
**Tourism and related services —
Guidelines on developing
environmental specifications for
accommodation establishments**

*Tourisme et services connexes — Lignes directrices pour l'élaboration
de spécifications environnementales pour les hébergements*

PROOF / ÉPREUVE



Reference number
ISO/TS 13811:2015(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Terms and definitions	1
3 Principles	2
3.1 General	2
3.2 Reduce the negative impacts and strengthen the positive impacts of tourism on the environment	2
3.2.1 Conserve the natural environment and biodiversity	2
3.2.2 Reduce the consumption of resources	3
3.2.3 Reduce pollution	3
4 Recommendations	4
4.1 General recommendations	4
4.2 Recommended criteria to maximize positive impacts to the environment and minimize negative impacts	4
4.2.1 Applicability	4
4.2.2 Conserving biodiversity, ecosystems, and landscapes	4
4.2.3 Conserving resources	5
4.2.4 Reducing pollution	5
4.2.5 General criteria	5
Bibliography	7

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is Technical Committee ISO/TC 228, *Tourism and related services*.

Introduction

Accommodation establishments exist in nearly every habitat in the world. While many impacts, such as energy and water consumption, are universal, the location of the accommodation establishment determines the priority and type of impacts to be considered. A hotel in the desert, on a small island or in a traditional resort can have greater impact on water resources than one in a rain forest. A building in the Arctic needs to consider protection of the permafrost from melting beneath the buildings. A lodge in the African savannah needs to consider its effect on wildlife, just as a resort hotel on the beach needs to consider the effect of its lighting on nesting sea turtles.

Because of the diversity of habitats in the world, these effects are not detailed in this Technical Specification. This Technical Specification is intended to be used as a guideline for the development of national and private specifications that are oriented towards the special conditions prevailing in each country, while considering the general impacts of tourists and accommodation establishments.

In order to reduce the negative environmental impacts of accommodation, establishments are encouraged to follow good practices which do not compromise health and safety practices and requirements.

The Global Sustainable Tourism Council (GSTC) has contributed to the development of this Technical Specification. The criteria specified in [4.2](#) are based on the environmental part of the GSTC criteria for Hotels and Tour Operators.

Tourism and related services — Guidelines on developing environmental specifications for accommodation establishments

1 Scope

This Technical Specification provides guidelines for developing specifications aimed at reducing the negative impacts and increasing the positive impacts on the environment of accommodation establishments.

This Technical Specification does not apply to campsites.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

accommodation

provision of at least sleeping and sanitary facilities

[SOURCE: ISO 18513:2003, 2.1.1]

2.2

accommodation establishment

establishment providing tourist *accommodation* (2.1)

2.3

additionality

difference between what an individual consumes at home and in an *accommodation establishment* (2.2)

2.4

environment

surroundings in which an *accommodation establishment* (2.2) operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelationships

Note 1 to entry: Surroundings in this context extend from within an accommodation establishment to the global system.

[SOURCE: ISO 14001:2015, 3.2.1, modified]

2.5

environmental aspect

element of an *accommodation establishment's* (2.2) activities or products or services that can interact with the *environment* (2.4)

Note 1 to entry: A significant environmental aspect has or can have a significant *environmental impact* (2.6).

[SOURCE: ISO 14001:2015, 3.2.2, modified]

2.6

environmental impact

change to the *environment* (2.4), whether adverse or beneficial, wholly or partially resulting from an *accommodation establishment's* (2.2) *environmental aspects* (2.5)

[SOURCE: ISO 14001:2015, 3.2.4, modified]

2.7

grey water

waste water from household baths and showers, handbasins and kitchen sinks but excluding waste water and excreta from water closets

[SOURCE: ISO 6107-7:2006, 21]

2.8

specification

document stating requirements

[SOURCE: ISO 9000:2015, 3.8.7, modified]

3 Principles

3.1 General

This clause provides guidelines for new and, when reviewed, existing specifications, which:

- should consider the principles of this Technical Specification;
- should emphasize the importance of taking actions to implement these principles;
- may contain explanations for exceptions where parts of this Technical Specification have not been adopted and/or applied.

3.2 Reduce the negative impacts and strengthen the positive impacts of tourism on the environment

3.2.1 Conserve the natural environment and biodiversity

Biological diversity and the integrity of landscapes can be affected by tourism positively or negatively. Accommodation establishments can contribute to conservation or can damage the natural resources.

a) Positive impacts can be produced by:

- conserving or restoring natural areas and areas of scenic beauty, whether owned by the accommodation establishment or not;
- extractive activities that are sustainable and increase the viability of natural populations, relative to traditional extractive activities;
- environmental education of individuals, staff, and neighbouring communities.

b) Negative impact can be produced by:

- inappropriate earth movement or destruction of natural habitats during construction;
- destruction or alteration of scenic landscapes;
- direct or indirect extractive activities (inappropriate harvesting, use, display, or sale of plants and animals);
- blocking migratory paths for animals;
- light and noise pollution;
- physical pollutions (air, water and soil);
- introduction of invasive species or species that compete for resources with the natural habitat;

- alteration of wildlife habitat or behaviour by activities of accommodation establishments.

