

~~ISO/IEC JTC1/SC35 — DTR 30150-2~~

~~Date: 2023-02-25~~

~~ISO/IEC JTC1/SC35/AVG5~~

~~Secretariat: AFNOR~~

~~Date: 2023-10-18~~

- Style Definition
- Formatted: Font: 14 pt, Font color: Auto
- Formatted: zzCover large
- Formatted: Font: 14 pt, Bold, Font color: Auto
- Formatted: Font: 11 pt, Font color: Auto
- Formatted: Space Before: 0 pt
- Formatted
- Formatted: Font: 11 pt, Font color: Auto
- Formatted: Space After: 0 pt
- Formatted

~~Information technology — Affective computing user interface (AUI) — Part 2: —~~

~~Part 2: Affective characteristics~~

iTeh Standards

(<https://standards.iteh.ai>)

Warning

This document is not an ISO International Standard. It is distributed for review and comment. It is subject to change without notice and may not be referred to as an International Standard.

ISO/IEC DTR 30150-2

<https://standards.iteh.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-0fbc8003000f/iso-iec-dtr-30150-2>

Recipients of this draft are invited to submit, with their comments, notification of any relevant

patent **FDIS stage**

© ISO/IEC 2023

All rights of which they are aware and to provide supporting documentation.

Formatted: Font: 11 pt, Font color: Auto

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

<https://standards.itih.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-cfbc8003000f/iso-iec-dtr-30150-2>

ISO/IEC DTR 30150-2:(E)

Copyright notice

~~This ISO document is a working draft reserved. Unless otherwise specified, or committee draft and is copyright-protected by ISO. While required in the reproduction of working drafts or committee drafts in any form for use by participants in the ISO standards development process is permitted without prior permission from ISO, neither this document nor any extract from it context of its implementation, no part of this publication may be reproduced, stored or utilized otherwise in any form or transmitted in any form for any other purpose 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.~~

~~Requests for permission to reproduce this document for at the purpose of selling it should be addressed as shown address below or to ISO's ISO's member body in the country of the requester.~~

~~[Indicate the full address, telephone number, fax number, telex number, and electronic mail address, as appropriate, of the Copyright Manager of the ISO member body responsible for the secretariat of the TC or SC within the framework of which the working document has been prepared.]~~

~~Reproduction for sales purposes may be subject to royalty payments or a licensing agreement.~~

~~Violators may be prosecuted.~~

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO/IEC DTR 30150-2

<https://standards.iteh.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-cfbc8003000f/iso-iec-dtr-30150-2>

ISO/IEC DTR 30150-2:(E)

[ISO copyright office](#)
[CP 401 • Ch. de Blandonnet 8](#)
[CH-1214 Vernier, Geneva](#)
[Phone: + 41 22 749 01 11](#)
[E-mail: copyright@iso.org](mailto:copyright@iso.org)
[Website: www.iso.org](http://www.iso.org)

[Published in Switzerland](#)

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO/IEC DTR 30150-2](#)

<https://standards.iteh.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-cfbc8003000f/iso-iec-dtr-30150-2>

Contents

Foreword	viii
Introduction	xi
1 Scope	1
2 Normative reference	1
3 Terms and definitions	1
4 Organizing affective characteristics	2
5 Universal affective characteristics	3
5.1 General	3
5.2 Hierarchy of human needs	3
5.3 Human needs and application designs	3
5.3.1 General	3
5.3.2 Application designs for each level of needs	3
5.4 Applying hierarchy of needs	4
6 Cultural affective characteristics	4
6.1 General	4
6.2 Cultures as a source of belief and action	4
6.3 Recognizing the effects of cultures	5
6.4 Cultures and designs for user interfaces	5
6.5 Group characteristics related to cultures	6
6.5.1 General	6
6.5.2 Characteristics of groups and application designs	6
6.5.3 Trade offs of characteristics	7
7 Individual affective characteristics	7
7.1 General	7
7.2 Personality	7
7.3 Attitudes	7
7.4 Beliefs	8
7.5 Achievement motivation	8
7.6 Risk taking/aversion	8
8 Situational affective characteristics	9
8.1 General	9
8.2 Transient nature of emotions	9
8.3 Emotions, satisfaction and user experience	9
8.4 Emotions and context of use	9
9 Identification of affective characteristics	9
9.1 General	9
9.2 Time frame of identification	9
9.3 Methods of identification	10

