ISO/IEC TR 10176:2003-04 (E)

Information technology - Guidelines for the preparation of programming language standards

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Guidelines 7
4.1 Guidelines for the form and content of standards 7
4.1.1 Guideline: The general framework 7
4.1.2 Guideline: Definitions of syntax and semantics 8
4.1.3 Guidelines on the use of character sets 8
4.1.4 Guideline: Error detection requirements 14
4.1.5 Guideline: Exception detection requirements 17
4.1.6 Guideline: Static detection of exceptions 19
4.1.7 Guideline: Recovery from non-fatal errors and exceptions 20
4.1.8 Guideline: Requirements on user documentation 20
4.1.9 Guideline: Provision of processor options 20
4.1.10 Guideline: Processor-defined limits 22
4.2 Guidelines on presentation 23
4.2.1 Guideline: Terminology 23
4.2.2 Guideline: Presentation of source programs 24
4.3 Guidelines on processor dependence 24
4.3.1 Guideline: Completeness of definition 24
4.3.2 Guideline: Optional language features 24
4.3.3 Guideline: Management of optional language features 24
4.3.4 Guideline: Syntax and semantics of optional language features 25
4.3.5 Guideline: Predefined keywords and identifiers 25
4.3.6 Guideline: Definition of optional features 25
4.3.7 Guideline: Processor dependence in numerical processing 26
4.4 Guidelines on conformity requirements 26
4.5 Guidelines on strategy 26
4.5.1 Guideline: Secondary standards 26
4.5.2 Guideline: Incremental standards 26
4.5.3 Guideline: Consistency of use of guidelines 27
4.5.4 Guideline: Revision compatibility 27
4.6 Guidelines on cross-language issues 29
4.6.1 Guideline: Binding to functional standards 29
4.6.2 Guideline: Facilitation of binding 29
4.6.3 Guideline: Conformity with multi-level functional standards 30
4.6.4 Guideline: Mixed language programming 30
4.6.5 Guideline: Common elements 30
4.6.6 Guideline: Use of data dictionaries 30
4.7 Guidelines on Internationalization 30
4.7.1 Guideline: Cultural convention set switching mechanism 30
4.7.2 Guideline: Cultural convention related functionality 31

Annex A (informative) Recommended extended repertoire for user-defined identifiers 32