3.2.2 Reduce the consumption of resources

Specifications should consider how accommodation establishments can make an active contribution to the conservation and recovery of natural resources. From the point of view of additionality, water consumption, for example, involves a typical inhabitant of Europe consuming 100 l to 200 l per night at home; however, in a hotel, a European tourist consumes around 300 l per night depending on how the hotel is managed and the facilities offered (see Reference [9]). Hotels with bad practices can consume more water than an entire village and, in some cases, they have left local communities without sufficient water for their own consumption.

Similar cases exist for the consumption of energy from electricity, fossil fuels and firewood. Disposable goods, chemicals for laundry use and green areas, etc. all have additionality relative to the consumption of an individual. In most cases, accommodation establishments offer economies of scale that permit greater efficiency in resource use than would be possible for the individuals at home, but all too frequently these potential efficiencies are not put into practice, even though they would save large quantities of money in operating expense.

Criteria should be designed to promote zero or negative additionality for the consumption of resources. In regions with important resource limitations, such as water in arid regions, criteria should be designed to limit the use of resources in accordance with their availability, taking into consideration that access to the resource by local communities should not be diminished. See ISO 14046.

3.2.3 Reduce pollution

The degree of contamination of water, air or soil depends both on the amount of resources consumed and on the disposition that is made of the resultant waste products.

The principal categories of air, water and soil pollution produced in accommodation establishments from resource consumption are:

- greenhouse gases from transportation, heating and cooling, electricity and methane from sewage treatment (see ISO/TS 14067);
- other air pollutants caused by burning wood or fossil fuels, or the release of chemicals that can cause ozone depletion;
- sewage;
- solid waste;
- chemical pollution of soil and water caused by detergents, paints and solvents, pesticides, herbicides and fertilizers, among others.

Excess noise and light pollution can also be produced, irrespective of consumption. Noise and light pollution can negatively affect the quality of life of individuals. It can also affect the behaviour and viability of populations of wildlife.

To limit pollution, emphasis should be placed on policies and actions that reduce the consumption of waste-producing items, such as fossil fuels, disposable goods, chemicals, detergents and water. Following this, methods of disposing of waste should be based on best international practices on the re-use of waste, such as processed grey water, composting of organic waste, or secondary uses of waste heat. Remaining wastes should be recycled where possible, and the remainder given final disposition in a manner that does not damage the environment.

4 Recommendations

4.1 General recommendations

Developed specifications should consider the requirements for the following:

- a) identification of environmental aspects and impacts, such as:
 - natural areas, flora and fauna (biodiversity);
 - emissions, effluents and solid waste;
 - energy efficiency;
 - water conservation and efficiency;
 - architecture and construction;
 - landscaping;
 - others;
- b) criteria for quantifying and qualifying environmental aspects and impacts;
- c) environmental practices for reducing the negative impacts;
- d) environmental practices for increasing the positive impacts;
- e) environmental training needs for staff;
- f) communication of environmental initiatives and practices to staff, visitors and local community;
- g) commitment of stakeholders including staff and visitors in environmental practices;
- h) current practice which shows that environmental management systems (e.g. ISO 14001) are useful in ensuring achievement of environmental requirements;
- i) resources for reducing the negative impact and increasing the positive impacts.

4.2 Recommended criteria to maximize positive impacts to the environment and minimize negative impacts

4.2.1 Applicability

All criteria¹⁾ should be applied to the greatest extent practical, unless for a specific situation the criterion is not applicable and this is justified. There may be circumstances in which a criterion is not applicable to a specific accommodation establishment, given the local regulatory, environmental, social, economic or cultural conditions. While micro and community-owned tourism businesses do have a significant economic and environmental footprint collectively, however, flexibility is given for the implementation of all criteria given their financial and technical constraints (see References [11], [12] and [13]).

4.2.2 Conserving biodiversity, ecosystems, and landscapes

- a) Wildlife species should not be harvested, consumed, displayed, sold, or traded, except as part of a regulated activity that ensures that their utilization is sustainable.

1) The criteria specified in 4.2 are based on the environmental part of the Global Sustainable Tourism Council (GSTC) criteria for Hotels and Tour Operators (see Reference [10]).

- b) No captive wildlife should be held, except for properly regulated activities. Living specimens of protected and wildlife species should only be kept by those authorized and suitably equipped to house and care for them humanely.
- c) The accommodation establishment should take measures to avoid the introduction of invasive alien species. Native species should be used for landscaping and restoration wherever feasible, particularly in natural landscapes. The accommodation establishment should support and contribute to biodiversity conservation, including natural protected areas, critical habitats and areas of high biodiversity value. Interactions with wildlife, taking into account cumulative impacts, should not produce adverse effects on the viability and behaviour of populations in the wild. Any disturbance of natural ecosystems should be minimized and rehabilitated, and there should be a compensatory contribution to conservation management.

