# INTERNATIONAL STANDARD



First edition 2007-11-01

# Assistive products for persons with vision impairments and persons with vision and hearing impairments — Acoustic and tactile signals for pedestrian traffic lights

Aides fonctionnelles pour personnes ayant des déficiences visuelles et/ou des déficiences visuelles et auditives — Signaux acoustiques et tactiles pour feux de circulation



Reference number ISO 23600:2007(E)

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Published in Switzerland

# Foreword

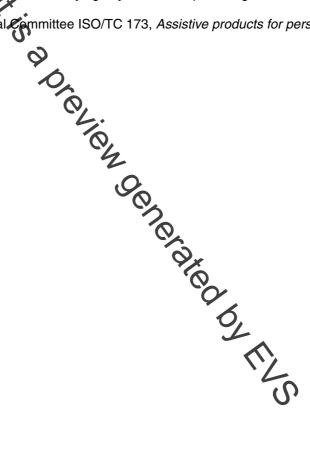
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ISO 23600 was prepared by Technical committee ISO/TC 173, Assistive products for persons with disability.



# Introduction

The aim of this International Standard is to specify the requirements for acoustic and tactile signals for pedestrian traffic lights, for persons with vision impairments and persons with vision and hearing impairments.

Persons with vision impairments and persons with vision and hearing impairments travelling alone use a number of techniques and cues in the environment to commence a safe street crossing. Environmental sounds and cues provide timing and directional information.

At an intersection that is equipped with pedestrian lights, acoustic and tactile signals provide equivalent information to persons with vision impairments and persons with vision and hearing impairments.

At an intersection that is not equipped with acoustic and tactile signals, persons with vision impairments are forced to use the sounds of vehicular traffic in order to estimate the time to start crossing a street and to determine their direction of travel. However, the sounds of vehicular traffic are not always available and often insufficient. In the case of persons with vision and hearing impairments, the majority of these people have to rely on assistance. The installation of acoustic and tactile signals for pedestrian traffic lights significantly improves the ability of persons with vision impairments and persons with vision and hearing impairments to travel safely and independently.

Acoustic and tactile signals for pedestrian traffic tonts provide persons with vision impairments and persons with vision and hearing impairments with information to know precisely when the walk initiation signal has been activated. They can also provide directional information and the geometry of the intersection.

The specifications and installation methods of acoustic and tactile signals for pedestrian traffic lights have been different from country to country. This International Standard sets out the requirements, technical specifications and performance criteria for acoustic and tactile signals for pedestrian traffic lights.



# Assistive products for persons with vision impairments and persons with vision and hearing impairments — Acoustic and tactile signals for pedestrian traffic lights

# 1 Scope

This International Standard specifies requirements for acoustic and tactile signals for pedestrian traffic lights to assist in safe and independent mobility of persons with vision impairments and persons with vision and hearing impairments.

It is applicable to design, installation and operation of acoustic and tactile signals for pedestrian traffic lights.

It is not applicable to electromagnetic compatibility (EMC), electrical safety or operating conditions.

NOTE Operating conditions can be affected by climate, shock, vibrations or other environmental factors.

### 2 Terms and definitions

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

#### 2.1

#### persons with vision impairments

persons who are blind or who have low vision

#### 2.2

#### persons with vision and hearing impairments

persons who are blind or who have low vision in combination with deafness or hearing loss

#### 2.3

#### acoustic orientation signal

sound used to enable persons with vision impairments to recognise the presence of and to locate a push-button box and/or pedestrian crosswalk

#### 2.4

#### walk initiation period

period when the display indicates that pedestrians may begin their crossing in the pedestrian crosswalk

#### 2.5

#### prohibited walk initiation period

period when the display indicates that pedestrians may not enter the pedestrian crosswalk

NOTE The prohibited walk initiation period consists of two parts: the period following the walk initiation period when pedestrians in the pedestrian crosswalk may continue going out of the pedestrian crosswalk and the period when pedestrians are prohibited to enter the pedestrian crosswalk.

#### 2.6

#### acoustic walk initiation signal

sound used to indicate to persons with vision impairments the walk initiation period