

BS 8611:2023



BSI Standards Publication

**Robots and robotic devices – Ethical
design and application of robots and
robotic systems – Guide**

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2023

Published by BSI Standards Limited 2023

ISBN 978 0 539 21195 5

ICS 25.040.30

The following BSI references relate to the work on this document:

Committee reference AMT/10/1

Draft for comment 22/30451737 DC

Amendments/corrigenda issued since publication

Date

Text affected

Contents

	Page
Foreword	II
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Ethical risks	2
4.1 General	2
<i>Table 1 — Ethical issues, hazards and risks</i>	3
4.2 Ethical hazard identification	8
4.3 Ethical risk assessment	8
4.4 Learning robots	9
<i>Figure 1 — Ethical risk assessment and management process</i>	10
5 Ethical guidelines and measures	11
5.1 General societal ethical guidelines	11
5.2 Application of ethical recommendations and measures	13
<i>Table 2 — Ethical design parameters</i>	14
5.3 Commercial/financial ethical guidelines and measures	14
5.4 Environmental ethical guidelines, measures and sustainable development	15
6 Ethics-related system design recommendations	15
6.1 General principles for ethical design	15
6.2 Protection against the perception of harm	16
7 Verification and validation	16
7.1 General	16
7.2 Mitigation	17
7.3 Suggested methods	17
8 Information for use	19
8.1 General	19
8.2 Markings or indications	20
8.3 User manual	21
8.4 Service manual	21
Bibliography	22

Summary of pages

This document comprises a front cover, an inside front cover, pages I to IV, pages 1 to 23, an inside back cover and a back cover.