4.2.3 Conserving resources

- a) Purchasing policies should favour locally appropriate, locally produced and ecologically sustainable products, including building materials, capital goods, food, beverages, consumables and housekeeping products.
- b) The purchase and use of disposable and consumable goods should be measured and the accommodation establishment should actively seek ways to reduce their use. Energy consumption should be measured, sources should be indicated, and measures should be adopted to minimize overall consumption and encourage the use of clean and renewable energy.
- c) Water consumption, including treated water, should be measured, sources should be indicated and measures should be adopted to minimize overall consumption. Water sourcing should be sustainable and should not adversely affect environmental flows.

4.2.4 Reducing pollution

Greenhouse gas emissions from all sources controlled by the accommodation establishment should be measured, procedures should be implemented to minimize them, and offsetting remaining emissions should be encouraged.

- a) The accommodation establishment should encourage its customers, staff and suppliers to reduce transportation-related greenhouse gas emissions.
- b) Wastewater, including grey water, should be effectively treated and only be reused or released safely, with no adverse effects to the local population and the environment.
- c) Waste should be measured, mechanisms should be in place to reduce waste and, where reduction is not feasible, to re-use or recycle it. Any residual waste disposal should have no adverse effect on the local population and the environment.
- d) The use of harmful substances, including pesticides, paints, swimming pool disinfectants and cleaning materials, should be minimized, and substituted when available, by innocuous products or processes. All storage, use, handling and disposal of chemicals should be properly managed.
- e) The accommodation establishment should implement practices to minimize pollution from noise, light, runoff, erosion, ozone-depleting compounds, and air, water and soil contaminants.

4.2.5 General criteria

- a) All personnel should receive periodic guidance and training regarding their roles and responsibilities with respect to environmental, social, cultural, economic, quality, health and safety issues.

- b) Planning, design, construction, renovation, operation and demolition of buildings and infrastructure should:
 - 1) comply with zoning requirements and with laws related to protected areas and heritage consideration;
 - 2) respect the natural and cultural heritage surroundings in planning, siting, design and impact assessment;
 - 3) use locally appropriate sustainable practices and materials.
- c) Information about, and interpretation of, the natural surroundings, local culture and cultural heritage should be provided to customers, as well as explaining appropriate behaviour while visiting natural areas, living cultures and cultural heritage sites. Donations to, and promotions of, conservation projects or actions should be encouraged.
- d) The activities of the accommodation establishment should not jeopardize the provision of basic services, such as food, water, energy, healthcare or sanitation, to neighbouring communities.
- e) Tourism activity should not adversely affect local access to livelihoods, including land and aquatic resource use, rights-of-way, transport and housing.

Bibliography

- [1] ISO 6107-7:2006, *Water quality — Vocabulary — Part 7*
- [2] ISO 9000:2015, *Quality management systems — Fundamentals and vocabulary*
- [3] ISO 14001:2015, *Environmental management systems — Requirements with guidance for use*
- [4] ISO 14004, *Environmental management systems — General guidelines on implementation*
- [5] ISO 14046, *Environmental management — Water footprint — Principles, requirements and guidelines*
- [6] ISO/TS 14067, *Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification and communication*
- [7] ISO 18513:2003, *Tourism services — Hotels and other types of tourism accommodation — Terminology*
- [8] GÖSSLING S., PEETERS P., HALL C.M., CERON J.P., DUBOIS G., LEHMANN L.V., SCOTT D. Tourism and water use: Supply, demand and security. An international review. *Tour. Manage.* 2012, **33** (1) pp. 1–15
- [9] STYLES D., SCHÖNBERGER H., GALVEZ M.J.L. 2013). *Best environmental management practice in the tourism sector: Learning from frontrunners*. Luxembourg: Publications Office of the European Union. <http://susproc.jrc.ec.europa.eu/activities/emas/documents/TourismBEMP.pdf>
- [10] Global Sustainable Tourism Criteria for Hotels and Tour Operators from the Global Sustainable Tourism Council (GSTC), available at <https://www.gstcouncil.org/en/>
- [11] VAN HAASTERT M., & DE GROSBOIS D. Environmental initiatives in bed and breakfast establishments in Canada: Scope and major challenges with implementation. *Tourism and Hospitality Planning & Development.* 2010, **7** (2) pp. 179–193
- [12] SCHAPER M., & CARLSEN J. 2004). Overcoming the green gap: Improving the environmental performance of small tourism firms in Western Australia. In R. Thomas (Ed.), *Small firms in tourism: International perspectives* (197-214). New York: Elsevier
- [13] BUI D.T. Tourism industry responses to the rise of sustainable tourism and related environmental policy initiatives: The case of Hue City, Vietnam. (Unpublished doctoral dissertation). Auckland University of Technology, New Zealand, 2009, <http://aut.researchgateway.ac.nz/handle/10292/769>

