

TABLE OF CONTENTS**VOLUME I**

| | Page |
|-------------------------------------------------------------------------------------------------------------------|-------------|
| EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS (ADN)..... | xi |
| ANNEXED REGULATIONS | 1 |
| PART 1 GENERAL PROVISIONS..... | 3 |
| Chapter 1.1 Scope and applicability | |
| 1.1.1 Structure..... | 5 |
| 1.1.2 Scope..... | 5 |
| 1.1.3 Exemptions | 6 |
| 1.1.4 Applicability of other regulations | 9 |
| Chapter 1.2 Definitions and units of measurement | |
| 1.2.1 Definitions | 11 |
| 1.2.2 Units of measurement | 38 |
| Chapter 1.3 Training of persons involved in the carriage of dangerous goods | |
| 1.3.1 Scope and applicability | 41 |
| 1.3.2 Nature of the training | 41 |
| 1.3.3 Documentation..... | 42 |
| Chapter 1.4 Safety obligations of the participants | |
| 1.4.1 General safety measures | 43 |
| 1.4.2 Obligations of the main participants | 43 |
| 1.4.3 Obligations of the other participants..... | 45 |
| Chapter 1.5 Special rules, derogations | |
| 1.5.1 Bilateral and multilateral agreements | 49 |
| 1.5.2 Special authorizations concerning transport in tank vessels | 49 |
| 1.5.3 Equivalents and derogations (Article 7, paragraph 3 of ADN)..... | 50 |
| Chapter 1.6 Transitional measures | |
| 1.6.1 General..... | 51 |
| 1.6.2 Pressure receptacles and receptacles for Class 2..... | 52 |
| 1.6.3 Fixed tanks (tank-vehicles and tank wagons), demountable tanks, battery vehicles and battery wagons..... | 52 |
| 1.6.4 Tank-containers, portable tanks and MEGCs | 52 |
| 1.6.5 Vehicles | 52 |
| 1.6.6 Class 7..... | 52 |
| 1.6.7 Transitional provisions concerning vessels..... | 52 |
| Chapter 1.7 General provisions concerning class 7 | |
| 1.7.1 Scope and application | 91 |
| 1.7.2 Radiation protection programme | 92 |
| 1.7.3 Quality assurance | 93 |
| 1.7.4 Special arrangement..... | 94 |
| 1.7.5 Radioactive material possessing other dangerous properties..... | 94 |
| 1.7.6 Non-compliance..... | 94 |

Table of contents (cont'd)

| | | |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------|
| Chapter 1.8 | Checks and other support measures to ensure compliance with safety requirements | |
| 1.8.1 | Monitoring compliance with requirements | 95 |
| 1.8.2 | Administrative assistance during the checking of a foreign vessel..... | 96 |
| 1.8.3 | Safety adviser..... | 96 |
| 1.8.4 | List of competent authorities and bodies designated by them | 103 |
| 1.8.5 | Notifications of occurrences involving dangerous goods | 103 |
| Chapter 1.9 | Transport restrictions by the competent authorities | 109 |
| Chapter 1.10 | Security provisions | |
| 1.10.1 | General provisions | 111 |
| 1.10.2 | Security training..... | 111 |
| 1.10.3 | Provisions for high consequence dangerous goods..... | 111 |
| Chapters 1.11 to 1.14 | | |
| | <i>(Reserved)</i> | |
| Chapter 1.15 | Recognition of classification societies | |
| 1.15.1 | General..... | 117 |
| 1.15.2 | Procedure for the recognition of classification societies..... | 117 |
| 1.15.3 | Conditions and criteria for the recognition of a classification society applying for recognition under this Agreement..... | 118 |
| 1.15.4 | Obligations of recommended classification societies | 119 |
| Chapter 1.16 | Procedure for the issue of the certificate of approval | |
| 1.16.1 | Certificate of approval | 121 |
| 1.16.2 | Issue and recognition of certificates of approval | 122 |
| 1.16.3 | Inspection procedure | 122 |
| 1.16.4 | Inspection body..... | 122 |
| 1.16.5 | Application for the issue of a certificate of approval..... | 123 |
| 1.16.6 | Particulars entered in the certificate of approval and amendments thereto | 123 |
| 1.16.7 | Presentation of the vessel for inspection..... | 123 |
| 1.16.8 | First inspection..... | 123 |
| 1.16.9 | Special inspection | 123 |
| 1.16.10 | Periodic inspection and renewal of the certificate of approval | 124 |
| 1.16.11 | Extension of the certificate of approval without an inspection..... | 124 |
| 1.16.12 | Official inspection..... | 124 |
| 1.16.13 | Withholding and return of the certificate of approval..... | 124 |
| 1.16.14 | Duplicate copy | 125 |
| 1.16.15 | Register of certificates of approval | 125 |
| PART 2 | CLASSIFICATION | (See Volume II) |
| PART 3 | DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND EXEMPTIONS RELATED TO LIMITED AND EXCEPTED QUANTITIES | 129 |
| Chapter 3.1 | General | (See Volume II) |
| Chapter 3.2 | List of dangerous goods | |
| 3.2.1 | Table A: List of dangerous goods in numerical order | (See Volume II) |

