import itertools

```
from collections import namedtuple, Iterable
from enum import unique, IntFlag
from ubl.business document.components.ccts import BusinessDocument
from ubl.business_document.components.ccts import CodeType, AmountType, \
    BinaryObjectType, AssociatedBusinessEntity, DateTimeType, NumericType, \
    TextType, MeasureType, QuantityType, IdentifierType, IndicatorType, NameType
from ubl.business_processes import ProcessRegistry
@unique
class BIERegistry(IntFlag):
    List of the Business Information Elements (BIE) as defined in UBL 2.1
    ACCEPTED INDICATOR = 1
    ACCEPTED VARIANTS DESCRIPTION = 2
    ACCOUNT FORMAT CODE = 3
    ACCOUNT ID = 4
    ACCOUNT_TYPE_CODE = 5
    ACCOUNTING_COST = 6
    ACCOUNTING COST CODE = 7
    ACTION CODE = 8
    ACTIVITY TYPE = 9
    ACTIVITY TYPE CODE = 10
    ACTUAL DELIVERY DATE = 11
    ACTUAL DELIVERY TIME = 12
    ACTUAL DESPATCH DATE = 13
    ACTUAL DESPATCH TIME = 14
    ACTUAL PICKUP DATE = 15
    ACTUAL PICKUP TIME = 16
    ACTUAL TEMPERATURE REDUCTION QUANTITY = 17
    AD VALOREM INDICATOR = 18
    ADDITIONAL ACCOUNT ID = 19
    ADDITIONAL CONDITIONS = 20
    ADDITIONAL INFORMATION = 21
    ADDITIONAL_STREET_NAME = 22
    ADDRESS FORMAT CODE = 23
    ADDRESS_TYPE_CODE = 24
    ADJUSTMENT_REASON_CODE = 25
    ADMISSION CODE = 26
    ADVERTISEMENT_AMOUNT = 27
    AGENCY_ID = 28
    AGENCY NAME = 29
    AIR_FLOW_PERCENT = 30
    AIRCRAFT ID = 31
    ALIAS NAME = 32
    ALLOWANCE_CHARGE_REASON = 33
    ALLOWANCE CHARGE REASON CODE = 34
    ALLOWANCE_TOTAL_AMOUNT = 35
    ALTITUDE_MEASURE = 36
```

```
AMOUNT = 37
AMOUNT RATE = 38
ANIMAL_FOOD_APPROVED_INDICATOR = 39
ANIMAL_FOOD_INDICATOR = 40
ANNUAL_AVERAGE_AMOUNT = 41
APPLICATION_STATUS_CODE = 42
APPROVAL_DATE = 43
APPROVAL_STATUS = 44
ATTRIBUTE_ID = 45
AUCTION CONSTRAINT INDICATOR = 46
AUCTION_URI = 47
AVAILABILITY_DATE = 48
AVAILABILITY STATUS CODE = 49
AVERAGE_AMOUNT = 50
AVERAGE_SUBSEQUENT_CONTRACT_AMOUNT = 51
AWARD DATE = 52
AWARD_TIME = 53
AWARDING CRITERION DESCRIPTION = 54
AWARDING_CRITERION_ID = 55
AWARDING_CRITERION_TYPE_CODE = 56
AWARDING METHOD TYPE CODE = 57
BACK_ORDER_ALLOWED_INDICATOR = 58
BACKORDER QUANTITY = 59
BACKORDER REASON = 60
BALANCE_AMOUNT = 61
BALANCE BROUGHT FORWARD INDICATOR = 62
BARCODE SYMBOLOGY ID = 63
BASE\_AMOUNT = 64
BASE QUANTITY = 65
BASE UNIT MEASURE = 66
BASED_ON_CONSENSUS_INDICATOR = 67
BASIC CONSUMED QUANTITY = 68
BATCH QUANTITY = 69
BEST BEFORE DATE = 70
BINDING ON BUYER INDICATOR = 71
BIRTH_DATE = 72
BIRTHPLACE NAME = 73
BLOCK NAME = 74
BRAND_NAME = 75
BROKER ASSIGNED ID = 76
BUDGET_YEAR_NUMERIC = 77
BUILDING_NAME = 78
BUILDING_NUMBER = 79
BULK_CARGO_INDICATOR = 80
BUSINESS_CLASSIFICATION_EVIDENCE_ID = 81
BUSINESS_IDENTITY_EVIDENCE_ID = 82
BUYER_EVENT_ID = 83
BUYER_PROFILE_URI = 84
BUYER_REFERENCE = 85
CV2ID = 86
CALCULATION_EXPRESSION = 87
CALCULATION_EXPRESSION_CODE = 88
```

```
CALCULATION METHOD CODE = 89
CALCULATION RATE = 90
CALCULATION_SEQUENCE_NUMERIC = 91
CALL_BASE_AMOUNT = 92
CALL_DATE = 93
CALL_EXTENSION_AMOUNT = 94
CALL_TIME = 95
CANCELLATION_NOTE = 96
CANDIDATE_REDUCTION_CONSTRAINT_INDICATOR = 97
CANDIDATE STATEMENT = 98
CANONICALIZATION_METHOD = 99
CAPABILITY_TYPE_CODE = 100
CARD CHIP CODE = 101
CARD_TYPE_CODE = 102
CARGO_TYPE_CODE = 103
CARRIER ASSIGNED ID = 104
CARRIER_SERVICE_INSTRUCTIONS = 105
CATALOGUE INDICATOR = 106
CATEGORY_NAME = 107
CERTIFICATE_TYPE = 108
CERTIFICATE TYPE CODE = 109
CHANGE_CONDITIONS = 110
CHANNEL = 111
CHANNEL CODE = 112
CHARACTER_SET_CODE = 113
CHARACTERISTICS = 114
CHARGE INDICATOR = 115
CHARGE_TOTAL_AMOUNT = 116
CHARGEABLE QUANTITY = 117
CHARGEABLE_WEIGHT_MEASURE = 118
CHILD_CONSIGNMENT_QUANTITY = 119
CHIP APPLICATION ID = 120
CITY_NAME = 121
CITY SUBDIVISION NAME = 122
CODE VALUE = 123
COLLABORATION PRIORITY CODE = 124
COMMENT = 125
COMMODITY CODE = 126
COMPANY_ID = 127
COMPANY LEGAL FORM = 128
COMPANY_LEGAL_FORM_CODE = 129
COMPANY_LIQUIDATION_STATUS_CODE = 130
COMPARED_VALUE_MEASURE = 131
COMPARISON_DATA_CODE = 132
COMPARISON_DATA_SOURCE_CODE = 133
COMPARISON_FORECAST_ISSUE_DATE = 134
COMPARISON_FORECAST_ISSUE_TIME = 135
COMPLETION_INDICATOR = 136
CONDITION = 137
CONDITION CODE = 138
CONDITIONS = 139
CONDITIONS_DESCRIPTION = 140
```

```
CONSIGNEE ASSIGNED ID = 141
CONSIGNMENT QUANTITY = 142
CONSIGNOR_ASSIGNED_ID = 143
CONSOLIDATABLE INDICATOR = 144
CONSTITUTION_CODE = 145
CONSUMER_INCENTIVE_TACTIC_TYPE_CODE = 146
CONSUMER_UNIT_QUANTITY = 147
CONSUMERS_ENERGY_LEVEL = 148
CONSUMERS_ENERGY_LEVEL_CODE = 149
CONSUMPTION ENERGY QUANTITY = 150
CONSUMPTION_ID = 151
CONSUMPTION_LEVEL = 152
CONSUMPTION LEVEL CODE = 153
CONSUMPTION_REPORT_ID = 154
CONSUMPTION_TYPE = 155
CONSUMPTION TYPE CODE = 156
CONSUMPTION_WATER_QUANTITY = 157
CONTAINERIZED INDICATOR = 158
CONTENT = 159
CONTENT_UNIT_QUANTITY = 160
CONTRACT FOLDER ID = 161
CONTRACT_NAME = 162
CONTRACT SUBDIVISION = 163
CONTRACT TYPE = 164
CONTRACT_TYPE_CODE = 165
CONTRACTED CARRIER ASSIGNED ID = 166
CONTRACTING SYSTEM CODE = 167
COORDINATE_SYSTEM_CODE = 168
COPY INDICATOR = 169
CORPORATE REGISTRATION TYPE CODE = 170
CORPORATE_STOCK_AMOUNT = 171
CORRECTION AMOUNT = 172
CORRECTION TYPE = 173
CORRECTION TYPE CODE = 174
CORRECTION UNIT AMOUNT = 175
COUNTRY_SUBENTITY = 176
COUNTRY SUBENTITY CODE = 177
CREDIT LINE AMOUNT = 178
CREDIT_NOTE_TYPE_CODE = 179
CREDITED QUANTITY = 180
CREW_QUANTITY = 181
CURRENCY_CODE = 182
CURRENT_CHARGE_TYPE = 183
CURRENT_CHARGE_TYPE_CODE = 184
CUSTOMER_ASSIGNED_ACCOUNT_ID = 185
CUSTOMER_REFERENCE = 186
CUSTOMIZATION_ID = 187
CUSTOMS_CLEARANCE_SERVICE_INSTRUCTIONS = 188
CUSTOMS_IMPORT_CLASSIFIED_INDICATOR = 189
CUSTOMS STATUS CODE = 190
CUSTOMS_TARIFF_QUANTITY = 191
DAMAGE_REMARKS = 192
```

```
DANGEROUS GOODS APPROVED INDICATOR = 193
DATA SENDING CAPABILITY = 194
DATA_SOURCE_CODE = 195
DATE = 196
DEBIT_LINE_AMOUNT = 197
DEBITED_QUANTITY = 198
DECLARATION_TYPE_CODE = 199
DECLARED_CARRIAGE_VALUE_AMOUNT = 200
DECLARED_CUSTOMS_VALUE_AMOUNT = 201
DECLARED FOR CARRIAGE VALUE AMOUNT = 202
DECLARED_STATISTICS_VALUE_AMOUNT = 203
DELIVERED_QUANTITY = 204
DELIVERY INSTRUCTIONS = 205
DEMURRAGE_INSTRUCTIONS = 206
DEPARTMENT = 207
DESCRIPTION = 208
DESCRIPTION_CODE = 209
DESPATCH ADVICE TYPE CODE = 210
DIFFERENCE_TEMPERATURE_REDUCTION_QUANTITY = 211
DIRECTION_CODE = 212
DISPLAY_TACTIC_TYPE_CODE = 213
DISPOSITION_CODE = 214
DISTRICT = 215
DOCUMENT CURRENCY CODE = 216
DOCUMENT_DESCRIPTION = 217
DOCUMENT HASH = 218
DOCUMENT ID = 219
DOCUMENT_STATUS_CODE = 220
DOCUMENT STATUS REASON CODE = 221
DOCUMENT_STATUS_REASON_DESCRIPTION = 222
DOCUMENT_TYPE = 223
DOCUMENT TYPE CODE = 224
DOCUMENTATION FEE AMOUNT = 225
DUE DATE = 226
DURATION MEASURE = 227
DUTY = 228
DUTY CODE = 229
EARLIEST PICKUP DATE = 230
EARLIEST_PICKUP_TIME = 231
ECONOMIC OPERATOR REGISTRY URI = 232
EFFECTIVE DATE = 233
EFFECTIVE TIME = 234
ELECTRONIC_DEVICE_DESCRIPTION = 235
ELECTRONIC_MAIL = 236
EMBEDDED_DOCUMENT_BINARY_OBJECT = 237
EMERGENCY_PROCEDURES_CODE = 238
EMPLOYEE_QUANTITY = 239
ENCODING_CODE = 240
END_DATE = 241
END TIME = 242
ENDPOINT_ID = 243
ENVIRONMENTAL_EMISSION_TYPE_CODE = 244
```

```
ESTIMATED AMOUNT = 245
ESTIMATED CONSUMED QUANTITY = 246
ESTIMATED DELIVERY DATE = 247
ESTIMATED DELIVERY TIME = 248
ESTIMATED_DESPATCH_DATE = 249
ESTIMATED_DESPATCH_TIME = 250
ESTIMATED_OVERALL_CONTRACT_AMOUNT = 251
ESTIMATED_OVERALL_CONTRACT_QUANTITY = 252
EVALUATION_CRITERION_TYPE_CODE = 253
EVIDENCE TYPE CODE = 254
EXCEPTION_RESOLUTION_CODE = 255
EXCEPTION_STATUS_CODE = 256
EXCHANGE MARKET ID = 257
EXCLUSION_REASON = 258
EXECUTION_REQUIREMENT_CODE = 259
EXEMPTION REASON = 260
EXEMPTION_REASON_CODE = 261
EXPECTED OPERATOR QUANTITY = 262
EXPECTED QUANTITY = 263
EXPENSE_CODE = 264
EXPIRY DATE = 265
EXPIRY_TIME = 266
EXPRESSION = 267
EXPRESSION CODE = 268
EXTENDED_ID = 269
EXTENSION = 270
FACE VALUE AMOUNT = 271
FAMILY_NAME = 272
FEATURE TACTIC TYPE CODE = 273
FEE AMOUNT = 274
FEE_DESCRIPTION = 275
FILE NAME = 276
FINANCING_INSTRUMENT_CODE = 277
FIRST NAME = 278
FIRST SHIPMENT AVAILIBILITY DATE = 279
FLOOR = 280
FOLLOWUP CONTRACT INDICATOR = 281
FORECAST PURPOSE CODE = 282
FORECAST_TYPE_CODE = 283
FORMAT CODE = 284
FORWARDER SERVICE INSTRUCTIONS = 285
FREE OF CHARGE INDICATOR = 286
FREE_ON_BOARD_VALUE_AMOUNT = 287
FREIGHT_FORWARDER_ASSIGNED_ID = 288
FREIGHT_RATE_CLASS_CODE = 289
FREQUENCY = 290
FROZEN_DOCUMENT_INDICATOR = 291
FROZEN_PERIOD_DAYS_NUMERIC = 292
FULLNESS_INDICATION_CODE = 293
FULLY PAID SHARES INDICATOR = 294
FUNDING_PROGRAM = 295
FUNDING_PROGRAM_CODE = 296
```

```
GAS PRESSURE QUANTITY = 297
GENDER CODE = 298
GENERAL_CARGO_INDICATOR = 299
GOVERNMENT_AGREEMENT_CONSTRAINT_INDICATOR = 300
GROSS_TONNAGE_MEASURE = 301
GROSS_VOLUME_MEASURE = 302
GROSS_WEIGHT_MEASURE = 303
GUARANTEE_TYPE_CODE = 304
GUARANTEED_DESPATCH_DATE = 305
GUARANTEED DESPATCH TIME = 306
HANDLING_CODE = 307
HANDLING_INSTRUCTIONS = 308
HASH ALGORITHM METHOD = 309
HAULAGE_INSTRUCTIONS = 310
HAZARD_CLASS_ID = 311
HAZARDOUS CATEGORY CODE = 312
HAZARDOUS_REGULATION_CODE = 313
HAZARDOUS RISK INDICATOR = 314
HEATING_TYPE = 315
HEATING_TYPE_CODE = 316
HIGHER TENDER AMOUNT = 317
HOLDER NAME = 318
HUMAN FOOD APPROVED INDICATOR = 319
HUMAN FOOD INDICATOR = 320
HUMIDITY_PERCENT = 321
ID = 322
IDENTIFICATION CODE = 323
IDENTIFICATION_ID = 324
IMMOBILIZATION CERTIFICATE ID = 325
IMPORTANCE CODE = 326
INDICATION_INDICATOR = 327
INDUSTRY CLASSIFICATION CODE = 328
INFORMATION = 329
INFORMATION URI = 330
INHALATION TOXICITY ZONE CODE = 331
INHOUSE\_MAIL = 332
INSPECTION METHOD CODE = 333
INSTALLMENT DUE DATE = 334
INSTRUCTION_ID = 335
INSTRUCTION NOTE = 336
INSTRUCTIONS = 337
INSURANCE PREMIUM AMOUNT = 338
INSURANCE_VALUE_AMOUNT = 339
INVENTORY_VALUE_AMOUNT = 340
INVOICE_TYPE_CODE = 341
INVOICED_QUANTITY = 342
INVOICING_PARTY_REFERENCE = 343
ISSUE_DATE = 344
ISSUE_NUMBER_ID = 345
ISSUE TIME = 346
ISSUER_ID = 347
ITEM_CLASSIFICATION_CODE = 348
```

```
ITEM UPDATE REQUEST INDICATOR = 349
JOB TITLE = 350
JOURNEY_ID = 351
JUSTIFICATION = 352
JUSTIFICATION_DESCRIPTION = 353
KEYWORD = 354
LANGUAGE_ID = 355
LAST_REVISION_DATE = 356
LAST_REVISION_TIME = 357
LATEST DELIVERY DATE = 358
LATEST_DELIVERY_TIME = 359
LATEST_METER_QUANTITY = 360
LATEST METER READING DATE = 361
LATEST_METER_READING_METHOD = 362
LATEST_METER_READING_METHOD_CODE = 363
LATEST PICKUP DATE = 364
LATEST_PICKUP_TIME = 365
LATEST PROPOSAL ACCEPTANCE DATE = 366
LATEST_SECURITY_CLEARANCE_DATE = 367
LATITUDE_DEGREES_MEASURE = 368
LATITUDE DIRECTION CODE = 369
LATITUDE_MINUTES_MEASURE = 370
LEAD TIME MEASURE = 371
LEGAL REFERENCE = 372
LEGAL_STATUS_INDICATOR = 373
LIABILITY AMOUNT = 374
LICENSE PLATE ID = 375
LIFE_CYCLE_STATUS_CODE = 376
LIMITATION DESCRIPTION = 377
LINE = 378
LINE_COUNT_NUMERIC = 379
LINE EXTENSION AMOUNT = 380
LINE_ID = 381
LINE NUMBER NUMERIC = 382
LINE STATUS CODE = 383
LIST_VALUE = 384
LIVESTOCK INDICATOR = 385
LOADING LENGTH MEASURE = 386
LOADING_SEQUENCE_ID = 387
LOCALE CODE = 388
LOCATION = 389
LOCATION_ID = 390
LOCATION_TYPE_CODE = 391
LOGIN = 392
LOGO_REFERENCE_ID = 393
LONGITUDE_DEGREES_MEASURE = 394
LONGITUDE_DIRECTION_CODE = 395
LONGITUDE_MINUTES_MEASURE = 396
LOSS_RISK = 397
LOSS RISK RESPONSIBILITY CODE = 398
LOT_NUMBER_ID = 399
LOW_TENDERS_DESCRIPTION = 400
```

```
LOWER ORANGE HAZARD PLACARD ID = 401
LOWER TENDER AMOUNT = 402
MANDATE_TYPE_CODE = 403
MANUFACTURE DATE = 404
MANUFACTURE_TIME = 405
MARK_ATTENTION = 406
MARK_ATTENTION_INDICATOR = 407
MARK_CARE = 408
MARK_CARE_INDICATOR = 409
MARKET VALUE AMOUNT = 410
MARKING_ID = 411
MATHEMATIC_OPERATOR_CODE = 412
MAXIMUM ADVERTISEMENT AMOUNT = 413
MAXIMUM_AMOUNT = 414
MAXIMUM_BACKORDER_QUANTITY = 415
MAXIMUM COPIES NUMERIC = 416
MAXIMUM_MEASURE = 417
MAXIMUM NUMBER NUMERIC = 418
MAXIMUM OPERATOR QUANTITY = 419
MAXIMUM_ORDER_QUANTITY = 420
MAXIMUM PAID AMOUNT = 421
MAXIMUM_PAYMENT_INSTRUCTIONS_NUMERIC = 422
MAXIMUM PERCENT = 423
MAXIMUM QUANTITY = 424
MAXIMUM_VALUE = 425
MAXIMUM VARIANT QUANTITY = 426
MEASURE = 427
MEDICAL_FIRST_AID_GUIDE_CODE = 428
METER CONSTANT = 429
METER CONSTANT CODE = 430
METER_NAME = 431
METER NUMBER = 432
METER READING COMMENTS = 433
METER READING TYPE = 434
METER READING TYPE CODE = 435
MIDDLE_NAME = 436
MIME CODE = 437
MINIMUM AMOUNT = 438
MINIMUM_BACKORDER_QUANTITY = 439
MINIMUM IMPROVEMENT BID = 440
MINIMUM_INVENTORY_QUANTITY = 441
MINIMUM MEASURE = 442
MINIMUM NUMBER NUMERIC = 443
MINIMUM ORDER QUANTITY = 444
MINIMUM_PERCENT = 445
MINIMUM_QUANTITY = 446
MINIMUM_VALUE = 447
MISCELLANEOUS_EVENT_TYPE_CODE = 448
MODEL_NAME = 449
MONETARY SCOPE = 450
MOVIE_TITLE = 451
MULTIPLE_ORDER_QUANTITY = 452
```

```
MULTIPLIER FACTOR NUMERIC = 453
NAME = 454
NAME_CODE = 455
NAME SUFFIX = 456
NATIONALITY_ID = 457
NATURE_CODE = 458
NEGOTIATION_DESCRIPTION = 459
NET_NET_WEIGHT_MEASURE = 460
NET_TONNAGE_MEASURE = 461
NET VOLUME MEASURE = 462
NET_WEIGHT_MEASURE = 463
NETWORK_ID = 464
NOMINATION DATE = 465
NOMINATION_TIME = 466
NORMAL_TEMPERATURE_REDUCTION_QUANTITY = 467
NOTE = 468
NOTIFICATION_TYPE_CODE = 469
OCCURRENCE DATE = 470
OCCURRENCE TIME = 471
ON_CARRIAGE_INDICATOR = 472
ONE TIME CHARGE TYPE = 473
ONE_TIME_CHARGE_TYPE_CODE = 474
ONTOLOGY URI = 475
OPEN TENDER ID = 476
OPERATING_YEARS_QUANTITY = 477
OPTIONAL LINE ITEM INDICATOR = 478
OPTIONS DESCRIPTION = 479
ORDER_INTERVAL_DAYS_NUMERIC = 480
ORDER QUANTITY INCREMENT NUMERIC = 481
ORDER RESPONSE CODE = 482
ORDER_TYPE_CODE = 483
ORDERABLE INDICATOR = 484
ORDERABLE UNIT = 485
ORDERABLE UNIT FACTOR RATE = 486
ORGANIZATION DEPARTMENT = 487
ORIGINAL_CONTRACTING_SYSTEM_ID = 488
ORIGINAL JOB ID = 489
OTHER CONDITIONS INDICATOR = 490
OTHER_INSTRUCTION = 491
OTHER NAME = 492
OUTSTANDING_QUANTITY = 493
OUTSTANDING REASON = 494
OVERSUPPLY_QUANTITY = 495
OWNER_TYPE_CODE = 496
PACK_LEVEL_CODE = 497
PACK_QUANTITY = 498
PACK_SIZE_NUMERIC = 499
PACKAGE_LEVEL_CODE = 500
PACKAGING_TYPE_CODE = 501
PACKING CRITERIA CODE = 502
PACKING_MATERIAL = 503
PAID_AMOUNT = 504
```

```
PAID DATE = 505
PAID TIME = 506
PARENT_DOCUMENT_ID = 507
PARENT_DOCUMENT_LINE_REFERENCE_ID = 508
PARENT_DOCUMENT_TYPE_CODE = 509
PARENT_DOCUMENT_VERSION_ID = 510
PART_PRESENTATION_CODE = 511
PARTECIPATION_PERCENT = 512
PARTIAL_DELIVERY_INDICATOR = 513
PARTICIPATION PERCENT = 514
PARTY_CAPACITY_AMOUNT = 515
PARTY_TYPE = 516
PARTY TYPE CODE = 517
PASSENGER_QUANTITY = 518
PASSWORD = 519
PAY PER VIEW = 520
PAYABLE_ALTERNATIVE_AMOUNT = 521
PAYABLE AMOUNT = 522
PAYABLE ROUNDING AMOUNT = 523
PAYER_REFERENCE = 524
PAYMENT ALTERNATIVE CURRENCY CODE = 525
PAYMENT_CHANNEL_CODE = 526
PAYMENT CURRENCY CODE = 527
PAYMENT DESCRIPTION = 528
PAYMENT_DUE_DATE = 529
PAYMENT FREQUENCY CODE = 530
PAYMENT ID = 531
PAYMENT_MEANS_CODE = 532
PAYMENT MEANS ID = 533
PAYMENT NOTE = 534
PAYMENT_ORDER_REFERENCE = 535
PAYMENT PERCENT = 536
PAYMENT PURPOSE CODE = 537
PAYMENT TERMS DETAILS URI = 538
PENALTY AMOUNT = 539
PENALTY SURCHARGE PERCENT = 540
PER UNIT AMOUNT = 541
PERCENT = 542
PERFORMANCE_METRIC_TYPE_CODE = 543
PERFORMANCE VALUE QUANTITY = 544
PERFORMING CARRIER ASSIGNED ID = 545
PERSONAL_SITUATION = 546
PHONE NUMBER = 547
PLACARD_ENDORSEMENT = 548
PLACARD_NOTATION = 549
PLANNED_DATE = 550
PLOT_IDENTIFICATION = 551
POSITION_CODE = 552
POST_EVENT_NOTIFICATION_DURATION_MEASURE = 553
POSTAL ZONE = 554
POSTBOX = 555
POWER_INDICATOR = 556
```

```
PRE CARRIAGE INDICATOR = 557
PRE EVENT NOTIFICATION DURATION MEASURE = 558
PREFERENCE_CRITERION_CODE = 559
PREPAID AMOUNT = 560
PREPAID_INDICATOR = 561
PREPAID_PAYMENT_REFERENCE_ID = 562
PREVIOUS_CANCELLATION_REASON_CODE = 563
PREVIOUS_JOB_ID = 564
PREVIOUS_METER_QUANTITY = 565
PREVIOUS METER READING DATE = 566
PREVIOUS_METER_READING_METHOD = 567
PREVIOUS_METER_READING_METHOD_CODE = 568
PREVIOUS VERSION ID = 569
PRICE_AMOUNT = 570
PRICE_CHANGE_REASON = 571
PRICE EVALUATION CODE = 572
PRICE_REVISION_FORMULA_DESCRIPTION = 573
PRICE TYPE = 574
PRICE TYPE CODE = 575
PRICING_CURRENCY_CODE = 576
PRICING UPDATE REQUEST INDICATOR = 577
PRIMARY_ACCOUNT_NUMBER_ID = 578
PRINT QUALIFIER = 579
PRIORITY = 580
PRIVACY_CODE = 581
PRIZE DESCRIPTION = 582
PRIZE INDICATOR = 583
PROCEDURE_CODE = 584
PROCESS DESCRIPTION = 585
PROCESS REASON = 586
PROCESS_REASON_CODE = 587
PROCUREMENT SUB TYPE CODE = 588
PROCUREMENT_TYPE_CODE = 589
PRODUCT TRACE ID = 590
PROFILE EXECUTION ID = 591
PROFILE_ID = 592
PROFILE STATUS CODE = 593
PROGRESS PERCENT = 594
PROMOTIONAL_EVENT_TYPE_CODE = 595
PROVIDER TYPE CODE = 596
PUBLISH AWARD INDICATOR = 597
PURPOSE = 598
PURPOSE CODE = 599
QUALITY_CONTROL_CODE = 600
QUANTITY = 601
QUANTITY_DISCREPANCY_CODE = 602
RADIO_CALL_SIGN_ID = 603
RAIL\_CAR\_ID = 604
RANK = 605
RATE = 606
RECEIPT_ADVICE_TYPE_CODE = 607
RECEIVED_DATE = 608
```

```
RECEIVED ELECTRONIC TENDER QUANTITY = 609
RECEIVED FOREIGN TENDER QUANTITY = 610
RECEIVED QUANTITY = 611
RECEIVED TENDER QUANTITY = 612
REFERENCE = 613
REFERENCE_DATE = 614
REFERENCE_EVENT_CODE = 615
REFERENCE_ID = 616
REFERENCE_TIME = 617
REFERENCED CONSIGNMENT ID = 618
REFRIGERATED_INDICATOR = 619
REFRIGERATION_ON_INDICATOR = 620
REGION = 621
REGISTERED_DATE = 622
REGISTERED_TIME = 623
REGISTRATION DATE = 624
REGISTRATION_EXPIRATION_DATE = 625
REGISTRATION ID = 626
REGISTRATION NAME = 627
REGISTRATION_NATIONALITY = 628
REGISTRATION NATIONALITY ID = 629
REGULATORY_DOMAIN = 630
REJECT ACTION CODE = 631
REJECT REASON = 632
REJECT_REASON_CODE = 633
REJECTED QUANTITY = 634
REJECTION NOTE = 635
RELEASE_ID = 636
RELIABILITY PERCENT = 637
REMARKS = 638
REMINDER_SEQUENCE_NUMERIC = 639
REMINDER TYPE CODE = 640
REPLENISHMENT OWNER DESCRIPTION = 641
REQUEST FOR QUOTATION LINE ID = 642
REQUESTED DELIVERY DATE = 643
REQUESTED_DESPATCH_DATE = 644
REQUESTED DESPATCH TIME = 645
REQUESTED INVOICE CURRENCY CODE = 646
REQUESTED_PUBLICATION_DATE = 647
REQUIRED CURRICULA INDICATOR = 648
REQUIRED_CUSTOMS_ID = 649
REQUIRED_DELIVERY_DATE = 650
REQUIRED_DELIVERY_TIME = 651
REQUIRED_FEE_AMOUNT = 652
RESIDENCE_TYPE = 653
RESIDENCE_TYPE_CODE = 654
RESIDENT_OCCUPANTS_NUMERIC = 655
RESOLUTION = 656
RESOLUTION_CODE = 657
RESOLUTION DATE = 658
RESOLUTION_TIME = 659
RESPONSE_CODE = 660
```

```
RESPONSE DATE = 661
RESPONSE TIME = 662
RETAIL_EVENT_NAME = 663
RETAIL_EVENT_STATUS_CODE = 664
RETURNABILITY_INDICATOR = 665
RETURNABLE_MATERIAL_INDICATOR = 666
RETURNABLE_QUANTITY = 667
REVISED_FORECAST_LINE_ID = 668
REVISION_DATE = 669
REVISION STATUS CODE = 670
REVISION_TIME = 671
ROAMING_PARTNER_NAME = 672
ROLE CODE = 673
ROLE_DESCRIPTION = 674
ROOM = 675
ROUNDING AMOUNT = 676
SALES_ORDER_ID = 677
SALES ORDER LINE ID = 678
SCHEME_URI = 679
SEAL_ISSUER_TYPE_CODE = 680
SEAL STATUS CODE = 681
SEALING_PARTY_TYPE = 682
SECURITY CLASSIFICATION CODE = 683
SECURITY ID = 684
SELLER_EVENT_ID = 685
SEQUENCE ID = 686
SEQUENCE NUMBER ID = 687
SEQUENCE_NUMERIC = 688
SERIAL ID = 689
SERVICE INFORMATION PREFERENCE CODE = 690
SERVICE_NAME = 691
SERVICE NUMBER CALLED = 692
SERVICE_TYPE = 693
SERVICE TYPE CODE = 694
SETTLEMENT DISCOUNT AMOUNT = 695
SETTLEMENT_DISCOUNT_PERCENT = 696
SHARES NUMBER QUANTITY = 697
SHIPPING MARKS = 698
SHIPPING_ORDER_ID = 699
SHIPPING PRIORITY LEVEL CODE = 700
SHIPS REQUIREMENTS = 701
SHORT_QUANTITY = 702
SHORTAGE_ACTION_CODE = 703
SIGNATURE_ID = 704
SIGNATURE_METHOD = 705
SIZE_TYPE_CODE = 706
SOLE_PROPRIETORSHIP_INDICATOR = 707
SOURCE_CURRENCY_BASE_RATE = 708
SOURCE_CURRENCY_CODE = 709
SOURCE FORECAST ISSUE DATE = 710
SOURCE_FORECAST_ISSUE_TIME = 711
SOURCE_VALUE_MEASURE = 712
```

```
SPECIAL INSTRUCTIONS = 713
SPECIAL SECURITY INDICATOR = 714
SPECIAL_SERVICE_INSTRUCTIONS = 715
SPECIAL_TERMS = 716
SPECIAL_TRANSPORT_REQUIREMENTS = 717
SPECIFICATION_ID = 718
SPECIFICATION_TYPE_CODE = 719
SPLIT_CONSIGNMENT_INDICATOR = 720
START_DATE = 721
START TIME = 722
STATEMENT_TYPE_CODE = 723
STATUS_AVAILABLE_INDICATOR = 724
STATUS CODE = 725
STATUS_REASON = 726
STATUS_REASON_CODE = 727
STREET NAME = 728
SUBCONTRACTING_CONDITIONS_CODE = 729
SUBMISSION DATE = 730
SUBMISSION_DUE_DATE = 731
SUBMISSION_METHOD_CODE = 732
SUBSCRIBER ID = 733
SUBSCRIBER_TYPE = 734
SUBSCRIBER TYPE CODE = 735
SUBSTITUTION STATUS CODE = 736
SUCCESSIVE_SEQUENCE_ID = 737
SUMMARY DESCRIPTION = 738
SUPPLIER ASSIGNED ACCOUNT ID = 739
SUPPLY_CHAIN_ACTIVITY_TYPE_CODE = 740
TARE WEIGHT MEASURE = 741
TARGET CURRENCY BASE RATE = 742
TARGET_CURRENCY_CODE = 743
TARGET INVENTORY QUANTITY = 744
TARGET SERVICE PERCENT = 745
TARIFF CLASS CODE = 746
TARIFF CODE = 747
TARIFF_DESCRIPTION = 748
TAX AMOUNT = 749
TAX CURRENCY CODE = 750
TAX_ENERGY_AMOUNT = 751
TAX ENERGY BALANCE AMOUNT = 752
TAX_ENERGY_ON_ACCOUNT_AMOUNT = 753
TAX_EVIDENCE_INDICATOR = 754
TAX_EXCLUSIVE_AMOUNT = 755
TAX_EXEMPTION_REASON = 756
TAX_EXEMPTION_REASON_CODE = 757
TAX_INCLUDED_INDICATOR = 758
TAX_INCLUSIVE_AMOUNT = 759
TAX_LEVEL_CODE = 760
TAX_POINT_DATE = 761
TAX TYPE CODE = 762
TAXABLE_AMOUNT = 763
TECHNICAL_COMMITTEE_DESCRIPTION = 764
```

```
TECHNICAL NAME = 765
TELECOMMUNICATIONS SERVICE CALL = 766
TELECOMMUNICATIONS_SERVICE_CALL_CODE = 767
TELECOMMUNICATIONS_SERVICE_CATEGORY = 768
TELECOMMUNICATIONS_SERVICE_CATEGORY_CODE = 769
TELECOMMUNICATIONS_SUPPLY_TYPE = 770
TELECOMMUNICATIONS_SUPPLY_TYPE_CODE = 771
TELEFAX = 772
TELEPHONE = 773
TENDER ENVELOPE ID = 774
TENDER_ENVELOPE_TYPE_CODE = 775
TENDER_RESULT_CODE = 776
TENDER TYPE CODE = 777
TENDERER_REQUIREMENT_TYPE_CODE = 778
TENDERER_ROLE_CODE = 779
TEST METHOD = 780
TEXT = 781
THIRD PARTY PAYER INDICATOR = 782
THRESHOLD AMOUNT = 783
THRESHOLD_QUANTITY = 784
THRESHOLD VALUE COMPARISON CODE = 785
TIER RANGE = 786
TIER RATE PERCENT = 787
TIME AMOUNT = 788
TIME_DELTA_DAYS_QUANTITY = 789
TIME FREQUENCY CODE = 790
TIMEZONE OFFSET = 791
TIMING_COMPLAINT = 792
TIMING COMPLAINT CODE = 793
TITLE = 794
TO_ORDER_INDICATOR = 795
TOTAL AMOUNT = 796
TOTAL BALANCE AMOUNT = 797
TOTAL CONSUMED QUANTITY = 798
TOTAL CREDIT AMOUNT = 799
TOTAL_DEBIT_AMOUNT = 800
TOTAL DELIVERED QUANTITY = 801
TOTAL GOODS ITEM QUANTITY = 802
TOTAL_INVOICE_AMOUNT = 803
TOTAL METERED QUANTITY = 804
TOTAL_PACKAGE_QUANTITY = 805
TOTAL_PACKAGES_QUANTITY = 806
TOTAL_PAYMENT_AMOUNT = 807
TOTAL_TASK_AMOUNT = 808
TOTAL_TAX_AMOUNT = 809
TOTAL_TRANSPORT_HANDLING_UNIT_QUANTITY = 810
TRACE_ID = 811
TRACKING_DEVICE_CODE = 812
TRACKING_ID = 813
TRADE ITEM PACKING LABELING TYPE CODE = 814
TRADE_SERVICE_CODE = 815
TRADING_RESTRICTIONS = 816
```

```
TRAIN ID = 817
TRANSACTION CURRENCY TAX AMOUNT = 818
TRANSIT_DIRECTION_CODE = 819
TRANSPORT_AUTHORIZATION_CODE = 820
TRANSPORT_EMERGENCY_CARD_CODE = 821
TRANSPORT_EQUIPMENT_TYPE_CODE = 822
TRANSPORT_EVENT_TYPE_CODE = 823
TRANSPORT_EXECUTION_PLAN_REFERENCE_ID = 824
TRANSPORT_EXECUTION_STATUS_CODE = 825
TRANSPORT HANDLING UNIT TYPE CODE = 826
TRANSPORT_MEANS_TYPE_CODE = 827
TRANSPORT_MODE_CODE = 828
TRANSPORT SERVICE CODE = 829
TRANSPORT_SERVICE_PROVIDER_REMARKS = 830
TRANSPORT_SERVICE_PROVIDER_SPECIAL_TERMS = 831
TRANSPORT USER REMARKS = 832
TRANSPORT_USER_SPECIAL_TERMS = 833
TRANSPORTATION SERVICE DESCRIPTION = 834
TRANSPORTATION_SERVICE_DETAILS_URI = 835
TRANSPORTATION_STATUS_TYPE_CODE = 836
TYPE CODE = 837
UBL_VERSION_ID = 838
U N D G CODE = 839
URI = 840
UUID = 841
UNKNOWN PRICE INDICATOR = 842
UPPER ORANGE HAZARD PLACARD ID = 843
URGENCY_CODE = 844
UTILITY STATEMENT TYPE CODE = 845
VALIDATE PROCESS = 846
VALIDATE_TOOL = 847
VALIDATE TOOL VERSION = 848
VALIDATION_DATE = 849
VALIDATION RESULT CODE = 850
VALIDATION TIME = 851
VALIDATOR_ID = 852
VALIDITY START DATE = 853
VALUE = 854
VALUE_AMOUNT = 855
VALUE MEASURE = 856
VALUE_QUALIFIER = 857
VALUE_QUANTITY = 858
VARIANCE QUANTITY = 859
VARIANT_CONSTRAINT_INDICATOR = 860
VARIANT_ID = 861
VERSION_ID = 862
VESSEL_ID = 863
VESSEL_NAME = 864
WARRANTY_INFORMATION = 865
WEBSITE URI = 866
WEEK_DAY_CODE = 867
WEIGHT = 868
```

```
WEIGHT NUMERIC = 869
    WEIGHTING ALGORITHM CODE = 870
    WORK PHASE = 871
    WORK_PHASE_CODE = 872
    XPATH = 873
@unique
class ABIERegistry(IntFlag):
    List of the Aggregate Business Information Elements as defined in UBL 2.1
    ACCEPTANCE TRANSPORT EVENT = 1
    ACCESSORY_RELATED_ITEM = 2
    ACCOUNTING_CONTACT = 3
    ACCOUNTING CUSTOMER PARTY = 4
    ACCOUNTING_SUPPLIER_PARTY = 5
    ACTIVITY DATA LINE = 6
    ACTIVITY FINAL LOCATION = 7
    ACTIVITY_ORIGIN_LOCATION = 8
    ACTIVITY PERIOD = 9
    ACTIVITY_PROPERTY = 10
    ACTUAL ARRIVAL TRANSPORT EVENT = 11
    ACTUAL DEPARTURE TRANSPORT EVENT = 12
    ACTUAL_PACKAGE = 13
    ACTUAL PICKUP TRANSPORT EVENT = 14
    ACTUAL WAYPOINT TRANSPORT EVENT = 15
    ADDITIONAL_COMMODITY_CLASSIFICATION = 16
    ADDITIONAL DOCUMENT REFERENCE = 17
    ADDITIONAL DOCUMENT RESPONSE = 18
    ADDITIONAL_INFORMATION_PARTY = 19
    ADDITIONAL ITEM IDENTIFICATION = 20
    ADDITIONAL_ITEM_PROPERTY = 21
    ADDITIONAL QUALIFYING PARTY = 22
    ADDITIONAL TEMPERATURE = 23
    ADDITIONAL_TRANSPORTATION_SERVICE = 24
    ADDRESS = 25
    ADDRESS LINE = 26
    AGENT_PARTY = 27
    AIR TRANSPORT = 28
    ALLOWANCE_CHARGE = 29
    ALLOWED SUBCONTRACT TERMS = 30
    ALTERNATIVE_CONDITION_PRICE = 31
    ALTERNATIVE_DELIVERY_LOCATION = 32
    ALTERNATIVE_LINE_ITEM = 33
    ANTICIPATED_MONETARY_TOTAL = 34
    APPEAL_INFORMATION_PARTY = 35
    APPEAL_RECEIVER_PARTY = 36
    APPEAL\_TERMS = 37
    APPLICABLE ADDRESS = 38
    APPLICABLE_PERIOD = 39
    APPLICABLE_REGULATION = 40
```

```
APPLICABLE TAX CATEGORY = 41
APPLICABLE TERRITORY ADDRESS = 42
APPLICABLE_TRANSPORT_MEANS = 43
AT LOCATION = 44
ATTACHED_TRANSPORT_EQUIPMENT = 45
ATTACHMENT = 46
AUCTION_TERMS = 47
AVAILABILITY_TRANSPORT_EVENT = 48
AWARDED_TENDERED_PROJECT = 49
AWARDING CRITERION = 50
AWARDING_CRITERION_RESPONSE = 51
AWARDING_TERMS = 52
BENEFICIARY PARTY = 53
BILL_OF_LADING_HOLDER_PARTY = 54
BILL_TO_PARTY = 55
BILLING REFERENCE = 56
BILLING_REFERENCE_LINE = 57
BONUS PAYMENT TERMS = 58
BRANCH = 59
BUDGET_ACCOUNT = 60
BUDGET ACCOUNT LINE = 61
BUSINESS_CLASSIFICATION_SCHEME = 62
BUYER\_CONTACT = 63
BUYER CUSTOMER PARTY = 64
BUYER_PROPOSED_SUBSTITUTE_LINE_ITEM = 65
BUYERS ITEM IDENTIFICATION = 66
CALL DUTY = 67
CALL_FOR_TENDERS_DOCUMENT_REFERENCE = 68
CALL FOR TENDERS LINE REFERENCE = 69
CAPABILITY = 70
CARD_ACCOUNT = 71
CARRIER PARTY = 72
CATALOGUE_DOCUMENT_REFERENCE = 73
CATALOGUE ITEM IDENTIFICATION = 74
CATALOGUE ITEM SPECIFICATION UPDATE LINE = 75
CATALOGUE_LINE = 76
CATALOGUE LINE REFERENCE = 77
CATALOGUE PRICING UPDATE LINE = 78
CATALOGUE_REFERENCE = 79
CATALOGUE REQUEST LINE = 80
CATEGORIZES_CLASSIFICATION_CATEGORY = 81
CERTIFICATE = 82
CERTIFICATE_OF_ORIGIN_APPLICATION = 83
CHILD CONSIGNMENT = 84
CLASSIFICATION_CATEGORY = 85
CLASSIFICATION_SCHEME = 86
CLASSIFIED_TAX_CATEGORY = 87
CLAUSE = 88
COLLECT_PAYMENT_TERMS = 89
COLLECTED PAYMENT = 90
COMMISSION_PAYMENT_TERMS = 91
COMMODITY_CLASSIFICATION = 92
```

```
COMMUNICATION = 93
COMPLEMENTARY RELATED ITEM = 94
COMPLETED_TASK = 95
COMPONENT_RELATED_ITEM = 96
CONDITION = 97
CONSIGNEE_PARTY = 98
CONSIGNMENT = 99
CONSIGNOR_PARTY = 100
CONSOLIDATED_SHIPMENT = 101
CONSTITUTION PERIOD = 102
CONSUMPTION = 103
CONSUMPTION_AVERAGE = 104
CONSUMPTION CORRECTION = 105
CONSUMPTION_HISTORY = 106
CONSUMPTION_LINE = 107
CONSUMPTION POINT = 108
CONSUMPTION_REPORT = 109
CONSUMPTION REPORT REFERENCE = 110
CONTACT = 111
CONTACT_PARTY = 112
CONTAINED GOODS ITEM = 113
CONTAINED_IN_TRANSPORT_EQUIPMENT = 114
CONTAINED_PACKAGE = 115
CONTAINING PACKAGE = 116
CONTAINING_TRANSPORT_EQUIPMENT = 117
CONTRACT = 118
CONTRACT ACCEPTANCE PERIOD = 119
CONTRACT_DOCUMENT_REFERENCE = 120
CONTRACT EXECUTION REQUIREMENT = 121
CONTRACT EXTENSION = 122
CONTRACT_FORMALIZATION_PERIOD = 123
CONTRACT RESPONSIBLE PARTY = 124
CONTRACTING_ACTIVITY = 125
CONTRACTING PARTY = 126
CONTRACTING PARTY TYPE = 127
CONTRACTOR_CUSTOMER_PARTY = 128
CONTRACTUAL DELIVERY = 129
CONTRACTUAL DOCUMENT REFERENCE = 130
CORPORATE_REGISTRATION_SCHEME = 131
COUNTRY = 132
CREDIT_ACCOUNT = 133
CREDIT_NOTE_DOCUMENT_REFERENCE = 134
CREDIT_NOTE_LINE = 135
CREW_MEMBER_PERSON = 136
CURRENT_STATUS = 137
CUSTOMER_PARTY = 138
CUSTOMS_AGENT_PARTY = 139
CUSTOMS_DECLARATION = 140
DEBIT_NOTE_DOCUMENT_REFERENCE = 141
DEBIT NOTE LINE = 142
DECLARATION = 143
DEFAULT_LANGUAGE = 144
```

```
DELETED CATALOGUE REFERENCE = 145
DELIVERY = 146
DELIVERY_ADDRESS = 147
DELIVERY_CONTACT = 148
DELIVERY_CUSTOMER_PARTY = 149
DELIVERY_LOCATION = 150
DELIVERY_PARTY = 151
DELIVERY_PERIOD = 152
DELIVERY_TERMS = 153
DELIVERY TRANSPORT EVENT = 154
DELIVERY_UNIT = 155
DEPENDENT_LINE_REFERENCE = 156
DEPENDENT PRICE REFERENCE = 157
DESPATCH = 158
DESPATCH_ADDRESS = 159
DESPATCH CONTACT = 160
DESPATCH_DOCUMENT_REFERENCE = 161
DESPATCH LINE = 162
DESPATCH LINE REFERENCE = 163
DESPATCH_LOCATION = 164
DESPATCH PARTY = 165
DESPATCH_SUPPLIER_PARTY = 166
DESTINATION COUNTRY = 167
DETENTION TRANSPORT EVENT = 168
DIGITAL_SIGNATURE_ATTACHMENT = 169
DIMENSION = 170
DISBURSEMENT PAYMENT TERMS = 171
DISCHARGE_TRANSPORT_EVENT = 172
DISCREPANCY RESPONSE = 173
DOCUMENT AVAILABILITY PERIOD = 174
DOCUMENT_DISTRIBUTION = 175
DOCUMENT PROVIDER PARTY = 176
DOCUMENT REFERENCE = 177
DOCUMENT RESPONSE = 178
DOCUMENT TENDER REQUIREMENT = 179
DRIVER PERSON = 180
DROPOFF TRANSPORT EVENT = 181
DURATION PERIOD = 182
DUTY = 183
ECONOMIC OPERATOR ROLE = 184
ECONOMIC_OPERATOR_SHORT_LIST = 185
EFFECTIVE_PERIOD = 186
EMBASSY ENDORSEMENT = 187
EMERGENCY TEMPERATURE = 188
EMISSION_CALCULATION_METHOD = 189
EMPLOYMENT_LEGISLATION_DOCUMENT_REFERENCE = 190
ENDORSEMENT = 191
ENDORSER_PARTY = 192
ENERGY_TAX_REPORT = 193
ENERGY WATER CONSUMPTION CORRECTION = 194
ENERGY_WATER_SUPPLY = 195
ENVIRONMENTAL_EMISSION = 196
```

```
ENVIRONMENTAL LEGISLATION DOCUMENT REFERENCE = 197
ESTIMATED ARRIVAL TRANSPORT EVENT = 198
ESTIMATED DELIVERY PERIOD = 199
ESTIMATED DEPARTURE TRANSPORT EVENT = 200
ESTIMATED_DESPATCH_PERIOD = 201
ESTIMATED_DURATION_PERIOD = 202
ESTIMATED_TRANSIT_PERIOD = 203
EVALUATION CRITERION = 204
EVENT = 205
EVENT COMMENT = 206
EVENT_LINE_ITEM = 207
EVENT_TACTIC = 208
EVENT TACTIC ENUMERATION = 209
EVIDENCE = 210
EVIDENCE_DOCUMENT_REFERENCE = 211
EVIDENCE ISSUING PARTY = 212
EVIDENCE_SUPPLIED = 213
EXAMINATION TRANSPORT EVENT = 214
EXCEPTION CRITERIA LINE = 215
EXCEPTION_NOTIFICATION_LINE = 216
EXCEPTION OBSERVATION PERIOD = 217
EXCHANGE_RATE = 218
EXPORT COUNTRY = 219
EXPORTATION TRANSPORT EVENT = 220
EXPORTER_PARTY = 221
EXTERNAL REFERENCE = 222
EXTRA ALLOWANCE CHARGE = 223
FINAL_DELIVERY_PARTY = 224
FINAL DELIVERY TRANSPORTATION SERVICE = 225
FINAL DESTINATION COUNTRY = 226
FINAL_FINANCIAL_GUARANTEE = 227
FINANCIAL ACCOUNT = 228
FINANCIAL CAPABILITY = 229
FINANCIAL EVALUATION CRITERION = 230
FINANCIAL GUARANTEE = 231
FINANCIAL INSTITUTION = 232
FINANCIAL INSTITUTION BRANCH = 233
FINANCING FINANCIAL ACCOUNT = 234
FINANCING_PARTY = 235
FIRST ARRIVAL PORT LOCATION = 236
FISCAL LEGISLATION DOCUMENT REFERENCE = 237
FLASHPOINT TEMPERATURE = 238
FLOOR_SPACE_MEASUREMENT_DIMENSION = 239
FORECAST EXCEPTION = 240
FORECAST EXCEPTION CRITERION LINE = 241
FORECAST_LINE = 242
FORECAST_PERIOD = 243
FORECAST_REVISION_LINE = 244
FOREIGN_EXCHANGE_CONTRACT = 245
FRAMEWORK AGREEMENT = 246
FREIGHT_ALLOWANCE_CHARGE = 247
FREIGHT_CHARGE_LOCATION = 248
```

```
FREIGHT FORWARDER PARTY = 249
FREQUENCY PERIOD = 250
FROM_LOCATION = 251
GOODS ITEM = 252
GOODS_ITEM_CONTAINER = 253
GUARANTEE_DOCUMENT_REFERENCE = 254
GUARANTOR\_PARTY = 255
GUIDANCE_DOCUMENT_REFERENCE = 256
HANDLING_TRANSPORT_EVENT = 257
HANDLING UNIT DESPATCH LINE = 258
HAULAGE_TRADING_TERMS = 259
HAZARDOUS_GOODS_TRANSIT = 260
HAZARDOUS ITEM = 261
HAZARDOUS_ITEM_NOTIFICATION_PARTY = 262
HEAD_OFFICE_PARTY = 263
IDENTITY DOCUMENT REFERENCE = 264
IMMOBILIZED_SECURITY = 265
IMPORTER PARTY = 266
INFORMATION CONTENT PROVIDER PARTY = 267
INSTRUCTION_FOR_RETURNS_LINE = 268
INSURANCE ENDORSEMENT = 269
INSURANCE_PARTY = 270
INTERESTED PARTY = 271
INTERESTED PROCUREMENT PROJECT LOT = 272
INVENTORY_LOCATION = 273
INVENTORY PERIOD = 274
INVENTORY REPORT LINE = 275
INVENTORY_REPORTING_PARTY = 276
INVITATION SUBMISSION PERIOD = 277
INVOICE DOCUMENT REFERENCE = 278
INVOICE_LINE = 279
INVOICE PERIOD = 280
ISSUER ENDORSEMENT = 281
ISSUER PARTY = 282
ISSUING COUNTRY = 283
ITEM = 284
ITEM COMPARISON = 285
ITEM IDENTIFICATION = 286
ITEM_INFORMATION_REQUEST_LINE = 287
ITEM INSTANCE = 288
ITEM LOCATION QUANTITY = 289
ITEM MANAGEMENT PROFILE = 290
ITEM_PRICE_EXTENSION = 291
ITEM PROPERTY = 292
ITEM_PROPERTY_GROUP = 293
ITEM_PROPERTY_RANGE = 294
ITEM_SPECIFICATION_DOCUMENT_REFERENCE = 295
JURISDICTION_REGION_ADDRESS = 296
KEYWORD_ITEM_PROPERTY = 297
LANGUAGE = 298
LAST_EXIT_PORT_LOCATION = 299
LEGAL_DOCUMENT_REFERENCE = 300
```

```
LEGAL MONETARY TOTAL = 301
LINE ITEM = 302
LINE_REFERENCE = 303
LINE RESPONSE = 304
LINE_VALIDITY_PERIOD = 305
LOADING_LOCATION = 306
LOADING_PORT_LOCATION = 307
LOADING_PROOF_PARTY = 308
LOADING_TRANSPORT_EVENT = 309
LOCATION = 310
LOCATION_ADDRESS = 311
LOCATION_COORDINATE = 312
LOGISTICS OPERATOR PARTY = 313
LOT_IDENTIFICATION = 314
MAIN_CARRIAGE_SHIPMENT_STAGE = 315
MAIN COMMODITY CLASSIFICATION = 316
MAIN_ON_ACCOUNT_PAYMENT = 317
MAIN PERIOD = 318
MAIN QUALIFYING PARTY = 319
MAIN_TRANSPORTATION_SERVICE = 320
MANDATE DOCUMENT REFERENCE = 321
MANUFACTURER_PARTY = 322
MANUFACTURERS ITEM IDENTIFICATION = 323
MARITIME TRANSPORT = 324
MASTER_PERSON = 325
MAXIMUM DELIVERY UNIT = 326
MAXIMUM TEMPERATURE = 327
MEASUREMENT_DIMENSION = 328
MEASUREMENT FROM LOCATION = 329
MEASUREMENT TO LOCATION = 330
MEDIATION_PARTY = 331
METER = 332
METER PROPERTY = 333
METER READING = 334
MINIMUM DELIVERY UNIT = 335
MINIMUM_TEMPERATURE = 336
MINUTES DOCUMENT REFERENCE = 337
MISCELLANEOUS EVENT = 338
MONETARY_TOTAL = 339
MORTGAGE HOLDER PARTY = 340
NOMINATION_PERIOD = 341
NOTARY PARTY = 342
NOTICE_DOCUMENT_REFERENCE = 343
NOTIFICATION_LOCATION = 344
NOTIFICATION_PERIOD = 345
NOTIFICATION_REQUIREMENT = 346
NOTIFY_PARTY = 347
OCCURENCE_LOCATION = 348
OFFERED_ITEM_LOCATION_QUANTITY = 349
ON ACCOUNT PAYMENT = 350
ON_CARRIAGE_SHIPMENT_STAGE = 351
OPEN_TENDER_EVENT = 352
```

```
OPERATING PARTY = 353
OPTION VALIDITY PERIOD = 354
OPTIONAL_TAKEOVER_TRANSPORT_EVENT = 355
ORDER_DOCUMENT_REFERENCE = 356
ORDER_LINE = 357
ORDER_LINE_REFERENCE = 358
ORDER REFERENCE = 359
ORDERED_SHIPMENT = 360
ORIGIN_ADDRESS = 361
ORIGIN COUNTRY = 362
ORIGINAL_DEPARTURE_COUNTRY = 363
ORIGINAL_DESPATCH_PARTY = 364
ORIGINAL DESPATCH TRANSPORTATION SERVICE = 365
ORIGINAL_DOCUMENT_REFERENCE = 366
ORIGINAL_ITEM_LOCATION_QUANTITY = 367
ORIGINATOR CUSTOMER PARTY = 368
ORIGINATOR_DOCUMENT_REFERENCE = 369
ORIGINATOR PARTY = 370
OTHER COMMUNICATION = 371
OWNER_PARTY = 372
PACKAGE = 373
PACKAGED_TRANSPORT_HANDLING_UNIT = 374
PALLET SPACE MEASUREMENT DIMENSION = 375
PARENT DOCUMENT LINE REFERENCE = 376
PARENT_DOCUMENT_REFERENCE = 377
PARTICIPATING LOCATIONS LOCATION = 378
PARTICIPATION REQUEST RECEPTION PERIOD = 379
PARTY = 380
PARTY IDENTIFICATION = 381
PARTY LEGAL ENTITY = 382
PARTY_NAME = 383
PARTY TAX SCHEME = 384
PASSENGER PERSON = 385
PAYEE FINANCIAL ACCOUNT = 386
PAYEE PARTY = 387
PAYER_FINANCIAL_ACCOUNT = 388
PAYER PARTY = 389
PAYMENT = 390
PAYMENT_ALTERNATIVE_EXCHANGE_RATE = 391
PAYMENT EXCHANGE RATE = 392
PAYMENT MANDATE = 393
PAYMENT_MEANS = 394
PAYMENT_REVERSAL_PERIOD = 395
PAYMENT_TERMS = 396
PENALTY_CLAUSE = 397
PENALTY_PAYMENT_TERMS = 398
PENALTY_PERIOD = 399
PERFORMANCE_DATA_LINE = 400
PERFORMING_CARRIER_PARTY = 401
PERIOD = 402
PERSON = 403
PHYSICAL_ATTRIBUTE = 404
```

```
PHYSICAL LOCATION = 405
PICKUP = 406
PICKUP_LOCATION = 407
PICKUP PARTY = 408
PICKUP_TRANSPORT_EVENT = 409
PLANNED_ARRIVAL_TRANSPORT_EVENT = 410
PLANNED_DELIVERY_TRANSPORT_EVENT = 411
PLANNED_DEPARTURE_TRANSPORT_EVENT = 412
PLANNED_PERIOD = 413
PLANNED PICKUP TRANSPORT EVENT = 414
PLANNED_WAYPOINT_TRANSPORT_EVENT = 415
POSITIONING_TRANSPORT_EVENT = 416
POSTAL ADDRESS = 417
POWER_OF_ATTORNEY = 418
PRE_CARRIAGE_SHIPMENT_STAGE = 419
PRE SELECTED PARTY = 420
PREPAID_PAYMENT = 421
PREPAID PAYMENT TERMS = 422
PREPARATION PARTY = 423
PRESENTATION_PERIOD = 424
PREVIOUS DOCUMENT REFERENCE = 425
PREVIOUS_PRICE_LIST = 426
PRICE = 427
PRICE EXTENSION = 428
PRICE LIST = 429
PRICING EXCHANGE RATE = 430
PRICING REFERENCE = 431
PROCESS_JUSTIFICATION = 432
PROCUREMENT LEGISLATION DOCUMENT REFERENCE = 433
PROCUREMENT PROJECT = 434
PROCUREMENT_PROJECT_LOT = 435
PROJECT REFERENCE = 436
PROMISED DELIVERY PERIOD = 437
