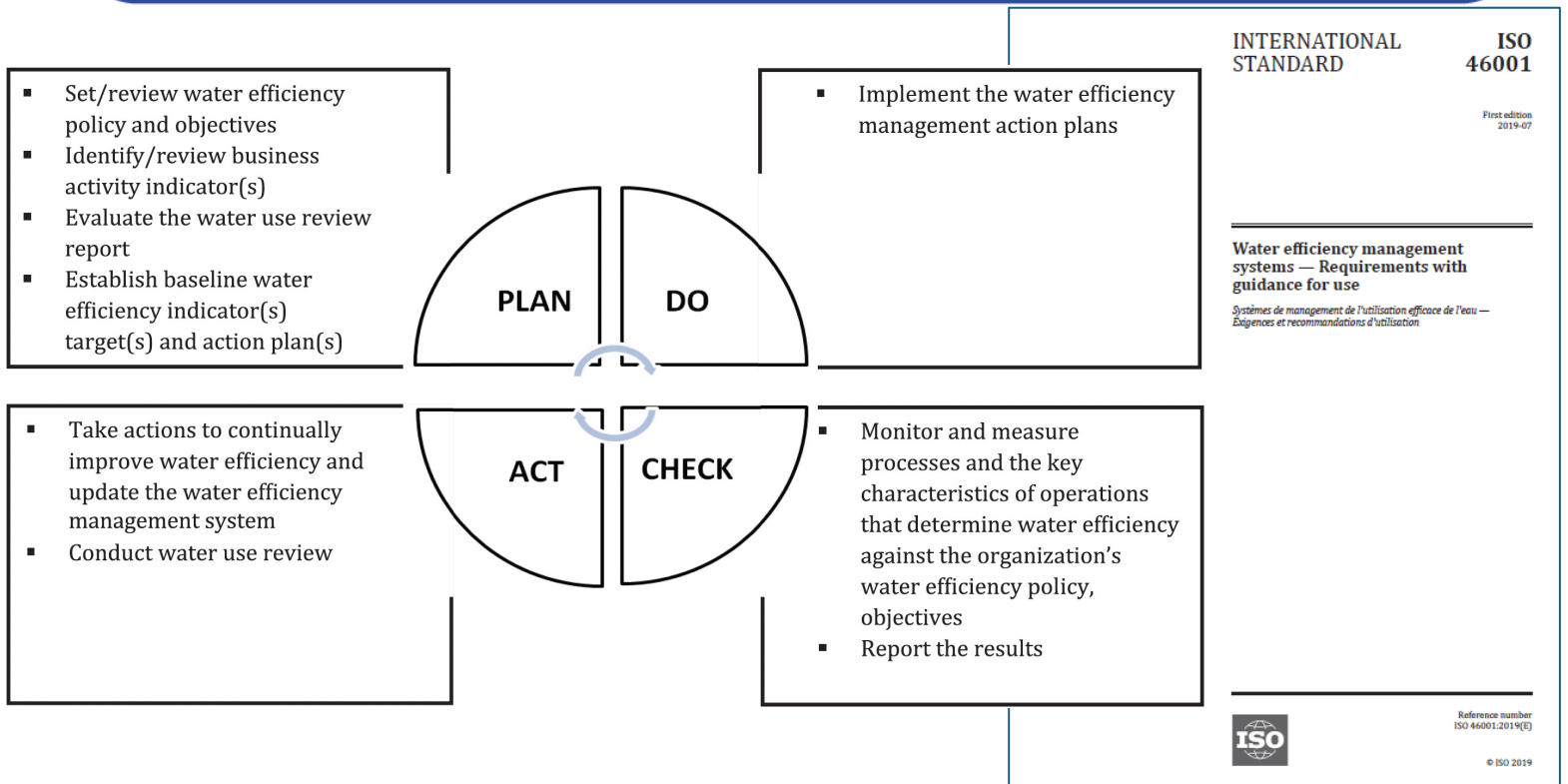
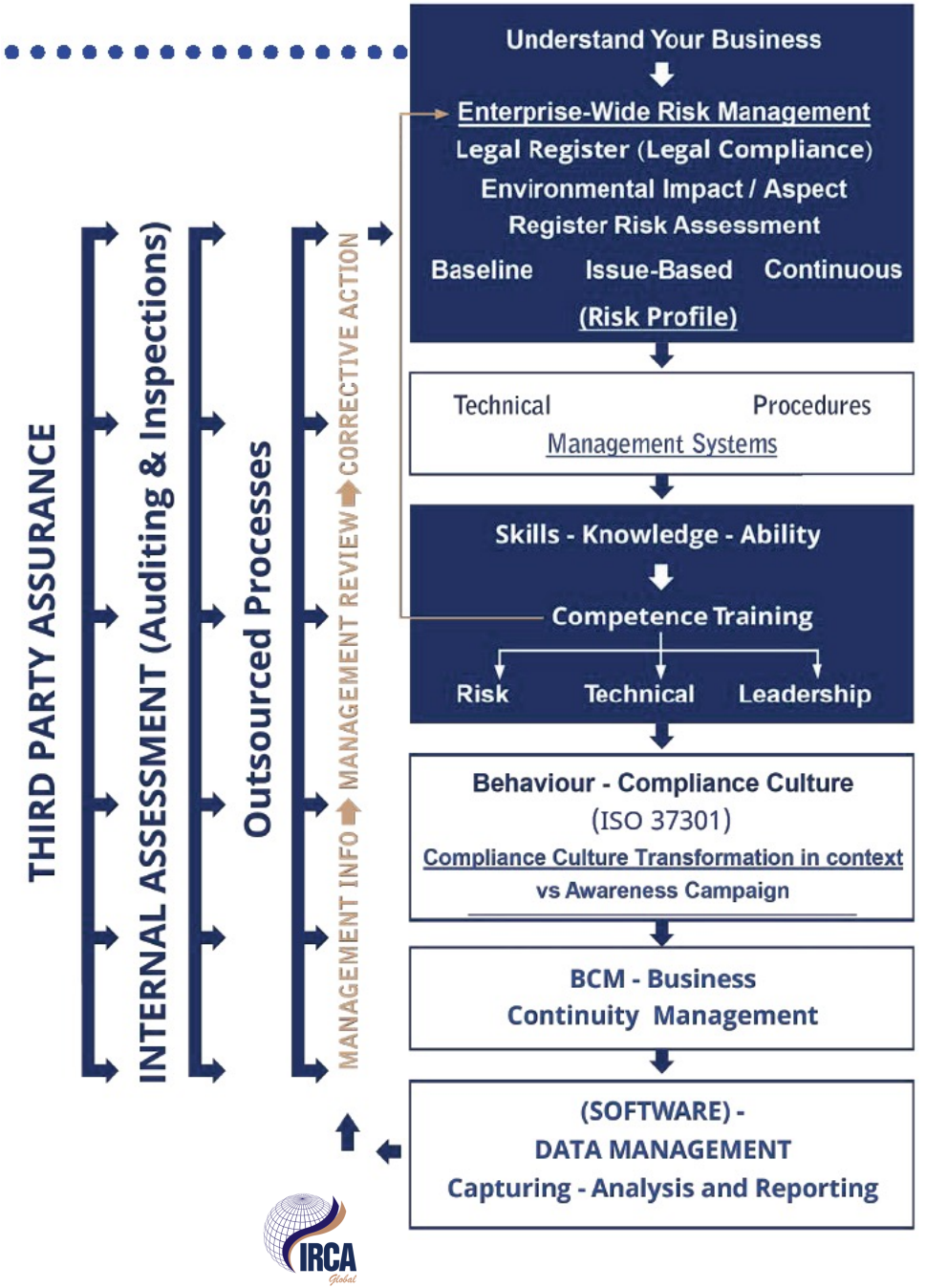
ACTIVISM FACTORS

