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Kommunikation på energimarknaden – Del 451-7: Balanseringsprocesser, kontextuella modeller och sammansättningsmodeller för marknader av europeisk modell

Framework for energy market communications –

Part 451-7: Balancing processes, contextual and assembly models for European style market

Som svensk standard gäller europastandarden EN IEC 62325-451-7:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62325-451-7:2021.

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English Version

**Framework for energy market communications - Part 451-7:
Balancing processes, contextual and assembly models for
European style market
(IEC 62325-451-7:2021)**

Cadre pour les communications pour le marché de l'énergie
- Partie 451-7: Processus d'équilibrage, modèles
contextuels et modèles d'assemblage pour le marché de
style européen
(IEC 62325-451-7:2021)

Kommunikation im Energiemarkt - Teil 451-7:
Ausgleichsprozesse, kontextuelle Modelle und Regeln zum
Aufbau von Modellen für den Markt nach europäischem Stil
(IEC 62325-451-7:2021)

This European Standard was approved by CENELEC on 2021-04-21. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 57/2332/FDIS, future edition 1 of IEC 62325-451-7, prepared by IEC/TC 57 "Power systems management and associated information exchange" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62325-451-7:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-01-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-04-21

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Endorsement notice

The text of the International Standard IEC 62325-451-7:2021 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TS 61970-2	-	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	-
IEC 62325-351	2016	Framework for energy market communications - Part 351: CIM European market model exchange profile	EN 62325-351	2016
IEC 62325-450	2013	Framework for energy market communications - Part 450: Profile and context modelling rules	EN 62325-450	2013
IEC 62325-451-1	-	Framework for energy market communications - Part 451-1: Acknowledgement business process and contextual model for CIM European market	EN 62325-451-1	-
IEC 62325-451-2	-	Framework for energy market communications - Part 451-2: Scheduling business process and contextual model for CIM European market	EN 62325-451-2	-
IEC 62325-451-3	-	Framework for energy market communications - Part 451-3: Transmission capacity allocation business process (explicit or implicit auction) and contextual models for European market	EN 62325-451-3	-
IEC 62325-451-4	-	Framework for energy market communications - Part 451-4: Settlement and reconciliation business process, contextual and assembly models for European market	EN 62325-451-4	-
IEC 62325-451-5	-	Framework for energy market communications - Part 451-5: Problem statement and status request business processes, contextual and assembly models for European market	EN 62325-451-5	-

EN IEC 62325-451-7:2021 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62361-100	-	Power systems management and associated information exchange - Interoperability in the long term - Part 100: CIM profiles to XML schema mapping	EN 62361-100	-

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Framework for energy market communications –
Part 451-7: Balancing processes, contextual and assembly models for European
style market**

**Cadre pour les communications pour le marché de l'énergie –
Partie 451-7: Processus d'équilibrage, modèles contextuels et modèles
d'assemblage pour le marché de style européen**

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CONTENTS

FOREWORD.....	10
INTRODUCTION.....	12
1 Scope.....	13
2 Normative references	13
3 Terms and definitions	14
4 Document contextual model and message assembly model basic concepts	16
4.1 Overview.....	16
4.2 European style market package structure (ESMP)	17
4.3 From the European style market profile to the document contextual model	18
4.4 From the document contextual model to the message assembly model.....	18
4.5 From the assembly model to the XML schema	18
5 The Balancing business process.....	19
5.1 General.....	19
5.2 Roles	19
5.2.1 The Load-Frequency Control Operator role (LFC Operator)	19
5.2.2 The Merit Order List Responsible role (MOL Responsible).....	19
5.2.3 The Balancing Service Provider role (BSP).....	20
5.2.4 The Coordination Center Operator role	20
5.2.5 The Market Information Aggregator role.....	20
5.2.6 The Imbalance Settlement Responsible role	20
5.3 Overview of balancing business process	21
5.4 Use Cases	22
5.4.1 General Overview	22
5.4.2 Pre-qualification phase: Pre-qualify Balancing Resources.....	23
5.4.3 Pre-tendering phase: Submit balancing energy bids for pre-tendering.....	24
5.4.4 Tendering phase: Submit balancing needs and validated balancing energy bids.....	24
5.4.5 Tendering phase: Submit network constraints information necessary for tendering	24
5.4.6 Clearing phase: Execute optimization activation function	25
5.4.7 Activation phase: Sending clearing results.....	25
5.4.8 Activation phase: Activate balancing energy bids.....	25
5.4.9 Post-clearing phase: Make available balancing transparency information	25
5.4.10 Post-clearing phase: Establish TSO-TSO Settlement.....	25
5.5 Sequence Diagram	26
5.6 Electronic documents used	26
5.6.1 Reserve Bid Document	26
5.6.2 MeritOrder List Document.....	27
5.6.3 Activation Document.....	27
5.6.4 Capacity Document	27
5.6.5 HVDC Link Document	27
5.6.6 Schedule Document.....	27
5.6.7 Reporting Document	28
5.6.8 Balancing Document.....	28
5.6.9 Energy Account Report Document	28
5.6.10 ProblemStatement Document	28
5.7 Generic business rules for documents	28