PROMOTIONAL EVENT = 438
PROMOTIONAL EVENT LINE ITEM = 439
PROMOTIONAL_SPECIFICATION = 440
PROVIDER PARTY = 441
QUALIFICATION RESOLUTION = 442
QUALIFYING_PARTY = 443
QUARANTINE TRANSPORT EVENT = 444
QUOTATION DOCUMENT REFERENCE = 445
QUOTATION LINE = 446
QUOTATION_LINE_REFERENCE = 447
QUOTED_MONETARY_TOTAL = 448
RAIL_TRANSPORT = 449
RANGE_DIMENSION = 450
REALIZED_LOCATION = 451
RECEIPT_DOCUMENT_REFERENCE = 452
RECEIPT_LINE = 453
RECEIPT LINE REFERENCE = 454
RECEIPT_TRANSPORT_EVENT = 455
RECEIVED_HANDLING_UNIT_RECEIPT_LINE = 456
```

```
RECEIVER PARTY = 457
RECIPIENT CUSTOMER PARTY = 458
RECIPIENT PARTY = 459
REFERENCED CONSIGNMENT = 460
REFERENCED CONTRACT = 461
REFERENCED_GOODS_ITEM = 462
REFERENCED PACKAGE = 463
REFERENCED_SHIPMENT = 464
REFERENCED_TRANSPORT_EQUIPMENT = 465
REGISTRATION ADDRESS = 466
REGISTRY_CERTIFICATE_DOCUMENT_REFERENCE = 467
REGISTRY_PORT_LOCATION = 468
REGULATION = 469
RELATED_CATALOGUE_REFERENCE = 470
RELATED_ITEM = 471
REMINDER DOCUMENT REFERENCE = 472
REMINDER_LINE = 473
REMINDER_PERIOD = 474
REMITTANCE ADVICE LINE = 475
RENEWAL = 476
REPLACED NOTICE DOCUMENT REFERENCE = 477
REPLACED RELATED ITEM = 478
REPLACEMENT RELATED ITEM = 479
REPORTED SHIPMENT = 480
REPORTING_PERSON = 481
REQUEST FOR QUOTATION DOCUMENT REFERENCE = 482
REQUEST FOR QUOTATION LINE = 483
REQUEST_FOR_TENDER_LINE = 484
REQUEST LINE REFERENCE = 485
REQUESTED ARRIVAL TRANSPORT EVENT = 486
REQUESTED_CATALOGUE_REFERENCE = 487
REQUESTED_CLASSIFICATION_SCHEME = 488
REQUESTED_DELIVERY_PERIOD = 489
REQUESTED DELIVERY TRANSPORT EVENT = 490
REQUESTED DEPARTURE TRANSPORT EVENT = 491
REQUESTED DESPATCH PERIOD = 492
REQUESTED DOCUMENT REFERENCE = 493
REQUESTED LANGUAGE = 494
REQUESTED_MONETARY_TOTAL = 495
REQUESTED PICKUP TRANSPORT EVENT = 496
REQUESTED STATUS LOCATION = 497
REQUESTED STATUS PERIOD = 498
REQUESTED TENDER TOTAL = 499
REQUESTED_VALIDITY_PERIOD = 500
REQUESTED_WAYPOINT_TRANSPORT_EVENT = 501
REQUIRED_BUSINESS_CLASSIFICATION_SCHEME = 502
REQUIRED_CLASSIFICATION_SCHEME = 503
REQUIRED_FINANCIAL_GUARANTEE = 504
REQUIRED_ITEM_LOCATION_QUANTITY = 505
REQUIRED RELATED ITEM = 506
RESIDENCE ADDRESS = 507
RESOLUTION_DOCUMENT_REFERENCE = 508
```

```
RESPONSE = 509
RESPONSIBLE TRANSPORT SERVICE PROVIDER PARTY = 510
RESULT OF VERIFICATION = 511
RETAIL_PLANNED_IMPACT = 512
RETAILER_CUSTOMER_PARTY = 513
RETURN_ADDRESS = 514
ROAD_TRANSPORT = 515
SALES_ITEM = 516
SCHEDULED_SERVICE_FREQUENCY = 517
SECONDARY HAZARD = 518
SECURITY_OFFICER_PERSON = 519
SELF_BILLED_CREDIT_NOTE_DOCUMENT_REFERENCE = 520
SELF BILLED INVOICE DOCUMENT REFERENCE = 521
SELLER_CONTACT = 522
SELLER_PROPOSED_SUBSTITUTE_LINE_ITEM = 523
SELLER SUBSTITUTED LINE ITEM = 524
SELLER_SUPPLIER_PARTY = 525
SELLERS ITEM IDENTIFICATION = 526
SENDER PARTY = 527
SERVICE_ALLOWANCE_CHARGE = 528
SERVICE CHARGE PAYMENT TERMS = 529
SERVICE_END_TIME_PERIOD = 530
SERVICE FREQUENCY = 531
SERVICE PROVIDER PARTY = 532
SERVICE_START_TIME_PERIOD = 533
SETTLEMENT PERIOD = 534
SHAREHOLDER PARTY = 535
SHIPMENT = 536
SHIPMENT DOCUMENT REFERENCE = 537
SHIPMENT STAGE = 538
SHIPS_SURGEON_PERSON = 539
SIGNATORY CONTACT = 540
SIGNATORY PARTY = 541
SIGNATURE = 542
SOURCE CATALOGUE REFERENCE = 543
SOURCE_ISSUER_PARTY = 544
SPECIFIC TENDERER REQUIREMENT = 545
STANDARD ITEM IDENTIFICATION = 546
STATEMENT_DOCUMENT_REFERENCE = 547
STATEMENT LINE = 548
STATEMENT PERIOD = 549
STATUS = 550
STATUS_LOCATION = 551
STATUS_PERIOD = 552
STOCK_AVAILABILITY_REPORT_LINE = 553
STORAGE_LOCATION = 554
STORAGE_TRANSPORT_EVENT = 555
STOWAGE = 556
SUB_CREDIT_NOTE_LINE = 557
SUB DEBIT NOTE LINE = 558
SUB_INVOICE_LINE = 559
SUB_LINE_ITEM = 560
```

```
SUB REQUEST FOR TENDER LINE = 561
SUB TENDER LINE = 562
SUBCONTRACT_TERMS = 563
SUBCONTRACTOR PARTY = 564
SUBORDINATE_AWARDING_CRITERION = 565
SUBORDINATE_AWARDING_CRITERION_RESPONSE = 566
SUBSCRIBER CONSUMPTION = 567
SUBSCRIBER_PARTY = 568
SUBSEQUENT_PROCESS_TENDER_REQUIREMENT = 569
SUBSIDIARY LOCATION = 570
SUBSTITUTE_CARRIER_PARTY = 571
SUGGESTED_EVIDENCE = 572
SUPPLIER CONSUMPTION = 573
SUPPLIER_PARTY = 574
SUPPLY_CHAIN_ACTIVITY_DATA_LINE = 575
SUPPLY ITEM = 576
SUPPORTED_COMMODITY_CLASSIFICATION = 577
SUPPORTED TRANSPORT EQUIPMENT = 578
SUPPORTING DOCUMENT REFERENCE = 579
TAKEOVER_TRANSPORT_EVENT = 580
TAX CATEGORY = 581
TAX_EXCHANGE_RATE = 582
TAX EXCLUSIVE PRICE = 583
TAX INCLUSIVE PRICE = 584
TAX_REPRESENTATIVE_PARTY = 585
TAX SCHEME = 586
TAX SUBTOTAL = 587
TAX_TOTAL = 588
TECHNICAL CAPABILITY = 589
TECHNICAL COMMITTEE PERSON = 590
TECHNICAL_DOCUMENT_REFERENCE = 591
TECHNICAL EVALUATION CRITERION = 592
TELECOMMUNICATIONS SERVICE = 593
TELECOMMUNICATIONS SUPPLY = 594
TELECOMMUNICATIONS SUPPLY LINE = 595
TEMPERATURE = 596
TEMPLATE DOCUMENT REFERENCE = 597
TENDER DOCUMENT REFERENCE = 598
TENDER_EVALUATION_PARTY = 599
TENDER LINE = 600
TENDER PREPARATION = 601
TENDER_RECIPIENT_PARTY = 602
TENDER REQUIREMENT = 603
TENDER RESULT = 604
TENDER SUBMISSION DEADLINE PERIOD = 605
TENDER_VALIDITY_PERIOD = 606
TENDERED PROJECT = 607
TENDERER_PARTY = 608
TENDERER_PARTY_QUALIFICATION = 609
TENDERER QUALIFICATION DOCUMENT REFERENCE = 610
TENDERER_QUALIFICATION_REQUEST = 611
TENDERER_REQUIREMENT = 612
```

```
TENDERING PROCESS = 613
TENDERING TERMS = 614
TERMINAL_OPERATOR_PARTY = 615
TIME DUTY = 616
TO LOCATION = 617
TOTAL_CAPACITY_DIMENSION = 618
TRADE FINANCING = 619
TRADING_TERMS = 620
TRANSACTION_CONDITIONS = 621
TRANSIT COUNTRY = 622
TRANSIT_PERIOD = 623
TRANSPORT_ADVISOR_PARTY = 624
TRANSPORT CONTRACT = 625
TRANSPORT_EQUIPMENT = 626
TRANSPORT_EQUIPMENT_SEAL = 627
TRANSPORT EVENT = 628
TRANSPORT_EXECUTION_PLAN_DOCUMENT_REFERENCE = 629
TRANSPORT EXECUTION PLAN REQUEST DOCUMENT REFERENCE = 630
TRANSPORT_EXECUTION_TERMS = 631
TRANSPORT_HANDLING_UNIT = 632
TRANSPORT MEANS = 633
TRANSPORT_PROGRESS_STATUS_REQUEST_DOCUMENT_REFERENCE = 634
TRANSPORT SCHEDULE = 635
TRANSPORT SERVICE DESCRIPTION DOCUMENT REFERENCE = 636
TRANSPORT_SERVICE_DESCRIPTION_REQUEST_DOCUMENT_REFERENCE = 637
TRANSPORT SERVICE PROVIDER PARTY = 638
TRANSPORT SERVICE PROVIDER RESPONSE DEADLINE PERIOD = 639
TRANSPORT_SERVICE_PROVIDER_RESPONSE_REQUIRED_PERIOD = 640
TRANSPORT USER PARTY = 641
TRANSPORT USER RESPONSE REQUIRED PERIOD = 642
TRANSPORTATION_SEGMENT = 643
TRANSPORTATION SERVICE = 644
TRANSPORTATION STATUS REQUEST DOCUMENT REFERENCE = 645
TRANSSHIP PORT LOCATION = 646
UNLOADING LOCATION = 647
UNLOADING PORT LOCATION = 648
UNSTRUCTURED PRICE = 649
UNSUPPORTED COMMODITY CLASSIFICATION = 650
UNSUPPORTED_TRANSPORT_EQUIPMENT = 651
UPDATED DELIVERY TRANSPORT EVENT = 652
UPDATED_PICKUP_TRANSPORT_EVENT = 653
USABILITY PERIOD = 654
UTILITY CONSUMPTION POINT = 655
UTILITY_CUSTOMER_PARTY = 656
UTILITY_ITEM = 657
UTILITY_METER = 658
UTILITY_SUPPLIER_PARTY = 659
VALIDITY_PERIOD = 660
WAREHOUSING_TRANSPORT_EVENT = 661
WARRANTY PARTY = 662
WARRANTY_VALIDITY_PERIOD = 663
WEB_SITE_ACCESS = 664
```

```
WINNING PARTY = 665
    WITHHOLDING TAX TOTAL = 666
    WITNESS_PARTY = 667
    WORK_ORDER_DOCUMENT_REFERENCE = 668
    WORK_PHASE_REFERENCE = 669
@unique
class ComponentRegistry(IntFlag):
    ACTIVITY DATA LINE = 1
    ACTIVITY_PROPERTY = 2
    ADDRESS = 3
    ADDRESS LINE = 4
    AIR_TRANSPORT = 5
    ALLOWANCE_CHARGE = 6
    APPEAL TERMS = 7
    ATTACHMENT = 8
    AUCTION TERMS = 9
    AWARDING_CRITERION = 10
    AWARDING_CRITERION_RESPONSE = 11
    AWARDING TERMS = 12
    BILLING_REFERENCE = 13
    BILLING REFERENCE LINE = 14
    BRANCH = 15
    BUDGET_ACCOUNT = 16
    BUDGET ACCOUNT LINE = 17
    CAPABILITY = 18
    CARD_ACCOUNT = 19
    CATALOGUE ITEM SPECIFICATION UPDATE LINE = 20
    CATALOGUE LINE = 21
    CATALOGUE_PRICING_UPDATE_LINE = 22
    CATALOGUE REFERENCE = 23
    CATALOGUE_REQUEST_LINE = 24
    CERTIFICATE = 25
    CERTIFICATE OF ORIGIN APPLICATION = 26
    CLASSIFICATION_CATEGORY = 27
    CLASSIFICATION_SCHEME = 28
    CLAUSE = 29
    COMMODITY_CLASSIFICATION = 30
    COMMUNICATION = 31
    COMPLETED TASK = 32
    CONDITION = 33
    CONSIGNMENT = 34
    CONSUMPTION = 35
    CONSUMPTION_AVERAGE = 36
    CONSUMPTION_CORRECTION = 37
    CONSUMPTION_HISTORY = 38
    CONSUMPTION_LINE = 39
    CONSUMPTION_POINT = 40
    CONSUMPTION REPORT = 41
    CONSUMPTION_REPORT_REFERENCE = 42
    CONTACT = 43
```

```
CONTRACT = 44
CONTRACT EXECUTION REQUIREMENT = 45
CONTRACT_EXTENSION = 46
CONTRACTING_ACTIVITY = 47
CONTRACTING_PARTY = 48
CONTRACTING_PARTY_TYPE = 49
CORPORATE_REGISTRATION_SCHEME = 50
COUNTRY = 51
CREDIT_ACCOUNT = 52
CREDIT NOTE LINE = 53
CUSTOMER_PARTY = 54
CUSTOMS_DECLARATION = 55
DEBIT NOTE LINE = 56
DECLARATION = 57
DELIVERY = 58
DELIVERY TERMS = 59
DELIVERY_UNIT = 60
DEPENDENT PRICE REFERENCE = 61
DESPATCH = 62
DESPATCH_LINE = 63
DIMENSION = 64
DOCUMENT_DISTRIBUTION = 65
DOCUMENT REFERENCE = 66
DOCUMENT RESPONSE = 67
DUTY = 68
ECONOMIC OPERATOR ROLE = 69
ECONOMIC OPERATOR SHORT LIST = 70
EMISSION_CALCULATION_METHOD = 71
ENDORSEMENT = 72
ENDORSER PARTY = 73
ENERGY_TAX_REPORT = 74
ENERGY WATER SUPPLY = 75
ENVIRONMENTAL_EMISSION = 76
EVALUATION CRITERION = 77
EVENT = 78
EVENT_COMMENT = 79
EVENT LINE ITEM = 80
EVENT TACTIC = 81
EVENT_TACTIC_ENUMERATION = 82
EVIDENCE = 83
EVIDENCE_SUPPLIED = 84
EXCEPTION_CRITERIA_LINE = 85
EXCEPTION_NOTIFICATION_LINE = 86
EXCHANGE_RATE = 87
EXTERNAL_REFERENCE = 88
FINANCIAL_ACCOUNT = 89
FINANCIAL_GUARANTEE = 90
FINANCIAL_INSTITUTION = 91
FORECAST_EXCEPTION = 92
FORECAST_EXCEPTION_CRITERION_LINE = 93
FORECAST_LINE = 94
FORECAST_REVISION_LINE = 95
```

```
FRAMEWORK AGREEMENT = 96
GOODS ITEM = 97
GOODS_ITEM_CONTAINER = 98
HAZARDOUS_GOODS_TRANSIT = 99
HAZARDOUS_ITEM = 100
IMMOBILIZED_SECURITY = 101
INSTRUCTION_FOR_RETURNS_LINE = 102
INVENTORY_REPORT_LINE = 103
INVOICE_LINE = 104
ITEM = 105
ITEM_COMPARISON = 106
ITEM_IDENTIFICATION = 107
ITEM INFORMATION REQUEST LINE = 108
ITEM_INSTANCE = 109
ITEM_LOCATION_QUANTITY = 110
ITEM MANAGEMENT PROFILE = 111
ITEM_PROPERTY = 112
ITEM PROPERTY GROUP = 113
ITEM_PROPERTY_RANGE = 114
LANGUAGE = 115
LINE ITEM = 116
LINE_REFERENCE = 117
LINE RESPONSE = 118
LOCATION = 119
LOCATION_COORDINATE = 120
LOT IDENTIFICATION = 121
MARITIME TRANSPORT = 122
METER = 123
METER PROPERTY = 124
METER_READING = 125
MISCELLANEOUS_EVENT = 126
MONETARY TOTAL = 127
NOTIFICATION_REQUIREMENT = 128
ON ACCOUNT PAYMENT = 129
ORDERED SHIPMENT = 130
ORDER_LINE = 131
ORDER LINE REFERENCE = 132
ORDER REFERENCE = 133
PACKAGE = 134
PARTY = 135
PARTY_IDENTIFICATION = 136
PARTY_LEGAL_ENTITY = 137
PARTY_NAME = 138
PARTY_TAX_SCHEME = 139
PAYMENT = 140
PAYMENT_MANDATE = 141
PAYMENT_MEANS = 142
PAYMENT_TERMS = 143
PERFORMANCE_DATA_LINE = 144
PERIOD = 145
PERSON = 146
PHYSICAL_ATTRIBUTE = 147
```

```
PICKUP = 148
POWER OF ATTORNEY = 149
PRICE = 150
PRICE EXTENSION = 151
PRICE_LIST = 152
PRICING_REFERENCE = 153
PROCESS_JUSTIFICATION = 154
PROCUREMENT_PROJECT = 155
PROCUREMENT_PROJECT_LOT = 156
PROJECT REFERENCE = 157
PROMOTIONAL_EVENT = 158
PROMOTIONAL_EVENT_LINE_ITEM = 159
PROMOTIONAL SPECIFICATION = 160
QUALIFICATION_RESOLUTION = 161
QUALIFYING_PARTY = 162
QUOTATION_LINE = 163
RAIL_TRANSPORT = 164
RECEIPT LINE = 165
REGULATION = 166
RELATED_ITEM = 167
REMINDER LINE = 168
REMITTANCE_ADVICE_LINE = 169
RENEWAL = 170
REQUESTED TENDER TOTAL = 171
REQUEST_FOR_QUOTATION_LINE = 172
REQUEST FOR TENDER LINE = 173
RESPONSE = 174
RESULT_OF_VERIFICATION = 175
RETAIL PLANNED IMPACT = 176
ROAD_TRANSPORT = 177
SALES_ITEM = 178
SECONDARY HAZARD = 179
SERVICE_FREQUENCY = 180
SERVICE PROVIDER PARTY = 181
SHAREHOLDER PARTY = 182
SHIPMENT = 183
SHIPMENT STAGE = 184
SIGNATURE = 185
STATEMENT_LINE = 186
STATUS = 187
STOCK_AVAILABILITY_REPORT_LINE = 188
STOWAGE = 189
SUBCONTRACT_TERMS = 190
SUBSCRIBER_CONSUMPTION = 191
SUPPLIER_CONSUMPTION = 192
SUPPLIER_PARTY = 193
TAX_CATEGORY = 194
TAX_SCHEME = 195
TAX_SUBTOTAL = 196
TAX TOTAL = 197
TELECOMMUNICATIONS_SERVICE = 198
TELECOMMUNICATIONS_SUPPLY = 199
```

```
TELECOMMUNICATIONS SUPPLY LINE = 200
    TEMPERATURE = 201
    TENDERED_PROJECT = 202
    TENDERER_PARTY_QUALIFICATION = 203
    TENDERER_QUALIFICATION_REQUEST = 204
    TENDERER_REQUIREMENT = 205
    TENDERING_PROCESS = 206
    TENDERING_TERMS = 207
    TENDER_LINE = 208
    TENDER PREPARATION = 209
    TENDER_REQUIREMENT = 210
    TENDER_RESULT = 211
    TRADE FINANCING = 212
    TRADING_TERMS = 213
    TRANSACTION_CONDITIONS = 214
    TRANSPORTATION SEGMENT = 215
    TRANSPORTATION_SERVICE = 216
    TRANSPORT EQUIPMENT = 217
    TRANSPORT_EQUIPMENT_SEAL = 218
    TRANSPORT_EVENT = 219
    TRANSPORT EXECUTION TERMS = 220
    TRANSPORT_HANDLING_UNIT = 221
    TRANSPORT MEANS = 222
    TRANSPORT SCHEDULE = 223
    UNSTRUCTURED_PRICE = 224
    UTILITY ITEM = 225
    WEB SITE ACCESS = 226
    WINNING_PARTY = 227
    WORK PHASE REFERENCE = 228
@unique
class DocumentRegistry(IntFlag):
    Defines a list of named constants which identifies all
    Business Documents supported by this Python implementation of UBL 2.1
    APPLICATION RESPONSE = 2
    ATTACHED_DOCUMENT = 3
    UNAWARDED NOTIFICATION = 5
    BILL_OF_LADING = 7
    CALL_FOR_TENDERS = 11
    CATALOGUE = 13
    CATALOGUE_DELETION = 17
    CATALOGUE_ITEM_SPECIFICATION_UPDATE = 19
    CATALOGUE_PRICING_UPDATE = 23
    CATALOGUE_REQUEST = 29
    CERTIFICATE_OF_ORIGIN = 31
    CONTRACT_AWARD_NOTICE = 37
    CONTRACT NOTICE = 41
    CREDIT_NOTE = 43
    DEBIT_NOTE = 47
```

```
DESPATCH ADVICE = 53
DOCUMENT STATUS = 59
DOCUMENT_STATUS_REQUEST = 61
EXCEPTION CRITERIA = 67
EXCEPTION_NOTIFICATION = 71
FORECAST = 73
FORECAST_REVISION = 79
FORWARDING_INSTRUCTIONS = 83
FREIGHT_INVOICE = 89
FULFILMENT CANCELLATION = 97
GOODS_ITEM_ITINERARY = 101
GUARANTEE_CERTIFICATE = 103
INSTRUCTION FOR RETURNS = 107
INVENTORY_REPORT = 109
INVOICE = 113
ITEM INFORMATION REQUEST = 127
ORDER = 131
ORDER CANCELLATION = 137
ORDER CHANGE = 139
ORDER_RESPONSE = 149
ORDER RESPONSE SIMPLE = 151
PACKING_LIST = 157
PRIOR INFORMATION NOTICE = 163
PRODUCT ACTIVITY = 167
QUOTATION = 173
RECEIPT ADVICE = 179
REMINDER = 181
REMITTANCE_ADVICE = 191
REQUEST FOR QUOTATION = 193
RETAIL_EVENT = 197
SELF_BILLED_CREDIT_NOTE = 199
SELF BILLED INVOICE = 211
STATEMENT = 223
STOCK AVAILABILITY REPORT = 227
TENDER = 229
TENDERER_QUALIFICATION = 233
TENDERER QUALIFICATION RESPONSE = 239
TENDER RECEIPT = 241
TRADE_ITEM_LOCATION_PROFILE = 251
TRANSPORTATION STATUS = 257
TRANSPORTATION_STATUS_REQUEST = 263
TRANSPORT_EXECUTION_PLAN = 269
TRANSPORT_EXECUTION_PLAN_REQUEST = 271
TRANSPORT_PROGRESS_STATUS = 277
TRANSPORT_PROGRESS_STATUS_REQUEST = 281
TRANSPORT_SERVICE_DESCRIPTION = 283
TRANSPORT_SERVICE_DESCRIPTION_REQUEST = 293
UTILITY_STATEMENT = 307
WAYBILL = 311
AWARDED NOTIFICATION = 313
```

```
@unique
class CountryRegistry(IntFlag):
    AFGHANISTAN = 4
    ALAND ISLANDS = 248
    ALBANIA = 8
    ALGERIA = 12
    AMERICAN SAMOA = 16
    ANDORRA = 20
    ANGOLA = 24
    ANGUILLA = 660
    ANTARCTICA = 10
    ANTIGUA_AND_BARBUDA = 28
    ARGENTINA = 32
    ARMENIA = 51
    ARUBA = 533
    AUSTRALIA = 36
    AUSTRIA = 40
    AZERBAIJAN = 31
    THE BAHAMAS = 44
    BAHRAIN = 48
    BANGLADESH = 50
    BARBADOS = 52
    BELARUS = 112
    BELGIUM = 56
    BELIZE = 84
    BENIN = 204
    BERMUDA = 60
    BHUTAN = 64
    PLURINATIONAL STATE OF BOLIVIA = 68
    BONAIRE SINT EUSTATIUS AND SABA = 535
    BOSNIA_AND_HERZEGOVINA = 70
    BOTSWANA = 72
    BOUVET_ISLAND = 74
    BRAZIL = 76
    THE BRITISH INDIAN OCEAN TERRITORY = 86
    BRUNEI DARUSSALAM = 96
    BULGARIA = 100
    BURKINA FASO = 854
    BURUNDI = 108
    CABO_VERDE = 132
    CAMBODIA = 116
    CAMEROON = 120
    CANADA = 124
    THE_CAYMAN_ISLANDS = 136
    THE_CENTRAL_AFRICAN_REPUBLIC = 140
    CHAD = 148
    CHILE = 152
    CHINA = 156
    CHRISTMAS_ISLAND = 162
    THE COCOS KEELING ISLANDS = 166
    COLOMBIA = 170
    THE\_COMOROS = 174
```

```
THE_DEMOCRATIC_REPUBLIC_OF_THE_CONGO = 180
THE CONGO = 178
THE_COOK_ISLANDS = 184
COSTA_RICA = 188
COTE_D_IVOIRE = 384
CROATIA = 191
CUBA = 192
CURACAO = 531
CYPRUS = 196
CZECHIA = 203
DENMARK = 208
DJIBOUTI = 262
DOMINICA = 212
THE_DOMINICAN_REPUBLIC = 214
ECUADOR = 218
EGYPT = 818
EL_SALVADOR = 222
EQUATORIAL GUINEA = 226
ERITREA = 232
ESTONIA = 233
ETHIOPIA = 231
THE_FALKLAND_ISLANDS = 238
THE FAROE ISLANDS = 234
FIJI = 242
FINLAND = 246
FRANCE = 250
FRENCH_GUIANA = 254
FRENCH_POLYNESIA = 258
THE FRENCH SOUTHERN TERRITORIES = 260
GABON = 266
THE\_GAMBIA = 270
GEORGIA = 268
GERMANY = 276
GHANA = 288
GIBRALTAR = 292
GREECE = 300
GREENLAND = 304
GRENADA = 308
GUADELOUPE = 312
GUAM = 316
GUATEMALA = 320
GUERNSEY = 831
GUINEA = 324
GUINEA_BISSAU = 624
GUYANA = 328
HAITI = 332
HEARD_ISLAND_AND_McDONALD_ISLANDS = 334
THE_HOLY_SEE = 336
HONDURAS = 340
HONG KONG = 344
HUNGARY = 348
ICELAND = 352
```

```
INDIA = 356
INDONESIA = 360
ISLAMIC_REPUBLIC_OF_IRAN = 364
IRAQ = 368
IRELAND = 372
ISLE_OF_MAN = 833
ISRAEL = 376
ITALY = 380
JAMAICA = 388
JAPAN = 392
JERSEY = 832
JORDAN = 400
KAZAKHSTAN = 398
KENYA = 404
KIRIBATI = 296
THE_DEMOCRATIC_PEOPLES_REPUBLIC_OF_KOREA = 408
THE_REPUBLIC_OF_KOREA = 410
KUWAIT = 414
KYRGYZSTAN = 417
THE_LAO_PEOPLES_DEMOCRATIC_REPUBLIC = 418
LATVIA = 428
LEBANON = 422
LESOTHO = 426
LIBERIA = 430
LIBYA = 434
LIECHTENSTEIN = 438
LITHUANIA = 440
LUXEMBOURG = 442
MACAO = 446
THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA = 807
MADAGASCAR = 450
MALAWI = 454
MALAYSIA = 458
MALDIVES = 462
MALI = 466
MALTA = 470
THE MARSHALL ISLANDS = 584
MARTINIQUE = 474
MAURITANIA = 478
MAURITIUS = 480
MAYOTTE = 175
MEXICO = 484
FEDERATED_STATES_OF_MICRONESIA = 583
THE_REPUBLIC_OF_MOLDOVA = 498
MONACO = 492
MONGOLIA = 496
MONTENEGRO = 499
MONTSERRAT = 500
MOROCCO = 504
MOZAMBIQUE = 508
MYANMAR = 104
NAMIBIA = 516
```

```
NAURU = 520
NEPAL = 524
THE_NETHERLANDS = 528
NEW_CALEDONIA = 540
NEW_ZEALAND = 554
NICARAGUA = 558
NIGER = 562
NIGERIA = 566
NIUE = 570
NORFOLK ISLAND = 574
NORTHERN_MARIANA_ISLANDS = 580
NORWAY = 578
OMAN = 512
PAKISTAN = 586
PALAU = 585
PALESTINE_STATE_OF = 275
PANAMA = 591
PAPUA NEW GUINEA = 598
PARAGUAY = 600
PERU = 604
PHILIPPINES = 608
PITCAIRN = 612
POLAND = 616
PORTUGAL = 620
PUERTO_RICO = 630
QATAR = 634
REUNION = 638
ROMANIA = 642
