
**Information technology — Guidelines for
the organization and representation of data
elements for data interchange — Coding
methods and principles**

*Technologies de l'information — Principes directeurs pour l'organisation
et la représentation des éléments de données pour l'échange de
données — Méthodes et principes de codage*

Contents

1	Scope	1
2	References	1
2.1	General references	1
2.2	Examples of applications of this Technical Report	1
3	Definitions	2
4	Principles of coding	3
4.1	Information and coding	3
4.2	Coding	4
5	Coding objectives	4
5.1	Identification	5
5.2	Classification	6
5.3	Key to further information	6
6	Types of codes	7
6.1	Forms of codes	7
6.2	Sequential codes	7
6.3	Random codes	10
6.4	Mnemonic codes	11
6.5	Abbreviation based codes	12
6.6	Matrix codes	13
6.7	Hierarchical codes	14
6.8	Juxtaposition codes	15
6.9	Combination codes	16
6.10	Value addition code	16
7	Features of codes	17
7.1	General features	17
7.2	Uniqueness	17
7.3	Expandibility	18
7.4	Conciseness	18
7.5	Simplicity	18
7.6	Versatility	18
7.7	Suitability for sorting	18
7.8	Stability	18
7.9	Significance	19
7.10	Size	19
7.11	Structure and format	20
7.12	Capacity	20
8	Representation of code values	21
8.1	Character sets	21
8.2	Representation techniques	22

© ISO/IEC 1994

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland