ISO/IEC 15444-11:2007-04 (E)

Information technology - JPEG 2000 image coding system: Wireless

CONTENTS

Page

1 Scope 1
2 Normative references 1
3 Terms and definitions 1
4 Symbols and abbreviated terms 3
4.1 Abbreviations 3
4.2 Symbols 3
5 JPWL general description 4
5.1 Introduction 4
5.2 JPWL system description 5
6 JPWL normative parts 7
7 JPWL informative parts 7
Annex A – Codestream syntax 8
A.1 Definitions of markers and marker segments 8
A.2 Marker code range defined in this Recommendation | International Standard 8
A.3 Marker and marker segment and codestream rules 8
A.4 Information in the marker segments 8
A.5 Construction of the codestream 9
A.6 JPWL marker segments 9
Annex B – Header error protection 17
B.1 Introduction 17
B.2 Predefined error-correction codes 18
B.3 Use of EPB for header protection 18
Annex C – Error protection capability 22
C.1 Usage of the EPC marker segment 22
C.2 P_{CRC} 22
C.3 Data length (DL) 22
C.4 P_{EPC} 23
C.5 Identification of tools (ID) 23
C.6 Parameters for tools (P_{ID}) 23
Annex D – Error sensitivity descriptor 24
D.1 Introduction and applications 24
D.2 Marker definition and position in the codestream 24
D.3 Codestream subdivision into data units 25
D.4 Sensitivity information 25
D.5 Examples and guidelines 27
Annex E – Residual errors descriptor 29
E.1 Introduction 29
E.2 Signalling of residual errors 29
E.3 Examples 30
Annex F – Guidelines for encoding JPEG 2000 codestreams in the context of error-prone environments 31
F.1 Introduction 31
F.2 JPEG 2000 Part 1 error-resilience tools 31
F.3 JPEG 2000 encoder implementation guidelines 31
Annex G – Recommended decoder error handling behaviour 33
G.1 Introduction 33
G.2 JPEG 2000 Part 1 decoder recommended behaviour 33
G.3 JPWL decoder implementation guidelines 34

Page

Annex H – Error-resilient entropy coding 36
H.1 Introduction 36
H.2 Syntax 36
H.3 Binary encoding with forbidden symbol 37
H.4 Error-resilience segmentation symbols 38
H.5 Error detection 39
H.6 Error correction 40
Annex I – Unequal error protection 45
I.1 Introduction 45
I.2 Use of error-sensitivity descriptor as input information to unequal error-protection systems 45
I.3 Use of Error Protection Block (EPB) for unequal error protection 45
Annex J – Interoperability with ISO/IEC 15444 46
J.1 Interoperability with ISO/IEC 15444-1 46
J.2 Interoperability with ISO/IEC 15444-3 46
J.3 Interoperability with ISO/IEC 15444-8 (JPSEC) 46
Annex K – Registration authority 48
K.1 General introduction 48
K.2 Criteria for eligibility of applicants for registration 48
K.3 Applications for registration 48
K.4 Review and response to applications 49
K.5 Maintenance 50
K.6 Publication of the register 50
Annex L – Patent statement 51
BIBLIOGRAPHY 52