THE RUSSIAN FEDERATION = 643
RWANDA = 646
SAINT_BARTHELEMY = 652
SAINT HELENA ASCENSION AND TRISTAN DA CUNHA = 654
SAINT_KITTS_AND_NEVIS = 659
SAINT LUCIA = 662
SAINT MARTIN FRENCH PART = 663
SAINT_PIERRE_AND_MIQUELON = 666
SAINT_VINCENT_AND_THE_GRENADINES = 670
SAMOA = 882
SAN_MARINO = 674
SAO_TOME_AND_PRINCIPE = 678
SAUDI ARABIA = 682
SENEGAL = 686
SERBIA = 688
SEYCHELLES = 690
SIERRA_LEONE = 694
SINGAPORE = 702
SINT_MAARTEN_DUTCH_PART = 534
SLOVAKIA = 703
SLOVENIA = 705
SOLOMON ISLANDS = 90
SOMALIA = 706
SOUTH_AFRICA = 710
```

```
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS = 239
    SOUTH SUDAN = 728
    SPAIN = 724
    SRI LANKA = 144
    SUDAN = 729
    SURINAME = 740
    SVALBARD_AND_JAN_MAYEN = 744
    ESWATINI = 748
    SWEDEN = 752
    SWITZERLAND = 756
   SYRIAN_ARAB_REPUBLIC = 760
   TAIWAN_PROVINCE_OF_CHINA = 158
   TAJIKISTAN = 762
   UNITED_REPUBLIC_OF_TANZANIA = 834
    THAILAND = 764
   TIMOR LESTE = 626
   TOGO = 768
    TOKELAU = 772
   TONGA = 776
   TRINIDAD_AND_TOBAGO = 780
    TUNISIA = 788
   TURKEY = 792
   TURKMENISTAN = 795
    TURKS AND CAICOS ISLANDS = 796
   TUVALU = 798
   UGANDA = 800
    UKRAINE = 804
   THE_UNITED_ARAB_EMIRATES = 784
    THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND = 826
    THE UNITED STATES MINOR OUTLYING ISLANDS = 581
    THE_UNITED_STATES_OF_AMERICA = 840
    URUGUAY = 858
    UZBEKISTAN = 860
    VANUATU = 548
    BOLIVARIAN REPUBLIC OF VENEZUELA = 862
    VIET NAM = 704
   VIRGIN ISLANDS BRITISH = 92
    VIRGIN ISLANDS US = 850
   WALLIS_AND_FUTUNA = 876
   WESTERN SAHARA = 732
   YEMEN = 887
    ZAMBIA = 894
    ZIMBABWE = 716
class CountryCurrencyRegistry:
   # map countries to currency, code, numeric and minor
    __slots__ = '_currencies', '__weakref__'
   def init (self):
        self._currencies = dict()
        cr = CountryRegistry
```

```
fields = ['country', 'country code', 'currency', 'currency code',
          'currency_numeric_code', 'currency_minor_unit']
entries = namedtuple('CountryCurrency', fields)
self._currencies[cr.AFGHANISTAN] = \
    entries('AFGHANISTAN', 'AFG', 'Afghani', 'AFN', '971', '2', )
self._currencies[cr.ALAND_ISLANDS] = \
    entries('ALAND ISLANDS', 'ALA', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.ALBANIA] = \
    entries('ALBANIA', 'ALB', 'Lek', 'ALL', '008', '2', )
self. currencies[cr.ALGERIA] = \
    entries('ALGERIA', 'DZA', 'Algerian Dinar', 'DZD', '012', '2', )
self._currencies[cr.AMERICAN_SAMOA] = \
    entries('AMERICAN SAMOA', 'ASM', 'US Dollar', 'USD', '840', '2', )
self._currencies[cr.ANDORRA] = \
    entries('ANDORRA', 'AND', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.ANGOLA] = \
    entries('ANGOLA', 'AGO', 'Kwanza', 'AOA', '973', '2', )
self. currencies[cr.ANGUILLA] = \
    entries('ANGUILLA', 'AIA', 'East Caribbean Dollar', 'XCD', '951',
            '2', )
self. currencies[cr.ANTARCTICA] = \
    entries('ANTARCTICA', 'ATA', 'No universal currency', '', '', )
self. currencies[cr.ANTIGUA AND BARBUDA] = \
    entries('ANTIGUA AND BARBUDA', 'ATG', 'East Caribbean Dollar',
            'XCD', '951', '2', )
self. currencies[cr.ARGENTINA] = \
    entries('ARGENTINA', 'ARG', 'Argentine Peso', 'ARS', '032', '2', )
self._currencies[cr.ARMENIA] = \
    entries('ARMENIA', 'ARM', 'Armenian Dram', 'AMD', '051', '2', )
self. currencies[cr.ARUBA] = \
    entries('ARUBA', 'ABW', 'Aruban Florin', 'AWG', '533', '2', )
self. currencies[cr.AUSTRALIA] = \
    entries('AUSTRALIA', 'AUS', 'Australian Dollar', 'AUD', '036', '2')
self. currencies[cr.AUSTRIA] = \
    entries('AUSTRIA', 'AUT', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.AZERBAIJAN] = \
    entries('AZERBAIJAN', 'AZE', 'Azerbaijan Manat', 'AZN', '944', '2',)
self. currencies[cr.THE BAHAMAS] = \
    entries('THE BAHAMAS', 'BHS', 'Bahamian Dollar', 'BSD', '044', '2',)
self. currencies[cr.BAHRAIN] = \
    entries('BAHRAIN', 'BHR', 'Bahraini Dinar', 'BHD', '048', '3', )
self. currencies[cr.BANGLADESH] = \
    entries('BANGLADESH', 'BGD', 'Taka', 'BDT', '050', '2', )
self._currencies[cr.BARBADOS] = \
    entries('BARBADOS', 'BRB', 'Barbados Dollar', 'BBD', '052', '2', )
self._currencies[cr.BELARUS] = \
    entries('BELARUS', 'BLR', 'Belarusian Ruble', 'BYN', '933', '2', )
self._currencies[cr.BELGIUM] = \
    entries('BELGIUM', 'BEL', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.BELIZE] = \
    entries('BELIZE', 'BLZ', 'Belize Dollar', 'BZD', '084', '2', )
self._currencies[cr.BENIN] = \
```

```
entries('BENIN', 'BEN', 'CFA Franc BCEAO', 'XOF', '952', '0', )
self. currencies[cr.BERMUDA] = \
    entries('BERMUDA', 'BMU', 'Bermudian Dollar', 'BMD', '060', '2', )
self. currencies[cr.BHUTAN] = \
    entries('BHUTAN', 'BTN', 'Indian Rupee', 'INR', '356', '2', )
self._currencies[cr.BHUTAN] = \
    entries('BHUTAN', '', 'Ngultrum', 'BTN', '064', '2', )
self._currencies[cr.PLURINATIONAL_STATE_OF_BOLIVIA] = \
    entries('PLURINATIONAL STATE OF BOLIVIA', 'BOL', 'Boliviano',
            'BOB', '068', '2', )
self._currencies[cr.PLURINATIONAL_STATE_OF_BOLIVIA] = \
    entries('PLURINATIONAL STATE OF BOLIVIA', '', 'Mvdol', 'BOV',
            '984', '2', )
self._currencies[cr.BONAIRE_SINT_EUSTATIUS_AND_SABA] = \
    entries('BONAIRE SINT EUSTATIUS AND SABA', 'BES', 'US Dollar',
            'USD', '840', '2', )
self._currencies[cr.BOSNIA_AND_HERZEGOVINA] = \
    entries('BOSNIA AND HERZEGOVINA', 'BIH', 'Convertible Mark',
            'BAM', '977', '2', )
self._currencies[cr.BOTSWANA] = \
    entries('BOTSWANA', 'BWA', 'Pula', 'BWP', '072', '2', )
self._currencies[cr.BOUVET_ISLAND] = \
    entries('BOUVET ISLAND', 'BVT', 'Norwegian Krone', 'NOK', '578',
            '2', )
self._currencies[cr.BRAZIL] = \
    entries('BRAZIL', 'BRA', 'Brazilian Real', 'BRL', '986', '2', )
self. currencies[cr.THE BRITISH INDIAN OCEAN TERRITORY] = \
    entries('THE BRITISH INDIAN OCEAN TERRITORY', 'IOT', 'US Dollar',
            'USD', '840', '2', )
self. currencies[cr.BRUNEI DARUSSALAM] = \
    entries('BRUNEI DARUSSALAM', 'BRN', 'Brunei Dollar', 'BND',
            '096', '2', )
self. currencies[cr.BULGARIA] = \
    entries('BULGARIA', 'BGR', 'Bulgarian Lev', 'BGN', '975', '2', )
self. currencies[cr.BURKINA FASO] = \
    entries('BURKINA FASO', 'BFA', 'CFA Franc BCEAO', 'XOF', '952',
            '0', )
self. currencies[cr.BURUNDI] = \
    entries('BURUNDI', 'BDI', 'Burundi Franc', 'BIF', '108', '0', )
self. currencies[cr.CABO VERDE] = \
    entries('CABO VERDE', 'CPV', 'Cabo Verde Escudo', 'CVE', '132',
            '2', )
self._currencies[cr.CAMBODIA] = \
    entries('CAMBODIA', 'KHM', 'Riel', 'KHR', '116', '2', )
self._currencies[cr.CAMEROON] = \
    entries('CAMEROON', 'CMR', 'CFA Franc BEAC', 'XAF', '950', '0', )
self._currencies[cr.CANADA] = \
    entries('CANADA', 'CAN', 'Canadian Dollar', 'CAD', '124', '2', )
self._currencies[cr.THE_CAYMAN_ISLANDS] = \
    entries('THE CAYMAN ISLANDS', 'CYM', 'Cayman Islands Dollar',
            'KYD', '136', '2', )
self._currencies[cr.THE_CENTRAL_AFRICAN_REPUBLIC] = \
```

```
entries('THE CENTRAL AFRICAN REPUBLIC', 'CAF', 'CFA Franc BEAC',
            'XAF', '950', '0', )
self. currencies[cr.CHAD] = \
    entries('CHAD', 'TCD', 'CFA Franc BEAC', 'XAF', '950', '0', )
self._currencies[cr.CHILE] = \
    entries('CHILE', 'CHL', 'Chilean Peso', 'CLP', '152', '0', )
self._currencies[cr.CHILE] = \
    entries('CHILE', '', 'Unidad de Fomento', 'CLF', '990', '4', )
self._currencies[cr.CHINA] = \
    entries('CHINA', 'CHN', 'Yuan Renminbi', 'CNY', '156', '2', )
self._currencies[cr.CHRISTMAS_ISLAND] = \
    entries('CHRISTMAS ISLAND', 'CXR', 'Australian Dollar', 'AUD',
            '036', '2', )
self._currencies[cr.THE_COCOS_KEELING_ISLANDS] = \
    entries('THE COCOS KEELING ISLANDS', 'CCK', 'Australian Dollar',
            'AUD', '036', '2', )
self._currencies[cr.COLOMBIA] = \
    entries('COLOMBIA', 'COL', 'Colombian Peso', 'COP', '170', '2', )
self._currencies[cr.COLOMBIA] = \
    entries('COLOMBIA', '', 'Unidad de Valor Real', 'COU', '970', '2', )
self. currencies[cr.THE COMOROS] = \
    entries('THE COMOROS', 'COM', 'Comorian Franc', 'KMF', '174',
            '0', )
self. currencies[cr.THE DEMOCRATIC REPUBLIC OF THE CONGO] = \
    entries('THE DEMOCRATIC REPUBLIC OF THE CONGO', 'COD',
            'Congolese Franc', 'CDF', '976', '2', )
self. currencies[cr.THE CONGO] = \
    entries('THE CONGO', 'COG', 'CFA Franc BEAC', 'XAF', '950', '0', )
self. currencies[cr.THE COOK ISLANDS] = \
    entries('THE COOK ISLANDS', 'COK', 'New Zealand Dollar', 'NZD',
            '554', '2', )
self. currencies[cr.COSTA RICA] = \
    entries('COSTA RICA', 'CRI', 'Costa Rican Colon', 'CRC', '188',
            '2', )
self. currencies[cr.COTE D IVOIRE] = \
    entries('COTE D IVOIRE', 'CIV', 'CFA Franc BCEAO', 'XOF', '952',
            '0', )
self. currencies[cr.CROATIA] = \
    entries('CROATIA', 'HRV', 'Kuna', 'HRK', '191', '2', )
self. currencies[cr.CUBA] = \
    entries('CUBA', 'CUB', 'Cuban Peso', 'CUP', '192', '2', )
self. currencies[cr.CUBA] = \
    entries('CUBA', '', 'Peso Convertible', 'CUC', '931', '2', )
self._currencies[cr.CURACAO] = \
    entries('CURACAO', 'CUW', 'Netherlands Antillean Guilder', 'ANG',
            '532', '2', )
self._currencies[cr.CYPRUS] = \
    entries('CYPRUS', 'CYP', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.CZECHIA] = \
    entries('CZECHIA', 'CZE', 'Czech Koruna', 'CZK', '203', '2', )
self._currencies[cr.DENMARK] = \
    entries('DENMARK', 'DNK', 'Danish Krone', 'DKK', '208', '2', )
```

```
self. currencies[cr.DJIBOUTI] = \
    entries('DJIBOUTI', 'DJI', 'Djibouti Franc', 'DJF', '262', '0', )
self. currencies[cr.DOMINICA] = \
    entries('DOMINICA', 'DMA', 'East Caribbean Dollar', 'XCD', '951',
            '2', )
self._currencies[cr.THE_DOMINICAN_REPUBLIC] = \
    entries('THE DOMINICAN REPUBLIC', 'DOM', 'Dominican Peso',
            'DOP', '214', '2', )
self._currencies[cr.ECUADOR] = \
    entries('ECUADOR', 'ECU', 'US Dollar', 'USD', '840', '2', )
self._currencies[cr.EGYPT] = \
    entries('EGYPT', 'EGY', 'Egyptian Pound', 'EGP', '818', '2', )
self._currencies[cr.EL_SALVADOR] = \
    entries('EL SALVADOR', 'SLV', 'El Salvador Colon', 'SVC', '222',
            '2', )
self._currencies[cr.EL_SALVADOR] = \
    entries('EL SALVADOR', '', 'US Dollar', 'USD', '840', '2', )
self. currencies[cr.EQUATORIAL GUINEA] = \
    entries('EQUATORIAL GUINEA', 'GNQ', 'CFA Franc BEAC', 'XAF',
            '950', '0', )
self. currencies[cr.ERITREA] = \
    entries('ERITREA', 'ERI', 'Nakfa', 'ERN', '232', '2', )
self. currencies[cr.ESTONIA] = \
    entries('ESTONIA', 'EST', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.ETHIOPIA] = \
    entries('ETHIOPIA', 'ETH', 'Ethiopian Birr', 'ETB', '230', '2', )
self. currencies[cr.EUROPEAN UNION] = \
    entries('EUROPEAN UNION', '', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.THE FALKLAND ISLANDS] = \
    entries('THE FALKLAND ISLANDS', 'FLK', 'Falkland Islands Pound',
            'FKP', '238', '2', )
self. currencies[cr.THE FAROE ISLANDS] = \
    entries('THE FAROE ISLANDS', 'FRO', 'Danish Krone', 'DKK', '208',
            '2', )
self. currencies[cr.FIJI] = \
    entries('FIJI', 'FJI', 'Fiji Dollar', 'FJD', '242', '2', )
self. currencies[cr.FINLAND] = \
    entries('FINLAND', 'FIN', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.FRANCE] = \
    entries('FRANCE', 'FRA', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.FRENCH GUIANA] = \
    entries('FRENCH GUIANA', 'GUF', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.FRENCH_POLYNESIA] = \
    entries('FRENCH POLYNESIA', 'PYF', 'CFP Franc', 'XPF', '953', '0', )
self._currencies[cr.THE_FRENCH_SOUTHERN_TERRITORIES] = \
    entries('THE FRENCH SOUTHERN TERRITORIES', 'ATF', 'Euro', 'EUR',
            '978', '2', )
self._currencies[cr.GABON] = \
    entries('GABON', 'GAB', 'CFA Franc BEAC', 'XAF', '950', '0', )
self._currencies[cr.THE_GAMBIA] = \
    entries('THE GAMBIA', 'GMB', 'Dalasi', 'GMD', '270', '2', )
self._currencies[cr.GEORGIA] = \
```

```
entries('GEORGIA', 'GEO', 'Lari', 'GEL', '981', '2', )
self. currencies[cr.GERMANY] = \
    entries('GERMANY', 'DEU', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.GHANA] = \
    entries('GHANA', 'GHA', 'Ghana Cedi', 'GHS', '936', '2', )
self._currencies[cr.GIBRALTAR] = \
    entries('GIBRALTAR', 'GIB', 'Gibraltar Pound', 'GIP', '292', '2', )
self._currencies[cr.GREECE] = \
    entries('GREECE', 'GRC', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.GREENLAND] = \
    entries('GREENLAND', 'GRL', 'Danish Krone', 'DKK', '208', '2', )
self._currencies[cr.GRENADA] = \
    entries('GRENADA', 'GRD', 'East Caribbean Dollar', 'XCD', '951',
            '2', )
self._currencies[cr.GUADELOUPE] = \
    entries('GUADELOUPE', 'GLP', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.GUAM] = \
    entries('GUAM', 'GUM', 'US Dollar', 'USD', '840', '2', )
self._currencies[cr.GUATEMALA] = \
    entries('GUATEMALA', 'GTM', 'Quetzal', 'GTQ', '320', '2', )
self. currencies[cr.GUERNSEY] = \
    entries('GUERNSEY', 'GGY', 'Pound Sterling', 'GBP', '826', '2', )
self. currencies[cr.GUINEA] = \
    entries('GUINEA', 'GIN', 'Guinean Franc', 'GNF', '324', '0', )
self._currencies[cr.GUINEA_BISSAU] = \
    entries('GUINEA_BISSAU', 'GNB', 'CFA Franc BCEAO', 'XOF', '952',
            '0', )
self._currencies[cr.GUYANA] = \
    entries('GUYANA', 'GUY', 'Guyana Dollar', 'GYD', '328', '2', )
self. currencies[cr.HAITI] = \
    entries('HAITI', 'HTI', 'Gourde', 'HTG', '332', '2', )
self. currencies[cr.HAITI] = \
    entries('HAITI', '', 'US Dollar', 'USD', '840', '2', )
self. currencies[cr.HEARD ISLAND AND McDONALD ISLANDS] = \
    entries('HEARD ISLAND AND McDONALD ISLANDS', 'HMD',
            'Australian Dollar', 'AUD', '036', '2', )
self. currencies[cr.THE HOLY SEE] = \
    entries('THE HOLY SEE', 'VAT', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.HONDURAS] = \
    entries('HONDURAS', 'HND', 'Lempira', 'HNL', '340', '2', )
self. currencies[cr.HONG KONG] = \
    entries('HONG KONG', 'HKG', 'Hong Kong Dollar', 'HKD', '344', '2', )
self._currencies[cr.HUNGARY] = \
    entries('HUNGARY', 'HUN', 'Forint', 'HUF', '348', '2', )
self. currencies[cr.ICELAND] = \
    entries('ICELAND', 'ISL', 'Iceland Krona', 'ISK', '352', '0', )
self._currencies[cr.INDIA] = \
    entries('INDIA', 'IND', 'Indian Rupee', 'INR', '356', '2', )
self._currencies[cr.INDONESIA] = \
    entries('INDONESIA', 'IDN', 'Rupiah', 'IDR', '360', '2', )
self._currencies[cr.INTERNATIONAL_MONETARY_FUND_IMF] = \
    entries('INTERNATIONAL MONETARY FUND IMF', '',
```

```
'SDR (Special Drawing Right)', 'XDR', '960', 'N.A.', )
self. currencies[cr.ISLAMIC REPUBLIC OF IRAN] = \
    entries('ISLAMIC REPUBLIC OF IRAN', 'IRN', 'Iranian Rial', 'IRR',
            '364', '2', )
self._currencies[cr.IRAQ] = \
    entries('IRAQ', 'IRQ', 'Iraqi Dinar', 'IQD', '368', '3', )
self._currencies[cr.IRELAND] = \
    entries('IRELAND', 'IRL', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.ISLE_OF_MAN] = \
    entries('ISLE OF MAN', 'IMN', 'Pound Sterling', 'GBP', '826', '2', )
self._currencies[cr.ISRAEL] = \
    entries('ISRAEL', 'ISR', 'New Israeli Sheqel', 'ILS', '376', '2', )
self. currencies[cr.ITALY] = \
    entries('ITALY', 'ITA', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.JAMAICA] = \
    entries('JAMAICA', 'JAM', 'Jamaican Dollar', 'JMD', '388', '2', )
self._currencies[cr.JAPAN] = \
    entries('JAPAN', 'JPN', 'Yen', 'JPY', '392', '0', )
self._currencies[cr.JERSEY] = \
    entries('JERSEY', 'JEY', 'Pound Sterling', 'GBP', '826', '2', )
self. currencies[cr.JORDAN] = \
    entries('JORDAN', 'JOR', 'Jordanian Dinar', 'JOD', '400', '3', )
self. currencies[cr.KAZAKHSTAN] = \
    entries('KAZAKHSTAN', 'KAZ', 'Tenge', 'KZT', '398', '2', )
self._currencies[cr.KENYA] = \
    entries('KENYA', 'KEN', 'Kenyan Shilling', 'KES', '404', '2', )
self. currencies[cr.KIRIBATI] = \
    entries('KIRIBATI', 'KIR', 'Australian Dollar', 'AUD', '036', '2', )
self. currencies[cr.THE DEMOCRATIC PEOPLES REPUBLIC OF KOREA] = \
    entries('THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA', 'PRK',
            'North Korean Won', 'KPW', '408', '2', )
self. currencies[cr.THE REPUBLIC OF KOREA] = \
    entries('THE REPUBLIC OF KOREA', 'KOR', 'Won', 'KRW', '410', '0', )
self. currencies[cr.KUWAIT] = \
    entries('KUWAIT', 'KWT', 'Kuwaiti Dinar', 'KWD', '414', '3', )
self._currencies[cr.KYRGYZSTAN] = \
    entries('KYRGYZSTAN', 'KGZ', 'Som', 'KGS', '417', '2', )
self. currencies[cr.THE LAO PEOPLES DEMOCRATIC REPUBLIC]\
    entries('THE LAO PEOPLES DEMOCRATIC REPUBLIC', 'LAO', 'Lao Kip',
            'LAK', '418', '2', )
self._currencies[cr.LATVIA] = \
    entries('LATVIA', 'LVA', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.LEBANON] = \
    entries('LEBANON', 'LBN', 'Lebanese Pound', 'LBP', '422', '2', )
self._currencies[cr.LESOTHO] = \
    entries('LESOTHO', 'LSO', 'Loti', 'LSL', '426', '2', )
self._currencies[cr.LESOTHO] = \
    entries('LESOTHO', '', 'Rand', 'ZAR', '710', '2', )
self. currencies[cr.LIBERIA] = \
    entries('LIBERIA', 'LBR', 'Liberian Dollar', 'LRD', '430', '2', )
self._currencies[cr.LIBYA] = \
```

```
python ubl impl/ init .py at dev · frier17/python ubl impl · GitHub
    entries('LIBYA', 'LBY', 'Libyan Dinar', 'LYD', '434', '3', )
self. currencies[cr.LIECHTENSTEIN] = \
    entries('LIECHTENSTEIN', 'LIE', 'Swiss Franc', 'CHF', '756', '2', )
self. currencies[cr.LITHUANIA] = \
    entries('LITHUANIA', 'LTU', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.LUXEMBOURG] = \
    entries('LUXEMBOURG', 'LUX', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.MACAO] = \
    entries('MACAO', 'MAC', 'Pataca', 'MOP', '446', '2', )
self. currencies[
    cr.THE_FORMER_YUGOSLAV_REPUBLIC_OF_MACEDONIA] = \
    entries('THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA', 'MKD',
                   'Denar', 'MKD', '807', '2', )
self._currencies[cr.MADAGASCAR] = \
