

# ISO 14001:2015

## Operational Planning and Control Process orientation as a central aspect of environmental management systems

**A significant intention of ISO 14001:2015 is to strengthen the process orientation. Compared to the previous version from 2008, where Section 4.4.6 was still dealing with requirements for “process control”, the new environmental standard goes considerably further. The relevant Section 8.1 “Operational Planning and Control” now explicitly requires, in addition to a review and evaluation of planned and unplanned changes, the review of outsourced processes and the integration of the life-cycle concept.**

The fundamental aspects of environmental management have – unsurprisingly – remained the same in the new environmental standard: the consideration of environmentally relevant aspects in order to fulfil relevant requirements, the continuous improvement of environmental performance and the reduction of environmental impact. The central relevance of the process-oriented approach for the environmental management system is new, however, enabling organizations to safely measure and control environmentally relevant processes alongside their business processes. In order to measure the risks and opportunities of environmentally relevant aspects (Section 6.1.2), binding requirements (Section 6.1.3) as well as other environmentally relevant topics, a systematic analysis of the operational processes and their interactions within the scope of application of the organization is necessary. ISO 9001:2015 can be a valuable guidebook for this. If an organization orients itself by the systematic display of its own value-creating process in conformity

with the quality standard, the significant environmentally relevant aspects may be systematically recognized as well. Using this approach makes it clear quickly where an organization needs to take action. These actions are derived from Sections 6.1 (Actions for managing risks and opportunities) and 6.2 (environmental objectives and planning to achieve them) and need to be designed, realized controlled and maintained.

### Defining Actions Specific to an organization

An organization can, with respect to their operational processes, decide for itself about the flexibility and degree of detail of their actions. Examples of possible actions are:

- Procedure instructions, contracts or agreements with suppliers,
- Use of technical options,
- Optimization of installations,
- Technical supervision,
- Use of competent personnel,
- Or a combination thereof.

The selection of specific actions depends on various factors, such as e.g. skills, experience and qualifications of the people involved, as well as the complexity and environmental relevance of the operational implementation. However, it needs to be ensured that the actions, such as e. g. servicing, maintenance, compliance with limit values, are effective and the objectives defined during planning are achieved. For effective planning and control, operational criteria are to be determined (Section 8.1). The organization is also obliged to supervise planned changes of actions/processes and evaluate the consequences of unintentional changes. In addition, it needs to take action, if necessary, to mitigate or prevent negative effects. The type and extent of that control should correspond to the requirements of the organization, and shall be defined within the environmental management system.



## Outsourced process according to ISO 14004:2016, clause 8.1.2

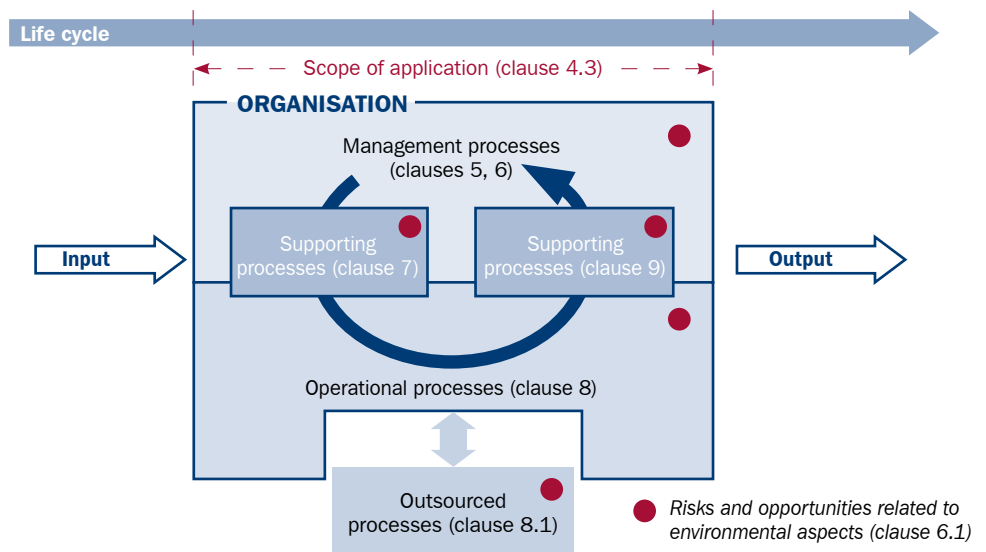
An outsourced process is one that fulfils all of the following criteria:

- the function or process is integral to the organization's functioning;
- the function or process is needed for the environmental management system to achieve its intended outcome;
- the liability for the function or process conforming to requirements is retained by the organization;
- the organization and the external provider have a relationship, e.g. one where the process is perceived by interested parties as being carried out by the organization.

Source: *Environmental management systems – General guidelines on implementation (ISO 14004:2016); German and English version EN ISO 14004:2016*

### New Aspect: Considering the Life Cycle

Significant environmental effects may occur during the entire life cycle, both upstream and downstream: such as e.g. raw material extraction, development and production, transport and delivery, use, end-of-life-cycle treatment or final disposal of the product or service (ISO 14004). The life cycle should be considered as early as possible, ideally already during product development and procurement. ISO 14001 does not require a detailed life cycle analysis according to ISO 14044, however, the organization is required to evaluate to which extent outsourced processes need to be controlled and influenced. External suppliers and contractors are also to be reviewed. In addition to significant environmental aspects, all other requirements and the environmental risks and opportunities connected with them are to be evaluated. This may require acquiring suitable information about possible significant environmental effects in connection with transport or delivery, use, end-of-life-cycle treatment and final



disposal of the products or services. This creates a good possibility to improve the entire environmental performance and leads to an unequivocal responsibility with regard to detrimental environmental effects and environmental protection. So as to be able to trust that the processes have been carried out as planned, ISO 14001:2015 correspondingly requires appropriately documented information.

According to Section 8.2 „Emergency Planning and Response“, the organization is obliged to set up and implement such processes as are required for the emergency situations projected (Section 6.1).

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