

# ISO TC 159/SC5

## Ergonomics of the Physical Environment

**Scope** To develop International Standards in the area of Ergonomics of the Physical Environment, including:

- Thermal environments
- Vision and lighting
- Danger signals and communication in noisy environments
- People with special requirements
- Surface temperatures
- Integrated environments
- Perception of air quality

**Chair** Prof. Ken Parsons (United Kingdom)

**Secretary** Mr. Jose Alcorta

**Participating Countries** (17)

**Observer Countries** (10)

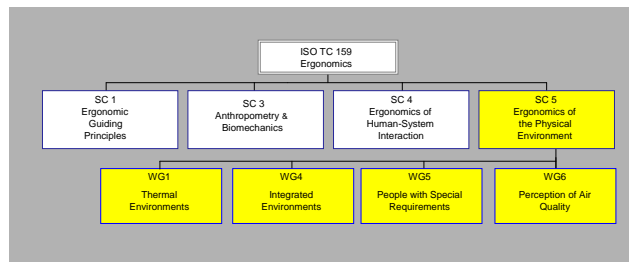
### Working Groups

- 1 - Thermal environments
- 4 - Integrated environments
- 5 - People with Special Requirements
- 6 - Perception of Air Quality

### How to get involved:

- 1) Find out more about the ANSI/HFES TAG to ISO TC 159/SC5 by contacting: Daryle Gardner-Bonneau at [JDNBonneau@charter.net](mailto:JDNBonneau@charter.net)
- 2) Participate in the HFES Standardization and Best Practices Working Group by contacting: Al Poston at [aposton86@comcast.net](mailto:aposton86@comcast.net)

### Organizational Structure



### Current Projects:

#### ISO/FDIS 24500

Guidelines for all people, including elderly persons and persons with disabilities -- Auditory signals on consumer products

#### ISO/DIS 24501

Guidelines for all people including elderly persons and persons with disabilities - Auditory signals on consumer products- Sound pressure levels of signals for the elderly and in noisy conditions

#### ISO/CD 24502

Guidelines for all people including elderly persons and persons with disabilities -- Visual signs and displays -- Specification of age -related relative luminance and its use in assessment of light

#### ISO/DIS 28802

Ergonomics of the physical environment -- The assessment of environments by means of an environmental survey involving physical measurements of the environment and subjective responses of people

#### ISO/DIS 28803

Ergonomics of the physical environment -- Application of international standards to people with special requirements

#### NWIP N492

Sound pressure levels of spoken announcements for consumer products and public address

#### NWIP N502

Mathematical model for predicting and evaluating the dynamic human physiological response to thermal environments

### Published Standards

[ISO 7243:1989](#) Hot environments -- Estimation of the heat stress on working man, based on the WBGT-index (wet bulb globe temperature)

[ISO 7726:1998](#) Ergonomics of the thermal environment -- Instruments for measuring physical quantities

[ISO 7730:2005](#) Ergonomics of the thermal environment -- Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria

[ISO 7731:2003](#) Ergonomics -- Danger signals for public and work areas -- Auditory danger signals

[ISO 7933:2004](#) Ergonomics of the thermal environment -- Analytical determination and interpretation of heat stress using calculation of the predicted heat strain

[ISO 8996:2004](#) Ergonomics of the thermal environment -- Determination of metabolic rate

[ISO 9886:2004](#) Ergonomics -- Evaluation of thermal strain by physiological measurements

[ISO 9920:2007](#) Ergonomics of the thermal environment -- Estimation of thermal insulation and water vapour resistance of a clothing ensemble

[ISO 9921:2003](#) Ergonomics -- Assessment of speech communication

[ISO 10551:1995](#) Ergonomics of the thermal environment -- Assessment of the influence of the thermal environment using subjective judgement scales

[ISO 11079:2007](#) Ergonomics of the thermal environment -- Determination and interpretation of cold stress when using required clothing insulation (IREQ) and local cooling effects

[ISO 11399:1995](#) Ergonomics of the thermal environment -- Principles and application of relevant International Standards

[ISO 11428:1996](#) Ergonomics -- Visual danger signals -- General requirements, design and testing

[ISO 11429:1996](#) Ergonomics -- System of auditory and visual danger and information signals

[ISO 12894:2001](#) Ergonomics of the thermal environment -- Medical supervision of individuals exposed to extreme hot or cold environments

[ISO 13731:2001](#) Ergonomics of the thermal environment -- Vocabulary and symbols

[ISO 13732-1:2006](#) Ergonomics of the thermal environment -- Methods for the assessment of human responses to contact with surfaces -- Part 1: Hot surfaces

[ISO/TS 13732-2:2001](#) Ergonomics of the thermal environment -- Methods for the assessment of human responses to contact with surfaces -- Part 2: Human contact with surfaces at moderate temperature

[ISO 13732-3:2005](#) Ergonomics of the thermal environment -- Methods for the assessment of human responses to contact with surfaces -- Part 3: Cold surfaces

[ISO/TS 14415:2005](#) Ergonomics of the thermal environment -- Application of International Standards to people with special requirements

[ISO/TS 14505-1:2007](#) Ergonomics of the thermal environment -- Evaluation of thermal environments in vehicles -- Part 1: Principles and methods for assessment of thermal stress

[ISO 14505-2:2006](#) Ergonomics of the thermal environment -- Evaluation of thermal environments in vehicles -- Part 2: Determination of equivalent temperature

[ISO 14505-3:2006](#) Ergonomics of the thermal environment -- Evaluation of thermal environments in vehicles -- Part 3: Evaluation of thermal comfort using human subjects

[ISO 15265:2004](#) Ergonomics of the thermal environment -- Risk assessment strategy for the prevention of stress or discomfort in thermal working conditions

[ISO 15743:2008](#) Ergonomics of the thermal environment -- Cold workplaces -- Risk assessment and management

[ISO/TR 19358:2002](#) Ergonomics -- Construction and application of tests for speech technology