    entries('MADAGASCAR', 'MDG', 'Malagasy Ariary', 'MGA', '969', '2', )
self. currencies[cr.MALAWI] = \
    entries('MALAWI', 'MWI', 'Malawi Kwacha', 'MWK', '454', '2', )
self. currencies[cr.MALAYSIA] = \
    entries('MALAYSIA', 'MYS', 'Malaysian Ringgit', 'MYR', '458', '2', )
self._currencies[cr.MALDIVES] = \
    entries('MALDIVES', 'MDV', 'Rufiyaa', 'MVR', '462', '2', )
self. currencies[cr.MALI] = \
    entries('MALI', 'MLI', 'CFA Franc BCEAO', 'XOF', '952', '0', )
self. currencies[cr.MALTA] = \
    entries('MALTA', 'MLT', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.THE MARSHALL ISLANDS] = \
    entries('THE MARSHALL ISLANDS', 'MHL', 'US Dollar', 'USD', '840',
            '2', )
self. currencies[cr.MARTINIQUE] = \
    entries('MARTINIQUE', 'MTQ', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.MAURITANIA] = \
    entries('MAURITANIA', 'MRT', 'Ouguiya', 'MRU', '929', '2', )
self._currencies[cr.MAURITIUS] = \
    entries('MAURITIUS', 'MUS', 'Mauritius Rupee', 'MUR', '480', '2', )
self. currencies[cr.MAYOTTE] = \
    entries('MAYOTTE', 'MYT', 'Euro', 'EUR', '978', '2', )
self. currencies[
    cr.MEMBER COUNTRIES OF THE AFRICAN DEVELOPMENT BANK GROUP] = \
    entries(
        'MEMBER COUNTRIES OF THE AFRICAN DEVELOPMENT BANK GROUP', '',
        'ADB Unit of Account', 'XUA', '965', 'N.A.', )
self. currencies[cr.MEXICO] = \
    entries('MEXICO', 'MEX', 'Mexican Peso', 'MXN', '484', '2', )
self._currencies[cr.MEXICO] = \
    entries('MEXICO', '', 'Mexican Unidad de Inversion (UDI)', 'MXV',
            '979', '2', )
self._currencies[cr.FEDERATED_STATES_OF_MICRONESIA] = \
    entries('FEDERATED STATES OF MICRONESIA', 'FSM', 'US Dollar',
            'USD', '840', '2', )
self. currencies[cr.THE REPUBLIC OF MOLDOVA] = \
    entries('THE REPUBLIC OF MOLDOVA', 'MDA', 'Moldovan Leu', 'MDL',
            '498', '2', )
```

```
self. currencies[cr.MONACO] = \
    entries('MONACO', 'MCO', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.MONGOLIA] = \
    entries('MONGOLIA', 'MNG', 'Tugrik', 'MNT', '496', '2', )
self._currencies[cr.MONTENEGRO] = \
    entries('MONTENEGRO', 'MNE', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.MONTSERRAT] = \
    entries('MONTSERRAT', 'MSR', 'East Caribbean Dollar', 'XCD',
            '951', '2', )
self. currencies[cr.MOROCCO] = \
    entries('MOROCCO', 'MAR', 'Moroccan Dirham', 'MAD', '504', '2', )
self._currencies[cr.MOZAMBIQUE] = \
    entries('MOZAMBIQUE', 'MOZ', 'Mozambique Metical', 'MZN', '943',
            '2', )
self._currencies[cr.MYANMAR] = \
    entries('MYANMAR', 'MMR', 'Kyat', 'MMK', '104', '2', )
self._currencies[cr.NAMIBIA] = \
    entries('NAMIBIA', 'NAM', 'Namibia Dollar', 'NAD', '516', '2', )
self. currencies[cr.NAMIBIA] = \
    entries('NAMIBIA', '', 'Rand', 'ZAR', '710', '2', )
self. currencies[cr.NAURU] = \
    entries('NAURU', 'NRU', 'Australian Dollar', 'AUD', '036', '2', )
self. currencies[cr.NEPAL] = \
    entries('NEPAL', 'NPL', 'Nepalese Rupee', 'NPR', '524', '2', )
self._currencies[cr.THE_NETHERLANDS] = \
    entries('THE NETHERLANDS', 'NLD', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.NEW CALEDONIA] = \
    entries('NEW CALEDONIA', 'NCL', 'CFP Franc', 'XPF', '953', '0', )
self. currencies[cr.NEW ZEALAND] = \
    entries('NEW ZEALAND', 'NZL', 'New Zealand Dollar', 'NZD',
            '554', '2', )
self. currencies[cr.NICARAGUA] = \
    entries('NICARAGUA', 'NIC', 'Cordoba Oro', 'NIO', '558', '2', )
self. currencies[cr.NIGER] = \
    entries('NIGER', 'NER', 'CFA Franc BCEAO', 'XOF', '952', '0', )
self._currencies[cr.NIGERIA] = \
    entries('NIGERIA', 'NGA', 'Naira', 'NGN', '566', '2', )
self. currencies[cr.NIUE] = \
    entries('NIUE', 'NIU', 'New Zealand Dollar', 'NZD', '554', '2', )
self. currencies[cr.NORFOLK ISLAND] = \
    entries('NORFOLK ISLAND', 'NFK', 'Australian Dollar', 'AUD',
                   '036', '2', )
self._currencies[cr.NORTHERN_MARIANA_ISLANDS] = \
    entries('NORTHERN MARIANA ISLANDS', 'MNP', 'US Dollar', 'USD',
            '840', '2',)
self._currencies[cr.NORWAY] = \
    entries('NORWAY', 'NOR', 'Norwegian Krone', 'NOK', '578', '2', )
self._currencies[cr.OMAN] = \
    entries('OMAN', 'OMN', 'Rial Omani', 'OMR', '512', '3', )
self. currencies[cr.PAKISTAN] = \
    entries('PAKISTAN', 'PAK', 'Pakistan Rupee', 'PKR', '586', '2', )
self._currencies[cr.PALAU] = \
```

```
entries('PALAU', 'PLW', 'US Dollar', 'USD', '840', '2', )
self. currencies[cr.PALESTINE STATE OF] = \
    entries('PALESTINE STATE OF', 'PSE', 'No universal currency', '',
            '', '', )
self._currencies[cr.PANAMA] = \
    entries('PANAMA', 'PAN', 'Balboa', 'PAB', '590', '2', )
self._currencies[cr.PANAMA] = \
    entries('PANAMA', '', 'US Dollar', 'USD', '840', '2', )
self._currencies[cr.PAPUA_NEW_GUINEA] = \
    entries('PAPUA NEW GUINEA', 'PNG', 'Kina', 'PGK', '598', '2', )
self._currencies[cr.PARAGUAY] = \
    entries('PARAGUAY', 'PRY', 'Guarani', 'PYG', '600', '0', )
self. currencies[cr.PERU] = \
    entries('PERU', 'PER', 'Sol', 'PEN', '604', '2', )
self._currencies[cr.PHILIPPINES] = \
    entries('PHILIPPINES', 'PHL', 'Philippine Peso', 'PHP', '608',
            '2', )
self. currencies[cr.PITCAIRN] = \
    entries('PITCAIRN', 'PCN', 'New Zealand Dollar', 'NZD', '554',
            '2', )
self. currencies[cr.POLAND] = \
    entries('POLAND', 'POL', 'Zloty', 'PLN', '985', '2', )
self. currencies[cr.PORTUGAL] = \
    entries('PORTUGAL', 'PRT', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.PUERTO_RICO] = \
    entries('PUERTO RICO', 'PRI', 'US Dollar', 'USD', '840', '2', )
self. currencies[cr.QATAR] = \
    entries('QATAR', 'QAT', 'Qatari Rial', 'QAR', '634', '2', )
self. currencies[cr.REUNION] = \
    entries('REUNION', 'REU', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.ROMANIA] = \
    entries('ROMANIA', 'ROU', 'Romanian Leu', 'RON', '946', '2', )
self._currencies[cr.THE_RUSSIAN_FEDERATION] = \
    entries('THE RUSSIAN FEDERATION', 'RUS', 'Russian Ruble', 'RUB',
            '643', '2', )
self._currencies[cr.RWANDA] = \
    entries('RWANDA', 'RWA', 'Rwanda Franc', 'RWF', '646', '0', )
self. currencies[cr.SAINT BARTHELEMY] = \
    entries('SAINT BARTHELEMY', 'BLM', 'Euro', 'EUR', '978', '2', )
self. currencies[
    cr.SAINT_HELENA_ASCENSION_AND_TRISTAN_DA_CUNHA] = \
    entries('SAINT HELENA ASCENSION AND TRISTAN DA CUNHA', 'SHN',
                   'Saint Helena Pound', 'SHP', '654', '2', )
self._currencies[cr.SAINT_KITTS_AND_NEVIS] = \
    entries('SAINT KITTS AND NEVIS', 'KNA',
                   'East Caribbean Dollar', 'XCD', '951', '2', )
self._currencies[cr.SAINT_LUCIA] = \
    entries('SAINT LUCIA', 'LCA', 'East Caribbean Dollar', 'XCD',
                   '951', '2', )
self._currencies[cr.SAINT_MARTIN_FRENCH_PART] = \
    entries('SAINT MARTIN FRENCH PART', 'MAF', 'Euro', 'EUR',
                   '978', '2', )
```

```
self. currencies[cr.SAINT PIERRE AND MIQUELON] = \
    entries('SAINT PIERRE AND MIQUELON', 'SPM', 'Euro', 'EUR',
                   '978', '2', )
self._currencies[cr.SAINT_VINCENT_AND_THE_GRENADINES] = \
    entries('SAINT VINCENT AND THE GRENADINES', 'VCT',
                   'East Caribbean Dollar', 'XCD', '951', '2', )
self._currencies[cr.SAMOA] = \
    entries('SAMOA', 'WSM', 'Tala', 'WST', '882', '2', )
self._currencies[cr.SAN_MARINO] = \
    entries('SAN MARINO', 'SMR', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.SAO_TOME_AND_PRINCIPE] = \
    entries('SAO TOME AND PRINCIPE', 'STP', 'Dobra', 'STN', '930',
            '2', )
self._currencies[cr.SAUDI_ARABIA] = \
    entries('SAUDI ARABIA', 'SAU', 'Saudi Riyal', 'SAR', '682', '2', )
self. currencies[cr.SENEGAL] = \
    entries('SENEGAL', 'SEN', 'CFA Franc BCEAO', 'XOF', '952', '0', )
self. currencies[cr.SERBIA] = \
    entries('SERBIA', 'SRB', 'Serbian Dinar', 'RSD', '941', '2', )
self._currencies[cr.SEYCHELLES] = \
    entries('SEYCHELLES', 'SYC', 'Seychelles Rupee', 'SCR', '690',
            '2', )
self. currencies[cr.SIERRA LEONE] = \
    entries('SIERRA LEONE', 'SLE', 'Leone', 'SLL', '694', '2', )
self. currencies[cr.SINGAPORE] = \
    entries('SINGAPORE', 'SGP', 'Singapore Dollar', 'SGD', '702', '2', )
self. currencies[cr.SINT MAARTEN DUTCH PART] = \
    entries('SINT MAARTEN DUTCH PART', 'SXM',
            'Netherlands Antillean Guilder', 'ANG', '532', '2', )
self. currencies[
    cr.SISTEMA_UNITARIO_DE_COMPENSACION_REGIONAL_DE_PAGOS_SUCRE] = \
    entries(
        'SISTEMA UNITARIO DE COMPENSACION REGIONAL DE PAGOS SUCRE', '',
        'Sucre', 'XSU', '994', 'N.A.', )
self. currencies[cr.SLOVAKIA] = \
    entries('SLOVAKIA', 'SVK', 'Euro', 'EUR', '978', '2', )
self. currencies[cr.SLOVENIA] = \
    entries('SLOVENIA', 'SVN', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.SOLOMON_ISLANDS] = \
    entries('SOLOMON ISLANDS', 'SLB', 'Solomon Islands Dollar',
            'SBD', '090', '2', )
self. currencies[cr.SOMALIA] = \
    entries('SOMALIA', 'SOM', 'Somali Shilling', 'SOS', '706', '2', )
self._currencies[cr.SOUTH_AFRICA] = \
    entries('SOUTH AFRICA', 'ZAF', 'Rand', 'ZAR', '710', '2', )
self._currencies[
    cr.SOUTH_GEORGIA_AND_THE_SOUTH_SANDWICH_ISLANDS] = \
    entries('SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS',
                   'SGS', 'No universal currency', '', '', )
self._currencies[cr.SOUTH_SUDAN] = \
    entries('SOUTH SUDAN', 'SSD', 'South Sudanese Pound', 'SSP',
                   '728', '2', )
```

```
self. currencies[cr.SPAIN] = \
    entries('SPAIN', 'ESP', 'Euro', 'EUR', '978', '2', )
self._currencies[cr.SRI_LANKA] = \
    entries('SRI LANKA', 'LKA', 'Sri Lanka Rupee', 'LKR', '144', '2', )
self. currencies[cr.SUDAN] = \
    entries('SUDAN', 'SDN', 'Sudanese Pound', 'SDG', '938', '2', )
self._currencies[cr.SURINAME] = \
    entries('SURINAME', 'SUR', 'Surinam Dollar', 'SRD', '968', '2', )
self._currencies[cr.SVALBARD_AND_JAN_MAYEN] = \
    entries('SVALBARD AND JAN MAYEN', 'SJM', 'Norwegian Krone',
                   'NOK', '578', '2', )
self._currencies[cr.ESWATINI] = \
    entries('ESWATINI', 'SWZ', 'Lilangeni', 'SZL', '748', '2', )
self._currencies[cr.SWEDEN] = \
    entries('SWEDEN', 'SWE', 'Swedish Krona', 'SEK', '752', '2', )
self._currencies[cr.SWITZERLAND] = \
    entries('SWITZERLAND', 'CHE', 'Swiss Franc', 'CHF', '756', '2', )
self. currencies[cr.SWITZERLAND] = \
    entries('SWITZERLAND', '', 'WIR Euro', 'CHE', '947', '2', )
self._currencies[cr.SWITZERLAND] = \
    entries('SWITZERLAND', '', 'WIR Franc', 'CHW', '948', '2', )
self._currencies[cr.SYRIAN_ARAB_REPUBLIC] = \
    entries('SYRIAN ARAB REPUBLIC', 'SYR', 'Syrian Pound', 'SYP',
                   '760', '2', )
self._currencies[cr.TAIWAN_PROVINCE_OF_CHINA] = \
    entries('TAIWAN PROVINCE OF CHINA', 'TWN',
                   'New Taiwan Dollar', 'TWD', '901', '2', )
self._currencies[cr.TAJIKISTAN] = \
    entries('TAJIKISTAN', 'TJK', 'Somoni', 'TJS', '972', '2', )
self._currencies[cr.UNITED_REPUBLIC_OF_TANZANIA] = \
    entries('UNITED REPUBLIC OF TANZANIA', 'TZA',
                   'Tanzanian Shilling', 'TZS', '834', '2', )
self. currencies[cr.THAILAND] = \
    entries('THAILAND', 'THA', 'Baht', 'THB', '764', '2', )
self. currencies[cr.TIMOR LESTE] = \
    entries('TIMOR LESTE', 'TLS', 'US Dollar', 'USD', '840', '2', )
self. currencies[cr.TOGO] = \
    entries('TOGO', 'TGO', 'CFA Franc BCEAO', 'XOF', '952', '0', )
self._currencies[cr.TOKELAU] = \
    entries('TOKELAU', 'TKL', 'New Zealand Dollar', 'NZD', '554', '2', )
self._currencies[cr.TONGA] = \
    entries('TONGA', 'TON', 'Pa'anga', 'TOP', '776', '2', )
self._currencies[cr.TRINIDAD_AND_TOBAGO] = \
    entries('TRINIDAD AND TOBAGO', 'TTO',
                   'Trinidad and Tobago Dollar', 'TTD', '780', '2', )
self._currencies[cr.TUNISIA] = \
    entries('TUNISIA', 'TUN', 'Tunisian Dinar', 'TND', '788', '3', )
self._currencies[cr.TURKEY] = \
    entries('TURKEY', 'TUR', 'Turkish Lira', 'TRY', '949', '2', )
self._currencies[cr.TURKMENISTAN] = \
    entries('TURKMENISTAN', 'TKM', 'Turkmenistan New Manat',
                   'TMT', '934', '2', )
```

```
self. currencies[cr.TURKS AND CAICOS ISLANDS] = \
    entries('TURKS AND CAICOS ISLANDS', 'TCA', 'US Dollar',
                   'USD', '840', '2', )
self._currencies[cr.TUVALU] = \
    entries('TUVALU', 'TUV', 'Australian Dollar', 'AUD', '036', '2', )
self._currencies[cr.UGANDA] = \
    entries('UGANDA', 'UGA', 'Uganda Shilling', 'UGX', '800', '0', )
self._currencies[cr.UKRAINE] = \
    entries('UKRAINE', 'UKR', 'Hryvnia', 'UAH', '980', '2', )
self. currencies[cr.THE UNITED ARAB EMIRATES] = \
    entries('THE UNITED ARAB EMIRATES', 'ARE', 'UAE Dirham', 'AED',
            '784', '2', )
self. currencies[
    cr.THE_UNITED_KINGDOM_OF_GREAT_BRITAIN_AND_NORTHERN_IRELAND] = \
    entries(
        'THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND',
        'GBR', 'Pound Sterling', 'GBP', '826', '2', )
self. currencies[
    cr.THE UNITED STATES MINOR OUTLYING ISLANDS] = \
    entries('THE UNITED STATES MINOR OUTLYING ISLANDS', 'UMI',
            'US Dollar', 'USD', '840', '2', )
self._currencies[cr.THE_UNITED_STATES_OF_AMERICA] = \
    entries('THE UNITED STATES OF AMERICA', 'USA', 'US Dollar',
            'USD', '840', '2', )
self._currencies[cr.THE_UNITED_STATES_OF_AMERICA] = \
    entries('THE UNITED STATES OF AMERICA', '',
            'US Dollar (Next day)', 'USN', '997', '2', )
self. currencies[cr.URUGUAY] = \
    entries('URUGUAY', 'URY', 'Peso Uruguayo', 'UYU', '858', '2', )
self. currencies[cr.URUGUAY] = \
    entries('URUGUAY', '', 'Uruguay Peso en Unidades Indexadas (UI)',
            'UYI', '940', '0', )
self. currencies[cr.URUGUAY] = \
    entries('URUGUAY', '', 'Unidad Previsional', 'UYW', '927', '4', )
self. currencies[cr.UZBEKISTAN] = \
    entries('UZBEKISTAN', 'UZB', 'Uzbekistan Sum', 'UZS', '860', '2', )
self. currencies[cr.VANUATU] = \
    entries('VANUATU', 'VUT', 'Vatu', 'VUV', '548', '0', )
self._currencies[cr.BOLIVARIAN_REPUBLIC_OF_VENEZUELA] = \
    entries('BOLIVARIAN REPUBLIC OF VENEZUELA', 'VEN',
                   'Bolívar Soberano', 'VES', '928', '2', )
self. currencies[cr.VIET NAM] = \
    entries('VIET NAM', 'VNM', 'Dong', 'VND', '704', '0', )
self._currencies[cr.VIRGIN_ISLANDS_BRITISH] = \
    entries('VIRGIN ISLANDS BRITISH', 'VGB', 'US Dollar', 'USD',
            '840', '2', )
self._currencies[cr.VIRGIN_ISLANDS_US] = \
    entries('VIRGIN ISLANDS US', 'VIR', 'US Dollar', 'USD', '840', '2',)
self._currencies[cr.WALLIS_AND_FUTUNA] = \
    entries('WALLIS AND FUTUNA', 'WLF', 'CFP Franc', 'XPF', '953',
            '0',)
self._currencies[cr.WESTERN_SAHARA] = \
```

```
python ubl impl/ init .py at dev · frier17/python ubl impl · GitHub
            entries('WESTERN SAHARA', 'ESH', 'Moroccan Dirham', 'MAD', '504',
                    '2',)
        self. currencies[cr.YEMEN] = \
            entries('YEMEN', 'YEM', 'Yemeni Rial', 'YER', '886', '2', )
        self. currencies[cr.ZAMBIA] = \
            entries('ZAMBIA', 'ZMB', 'Zambian Kwacha', 'ZMW', '967', '2', )
        self._currencies[cr.ZIMBABWE] = \
            entries('ZIMBABWE', 'ZWE', 'Zimbabwe Dollar', 'ZWL', '932', '2', )
    def __iter__(self):
        for entry in self._currencies:
            yield entry
    def __getitem__(self, item):
        if isinstance(item, CountryRegistry):
            return self._currencies[item]
        else:
            raise IndexError('Unknown country index for lookup')
    def __contains__(self, item):
        return item in self. currencies
    def setitem (self, key, value):
        raise RuntimeError('Entries in the lookup cannot be altered')
class UBLComponentRegistry:
    slots = 'registry', 'binary', 'code', 'asbie', 'datetime ', \
                'measure', 'quantity', 'numeric', 'text', 'identifier', \
                'indicator', 'name', 'amount', 'values', '__weakref__'
    def __init__(self):
        self.binary = BinaryObjectType.mock()
        self.code = CodeType.mock('SAMPLE', pattern=r'/(\w+)/', max length=5)
        self.asbie = AssociatedBusinessEntity.mock()
        self.datetime = DateTimeType.mock()
        self.measure = MeasureType.mock(0.0, kwargs={})
        self.quantity = QuantityType.mock(0, kwargs={})
        self.numeric = NumericType.mock(0.0, kwargs={})
        self.text = TextType.mock('Sample', pattern=r'\w+', max_length=100)
        self.identifier = IdentifierType.mock('sample', pattern=r'/w+/')
        self.indicator = IndicatorType.mock()
        self.name = NameType.mock('Sample Name', pattern=r'\w+', max_length=20)
        self.amount = AmountType.mock(0.0, currency='NAIRA',
                                      currency_code='NGN', version_id='2.1')
        binary = self.binary
        code = self.code
        asbie = self.asbie
        datetime = self.datetime
        measure = self.measure
        quantity = self.quantity
```

```
numeric = self.numeric
text = self.text
identifier = self.identifier
indicator = self.indicator
name = self.name
amount = self.amount
self.values = iter([
    ('id', identifier),
        ('supply_chain_activity_type_code', code),
        ('buyer_customer_party', asbie),
        ('seller_supplier_party', asbie),
        ('activity_period', asbie),
        ('activity_origin_location', asbie),
        ('activity_final_location', asbie),
        ('sales_item', asbie),
    ],
        ('name', name),
        ('value', text),
    ],
    Γ
        ('id', identifier),
        ('address_type_code', code),
        ('address format code', code),
        ('postbox', text),
        ('floor', text),
        ('room', text),
        ('street_name', name),
        ('additional_street_name', name),
        ('block_name', name),
        ('building_name', name),
        ('building_number', text),
        ('inhouse_mail', text),
        ('department', text),
        ('mark_attention', text),
        ('mark_care', text),
        ('plot_identification', text),
        ('city_subdivision_name', name),
        ('city_name', name),