5.7.1	General	28
5.7.2	Document instance implementation	28
5.7.3	Version of a document	29
5.7.4	Rules governing the Activation_MarketDocument	29
5.7.5	Rules governing the MeritOrderList_MarketDocument	30
5.7.6	Rules governing the ReserveBid_MarketDocument	30
6	Contextual and assembly models	31
6.1	Activation contextual model	31
6.1.1	Overview of the model	31
6.1.2	IsBasedOn relationships from the European style market profile	31
6.1.3	Detailed Activation contextual model	32
6.2	Activation assembly model	39
6.2.1	Overview of the model	39
6.2.2	IsBasedOn relationships from the European style market profile	40
6.2.3	Detailed Activation assembly model	41
6.2.4	Primitives	44
6.2.5	Datatypes	45
6.2.6	Enumerations	52
6.3	MeritOrderList contextual model	52
6.3.1	Overview of the model	52
6.3.2	IsBasedOn relationships from the European style market profile	53
6.3.3	Detailed MeritOrderList contextual model	54
6.4	MeritOrderList assembly model	63
6.4.1	Overview of the model	63
6.4.2	IsBasedOn relationships from the European style market profile	64
6.4.3	Detailed MeritOrderList assembly model	65
6.4.4	Primitives	69
6.4.5	Datatypes	70
6.4.6	Enumerations	78
6.5	Reserve bid contextual model	78
6.5.1	Overview of the model	78
6.5.2	IsBasedOn relationships from the European style market profile	79
6.5.3	Detailed Reserve bid contextual model	80
6.6	Reserve bid assembly model	92
6.6.1	Overview of the model	92
6.6.2	IsBasedOn relationships from the European style market profile	93
6.6.3	Detailed Reserve bid assembly model	94
6.6.4	Primitives	101
6.6.5	Datatypes	101
6.6.6	Enumerations	110
7	XML schema	110
7.1	XML schema URN namespace rules	110
7.2	Code list URN namespace rules	111
7.3	URI rules for model documentation	111
7.3.1	Datatype	111
7.3.2	Class	111
7.3.3	Attribute	112
7.3.4	Association end role name	112
7.4	Activation_MarketDocument schema	112