9.3.1	Physiological identification of affect	10
9.3.2	Questions to the user	10
9.3.3	Inferring from user customizations	11
9.3.4	Inferring from user actions	11
9.3.5	Inferring from user vocabulary	11
9.3.6	Inferring by association	11
Annex A (informative) The affective and cognitive domain		12
A.1 General		13
A.2 Cognitive issues related to affective computing		13
A.2.1 Reasoning		13
A.2.2 Problem solving and decision making		13
A.2.3 Adaptability and creative thinking		14
A.2.4 Multi-tasking		14
A.2.5 Intelligence		15
Bibliography		16
Foreword		viii
Introduction		xi
1	Scope	1
2	Normative reference	1
3	Terms and definitions	1
4	Organizing affective characteristics	2
5	Universal affective characteristics	3
5.1	General	3
5.2	Hierarchy of human needs	3
5.3	Human needs and application designs	3
5.3.1	General	3
5.3.2	Application designs for each level of needs	3
5.4	Applying hierarchy of needs	4
6	Cultural affective characteristics	4
6.1	General	4
6.2	Cultures as a source of belief and action	4
6.3	Recognizing the effects of cultures	5
6.4	Cultures and designs for user interfaces	5
6.5	Group characteristics related to cultures	6
6.5.1	General	6
6.5.2	Characteristics of groups and application designs	6
6.5.3	Trade-offs of characteristics	7
7	Individual affective characteristics	7
7.1	General	7
7.2	Personality	7

ISO/IEC DTR 30150-2:(E)

7.3	Attitudes	7
7.4	Beliefs.....	8
7.5	Achievement motivation.....	8
7.6	Risk taking/aversion	8
8	Situational affective characteristics	9
8.1	General	9
8.2	Transient nature of emotions	9
8.3	Emotions, satisfaction and user experience	9
8.4	Emotions and context of use	9
9	Identification of affective characteristics.....	9
9.1	General	9
9.2	Time frame of identification.....	9
9.3	Methods of identification.....	10
9.3.1	General.....	10
9.3.2	Physiological identification of affect.....	10
9.3.3	Questions to the user.....	10
9.3.4	Inferring from user customizations.....	11
9.3.5	Inferring from user actions.....	11
9.3.6	Inferring from user vocabulary.....	11
9.3.7	Inferring by association.....	11
Annex A (informative)	Affective and cognitive domain.....	12
Bibliography		16

ISO/IEC DTR 30150-2

<https://standards.iteh.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-c7bc8003000f/iso-iec-dtr-30150-2>

Foreword

ISO (the International Organization for Standardization) ~~is a and IEC (the International Electrotechnical Commission) form the specialized system for worldwide federation of national standards standardization. National bodies (that are members of ISO member bodies). The work or IEC participate in the development 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. Internationally by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.~~

~~International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.~~

~~The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.~~

~~Attention is drawn. 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 document 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 or www.iec.ch/members_experts/refdocs).~~

~~ISO and IEC draw attention to the possibility that some of the elements implementation of this document may be involve the subject use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights. ISO in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents and <http://patents.iec.ch>. ISO and IEC shall not be held responsible for identifying any or all such patent rights.~~

~~This part of ISO/IEC 30150. Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.~~

~~For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.~~

~~This document was prepared by Joint Technical Committee ISO/IEC JTC1, Information technology, Subcommittee SC-35, User interfaces.~~

~~A list of all parts in the ISO/IEC 30150 consists of the following parts, underseries can be found on the general title Affective computing user interface: ISO and IEC websites.~~

~~— Part 1: Model~~

ISO/IEC DTR 30150-2:(E)

— *Part 2: Affective characteristics*

— *Part 31: Emotion annotation*

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO/IEC DTR 30150-2](https://standards.iteh.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-cfbc8003000f/iso-iec-dtr-30150-2)

<https://standards.iteh.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-cfbc8003000f/iso-iec-dtr-30150-2>

ISO/IEC DTR 30150-2:(E)

[Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at \[www.iso.org/members.html\]\(http://www.iso.org/members.html\) and \[www.iec.ch/national-committees\]\(http://www.iec.ch/national-committees\).](#)

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

<https://standards.itih.ai/catalog/standards/sist/66adb948-fabe-413f-ac31-cfbc8003000f/iso-iec-dtr-30150-2>