

DIN EN ISO 9241-11:2018-11 (E)

Ergonomics of human-system interaction - Part 11: Usability: Definitions and concepts (ISO 9241-11:2018)

Contents	Page
European foreword	4
Foreword	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Rationale and benefits of usability	12
5 Usability in a context of use	12
5.1 Concept of usability	12
5.2 System, product or service	14
5.3 Consideration of usability for “specified” circumstances	14
5.3.1 General	14
5.3.2 Specified users	14
5.3.3 Specified goals	14
5.3.4 Specified contexts of use	14
6 Outcomes of use	15
6.1 Usability as an outcome	15
6.2 Effectiveness	15
6.2.1 General	15
6.2.2 Accuracy	15
6.2.3 Completeness	16
6.3 Efficiency	16
6.3.1 General	16
6.3.2 Time used	17
6.3.3 Human effort expended	17
6.3.4 Financial resources expended	17
6.3.5 Materials expended	17
6.4 Satisfaction	17
6.4.1 General	17
6.4.2 Physical responses	17
6.4.3 Cognitive responses	18
6.4.4 Emotional responses	18
6.5 Specific uses of the concept of usability	18
6.6 Other outcomes of use	18
6.6.1 General	18
6.6.2 Accessibility	18
6.6.3 User experience	19
6.6.4 Avoidance of harm from use	19
7 Context of use	19
7.1 Components of the context of use	19
7.2 Users within the context of use	20
7.3 Goals within the context of use	20
7.4 Tasks within the context of use	21
7.5 Resources	22
7.5.1 General	22
7.5.2 Reusable resources	22
7.5.3 Expendable resources	22

7.6	Environment.....	22
7.6.1	General.....	22
7.6.2	Technical environment.....	22
7.6.3	Physical environment.....	23
7.6.4	Social, cultural and organizational environment.....	23
8	Applying the concept of usability.....	23
8.1	Usability that results from use of various objects of interest.....	23
8.2	Characteristics of users, tasks and environments needed for usability.....	24
8.3	Achieving usability in design and development.....	24
8.4	Usability in procurement.....	25
8.5	Usability in a review or when making a comparison.....	25
8.6	Usability inputs to marketing and market research.....	25
	Annex A (informative) Relationship of usability to other concepts.....	26
	Annex B (informative) Usability measurement.....	31
	Bibliography.....	34