7.4.1	Schema structure	112
7.4.2	Schema description	115
7.5	MeritOrderList_MarketDocument schema.....	121
7.5.1	Schema structure	121
7.5.2	Schema description	124
7.6	ReserveBid_MarketDocument schema	131
7.6.1	Schema structure	131
7.6.2	Schema description	134
Annex ZZ (informative)	Annex ZZ based on the Frankfurt Agreement.....	144
ZZ.1	Link between clauses of the document and EU Regulations.....	144
ZZ.2	Reference to European Common Balancing Platforms (Subclause 5.1).....	144
Figure 1	– IEC 62325-450 modelling framework	16
Figure 2	– Overview of European style market profile dependency.....	17
Figure 3	– Phases of the Balancing Process	21
Figure 4	– Balancing Process Overview	23
Figure 5	– Sequence diagram of the information flows	26
Figure 6	– Activation contextual model.....	31
Figure 7	– Activation assembly model	40
Figure 8	– MeritOrderList contextual model.....	53
Figure 9	– MeritOrderList assembly model	64
Figure 10	– Reserve bid contextual model	79
Figure 11	– Reserve bid assembly model.....	93
Figure 12	– Activation_MarketDocument XML schema structure (1 of 2).....	113
Figure 13	– Activation_MarketDocument XML schema structure (2 of 2).....	114
Figure 14	– MeritOrderList_MarketDocument XML schema structure (1 of 2).....	122
Figure 15	– MeritOrderList_MarketDocument XML schema structure (2 of 2).....	123
Figure 16	– ReserveBid_MarketDocument XML schema structure (1 of 2).....	132
Figure 17	– ReserveBid_MarketDocument XML schema structure (2 of 2).....	133
Table 1	– Dependency table outline for the Energy Balancing process.....	29
Table 2	– IsBasedOn dependency.....	31
Table 3	– Attributes of Activation contextual model::Activation_MarketDocument.....	32
Table 4	– Association ends of Activation contextual model:: Activation_MarketDocument with other classes.....	33
Table 5	– Attributes of Activation contextual model::Domain	33
Table 6	– Attributes of Activation contextual model::FlowDirection	34
Table 7	– Attributes of Activation contextual model::MarketObjectStatus.....	34
Table 8	– Attributes of Activation contextual model::MarketParticipant.....	34
Table 9	– Association ends of Activation contextual model:: MarketParticipant with other classes	34
Table 10	– Attributes of Activation contextual model::MarketRole	35
Table 11	– Attributes of Activation contextual model::Measure_Unit.....	35
Table 12	– Attributes of Activation contextual model::Order_MarketDocument	35
Table 13	– Attributes of Activation contextual model::Point	36

Table 14 – Association ends of Activation contextual model::Point with other classes	36
Table 15 – Attributes of Activation contextual model::Process	36
Table 16 – Attributes of Activation contextual model::Reason	36
Table 17 – Attributes of Activation contextual model::RegisteredResource	37
Table 18 – Attributes of Activation contextual model::ResourceProvider_MarketParticipant	37
Table 19 – Attributes of Activation contextual model::Series_Period	37
Table 20 – Association ends of Activation contextual model:: Series_Period with other classes	37
Table 21 – Attributes of Activation contextual model::Time_Period	38
Table 22 – Attributes of Activation contextual model::TimeSeries	38
Table 23 – Association ends of Activation contextual model:: TimeSeries with other classes	38
Table 24 – IsBasedOn dependency	41
Table 25 – Attributes of Activation assembly model::Activation_MarketDocument	41
Table 26 – Association ends of Activation assembly model:: Activation_MarketDocument with other classes	42
Table 27 – Attributes of Activation assembly model::Point	42
Table 28 – Association ends of Activation assembly model::Point with other classes	42
Table 29 – Attributes of Activation assembly model::Reason	43
Table 30 – Attributes of Activation assembly model::Series_Period	43
Table 31 – Association ends of Activation assembly model:: Series_Period with other classes	43
Table 32 – Attributes of Activation assembly model::TimeSeries	44
Table 33 – Association ends of Activation assembly model:: TimeSeries with other classes	44
Table 34 – Attributes of ESMPDataTypes::ESMP_DateTimeInterval	45
Table 35 – Attributes of ESMPDataTypes::AreaID_String	46
Table 36 – Restrictions of attributes for ESMPDataTypes::AreaID_String	46
Table 37 – Attributes of ESMPDataTypes::BusinessKind_String	46
Table 38 – Attributes of ESMPDataTypes::DirectionKind_String	46
Table 39 – Attributes of ESMPDataTypes::ESMP_DateTime	47
Table 40 – Restrictions of attributes for ESMPDataTypes::ESMP_DateTime	47
Table 41 – Attributes of ESMPDataTypes::ESMPVersion_String	47
Table 42 – Restrictions of attributes for ESMPDataTypes::ESMPVersion_String	47
Table 43 – Attributes of ESMPDataTypes::ID_String	48
Table 44 – Restrictions of attributes for ESMPDataTypes::ID_String	48
Table 45 – Attributes of ESMPDataTypes::MarketRoleKind_String	48
Table 46 – Attributes of ESMPDataTypes::MeasurementUnitKind_String	48
Table 47 – Attributes of ESMPDataTypes::MessageKind_String	49
Table 48 – Attributes of ESMPDataTypes::PartyID_String	49
Table 49 – Restrictions of attributes for ESMPDataTypes::PartyID_String	49
Table 50 – Attributes of ESMPDataTypes::Position_Integer	49
Table 51 – Restrictions of attributes for ESMPDataTypes::Position_Integer	50
Table 52 – Attributes of ESMPDataTypes::ProcessKind_String	50