        ('postal_zone', text),
        ('country_sub_entity', text),
        ('country_sub_entity_code', code),
        ('region', text),
        ('district', text),
        ('timezone_offset', text),
        ('address_line', asbie),
        ('country', asbie),
        ('location coordinate', asbie),
    ],
    [('line', text)],
```

```
[('aircraft identifier', identifier)],
Γ
    ('id', identifier),
    ('charge_indicator', indicator),
    ('allowance_charge_reason_code', code),
    ('allowance_charge_reason', text),
    ('multiplier_factor', numeric),
    ('prepaid_indicator', indicator),
    ('sequence', numeric),
    ('amount', amount),
    ('base_amount', amount),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('per_unit_amount', amount),
    ('tax_category', asbie),
    ('tax_total', asbie),
    ('payment_means', asbie),
],
    ('description', text),
    ('presentation_period', asbie),
    ('appeal_information_party', asbie),
    ('appeal receiver party', asbie),
    ('mediation_party', asbie),
],
Γ
    ('embedded_document', binary),
    ('external_reference', asbie),
1,
Γ
    ('auction_constraint', indicator),
    ('justification description', text),
    ('description', text),
    ('process description', text),
    ('conditions description', text),
    ('electronic_device_description', text),
    ('auction_uri', identifier),
],
[
    ('id', identifier),
    ('awarding_criterion_type_code', code),
    ('description', text),
    ('weight_numeric', numeric),
    ('weight', text),
    ('calculation_expression', text),
    ('calculation_expression_code', code),
    ('minimum_quantity', quantity),
    ('maximum_quantity', quantity),
    ('minimum_amount', amount),
    ('maximum_amount', amount),
    ('minimum_improvement_bid', text),
    ('subordinate_awarding_criterion', asbie),
```

```
1,
Γ
    ('id', identifier),
    ('awarding_criterion_identifier', identifier),
    ('awarding_criterion_description', text),
    ('description', text),
    ('quantity', quantity),
    ('amount', amount),
    ('subordinate_awarding_criterion_response', asbie),
],
('weighting_algorithm_code', code),
    ('description', text),
    ('technical_committee_description', text),
    ('low_tenders_description', text),
    ('prize_indicator', indicator),
    ('prize_description', text),
    ('payment description', text),
    ('followup_contract_indicator', indicator),
    ('binding_on_buyer_indicator', indicator),
    ('awarding_criterion', asbie),
    ('technical_committee_person', asbie),
1,
Γ
    ('invoice_document_reference', asbie),
    ('self billed invoice document reference', asbie),
    ('credit_note_document_reference', asbie),
    ('self_billed_credit_note_document_reference', asbie),
    ('debit note document reference', asbie),
    ('reminder_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('billing reference line', asbie),
],
    ('id', identifier),
    ('amount', amount),
    ('allowance_charge', asbie),
1,
Γ
    ('id', identifier),
    ('name', name),
    ('financial_institution', asbie),
    ('address', asbie),
],
Γ
    ('id', identifier),
    ('budget_year', numeric),
    ('required_classification_scheme', asbie),
],
Γ
    ('id', identifier),
    ('total_amount', amount),
```

```
('budget account', asbie),
],
Γ
    ('capability_type_code', code),
    ('description', text),
    ('value', amount),
    ('value_quantity', quantity),
    ('evidence_supplied', asbie),
    ('validity_period', asbie),
],
('primary_account_number', identifier),
    ('network', identifier),
    ('card_type_code', code),
    ('validity_start_date', datetime_),
    ('expiry_date', datetime_),
    ('issuer', identifier),
    ('issue number', identifier),
    ('cv2', identifier),
    ('card_chip_code', code),
    ('chip_application', identifier),
    ('holder', name),
1,
Γ
    ('id', identifier),
    ('contractor customer party', asbie),
    ('seller_supplier_party', asbie),
    ('item', asbie),
1,
Γ
    ('id', identifier),
    ('action code', code),
    ('life_cycle_status_code', code),
    ('contract subdivision', text),
    ('note', text),
    ('orderable_indicator', indicator),
    ('orderable unit', text),
    ('content unit', quantity),
    ('order_quantity_increment', numeric),
    ('minimum_order_quantity', quantity),
    ('maximum_order_quantity', quantity),
    ('warranty_information', text),
    ('pack_level_code', code),
    ('contractor_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('warranty_party', asbie),
    ('warranty_validity_period', asbie),
    ('line_validity_period', asbie),
    ('item_comparison', asbie),
    ('component_related_item', asbie),
    ('accessory_related_item', asbie),
    ('required_related_item', asbie),
```

```
('replacement related item', asbie),
    ('complementary related item', asbie),
    ('replaced_related_item', asbie),
    ('required_item_location_quantity', asbie),
    ('document_reference', asbie),
    ('item', asbie),
    ('keyword_item_property', asbie),
    ('call_for_tenders_line_reference', asbie),
    ('call_for_tenders_document_reference', asbie),
],
[
    ('id', identifier),
    ('contractor_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('required_item_location_quantity', asbie),
],
('id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('revision_date', datetime_),
    ('revision time', datetime ),
    ('note', text),
    ('description', text),
    ('version', identifier),
    ('previous_version', identifier),
],
Γ
    ('id', identifier),
    ('contract_subdivision', text),
    ('note', text),
    ('line_validity_period', asbie),
    ('required_item_location_quantity', asbie),
    ('item', asbie),
],
    ('id', identifier),
    ('certificate_type_code', code),
    ('certificate_type', text),
    ('remarks', text),
    ('issuer_party', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
],
    ('reference', identifier),
    ('certificate_type', text),
    ('application_status_code', code),
    ('original job identifier', identifier),
    ('previous_job_identifier', identifier),
    ('remarks', text),
```

```
('shipment', asbie),
    ('endorser_party', asbie),
    ('preparation_party', asbie),
    ('issuer_party', asbie),
    ('exporter_party', asbie),
    ('importer_party', asbie),
    ('issuing_country', asbie),
    ('document_distribution', asbie),
    ('supporting_document_reference', asbie),
    ('signature', asbie),
],
    ('name', name),
    ('code_value', text),
    ('description', text),
    ('categorizes_classification_category', asbie),
],
Γ
    ('id', identifier),
    ('uuid', identifier),
    ('last_revision_date', datetime_),
    ('last_revision_time', datetime_),
    ('note', text),
    ('name', name),
    ('description', text),
    ('agency identifier', identifier),
    ('agency_name', text),
    ('version', identifier),
    ('uri', identifier),
    ('scheme_uri', identifier),
    ('language', identifier),
    ('classification_category', asbie),
],
    ('id', identifier),
    ('content', text),
],
Γ
    ('nature_code', code),
    ('cargo_type_code', code),
    ('commodity_code', code),
    ('item_classification_code', code),
],
('channel_code', code),
    ('channel', text),
    ('value', text),
],
    ('annual_average', amount),
    ('total_task', amount),
    ('party_capacity', amount),
```

```
('description', text),
    ('evidence supplied', asbie),
    ('period', asbie),
    ('recipient_customer_party', asbie),
],
    ('attribute_identifier', identifier),
    ('measure', measure),
    ('description', text),
    ('minimum measure', measure),
    ('maximum_measure', measure),
],
    ('id', identifier),
    ('carrier_assigned_id', identifier),
    ('consignee_assigned_id', identifier),
    ('consignor_assigned_id', identifier),
    ('freight forwarder assigned id', identifier),
    ('broker_assigned_id', identifier),
    ('contracted_carrier_assigned_id', identifier),
    ('performing_carrier_assigned_id', identifier),
    ('summary_description', text),
    ('total_invoice_amount', amount),
    ('declared_customs_value', amount),
    ('tariff_description', text),
    ('tariff code', code),
    ('insurance_premium_amount', amount),
    ('gross_weight', measure),
    ('net weight', measure),
    ('net_net_weight', measure),
    ('chargeable_weight', measure),
    ('gross volume', measure),
    ('net_volume', measure),
    ('loading length', measure),
    ('remarks', text),
    ('hazardous_risk_indicator', indicator),
    ('animal food indicator', indicator),
    ('human food indicator', indicator),
    ('livestock_indicator', indicator),
    ('bulk_cargo_indicator', indicator),
    ('containerized_indicator', indicator),
    ('general_cargo_indicator', indicator),
    ('special_security_indicator', indicator),
    ('third_party_payer_indicator', indicator),
    ('carrier_service_instructions', text),
    ('customs_clearance_service_instructions', text),
    ('forwarder_service_instructions', text),
    ('special_service_instructions', text),
    ('sequence_identifier', identifier),
    ('shipping priority level code', code),
    ('handling_code', code),
    ('handling_instructions', text),
```

```
('information', text),
('total_goods_item_quantity', quantity),
('total_transport_handling_unit_quantity', quantity),
('insurance_value', amount),
('declared_for_carriage_value', amount),
('declared_statistics_value', amount),
('free_on_board_value', amount),
('special_instructions', text),
('split_consignment_indicator', indicator),
('delivery instructions', text),
('consignment_quantity', quantity),
('consolidatable_indicator', indicator),
('haulage_instructions', text),
('loading_sequence_identifier', identifier),
('child_consignment_quantity', quantity),
('total_packages_quantity', quantity),
('consolidated_shipment', asbie),
('customs declaration', asbie),
('requested_pickup_transport_event', asbie),
('requested_delivery_transport_event', asbie),
('planned_pickup_transport_event', asbie),
('planned_delivery_transport_event', asbie),
('status', asbie),
('child_consignment', asbie),
('consignee_party', asbie),
('exporter party', asbie),
('consignor_party', asbie),
('importer_party', asbie),
('carrier party', asbie),
('freight_forwarder_party', asbie),
('notify_party', asbie),
('original despatch party', asbie),
('final_delivery_party', asbie),
('performing carrier party', asbie),
('substitute carrier party', asbie),
('logistics_operator_party', asbie),
('transport_advisor_party', asbie),
('hazardous item notification party', asbie),
('insurance_party', asbie),
('mortgage_holder_party', asbie),
('bill_of_lading_holder_party', asbie),
('original_departure_country', asbie),
('final_destination_country', asbie),
('transit_country', asbie),
('transport_contract', asbie),
('transport_event', asbie),
('original_despatch_transportation_service', asbie),
('final_delivery_transportation_service', asbie),
('delivery_terms', asbie),
('payment_terms', asbie),
('collect_payment_terms', asbie),
('disbursement_payment_terms', asbie),
```

```
('prepaid_payment_terms', asbie),
    ('freight_allowance_charge', asbie),
    ('extra_allowance_charge', asbie),
    ('main_carriage_shipment_stage', asbie),
    ('pre_carriage_shipment_stage', asbie),
    ('on_carriage_shipment_stage', asbie),
    ('transport_handling_unit', asbie),
    ('first_arrival_port_location', asbie),
    ('last_exit_port_location', asbie),
],
('utility_statement_type_code', code),
    ('main_period', asbie),
    ('allowance_charge', asbie),
    ('tax_total', asbie),
    ('energy_water_supply', asbie),
    ('telecommunications_supply', asbie),
    ('legal_monetary_total', asbie),
],
('average_amount', amount),
    ('description', text),
1,
Γ
    ('correction_type', text),
    ('correction type code', code),
    ('meter_number', text),
    ('gas_pressure', quantity),
    ('actual_temperature_reduction', quantity),
    ('normal_temperature_reduction', quantity),
    ('difference_temperature_reduction', quantity),
    ('description', text),
    ('correction_unit_amount', amount),
    ('consumption_energy', quantity),
    ('consumption_water', quantity),
    ('correction_amount', amount),
],
Γ
    ('meter_number', text),
    ('quantity', quantity),
    ('amount', amount),
    ('consumption_level_code', code),
    ('consumption_level_text', text),
    ('description', text),
    ('period', asbie),
],
('id', identifier),
    ('parent_document_line_reference_identifier', identifier),
    ('invoiced_quantity', quantity),
    ('line_extension_amount', amount),
    ('period', asbie),
```

```
('delivery', asbie),
    ('allowance_charge', asbie),
    ('tax_total', asbie),
    ('utility_item', asbie),
    ('price', asbie),
    ('unstructured_price', asbie),
],
('id', identifier),
    ('description', text),
    ('subscriber_identifier', identifier),
    ('subscriber_type', text),
    ('subscriber_type_code', code),
    ('total_delivered_quantity', quantity),
    ('address', asbie),
    ('web_site_access', asbie),
    ('utility_meter', asbie),
],
    ('id', identifier),
    ('consumption_type', text),
    ('consumption_type_code', code),
    ('description', text),
    ('total_consumed_quantity', quantity),
    ('basic_consumed_quantity', quantity),
    ('resident occupants numeric', numeric),
    ('consumers_energy_level_code', code),
    ('consumers_energy_level', text),
    ('residence type', text),
    ('residence_type_code', code),
    ('heating_type', text),
    ('heating type code', code),
    ('period', asbie),
    ('guidance document reference', asbie),
    ('document reference', asbie),
    ('consumption_report_reference', asbie),
    ('consumption_history', asbie),
],
Γ
    ('consumption_report_identifier', identifier),
    ('consumption_type', text),
    ('consumption_type_code', code),
    ('total_consumed_quantity', quantity),
    ('period', asbie),
],
    ('id', identifier),
    ('name', name),
    ('telephone', text),
    ('telefax', text),
    ('electronic_mail', text),
    ('note', text),
```

```
('other_communication', asbie),
],
[
    ('id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('nomination_date', datetime_),
    ('nomination_time', datetime_),
    ('contract_type_code', code),
    ('contract_type', text),
    ('note', text),
    ('version', identifier),
    ('description', text),
    ('validity_period', asbie),
    ('contract_document_reference', asbie),
    ('nomination_period', asbie),
    ('contractual_delivery', asbie),
],
    ('name', name),
    ('execution_requirement_code', code),
    ('description', text),
1,
Γ
    ('options_description', text),
    ('minimum number', numeric),
    ('maximum_number', numeric),
    ('option_validity_period', asbie),
    ('renewal', asbie),
],
    ('activity_type_code', code),
    ('activity_type', text),
],
Γ
    ('buyer_profile_uri', identifier),
    ('contracting_party_type', asbie),
    ('contracting_activity', asbie),
    ('party', asbie),
],
('party_type_code', code),
    ('party_type', text),
],
[
    ('id', identifier),
    ('name', name),
    ('corporate_registration_type_code', code),
    ('jurisdiction_region_address', asbie),
],
('identification_code', code),
```

```
('name', name),
1,
[('account_identifier', identifier)],
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('credited_quantity', quantity),
    ('line_extension_amount', amount),
    ('tax_point_date', datetime_),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('payment_purpose_code', code),
    ('free_of_charge_indicator', indicator),
    ('invoice_period', asbie),
    ('order_line_reference', asbie),
    ('discrepancy_response', asbie),
    ('despatch line reference', asbie),
    ('receipt_line_reference', asbie),
    ('billing_reference', asbie),
    ('document_reference', asbie),
    ('pricing_reference', asbie),
    ('originator party', asbie),
    ('delivery', asbie),
    ('payment_terms', asbie),
    ('tax total', asbie),
    ('allowance_charge', asbie),
    ('item', asbie),
    ('price', asbie),
    ('delivery_terms', asbie),
    ('sub_credit_note_line', asbie),
    ('item price extension', asbie),
],
    ('customer assigned account identifier', identifier),
    ('supplier_assigned_account_identifier', identifier),
    ('additional account identifier', identifier),
    ('party', asbie),
    ('delivery_contact', asbie),
    ('accounting_contact', asbie),
    ('buyer_contact', asbie),
],
    ('id', identifier),
    ('issuer_party', asbie),
],
Γ
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('debited_quantity', quantity),
    ('line_extension_amount', amount),
```

```
('tax point date', datetime ),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('payment_purpose_code', code),
    ('discrepancy_response', asbie),
    ('despatch_line_reference', asbie),
    ('receipt_line_reference', asbie),
    ('billing_reference', asbie),
    ('document_reference', asbie),
    ('pricing reference', asbie),
    ('delivery', asbie),
    ('tax_total', asbie),
    ('allowance_charge', asbie),
    ('item', asbie),
    ('price', asbie),
    ('sub_debit_note_line', asbie),
],
    ('name', name),
    ('declaration_type_code', code),
    ('description', text),
    ('evidence_supplied', asbie),
1,
Γ
    ('id', identifier),
    ('quantity', quantity),
    ('minimum_quantity', quantity),
    ('maximum_quantity', quantity),
    ('actual delivery date', datetime ),
    ('actual_delivery_time', datetime_),
    ('latest_delivery_date', datetime_),
    ('latest delivery time', datetime ),
    ('release', identifier),
    ('tracking identifier', identifier),
    ('delivery address', asbie),
    ('delivery_location', asbie),
    ('alternative delivery location', asbie),
    ('requested delivery period', asbie),
    ('promised_delivery_period', asbie),
    ('estimated_delivery_period', asbie),
    ('carrier_party', asbie),
    ('delivery_party', asbie),
    ('notify_party', asbie),
    ('despatch', asbie),
    ('delivery_terms', asbie),
