ISO TC 159/SC4
Ergonomics of Human-System Interaction

Scope Ergonomics standardization of the interaction between systems (often computer based) and the people who design, manufacture, use and maintain them. Areas of standardization include hardware ergonomics (including input, display and interactive devices, software ergonomics (including dialogue and interaction design) and human centred design processes and methods (including usability engineering and participative design methods).

Chair Thomas Stewart, UK

Secretary Ben Hedley, BSI (UK)

Participating Countries (22)

Observer Countries (13)

Working Groups

WG 1 – Fundamentals of controls and signalling methods
Convenor: Shinichi Fukuzumi, Japan

WG 2 – Visual display requirements
Convenor: Floris van Nes, Netherlands

WG 3 – Control, workplace and environmental requirements
Convenor: Ahmet Cakir, Germany

WG 5 – Software ergonomics and human computer dialogue
Convenor: Susan Harker, United Kingdom

WG 6 – Human centred design processes for interactive systems
Convenor: Johnathan Earthy, United Kingdom

WG 8 – Ergonomics design of control centres
Convenor: John Wood, United Kingdom

WG 9 – Haptic and tactile interactions
Convenor: Ian Sinclair, Canada

WG 10 – Accessible design – Doors and handles of consumer products
Convenor: Kenji Kurakata, Japan

WG 11 – Ease of operation for everyday products
Convenor: Nigel Bevan, United Kingdom

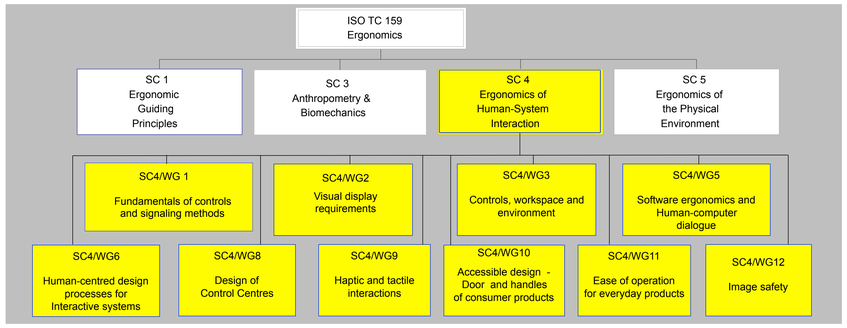
WG 12 – Image safety
Convenor: Dr Hiroyasu Ujike, Japan

JWG 28 (TC1 SC7 & TC159/SC4) – Common Industry Format (CIF)
Convenors: Thomas Geis, Germany; Mary Theofanos, USA

How to get involved:

Find out more about the ANSI/HFES TAG to ISO TC 159/SC4 by contacting: Tom Albin at talbinus@comcast.net

Organizational Structure



Current Projects:

ISO 9241-11 (rev.) Ergonomics of human system interaction – Part 11: Usability definitions and concepts (WG6). Committee Draft (CD) stage

ISO/TR 9241-1 Ergonomics of human system interaction – Part 1: Introduction to the ISO 9241 series (WG6). Working Draft (WD) stage

ISO 9241-112 and 125 Ergonomics of human system interaction – Part 112: Principles and general guidance for presentation of information; Part 125: Guidance on visual presentation of information (WG5) Both in Draft International Standard (DIS) stage.

ISO 9241-220 Ergonomics of human-system interaction – Part 220: Processes for enabling, executing and assessing human-centred design within organizations (WG6). CD stage

ISO 9241-300 series Ergonomics of human-system interaction – Electronic visual displays (WG2) –Part 306: Field assessment methods CD voted); Part 333: Stereoscopic displays using glasses (CD stage). 391 at FDIS stage and 392 FDIS approved (WG12)

ISO 9241-400 series Ergonomics of human-system interaction – Physical input devices (WG3) – Parts 400, 410, 411, 420 published

ISO 9241-900 series Ergonomics of human-system interaction – Tactile and haptic interactions (WG9) – Parts 910, 920 published; Part 940 (Evaluation) and Part 960 (Gesture interaction) at DIS stage

ISO 20282-1 Ease of operation of everyday products – Part 1: Design requirements for context of use and user characteristics – rev. (WG11)

ISO/IEC 2506X Series: Software product Quality Requirements and Evaluation (SQuaRE) – Common Industry Format (CIF) for Usability (JWG 28 – TC159/SC4 and ISO/IEC JTC1/SC7). ISO/IEC PDTR 25060 General Framework (published). ISO/IEC 25063 - Context of use description, and 25064 - User needs report (published); 25066 – Usability evaluation report, CD stage; 25065 – User requirements, WD stage

Published Standards

ISO 1503:2008 (revision) Spatial orientation and direction of movement – Ergonomic requirements

ISO 9241 Ergonomic requirements for office work with visual display terminals (VDTs)

Part 1:1997 General introduction; **Part 2:1992** Guidance on task requirements; **Part 4:1998** Keyboard requirements; **Part 5:1998** Workstation layout and postural requirements; **Part 6:1999** Guidance on the work environment; **Part 9:2000** Requirements for non-keyboard input devices; **Part 11:1998** Guidance on usability; **Part 12:1998** Presentation of informaton; **Part 13:1998** User guidance; **Part 14:1997** Menu dialogues; **Part 15:1997** Command dialogues; **Part 16:1999** Direct manipulation dialogues

ISO 9241-20:2008 Ergonomics of human-system interaction – Part 20: Accessibility guidelines for information/communication technology (ICT) equipment and services

ISO 9241-110:2006 Ergonomics of human-system interaction – Part 110: Dialogue principles (Revision of 9241-10)

ISO 9241-129:2010 Ergonomics of human-system interaction – Part 219: Guidance on software individualization

ISO 9241-143:2011 Ergonomics of human-system interaction – Part 143: Forms

ISO 9241-171:2008 Ergonomics of human-system interaction – Part 171: Guidance on software accessibility

ISO 9241-210:2010 Human-centred design process for interactive systems (Revision of ISO 13407)

ISO 9355 Ergonomic requirements for the design of displays and control actuators : **Part 1:1999** Human interactions with displays and control actuators; **Part 2:1999** Displays; **Part 3:2006** Control actuators

ISO 11064 Ergonomic design of control centres: **Part 1:2000** Principles for the design of control centres; **Part 2:2000** Principles for the arrangement of control suites; **Part 3:1999** Control room layout; **Part 6:2005** Environmental requirements for control centres; **Part 7:2006** Principles for the evaluation of control centres

ISO 13406-1,2:1999,2001 Ergonomic requirements for work with visual displays based on flat panels

ISO 14915-1,2,3:2002,2003,2002 Software ergonomics for multimedia user interfaces

ISO/TR 16982:2002 Ergonomics of human-system interaction – Usability methods supporting human-centred design

ISO/PAS 18152:2003 Ergonomics of human-system interaction – Specification for the process assessment of human-system issues

ISO/TR 18529:2000 Ergonomics of human-system interaction – Human-centred lifecycle process descriptions

ISO 24503:2011 Ergonomics – Accessible design – Tactile dots and bars on consumer products