Table 53 – Attributes of ESMPDataTypes::ReasonCode_String	50
Table 54 – Attributes of ESMPDataTypes::ReasonText_String	50
Table 55 – Restrictions of attributes for ESMPDataTypes::ReasonText_String	50
Table 56 – Attributes of ESMPDataTypes::ResourceID_String	51
Table 57 – Restrictions of attributes for ESMPDataTypes::ResourceID_String	51
Table 58 – Attributes of ESMPDataTypes::Status_String	51
Table 59 – Attributes of ESMPDataTypes::YMDHM_DateTime	51
Table 60 – Restrictions of attributes for ESMPDataTypes::YMDHM_DateTime	52
Table 61 – IsBasedOn dependency	53
Table 62 – Attributes of MeritOrderList contextual model::MeritOrderList_MarketDocument	54
Table 63 – Association ends of MeritOrderList contextual model::MeritOrderList_MarketDocument with other classes	54
Table 64 – Attributes of MeritOrderList contextual model::Auction	55
Table 65 – Attributes of MeritOrderList contextual model::BidTimeSeries	56
Table 66 – Association ends of MeritOrderList contextual model:: BidTimeSeries with other classes	56
Table 67 – Attributes of MeritOrderList contextual model::Currency_Unit	58
Table 68 – Attributes of MeritOrderList contextual model::Domain	58
Table 69 – Attributes of MeritOrderList contextual model::MarketAgreement	58
Table 70 – Attributes of MeritOrderList contextual model::MarketDocument	59
Table 71 – Attributes of MeritOrderList contextual model::MarketObjectStatus	59
Table 72 – Attributes of MeritOrderList contextual model::MarketParticipant	59
Table 73 – Association ends of MeritOrderList contextual model:: MarketParticipant with other classes	59
Table 74 – Attributes of MeritOrderList contextual model::MarketRole	60
Table 75 – Attributes of MeritOrderList contextual model::Measure_Unit	60
Table 76 – Attributes of MeritOrderList contextual model::Point	60
Table 77 – Association ends of MeritOrderList contextual model:: Point with other classes	60
Table 78 – Attributes of MeritOrderList contextual model::Price	61
Table 79 – Attributes of MeritOrderList contextual model::Process	61
Table 80 – Attributes of MeritOrderList contextual model::Quantity	62
Table 81 – Attributes of MeritOrderList contextual model::Reason	62
Table 82 – Attributes of MeritOrderList contextual model::RegisteredResource	62
Table 83 – Attributes of MeritOrderList contextual model::ResourceProvider_MarketParticipant	62
Table 84 – Attributes of MeritOrderList contextual model::Series_Period	63
Table 85 – Association ends of MeritOrderList contextual model:: Series_Period with other classes	63
Table 86 – Attributes of MeritOrderList contextual model::Time_Period	63
Table 87 – IsBasedOn dependency	65
Table 88 – Attributes of MeritOrderList assembly model::MeritOrderList_MarketDocument	65
Table 89 – Association ends of MeritOrderList assembly model::MeritOrderList_MarketDocument with other classes	66