- Economics
- Labour Unions
- Legal Requirements & Liabilities
- Technology
- Best Practices
- Workforce Changes
- International Codes & Standards
- Medical Research
- Social Demands (Consumerism)
- Politics





ISO Standard can assist organisations in becoming more resilient to water supply disruptions.

“Operational resilience – An organisation's ability to continue delivering critical activities throughout a disruption. This concept is not just about preventing disruptions but also encompasses the idea of bouncing back stronger and more agile after a disruption”.

Risk Assessment and Enterprise Risk Management (ISO 31000);(ISO 31010):

• ISO 31000 provides guidelines for risk management, helping companies identify, assess, and mitigate risks in this case water supply disruptions.

“Companies can develop comprehensive **risk management plans** to address potential water shortages, ensuring continuity of operations”

Environmental Management (ISO 14001):

- ISO 14001 focuses on effective environmental management systems, encouraging companies to reduce their water usage and improve efficiency.

- Through regular audits and monitoring, companies can identify areas for improvement and implement water-saving measures.

Water Efficiency Management (ISO 46001):

- ISO 46001 provides a framework for implementing and maintaining a water efficiency management system.

- Companies can optimise their water use, reduce wastage, and ensure sustainable water management practices.

Business Continuity Management (ISO 22301):

- ISO 22301 outlines the requirements for a business continuity management system, enabling companies to prepare for and respond to water supply disruptions.

- Training and certification ensure that employees are aware of the procedures and can act quickly in case of an emergency and minimise the impact.

Water Footprint Assessment (ISO 14046):

- ISO 14046:2014 specifies principles, requirements, and guidelines for assessing the water footprint of products, processes, and organisations based on life cycle assessment.

- This standard helps companies understand the environmental impacts related to water usage, enabling them to implement strategies to reduce their water footprint.

Supply Chain Security Management (ISO 28000):

• ISO 28000 focuses on security management systems for the supply chain, including the security of water supplies.

• Companies can ensure that their supply chains are resilient and capable of withstanding water supply disruptions.

Training and Capacity Building:

• Regular training programs ensure that employees are knowledgeable about best practices in water management and conservation.

• Internal Monitoring, Auditing, and certification help maintain high standards and continuous improvement in water management strategies.

By integrating these
ISO standards (Best Practice guidelines),

Companies can create robust systems to manage water resources effectively, minimise the impact of water supply disruptions, and ensure sustainable operations.

Businesses can implement a variety of initiatives to reduce their water consumption, and ISO standards provide guidelines and frameworks to support these efforts.

Water Efficiency Management:

- **ISO 46001 (Water Efficiency Management Systems)**: This standard provides a framework for implementing and maintaining a water efficiency management system. It helps organizations establish policies, objectives, and processes to manage water usage effectively.

1. Water Audits and Assessments:

- Conduct regular water audits to identify areas of high water consumption and opportunities for reduction.
- Use water assessment tools and techniques to measure and monitor water usage.

2. Leak Detection and Repair:

- Implement a leak detection program to identify and repair leaks in water supply systems promptly.
- Regularly inspect and maintain plumbing systems to prevent water wastage.

3. Water-Saving Technologies and Fixtures:

- Install water-efficient fixtures and appliances, such as low-flow faucets, toilets, and showerheads.
- Use water-saving technologies in industrial processes, such as water recirculation systems and cooling towers.

4. Recycling and Reuse:

- Implement water recycling and reuse systems to treat and reuse wastewater for non-potable purposes, such as irrigation, cooling, and cleaning.
- Utilize greywater systems to recycle water from sinks, showers, and laundry for landscape irrigation.

5. Employee Training and Engagement:

- Educate employees about water conservation practices and the importance of reducing water consumption.
- Encourage employees to report leaks and suggest water-saving ideas.

6. Process Optimization:

- Optimize industrial processes to reduce water usage, such as using dry cleaning methods or optimizing cooling systems.
- Implement best practices for water management in manufacturing and production processes.

7. Sustainable Landscaping:

- Use drought-tolerant plants and xeriscaping techniques to reduce water usage in landscaping.
- Implement efficient irrigation systems, such as drip irrigation, to minimize water waste.

8. **Monitoring and Reporting**:
    - Establish a water monitoring system to track water usage and identify trends and anomalies.
    - Report water usage and conservation efforts as part of sustainability reporting and communicate progress to stakeholders.

9. Community and Stakeholder Collaboration:
    - Collaborate with local communities, governments, and other stakeholders to promote water conservation initiatives.
    - Participate in water stewardship programs and support local water conservation efforts.

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