    ('minimum_delivery_unit', asbie),
    ('maximum_delivery_unit', asbie),
    ('shipment', asbie),
],
Γ
    ('id', identifier),
    ('special_terms', text),
```

```
('loss risk responsibility code', code),
    ('loss_risk', text),
    ('amount', amount),
    ('delivery_location', asbie),
    ('allowance_charge', asbie),
],
    ('batch_quantity', quantity),
    ('consumer_unit', quantity),
    ('hazardous risk indicator', indicator),
],
    ('percent', numeric),
    ('location_address', asbie),
    ('dependent_line_reference', asbie),
],
('id', identifier),
    ('requested_despatch_date', datetime_),
    ('requested_despatch_time', datetime_),
    ('estimated_despatch_date', datetime_),
    ('estimated_despatch_time', datetime_),
    ('actual despatch date', datetime ),
    ('actual_despatch_time', datetime_),
    ('guaranteed_despatch_date', datetime_),
    ('guaranteed despatch time', datetime ),
    ('release', identifier),
    ('instructions', text),
    ('despatch address', asbie),
    ('despatch_location', asbie),
    ('despatch_party', asbie),
    ('carrier party', asbie),
    ('notify_party', asbie),
    ('contact', asbie),
    ('estimated despatch period', asbie),
    ('requested_despatch_period', asbie),
],
Γ
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('line_status_code', code),
    ('delivered_quantity', quantity),
    ('backorder_quantity', quantity),
    ('backorder_reason', text),
    ('outstanding_quantity', quantity),
    ('outstanding_reason', text),
    ('oversupply_quantity', quantity),
    ('order_line_reference', asbie),
    ('document_reference', asbie),
    ('item', asbie),
    ('shipment', asbie),
```

```
],
[
    ('attribute_identifier', identifier),
    ('measure', measure),
    ('description', text),
    ('minimum_measure', measure),
    ('maximum_measure', measure),
],
    ('print_qualifier', text),
    ('maximum_copies', numeric),
    ('party', asbie),
],
('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('document_type_code', code),
    ('document_type', text),
    ('xpath', text),
    ('language', identifier),
    ('locale_code', code),
    ('version', identifier),
    ('document status code', code),
    ('document_description', text),
    ('attachment', asbie),
    ('validity_period', asbie),
    ('issuer_party', asbie),
    ('result_of_verification', asbie),
],
[
    ('response', asbie),
    ('document reference', asbie),
    ('issuer_party', asbie),
    ('recipient_party', asbie),
    ('line_response', asbie),
],
    ('amount', amount),
    ('duty', text),
    ('duty_code', code),
    ('tax_category', asbie),
],
    ('role_code', code),
    ('role_description', text),
],
[
    ('limitation_description', text),
    ('expected_quantity', quantity),
```

```
('maximum_quantity', quantity),
    ('minimum_quantity', quantity),
    ('pre_selected_party', asbie),
],
[
    ('calculation_method_code', code),
    ('fullness_indication_code', code),
    ('measurement_from_location', asbie),
    ('measurement_to_location', asbie),
],
[
    ('document', identifier),
    ('approval_status', text),
    ('remarks', text),
    ('endorser_party', asbie),
    ('signature', asbie),
],
    ('role_code', code),
    ('sequence', numeric),
    ('party', asbie),
    ('signatory_contact', asbie),
1,
Γ
    ('tax_energy_amount', amount),
    ('tax energy on account amount', amount),
    ('tax_energy_balance', amount),
    ('tax_scheme', asbie),
],
Γ
    ('consumption_report', asbie),
    ('energy_tax_report', asbie),
    ('consumption_average', asbie),
    ('energy_water_consumption_correction', asbie),
],
[
    ('environmental_emission_type_code', code),
    ('value', measure),
    ('description', text),
    ('emission_calculation_method', asbie),
],
    ('evaluation_criterion_type_code', code),
    ('description', text),
    ('threshold_amount', amount),
    ('threshold_quantity', quantity),
    ('expression_code', code),
    ('expression', text),
    ('duration_period', asbie),
    ('suggested_evidence', asbie),
],
```

```
('identification', identifier),
    ('occurrence_date', datetime_),
    ('occurrence_time', datetime_),
    ('type_code', code),
    ('description', text),
    ('completion_indicator', indicator),
    ('current_status', asbie),
    ('contact', asbie),
    ('occurence_location', asbie),
],
('comment', text),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
],
    ('line_number', numeric),
    ('participating_locations_location', asbie),
    ('retail_planned_impact', asbie),
    ('supply_item', asbie),
],
    ('comment', text),
    ('quantity', quantity),
    ('event_tactic_enumeration', asbie),
    ('period', asbie),
],
    ('consumer incentive tactic type code', code),
    ('display_tactic_type_code', code),
    ('feature_tactic_type_code', code),
    ('trade_item_packing_labeling_type_code', code),
],
    ('id', identifier),
    ('evidence_type_code', code),
    ('description', text),
    ('candidate_statement', text),
    ('evidence_issuing_party', asbie),
    ('document_reference', asbie),
    ('language', asbie),
],
[('id', identifier)],
    ('id', identifier),
    ('note', text),
    ('threshold_value_comparison_code', code),
    ('threshold_quantity', quantity),
    ('exception_status_code', code),
    ('collaboration_priority_code', code),
    ('exception_resolution_code', code),
    ('supply_chain_activity_type_code', code),
```

```
('performance metric type code', code),
    ('effective_period', asbie),
    ('supply_item', asbie),
    ('forecast_exception_criterion_line', asbie),
],
    ('id', identifier),
    ('note', text),
    ('description', text),
    ('exception_status_code', code),
    ('collaboration_priority_code', code),
    ('resolution_code', code),
    ('compared_value', measure),
    ('source_value', measure),
    ('variance', quantity),
    ('supply_chain_activity_type_code', code),
    ('performance_metric_type_code', code),
    ('exception observation period', asbie),
    ('document_reference', asbie),
    ('forecast_exception', asbie),
    ('supply_item', asbie),
],
Γ
    ('source currency code', code),
    ('source_currency_base_rate', numeric),
    ('target currency code', code),
    ('target_currency_base_rate', numeric),
    ('exchange_market_identifier', identifier),
    ('calculation rate', numeric),
    ('mathematic_operator_code', code),
    ('date', datetime_),
    ('foreign exchange contract', asbie),
],
    ('uri', identifier),
    ('document_hash', text),
    ('hash_algorithm_method', text),
    ('expiry date', datetime ),
    ('expiry_time', datetime_),
    ('mime_code', code),
    ('format_code', code),
    ('encoding_code', code),
    ('character_set_code', code),
    ('file_name', name),
    ('description', text),
],
Γ
    ('id', identifier),
    ('name', name),
    ('alias_name', name),
    ('account_type_code', code),
    ('account_format_code', code),
```

```
('currency code', code),
    ('payment_note', text),
    ('financial_institution_branch', asbie),
    ('country', asbie),
],
    ('guarantee_type_code', code),
    ('description', text),
    ('liability', amount),
    ('amount', numeric),
    ('constitution_period', asbie),
],
    ('id', identifier),
    ('name', name),
    ('address', asbie),
],
    ('forecast_purpose_code', code),
    ('forecast_type_code', code),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('data source code', code),
    ('comparison_data_code', code),
    ('comparison_forecast_issue_time', datetime_),
    ('comparison forecast issue date', datetime ),
],
    ('forecast purpose code', code),
    ('forecast_type_code', code),
    ('comparison_data_source_code', code),
    ('data source code', code),
    ('time_delta_days_quantity', quantity),
],
Γ
    ('id', identifier),
    ('note', text),
    ('frozen document indicator', indicator),
    ('forecast_type_code', code),
    ('forecast_period', asbie),
    ('sales_item', asbie),
],
    ('id', identifier),
    ('note', text),
    ('description', text),
    ('revised_forecast_line_identifier', identifier),
    ('source_forecast_issue_date', datetime_),
    ('source_forecast_issue_time', datetime_),
    ('adjustment_reason_code', code),
    ('forecast_period', asbie),
    ('sales_item', asbie),
```

```
1,
Γ
    ('expected_operator', quantity),
    ('maximum_operator', quantity),
    ('justification', text),
    ('frequency', text),
    ('duration_period', asbie),
    ('subsequent_process_tender_requirement', asbie),
],
    ('id', identifier),
    ('sequence_number', identifier),
    ('description', text),
    ('hazardous_risk_indicator', indicator),
    ('declared_customs_value', amount),
    ('declared_for_carriage_value', amount),
    ('declared_statistics_value', amount),
    ('free_on_board_value', amount),
    ('insurance_value', amount),
    ('value', amount),
    ('gross_weight', measure),
    ('net_weight', measure),
    ('net net weight', measure),
    ('chargeable_weight', measure),
    ('gross_volume', measure),
    ('net volume', measure),
    ('quantity', quantity),
    ('preference_criterion_code', code),
    ('required customs identifier', identifier),
    ('customs_status_code', code),
    ('customs_tariff_quantity', quantity),
    ('customs import classified indicator', indicator),
    ('chargeable_quantity', quantity),
    ('returnable_quantity', quantity),
    ('trace_id', identifier),
    ('item', asbie),
    ('goods_item_container', asbie),
    ('freight_allowance_charge', asbie),
    ('invoice_line', asbie),
    ('temperature', asbie),
    ('contained_goods_item', asbie),
    ('origin_address', asbie),
    ('delivery', asbie),
    ('pickup', asbie),
    ('despatch', asbie),
    ('measurement_dimension', asbie),
    ('containing_package', asbie),
    ('shipment_document_reference', asbie),
    ('minimum_temperature', asbie),
    ('maximum_temperature', asbie),
],
```

```
('id', identifier),
    ('quantity', quantity),
    ('transport_equipment', asbie),
],
[
    ('transport_emergency_card_code', code),
    ('packing_criteria_code', code),
    ('hazardous_regulation_code', code),
    ('inhalation_toxicity_zone_code', code),
    ('transport_authorization_code', code),
    ('maximum_temperature', asbie),
    ('minimum_temperature', asbie),
],
('id', identifier),
    ('placard_notation', text),
    ('placard_endorsement', text),
    ('additional_information', text),
    ('undg_code', code),
    ('emergency_procedures_code', code),
    ('medical_first_aid_guide_code', code),
    ('technical_name', name),
    ('category', name),
    ('hazardous_category_code', code),
    ('upper_orange_hazard_placard_identifier', identifier),
    ('lower orange hazard placard identifier', identifier),
    ('marking_identifier', identifier),
    ('hazard_class_identifier', identifier),
    ('net weight', measure),
    ('net_volume', measure),
    ('quantity', quantity),
    ('contact party', asbie),
    ('secondary_hazard', asbie),
    ('hazardous goods transit', asbie),
    ('emergency temperature', asbie),
    ('flashpoint_temperature', asbie),
    ('additional_temperature', asbie),
],
Γ
    ('immobilization certificate identifier', identifier),
    ('security identifier', identifier),
    ('issue_date', datetime_),
    ('face_value', amount),
    ('market_value', amount),
    ('shares_number', quantity),
    ('issuer_party', asbie),
],
('id', identifier),
    ('note', text),
    ('quantity', quantity),
    ('manufacturer_party', asbie),
```

```
('item', asbie),
],
Γ
    ('id', identifier),
    ('note', text),
    ('quantity', quantity),
    ('inventory_value', amount),
    ('availability_date', datetime_),
    ('availability_status_code', code),
    ('item', asbie),
    ('inventory_location', asbie),
],
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('invoiced_quantity', quantity),
    ('line extension amount', amount),
    ('tax_point_date', datetime_),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('payment_purpose_code', code),
    ('free of charge indicator', indicator),
    ('invoice_period', asbie),
    ('order_line_reference', asbie),
    ('despatch line reference', asbie),
    ('receipt_line_reference', asbie),
    ('billing_reference', asbie),
    ('document reference', asbie),
    ('pricing_reference', asbie),
    ('originator_party', asbie),
    ('delivery', asbie),
    ('payment_terms', asbie),
    ('allowance charge', asbie),
    ('tax total', asbie),
    ('withholding_tax_total', asbie),
    ('item', asbie),
    ('price', asbie),
    ('delivery_terms', asbie),
    ('sub_invoice_line', asbie),
    ('item_price_extension', asbie),
],
    ('description', text),
    ('pack_quantity', quantity),
    ('pack_size', numeric),
    ('catalogue_indicator', indicator),
    ('name', name),
    ('hazardous_risk_indicator', indicator),
    ('additional information', text),
    ('keyword', text),
    ('brand_name', name),
```

```
('model name', name),
    ('buyers item identification', asbie),
    ('sellers_item_identification', asbie),
    ('manufacturers_item_identification', asbie),
    ('standard_item_identification', asbie),
    ('catalogue_item_identification', asbie),
    ('additional_item_identification', asbie),
    ('catalogue_document_reference', asbie),
    ('item_specification_document_reference', asbie),
    ('origin_country', asbie),
    ('commodity_classification', asbie),
    ('transaction_conditions', asbie),
    ('hazardous_item', asbie),
    ('classified_tax_category', asbie),
    ('additional_item_property', asbie),
    ('manufacturer_party', asbie),
    ('information_content_provider_party', asbie),
    ('origin address', asbie),
    ('item_instance', asbie),
    ('certificate', asbie),
    ('dimension', asbie),
],
Γ
    ('price_amount', amount),
    ('quantity', quantity),
1,
Γ
    ('id', identifier),
    ('extended id', identifier),
    ('barcode_symbology_identifier', identifier),
    ('physical_attribute', asbie),
    ('measurement dimension', asbie),
    ('issuer_party', asbie),
],
Γ
    ('time_frequency_code', code),
    ('supply_chain_activity_type_code', code),
    ('forecast_type_code', code),
    ('performance_metric_type_code', code),
    ('period', asbie),
    ('sales_item', asbie),
],
    ('product_trace_id', identifier),
    ('manufacture_date', datetime_),
    ('manufacture_time', datetime_),
    ('best_before_date', datetime_),
    ('registration_identifier', identifier),
    ('serial_identifier', identifier),
    ('additional_item_property', asbie),
    ('lot_identification', asbie),
],
```

```
[
    ('lead_time', measure),
    ('minimum_quantity', quantity),
    ('maximum_quantity', quantity),
    ('hazardous_risk_indicator', indicator),
    ('trading_restrictions', text),
    ('applicable_territory_address', asbie),
    ('price', asbie),
    ('delivery_unit', asbie),
    ('applicable_tax_category', asbie),
    ('package', asbie),
    ('allowance_charge', asbie),
    ('dependent_price_reference', asbie),
],
    ('frozen_period_days', numeric),
    ('minimum_inventory_quantity', quantity),
    ('multiple_order_quantity', quantity),
    ('order_interval_days', numeric),
    ('replenishment_owner_description', text),
    ('target_service_percent', numeric),
    ('target_inventory_quantity', quantity),
    ('effective_period', asbie),
    ('item', asbie),
    ('item_location_quantity', asbie),
],
Γ
    ('id', identifier),
    ('name', name),
    ('name_code', code),
    ('test_method', text),
    ('value', text),
    ('value_quantity', quantity),
    ('value_qualifier', text),
    ('importance_code', code),
    ('list_value', text),
    ('usability_period', asbie),
    ('item_property_group', asbie),
    ('range_dimension', asbie),
    ('item_property_range', asbie),
],
[
    ('id', identifier),
    ('name', name),
    ('importance_code', code),
],
('minimum_value', text),
    ('maximum_value', text),
],
('id', identifier),
```

```
('name', name),
    ('locale_code', code),
],
    ('id', identifier),
    ('sales_order_identifier', identifier),
    ('uuid', identifier),
    ('note', text),
    ('line_status_code', code),
    ('quantity', quantity),
    ('line_extension_amount', amount),
    ('total_tax_amount', amount),
    ('minimum_quantity', quantity),
    ('maximum_quantity', quantity),
    ('minimum_backorder', quantity),
    ('maximum_backorder', quantity),
    ('inspection_method_code', code),
    ('partial delivery indicator', indicator),
    ('back_order_allowed_indicator', indicator),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('warranty_information', text),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('originator_party', asbie),
    ('ordered shipment', asbie),
    ('pricing_reference', asbie),
    ('allowance_charge', asbie),
    ('price', asbie),
    ('item', asbie),
    ('sub_line_item', asbie),
    ('warranty validity period', asbie),
    ('warranty_party', asbie),
    ('tax_total', asbie),
    ('item price extension', asbie),
    ('line_reference', asbie),
],
Γ
    ('line_identifier', identifier),
    ('uuid', identifier),
    ('line_status_code', code),
    ('document_reference', asbie),
],
('line_reference', asbie),
    ('response', asbie),
],
('id', identifier),
    ('description', text),
    ('conditions', text),
    ('country_subentity', text),
```

```
('country_subentity_code', code),
    ('location_type_code', code),
    ('information_uri', identifier),
    ('name', name),
    ('validity_period', asbie),
    ('address', asbie),
    ('subsidiary_location', asbie),
    ('location_coordinate', asbie),
],
    ('coordinate_system_code', code),
    ('latitude_degrees', measure),
    ('latitude_minutes', measure),
    ('latitude_direction_code', code),
    ('longitude_degrees', measure),
    ('longitude_minutes', measure),
    ('longitude_direction_code', code),
    ('altitude', measure),
],
[
    ('lot_number', identifier),
    ('expiry_date', datetime_),
    ('additional item property', asbie),
],