Table 90 – Attributes of MeritOrderList assembly model::BidTimeSeries	67
Table 91 – Association ends of MeritOrderList assembly model:: BidTimeSeries with other classes	68
Table 92 – Attributes of MeritOrderList assembly model::Point.....	68
Table 93 – Attributes of MeritOrderList assembly model::Reason.....	69
Table 94 – Attributes of MeritOrderList assembly model::Series_Period.....	69
Table 95 – Association ends of MeritOrderList assembly model:: Series_Period with other classes	69
Table 96 – Attributes of ESMPDataTypes::ESMP_DateTimeInterval	70
Table 97 – Attributes of ESMPDataTypes::Amount_Decimal	70
Table 98 – Restrictions of attributes for ESMPDataTypes::Amount_Decimal	71
Table 99 – Attributes of ESMPDataTypes::AreaID_String.....	71
Table 100 – Restrictions of attributes for ESMPDataTypes::AreaID_String	71
Table 101 – Attributes of ESMPDataTypes::BusinessKind_String	71
Table 102 – Attributes of ESMPDataTypes::CurrencyCode_String	72
Table 103 – Attributes of ESMPDataTypes::DirectionKind_String.....	72
Table 104 – Attributes of ESMPDataTypes::ESMP_DateTime	72
Table 105 – Restrictions of attributes for ESMPDataTypes::ESMP_DateTime	72
Table 106 – Attributes of ESMPDataTypes::ESMPVersion_String	73
Table 107 – Restrictions of attributes for ESMPDataTypes::ESMPVersion_String.....	73
Table 108 – Attributes of ESMPDataTypes::ID_String	73
Table 109 – Restrictions of attributes for ESMPDataTypes::ID_String.....	73
Table 110 – Attributes of ESMPDataTypes::MarketRoleKind_String.....	74
Table 111 – Attributes of ESMPDataTypes::MeasurementUnitKind_String	74
Table 112 – Attributes of ESMPDataTypes::MessageKind_String	74
Table 113 – Attributes of ESMPDataTypes::PartyID_String.....	74
Table 114 – Restrictions of attributes for ESMPDataTypes::PartyID_String.....	75
Table 115 – Attributes of ESMPDataTypes::PaymentTerms_String	75
Table 116 – Attributes of ESMPDataTypes::Position_Integer	75
Table 117 – Restrictions of attributes for ESMPDataTypes::Position_Integer	75
Table 118 – Attributes of ESMPDataTypes::ProcessKind_String	75
Table 119 – Attributes of ESMPDataTypes::ReasonCode_String	76
Table 120 – Attributes of ESMPDataTypes::ReasonText_String.....	76
Table 121 – Restrictions of attributes for ESMPDataTypes::ReasonText_String.....	76
Table 122 – Attributes of ESMPDataTypes::ResourceID_String	76
Table 123 – Restrictions of attributes for ESMPDataTypes::ResourceID_String	77
Table 124 – Attributes of ESMPDataTypes::Status_String	77
Table 125 – Attributes of ESMPDataTypes::YMDHM_DateTime	77
Table 126 – Restrictions of attributes for ESMPDataTypes::YMDHM_DateTime.....	77
Table 127 – IsBasedOn dependency.....	80
Table 128 – Attributes of Reserve bid contextual model::ReserveBid_MarketDocument.....	81
Table 129 – Association ends of Reserve bid contextual model::ReserveBid_MarketDocument with other classes.....	81
Table 130 – Attributes of Reserve bid contextual model::Auction	82