Table of contents (cont'd)

| | | |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 3.2.2 | Table B: List of dangerous goods in alphabetical order | (See Volume II) |
| 3.2.3 | Table C: List of dangerous goods accepted for carriage in tank vessels in numerical order | 133 |
| 3.2.4 | Modalities for the application of section 1.5.2 on special authorizations concerning transport in tank vehicles..... | 205 |
| Chapter 3.3 | Special provisions applicable to certain articles or substances | (See Volume II) |
| Chapter 3.4 | Dangerous goods packed in limited quantities | (See Volume II) |
| Chapter 3.5 | Dangerous goods packed in excepted quantities | (See Volume II) |
| PART 4 | PROVISIONS CONCERNING THE USE OF PACKAGINGS, TANKS AND BULK CARGO TRANSPORT UNITS..... | 221 |
| Chapter 4.1 | General provisions | 223 |
| PART 5 | CONSIGNMENT PROCEDURES | 225 |
| Chapter 5.1 | General provisions | |
| 5.1.1 | Application and general provisions..... | 227 |
| 5.1.2 | Use of overpacks..... | 227 |
| 5.1.3 | Empty uncleared packagings (including IBCs and large packagings), tanks, vehicles, wagons and containers for carriage in bulk | 227 |
| 5.1.4 | Mixed packing | 228 |
| 5.1.5 | General provisions for Class 7 | 228 |
| Chapter 5.2 | Marking and labelling | |
| 5.2.1 | Marking of packages..... | 235 |
| 5.2.2 | Labelling of packages | 239 |
| Chapter 5.3 | Placarding and marking of containers, MEGCs, tank-containers, portable tanks, vehicles and wagons | |
| 5.3.1 | Placarding | 247 |
| 5.3.2 | Orange-coloured plate marking | 250 |
| 5.3.3 | Mark for elevated temperature substances..... | 256 |
| 5.3.4 | Marking for carriage in a transport chain including maritime transport | 257 |
| 5.3.5 | (Reserved) | 258 |
| 5.3.6 | Environmentally hazardous substance mark..... | 258 |
| Chapter 5.4 | Documentation | |
| 5.4.1 | Dangerous goods transport document and related information | 259 |
| 5.4.2 | Container packing certificate | 268 |
| 5.4.3 | Instructions in writing | 270 |
| 5.4.4 | Example of a multimodal dangerous goods form | 275 |

Table of contents (cont'd)

| | | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Chapter 5.5 | Special provisions | |
| 5.5.1 | (Deleted) | |
| 5.5.2 | Special provisions for fumigated vehicles, wagons, containers and tanks | 279 |
| PART 6 | REQUIREMENTS FOR THE CONSTRUCTION AND TESTING OF PACKAGINGS (INCLUDING IBCS AND LARGE PACKAGINGS), TANKS AND BULK CARGO TRANSPORT UNITS | 281 |
| PART 7 | REQUIREMENTS CONCERNING LOADING, CARRIAGE, UNLOADING AND HANDLING OF CARGO..... | 285 |
| Chapter 7.1 | Dry cargo vessels | |
| 7.1.0 | General requirements | 287 |
| 7.1.1 | Mode of carriage of goods | 287 |
| 7.1.2 | Requirements applicable to vessels..... | 288 |
| 7.1.3 | General service requirements..... | 289 |
| 7.1.4 | Additional requirements concerning loading, carriage, unloading and other handling of the cargo..... | 292 |
| 7.1.5 | Additional requirements concerning the operation of vessels | 306 |
| 7.1.6 | Additional requirements..... | 309 |
| Chapter 7.2 | Tank vessels | |
| 7.2.0 | General requirements | 315 |
| 7.2.1 | Mode of carriage of goods | 315 |
| 7.2.2 | Requirements applicable to vessels..... | 315 |
| 7.2.3 | General service requirements..... | 317 |
| 7.2.4 | Additional requirements concerning loading, carriage, unloading and other handling of cargo | 323 |
| 7.2.5 | Additional requirements concerning the operation of vessels | 333 |
| PART 8 | PROVISIONS FOR VESSEL CREWS, EQUIPMENT, OPERATION AND DOCUMENTATION..... | 337 |
| Chapter 8.1 | General requirements applicable to vessels and equipment | |
| 8.1.1 | (Reserved) | |
| 8.1.2 | Documents | 339 |
| 8.1.3 | (Reserved) | |
| 8.1.4 | Fire-extinguishing arrangements..... | 341 |
| 8.1.5 | Special equipment..... | 341 |
| 8.1.6 | Checking and inspection of equipment..... | 342 |
| 8.1.7 | Electrical installations..... | 342 |
| 8.1.8 | Certificate of approval | 343 |
| 8.1.9 | Provisional certificate of approval | 344 |
| 8.1.10 | Loading journal..... | 344 |
| 8.1.11 | Register of operations during carriage relating to the carriage of UN 1203 | 345 |
| Chapter 8.2 | Requirements concerning training | |
| 8.2.1 | General requirements concerning training of experts | 347 |
| 8.2.2 | Special requirements for the training of experts | 348 |

Table of contents (cont'd)

| | | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Chapter 8.3 | Miscellaneous requirements to be complied with by the crew of the vessel | |
| 8.3.1 | Persons authorized on board | 359 |
| 8.3.2 | Portable lamps..... | 359 |
| 8.3.3 | Admittance on board..... | 359 |
| 8.3.4 | Prohibition on smoking, fire and naked light..... | 359 |
| 8.3.5 | Danger caused by work on board..... | 359 |
| Chapter 8.4 | (Reserved) | 361 |
| Chapter 8.5 | (Reserved) | 363 |
| Chapter 8.6 | Documents | |
| 8.6.1 | Certificate of approval | 365 |
| 8.6.2 | Certificate of special knowledge of ADN according to 8.2.1.3, 8.2.1.5 or 8.2.1.7 | 374 |
| 8.6.3 | Checklist ADN..... | 375 |
| 8.6.4 | Discharge of residual quantities and stripping systems | 381 |
| PART 9 | RULES FOR CONSTRUCTION | 385 |
| Chapter 9.1 | Rules for construction of dry cargo vessels | |
| 9.1.0 | Rules for construction applicable to dry cargo vessels | 387 |
| Chapter 9.2 | Rules for construction applicable to seagoing vessels which comply with the requirements of the SOLAS 74 Convention, Chapter II-2, Regulation 19 or SOLAS 74, Chapter II-2, Regulation 54 | 403 |
| Chapter 9.3 | Rules for construction of tank vessels | |
| 9.3.1 | Rules for construction of type G tank vessels..... | 409 |
| 9.3.2 | Rules for construction of type C tank vessels | 437 |
| 9.3.3 | Rules for construction of type N tank vessels | 470 |
| 9.3.4 | Alternative constructions | 503 |

