

### CONTENTS

<u>Section</u>	<u>Page</u>
<b>1 INTRODUCTION</b> .....	<b>1-1</b>
1.1 PURPOSE .....	1-1
1.2 SCOPE .....	1-1
1.3 APPLICABILITY .....	1-1
1.4 RATIONALE .....	1-1
1.5 BIT NUMBERING CONVENTION AND NOMENCLATURE .....	1-2
1.6 REFERENCES .....	1-2
<b>2 OVERVIEW</b> .....	<b>2-1</b>
2.1 GENERAL .....	2-1
2.2 THE SOURCE CODER.....	2-1
2.3 PACKETIZATION OF CODED DATA .....	2-3
2.4 ERROR CONTROL .....	2-3
<b>3 ADAPTIVE ENTROPY CODER</b> .....	<b>3-1</b>
3.1 CODE SPECIFICATION .....	3-1
3.2 FUNDAMENTAL SEQUENCE .....	3-2
3.3 SAMPLE SPLITTING.....	3-2
3.4 LOW ENTROPY OPTIONS .....	3-3
3.5 NO COMPRESSION .....	3-4
3.6 CODE SELECTION .....	3-4
<b>4 PREPROCESSOR</b> .....	<b>4-1</b>
4.1 PREPROCESSOR FUNCTION .....	4-1
4.2 PREDICTORS .....	4-1
4.3 REFERENCE SAMPLE .....	4-2
4.4 PREDICTION ERROR MAPPER.....	4-2
<b>5 DATA FORMAT</b> .....	<b>5-1</b>
5.1 LOSSLESS DATA STRUCTURES .....	5-1
5.2 PACKET FORMAT .....	5-4
<b>6 COMPRESSION IDENTIFICATION PACKET (OPTIONAL)</b> .....	<b>6-1</b>
6.1 COMPRESSION IDENTIFICATION PACKET STRUCTURE .....	6-1
6.2 CIP PRIMARY HEADER .....	6-1
6.3 PACKET DATA FIELD .....	6-2
<b>ANNEX A GLOSSARY OF ACRONYMS AND TERMS</b> .....	<b>A-1</b>
<b>ANNEX B INFORMATIVE REFERENCES</b> .....	<b>B-1</b>

## CONTENTS (continued)

<u>Figure</u>		<u>Page</u>
2-1	Schematic of the Source Coder .....	2-1
3-1	The Adaptive Entropy Coder with a Preprocessor.....	3-1
3-2	Split-Sample Format .....	3-3
4-1	A Preprocessor .....	4-1
4-2	Preprocessor Using a Unit-Delay Predictor .....	4-2
5-1	CDS Format When Sample-Splitting Option Is Selected .....	5-2
5-2	CDS Format When No-Compression Option Is Selected .....	5-3
5-3	CDS Format When Zero-Block Option Is Selected .....	5-3
5-4	CDS Format When the Second-Extension Option Is Selected .....	5-4
5-5	Packet Format for <i>l</i> CDSes.....	5-4
6-1	Compression Identification Packet Structure.....	6-1
6-2	Source Configuration Field .....	6-3

### Table

3-1	Fundamental Sequence Codewords As a Function of the Preprocessed Samples .....	3-2
3-2	Zero-Block Fundamental Sequence Codewords As a Function of the Number of Consecutive All-Zeros Blocks.....	3-4
5-1	Selected Code Option Identification Key .....	5-1