Table 131 – Attributes of Reserve bid contextual model::BiddingZone_Domain.....	82
Table 132 – Attributes of Reserve bid contextual model::BidTimeSeries	83
Table 133 – Association ends of Reserve bid contextual model:: BidTimeSeries with other classes	83
Table 134 – Attributes of Reserve bid contextual model::ConstraintDuration.....	86
Table 135 – Attributes of Reserve bid contextual model::Currency_Unit.....	86
Table 136 – Attributes of Reserve bid contextual model::Domain	86
Table 137 – Attributes of Reserve bid contextual model::FlowDirection.....	87
Table 138 – Attributes of Reserve bid contextual model::Linked_BidTimeSeries	87
Table 139 – Attributes of Reserve bid contextual model::MarketAgreement	87
Table 140 – Attributes of Reserve bid contextual model::MarketParticipant.....	88
Table 141 – Association ends of Reserve bid contextual model:: MarketParticipant with other classes	88
Table 142 – Attributes of Reserve bid contextual model::MarketProduct	88
Table 143 – Attributes of Reserve bid contextual model::MarketRole	88
Table 144 – Attributes of Reserve bid contextual model::Measure_Unit	89
Table 145 – Attributes of Reserve bid contextual model::Origin_MarketParticipant	89
Table 146 – Attributes of Reserve bid contextual model::Point.....	89
Table 147 – Association ends of Reserve bid contextual model::Point with other classes	90
Table 148 – Attributes of Reserve bid contextual model::Price	90
Table 149 – Attributes of Reserve bid contextual model::Process	90
Table 150 – Attributes of Reserve bid contextual model::Provider_MarketParticipant.....	91
Table 151 – Attributes of Reserve bid contextual model::Quantity.....	91
Table 152 – Attributes of Reserve bid contextual model::Reason	91
Table 153 – Attributes of Reserve bid contextual model::RegisteredResource	92
Table 154 – Attributes of Reserve bid contextual model::Series_Period	92
Table 155 – Association ends of Reserve bid contextual model:: Series_Period with other classes	92
Table 156 – Attributes of Reserve bid contextual model::Time_Period	92
Table 157 – IsBasedOn dependency.....	94
Table 158 – Attributes of Reserve bid assembly model::ReserveBid_MarketDocument	94
Table 159 – Association ends of Reserve bid assembly model::ReserveBid_MarketDocument with other classes.....	95
Table 160 – Attributes of Reserve bid assembly model::BiddingZone_Domain	95
Table 161 – Attributes of Reserve bid assembly model::BidTimeSeries.....	96
Table 162 – Association ends of Reserve bid assembly model:: BidTimeSeries with other classes	98
Table 163 – Attributes of Reserve bid assembly model::Linked_BidTimeSeries	99
Table 164 – Attributes of Reserve bid assembly model::Origin_MarketParticipant.....	99
Table 165 – Attributes of Reserve bid assembly model::Point	100
Table 166 – Attributes of Reserve bid assembly model::Reason	100
Table 167 – Attributes of Reserve bid assembly model::Series_Period	100
Table 168 – Association ends of Reserve bid assembly model:: Series_Period with other classes	101

Table 169 – Attributes of ESMPDataTypes::Action_Status	102
Table 170 – Attributes of ESMPDataTypes::ESMP_DateTimeInterval	102
Table 171 – Attributes of ESMPDataTypes::Amount_Decimal	102
Table 172 – Restrictions of attributes for ESMPDataTypes::Amount_Decimal	102
Table 173 – Attributes of ESMPDataTypes::AreaID_String.....	103
Table 174 – Restrictions of attributes for ESMPDataTypes::AreaID_String	103
Table 175 – Attributes of ESMPDataTypes::BusinessKind_String	103
Table 176 – Attributes of ESMPDataTypes::CapacityContractKind_String.....	103
Table 177 – Attributes of ESMPDataTypes::CurrencyCode_String	104
Table 178 – Attributes of ESMPDataTypes::DirectionKind_String.....	104
Table 179 – Attributes of ESMPDataTypes::ESMP_DateTime	104
Table 180 – Restrictions of attributes for ESMPDataTypes::ESMP_DateTime	104
Table 181 – Attributes of ESMPDataTypes::ESMPBoolean_String	105
Table 182 – Attributes of ESMPDataTypes::ESMPVersion_String	105
Table 183 – Restrictions of attributes for ESMPDataTypes::ESMPVersion_String.....	105
Table 184 – Attributes of ESMPDataTypes::ID_String	105
Table 185 – Restrictions of attributes for ESMPDataTypes::ID_String.....	106
Table 186 – Attributes of ESMPDataTypes::MarketProductKind_String.....	106
Table 187 – Attributes of ESMPDataTypes::MarketRoleKind_String.....	106
Table 188 – Attributes of ESMPDataTypes::MeasurementUnitKind_String	106
Table 189 – Attributes of ESMPDataTypes::MessageKind_String	107
Table 190 – Attributes of ESMPDataTypes::PartyID_String.....	107
Table 191 – Restrictions of attributes for ESMPDataTypes::PartyID_String.....	107
Table 192 – Attributes of ESMPDataTypes::Position_Integer	107
Table 193 – Restrictions of attributes for ESMPDataTypes::Position_Integer	108
Table 194 – Attributes of ESMPDataTypes::ProcessKind_String.....	108
Table 195 – Attributes of ESMPDataTypes::ReasonCode_String	108
Table 196 – Attributes of ESMPDataTypes::ReasonText_String.....	108
Table 197 – Restrictions of attributes for ESMPDataTypes::ReasonText_String.....	108
Table 198 – Attributes of ESMPDataTypes::ResourceID_String	109
Table 199 – Restrictions of attributes for ESMPDataTypes::ResourceID_String	109
Table 200 – Attributes of ESMPDataTypes::Status_String	109
Table 201 – Attributes of ESMPDataTypes::YMDHM_DateTime	109
Table 202 – Restrictions of attributes for ESMPDataTypes::YMDHM_DateTime.....	110