TABLE OF CONTENTS**VOLUME II**

| | | Page |
|--------------------------------------------------------------------------------------------------------------------------------------------|--|----------------|
| ANNEXED REGULATIONS | | 1 |
| PART 1 GENERAL PROVISIONS | | (See Volume I) |
| PART 2 CLASSIFICATION | | 3 |
| Chapter 2.1 General provisions | | |
| 2.1.1 Introduction..... | | 5 |
| 2.1.2 Principles of classification | | 6 |
| 2.1.3 Classification of substances, including solutions and mixtures (such as preparations and wastes), not mentioned by name..... | | 7 |
| 2.1.4 Classification of samples | | 13 |
| Chapter 2.2 Class specific provisions | | |
| 2.2.1 Class 1 Explosive substances and articles..... | | 15 |
| 2.2.2 Class 2 Gases | | 43 |
| 2.2.3 Class 3 Flammable liquids | | 53 |
| 2.2.41 Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives..... | | 59 |
| 2.2.42 Class 4.2 Substances liable to spontaneous combustion | | 71 |
| 2.2.43 Class 4.3 Substances which, in contact with water, emit flammable gases..... | | 75 |
| 2.2.51 Class 5.1 Oxidizing substances..... | | 78 |
| 2.2.52 Class 5.2 Organic peroxides | | 83 |
| 2.2.61 Class 6.1 Toxic substances | | 97 |
| 2.2.62 Class 6.2 Infectious substances..... | | 110 |
| 2.2.7 Class 7 Radioactive material..... | | 117 |
| 2.2.8 Class 8 Corrosive substances | | 150 |
| 2.2.9 Class 9 Miscellaneous dangerous substances and articles | | 156 |
| Chapter 2.3 Test methods | | |
| 2.3.0 General..... | | 165 |
| 2.3.1 Exudation test for blasting explosives of Type A | | 165 |
| 2.3.2 Tests relating to nitrated cellulose mixtures of Class 4.1..... | | 167 |
| 2.3.3 Tests relating to flammable liquids of classes 3, 6.1 and 8..... | | 168 |
| 2.3.4 Test for determining fluidity | | 171 |
| 2.3.5 Classification of organometallic substances in classes 4.2 and 4.3 | | 173 |
| Chapter 2.4 Criteria for substances hazardous to the aquatic environment..... | | |
| 2.4.1 General definitions..... | | 175 |
| 2.4.2 Definitions and data requirements | | 176 |
| 2.4.3 Classification categories and criteria for substances..... | | 177 |
| 2.4.4 Classification categories and criteria for mixtures..... | | 178 |

Table of contents (cont'd)

| | | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| PART 3 | DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND EXEMPTIONS RELATED TO LIMITED AND EXCEPTED QUANTITIES | 185 |
| Chapter 3.1 | General | |
| 3.1.1 | Introduction..... | 187 |
| 3.1.2 | Proper shipping name | 187 |
| Chapter 3.2 | Dangerous goods list | |
| 3.2.1 | Table A: List of dangerous goods in numerical order..... | 191 |
| 3.2.2 | Table B: List of dangerous goods in alphabetical order..... | 353 |
| 3.2.3 | Table C: List of dangerous goods accepted for carriage in tank vessels in numerical order.....(See Volume I) | |
| 3.2.4 | Modalities for the application of section 1.5.2 on special authorizations concerning transport in tank vehicles.....(See Volume I) | |
| Chapter 3.3 | Special provisions applicable to certain articles or substances | 417 |
| Chapter 3.4 | Dangerous goods packed in limited quantities | 449 |
| Chapter 3.5 | Dangerous goods packed in excepted quantities | 453 |
| PART 4 | PROVISIONS CONCERNING THE USE OF PACKAGINGS, TANKS AND BULK CARGO TRANSPORT UNITS | (See Volume I) |
| PART 5 | CONSIGNMENT PROCEDURES | (See Volume I) |
| PART 6 | REQUIREMENTS FOR THE CONSTRUCTION AND TESTING OF PACKAGINGS (INCLUDING IBCS AND LARGE PACKAGINGS), TANKS AND BULK CARGO TRANSPORT UNITS | (See Volume I) |
| PART 7 | REQUIREMENTS CONCERNING LOADING, CARRIAGE, UNLOADING AND HANDLING OF CARGO | (See Volume I) |
| PART 8 | PROVISIONS FOR VESSEL CREWS, EQUIPMENT, OPERATION AND DOCUMENTATION | (See Volume I) |
| PART 9 | RULES FOR CONSTRUCTION | (See Volume I) |