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 451-7: Balancing processes, contextual and assembly models for European style market

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INTRODUCTION

This document is one part of the IEC 62325 series for deregulated energy market data exchanges based on the European style market profile. This part of IEC 62325 defines the document contextual models, the message assembly models as well as the XML schemas to be used for the Balancing process.

The principal objective of the IEC 62325 series is to produce standards which facilitate the integration of market application software developed independently by different vendors into a market management system, between market management systems and market participant systems. This is accomplished by defining message exchanges to allow these applications or systems access to public data and exchange information independent of how such information is represented internally.

The common information model (CIM), i.e. IEC 62325-301, IEC 61970-301 and IEC 61968-11, specifies the basis for the semantics for message exchange.

This European style market profile is based on different parts of the CIM IEC standards and specifies the content of the messages exchanged.

This document provides, for the European style market profile, the necessary information to be exchanged between Balancing Service Providers, Transmission System Operators and a Common Merit Order List about the Electricity Balancing market.

These market processes are based on the European regulations (No. 1227/2011 and No. 543/2013), on the European Balancing Guidelines on Electricity Balancing (No. 2017/2195), and on the concepts of third-party access and zonal markets. (see Annex ZZ)

This part of IEC 62325 was originally based upon the work of the European Network of Transmission System Operators (ENTSO-E) CIM Expert Group (formerly Working Group EDI).

The profile in this document is also designed to be used in markets in other countries, including Japan, that are designed based on the European style market.

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 451-7: Balancing processes, contextual and assembly models for European style market

1 Scope

This part of IEC 62325 specifies a UML package for the electricity balancing business process and its associated document contextual models, assembly models and XML schemas for use within the European style electricity markets.

This part of IEC 62325 is based on the European style market contextual model (IEC 62325-351). The business process covered by this part of IEC 62325 is described in Clause 5.

The relevant aggregate core components (ACCs) defined in IEC 62325-351 have been contextualised into aggregated business information entities (ABIEs) to satisfy the requirements of the European style market publication business process.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TS 61970-2, *Energy management system application program interface (EMS-API) - Part 2: Glossary*

IEC 62325-351:2016, *Framework for energy market communications - Part 351: CIM European market model exchange profile*

IEC 62325-450:2013, *Framework for energy market communications - Part 450: Profile and context modelling rules*

IEC 62325-451-1, *Framework for energy market communications - Part 451-1: Acknowledgement business process and contextual model for CIM European market*

IEC 62325-451-2, *Framework for energy market communications - Part 451-2: Scheduling business process and contextual model for CIM European market*

IEC 62325-451-3, *Framework for energy market communications - Part 451-3: Transmission capacity allocation business process (explicit or implicit auction) and contextual models for European market*

IEC 62325-451-4, *Framework for energy market communications - Part 451-4: Settlement and reconciliation business process, contextual and assembly models for European market*

IEC 62325-451-5, *Framework for energy market communications - Part 451-5: Problem statement and status request business processes, contextual and assembly models for European market*

IEC 62361-100, *Power systems management and associated information exchange - Interoperability in the long term - Part 100: CIM profiles to XML schema mapping*