    ('vessel identifier', identifier),
    ('vessel_name', name),
    ('radio_call_sign_identifier', identifier),
    ('ships requirements', text),
    ('gross_tonnage', measure),
    ('net_tonnage', measure),
    ('registry_certificate_document_reference', asbie),
    ('registry_port_location', asbie),
],
Γ
    ('meter_number', text),
    ('meter_name', text),
    ('meter_constant', text),
    ('meter_constant_code', code),
    ('total_delivered_quantity', quantity),
    ('meter_reading', asbie),
    ('meter_property', asbie),
],
('name', name),
    ('name_code', code),
    ('value', text),
    ('value_quantity', quantity),
    ('value_qualifier', text),
],
('id', identifier),
```

```
('meter reading type', text),
    ('meter_reading_type_code', code),
    ('previous_meter_reading_date', datetime_),
    ('previous_meter_quantity', quantity),
    ('latest_meter_reading_date', datetime_),
    ('latest_meter_quantity', quantity),
    ('previous_meter_reading_method', text),
    ('previous_meter_reading_method_code', code),
    ('latest_meter_reading_method', text),
    ('latest_meter_reading_method_code', code),
    ('meter_reading_comments', text),
    ('delivered_quantity', quantity),
],
('miscellaneous_event_type_code', code),
    ('event_line_item', asbie),
],
    ('line_extension_amount', amount),
    ('tax_exclusive_amount', amount),
    ('tax_inclusive_amount', amount),
    ('allowance_total_amount', amount),
    ('charge total amount', amount),
    ('prepaid_amount', amount),
    ('payable_rounding_amount', amount),
    ('payable amount', amount),
    ('payable_alternative_amount', amount),
],
Γ
    ('notification_type_code', code),
    ('post_event_notification_duration', measure),
    ('pre event notification duration', measure),
    ('notify_party', asbie),
    ('notification period', asbie),
    ('notification location', asbie),
],
    ('estimated consumed quantity', quantity),
    ('note', text),
    ('payment_terms', asbie),
],
Γ
    ('substitution_status_code', code),
    ('note', text),
    ('line_item', asbie),
    ('seller_proposed_substitute_line_item', asbie),
    ('seller_substituted_line_item', asbie),
    ('buyer_proposed_substitute_line_item', asbie),
    ('catalogue_line_reference', asbie),
    ('quotation line reference', asbie),
    ('order_line_reference', asbie),
    ('document_reference', asbie),
```

```
1,
Γ
    ('line_identifier', identifier),
    ('sales_order_line_identifier', identifier),
    ('uuid', identifier),
    ('line_status_code', code),
    ('order_reference', asbie),
],
    ('id', identifier),
    ('sales_order_identifier', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('customer_reference', text),
    ('order_type_code', code),
    ('document_reference', asbie),
],
('shipment', asbie),
    ('package', asbie),
1,
Γ
    ('id', identifier),
    ('quantity', quantity),
    ('returnable_material_indicator', indicator),
    ('package_level_code', code),
    ('packaging type code', code),
    ('packing_material', text),
    ('trace_id', identifier),
    ('contained package', asbie),
    ('containing_transport_equipment', asbie),
    ('goods_item', asbie),
    ('measurement dimension', asbie),
    ('delivery_unit', asbie),
    ('delivery', asbie),
    ('pickup', asbie),
    ('despatch', asbie),
],
Γ
    ('mark_care_indicator', indicator),
    ('mark_attention_indicator', indicator),
    ('website_uri', identifier),
    ('logo_reference', identifier),
    ('endpoint_identifier', identifier),
    ('industry_classification_code', code),
    ('party_identification', asbie),
    ('party_name', asbie),
    ('language', asbie),
    ('postal_address', asbie),
    ('physical_location', asbie),
```

```
('party tax scheme', asbie),
    ('party_legal_entity', asbie),
    ('contact', asbie),
    ('person', asbie),
    ('agent_party', asbie),
    ('service_provider_party', asbie),
    ('power_of_attorney', asbie),
    ('financial_account', asbie),
],
[('id', identifier)],
    ('registration_name', name),
    ('company_identifier', identifier),
    ('registration_date', datetime_),
    ('registration_expiration_date', datetime_),
    ('company_legal_form_code', code),
    ('company_legal_form', text),
    ('sole proprietorship indicator', indicator),
    ('company_liquidation_status_code', code),
    ('corporate_stock_amount', amount),
    ('fully_paid_shares_indicator', indicator),
    ('registration_address', asbie),
    ('corporate registration scheme', asbie),
    ('head_office_party', asbie),
    ('shareholder_party', asbie),
1,
[('name', name)],
    ('registration name', name),
    ('company_identifier', identifier),
    ('tax_level_code', code),
    ('exemption reason code', code),
    ('exemption_reason', text),
    ('registration_address', asbie),
    ('tax scheme', asbie),
],
    ('id', identifier),
    ('paid_amount', amount),
    ('received_date', datetime_),
    ('paid_date', datetime_),
    ('paid_time', datetime_),
    ('instruction_identifier', identifier),
],
('id', identifier),
    ('mandate_type_code', code),
    ('maximum_payment_instructions', numeric),
    ('maximum_paid_amount', amount),
    ('signature identifier', identifier),
    ('payer_party', asbie),
    ('payer_financial_account', asbie),
```

```
('validity period', asbie),
    ('payment_reversal_period', asbie),
    ('clause', asbie),
],
('id', identifier),
    ('payment_means_code', code),
    ('payment_due_date', datetime_),
    ('payment_channel_code', code),
    ('instruction identifier', identifier),
    ('instruction_note', text),
    ('payment_identifier', identifier),
    ('card_account', asbie),
    ('payer_financial_account', asbie),
    ('payee_financial_account', asbie),
    ('credit_account', asbie),
    ('payment_mandate', asbie),
    ('trade financing', asbie),
],
('id', identifier),
    ('payment_means_identifier', identifier),
    ('prepaid payment reference identifier', identifier),
    ('note', text),
    ('reference_event_code', code),
    ('settlement discount percent', numeric),
    ('penalty_surcharge_percent', numeric),
    ('payment_percent', numeric),
    ('amount', amount),
    ('settlement_discount_amount', amount),
    ('penalty_amount', amount),
    ('payment terms details uri', identifier),
    ('payment_due_date', datetime_),
    ('installment due date', datetime ),
    ('invoicing party reference', text),
    ('settlement_period', asbie),
    ('penalty_period', asbie),
    ('exchange_rate', asbie),
    ('validity_period', asbie),
],
Γ
    ('id', identifier),
    ('note', text),
    ('performance_value', quantity),
    ('performance_metric_type_code', code),
    ('period', asbie),
    ('item', asbie),
],
    ('start date', datetime ),
    ('start_time', datetime_),
    ('end_date', datetime_),
```

```
('end_time', datetime_),
    ('duration', measure),
    ('description_code', code),
    ('description', text),
],
    ('id', identifier),
    ('first_name', name),
    ('family_name', name),
    ('title', text),
    ('middle_name', name),
    ('other_name', name),
    ('name_suffix', text),
    ('job_title', text),
    ('nationality', identifier),
    ('gender_code', code),
    ('birth_date', datetime_),
    ('birthplace name', text),
    ('organization_department', text),
    ('contact', asbie),
    ('financial_account', asbie),
    ('identity_document_reference', asbie),
    ('residence address', asbie),
],
    ('attribute identifier', identifier),
    ('position_code', code),
    ('description_code', code),
    ('description', text),
],
    ('id', identifier),
    ('actual_pickup_date', datetime_),
    ('actual_pickup_time', datetime_),
    ('earliest_pickup_date', datetime_),
    ('earliest_pickup_time', datetime_),
    ('latest_pickup_date', datetime_),
    ('latest_pickup_time', datetime_),
    ('pickup_location', asbie),
    ('pickup_party', asbie),
],
('id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('description', text),
    ('notary_party', asbie),
    ('agent_party', asbie),
    ('witness_party', asbie),
    ('mandate_document_reference', asbie),
],
```

```
('price_amount', amount),
    ('base_quantity', quantity),
    ('price_change_reason', text),
    ('price_type_code', code),
    ('price_type', text),
    ('orderable_unit_factor', numeric),
    ('validity_period', asbie),
    ('price_list', asbie),
    ('allowance_charge', asbie),
    ('pricing_exchange_rate', asbie),
],
('amount', amount),
    ('tax_total', asbie),
],
    ('id', identifier),
    ('status code', code),
    ('validity_period', asbie),
    ('previous_price_list', asbie),
],
    ('original item location quantity', asbie),
    ('alternative condition price', asbie),
],
Γ
    ('previous_cancellation_reason_code', code),
    ('process_reason_code', code),
    ('process reason', text),
    ('description', text),
],
Γ
    ('id', identifier),
    ('name', name),
    ('description', text),
    ('procurement_type_code', code),
    ('procurement_sub_type_code', code),
    ('quality_control_code', code),
    ('required_fee', amount),
    ('fee_description', text),
    ('requested_delivery_date', datetime_),
    ('estimated_overall_contract', quantity),
    ('note', text),
    ('requested_tender_total', asbie),
    ('main_commodity_classification', asbie),
    ('additional_commodity_classification', asbie),
    ('realized_location', asbie),
    ('planned_period', asbie),
    ('contract_extension', asbie),
    ('request_for_tender_line', asbie),
],
```

```
('id', identifier),
    ('tendering_terms', asbie),
    ('procurement_project', asbie),
],
[
    ('id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('work_phase_reference', asbie),
],
('promotional_event_type_code', code),
    ('submission', datetime_),
    ('first_shipment_availibility_date', datetime_),
    ('latest_proposal_acceptance_date', datetime_),
    ('promotional_specification', asbie),
],
Γ
    ('amount', amount),
    ('event_line_item', asbie),
],
    ('specification identifier', identifier),
    ('promotional_event_line_item', asbie),
    ('event_tactic', asbie),
1,
Γ
    ('admission_code', code),
    ('exclusion reason', text),
    ('resolution', text),
    ('resolution_date', datetime_),
    ('resolution time', datetime ),
    ('procurement_project_lot', asbie),
],
Γ
    ('participation', numeric),
    ('personal_situation', text),
    ('operating_years', quantity),
    ('employee', quantity),
    ('business_classification_evidence', identifier),
    ('business_identity_evidence', identifier),
    ('tenderer_role_code', code),
    ('business_classification_scheme', asbie),
    ('technical_capability', asbie),
    ('financial_capability', asbie),
    ('completed_task', asbie),
    ('declaration', asbie),
    ('party', asbie),
    ('economic_operator_role', asbie),
],
('id', identifier),
```

```
('note', text),
    ('quantity', quantity),
    ('line_extension_amount', amount),
    ('total_tax_amount', amount),
    ('request_for_quotation_line_identifier', identifier),
    ('document_reference', asbie),
    ('line_item', asbie),
    ('seller_proposed_substitute_line_item', asbie),
    ('alternative_line_item', asbie),
    ('request_line_reference', asbie),
],
('train_identifier', identifier),
    ('rail_car_identifier', identifier),
],
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('received_quantity', quantity),
    ('short_quantity', quantity),
    ('shortage_action_code', code),
    ('rejected quantity', quantity),
    ('reject_reason_code', code),
    ('reject_reason', text),
    ('reject action code', code),
    ('quantity_discrepancy_code', code),
    ('oversupply_quantity', quantity),
    ('received date', datetime ),
    ('timing_complaint_code', code),
    ('timing_complaint', text),
    ('order line reference', asbie),
    ('despatch_line_reference', asbie),
    ('document_reference', asbie),
    ('item', asbie),
    ('shipment', asbie),
],
Γ
    ('name', name),
    ('legal_reference', text),
    ('ontology_uri', identifier),
],
    ('id', identifier),
    ('quantity', quantity),
    ('description', text),
],
[
    ('id', identifier),
    ('note', text),
    ('uuid', identifier),
    ('balance_brought_forward_indicator', indicator),
```

```
('debit line amount', amount),
    ('credit_line_amount', amount),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('penalty_surcharge_percent', numeric),
    ('amount', amount),
    ('payment_purpose_code', code),
    ('reminder_period', asbie),
    ('billing_reference', asbie),
    ('exchange_rate', asbie),
],
    ('id', identifier),
    ('note', text),
    ('uuid', identifier),
    ('debit_line_amount', amount),
    ('credit_line_amount', amount),
    ('balance_amount', amount),
    ('payment_purpose_code', code),
    ('invoicing_party_reference', text),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
    ('buyer customer party', asbie),
    ('seller_supplier_party', asbie),
    ('originator_customer_party', asbie),
    ('payee party', asbie),
    ('invoice_period', asbie),
    ('billing_reference', asbie),
    ('document reference', asbie),
    ('exchange_rate', asbie),
],
Γ
    ('amount', amount),
    ('period', asbie),
],
[
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('optional_line_item_indicator', indicator),
    ('privacy_code', code),
    ('security_classification_code', code),
    ('document_reference', asbie),
    ('line_item', asbie),
],
    ('id', identifier),
    ('uuid', identifier),
    ('note', text),
    ('quantity', quantity),
    ('minimum_quantity', quantity),
    ('maximum_quantity', quantity),
```

```
('tax included indicator', indicator),
    ('minimum_amount', amount),
    ('maximum_amount', amount),
    ('estimated_amount', amount),
    ('document_reference', asbie),
    ('delivery_period', asbie),
    ('required_item_location_quantity', asbie),
    ('warranty_validity_period', asbie),
    ('item', asbie),
    ('sub_request_for_tender_line', asbie),
],
    ('estimated overall contract', amount),
    ('total_amount', amount),
    ('tax_included_indicator', indicator),
    ('minimum_amount', amount),
    ('maximum_amount', amount),
    ('monetary_scope', text),
    ('average_subsequent_contract', amount),
    ('applicable_tax_category', asbie),
],
    ('reference', identifier),
    ('response_code', code),
    ('description', text),
    ('effective date', datetime ),
    ('effective_time', datetime_),
    ('status', asbie),
1,
Γ
    ('validator', identifier),
    ('validation result code', code),
    ('validation_date', datetime_),
    ('validation_time', datetime_),
    ('validate process', text),
    ('validate_tool', text),
    ('validate_tool_version', text),
    ('signatory_party', asbie),
],
    ('amount', amount),
    ('forecast_purpose_code', code),
    ('forecast_type_code', code),
    ('period', asbie),
],
    ('license_plate_identifier', identifier)
],
    ('quantity', quantity),
    ('activity_property', asbie),
    ('tax_exclusive_price', asbie),
```

```
('tax inclusive price', asbie),
    ('item', asbie),
],
    ('id', identifier),
    ('placard_notation', text),
    ('placard_endorsement', text),
    ('emergency_procedures_code', code),
    ('extension', text),
1,
[('week_day', code)],
    ('id', identifier),
    ('service_type_code', code),
    ('service_type', text),
    ('party', asbie),
    ('seller_contact', asbie),
],
    ('partecipation', numeric),
    ('party', asbie),
],
Γ
    ('id', identifier),
    ('shipping_priority_level_code', code),
    ('handling code', code),
    ('handling_instructions', text),
    ('information', text),
    ('gross weight', measure),
    ('net_weight', measure),
    ('net_net_weight', measure),
    ('gross volume', measure),
    ('net_volume', measure),
    ('total_goods_item_quantity', quantity),
    ('total transport handling unit quantity', quantity),
    ('insurance_value', amount),
    ('declared_customs_value', amount),
    ('declared for carriage value', amount),
    ('declared_statistics_value', amount),
    ('free_on_board_value', amount),
    ('special_instructions', text),
    ('delivery_instructions', text),
    ('split_consignment_indicator', indicator),
    ('consignment_quantity', quantity),
    ('consignment', asbie),
    ('goods_item', asbie),
    ('shipment_stage', asbie),
    ('delivery', asbie),
    ('transport_handling_unit', asbie),
    ('return address', asbie),
    ('origin_address', asbie),
    ('first_arrival_port_location', asbie),
```

```
('last exit port location', asbie),
    ('export_country', asbie),
    ('freight_allowance_charge', asbie),
],
[
    ('id', identifier),
    ('transport_mode_code', code),
    ('transport_means_type_code', code),
    ('transit_direction_code', code),
    ('pre carriage indicator', indicator),
    ('on_carriage_indicator', indicator),
    ('estimated_delivery_date', datetime_),
    ('estimated_delivery_time', datetime_),
    ('required_delivery_date', datetime_),
    ('required_delivery_time', datetime_),
    ('loading_sequence_identifier', identifier),
    ('successive_sequence_identifier', identifier),
    ('instructions', text),
    ('demurrage_instructions', text),
    ('crew_quantity', quantity),
    ('passenger_quantity', quantity),
    ('transit_period', asbie),
    ('carrier party', asbie),
    ('transport_means', asbie),
    ('loading_port_location', asbie),
    ('unloading port location', asbie),
    ('transship_port_location', asbie),
    ('loading_transport_event', asbie),
    ('examination transport event', asbie),
    ('availability_transport_event', asbie),
    ('exportation_transport_event', asbie),
    ('discharge transport event', asbie),
    ('warehousing_transport_event', asbie),
    ('takeover transport event', asbie),
    ('optional takeover transport event', asbie),
    ('dropoff_transport_event', asbie),
    ('actual_pickup_transport_event', asbie),
    ('delivery transport event', asbie),
    ('receipt_transport_event', asbie),
    ('storage_transport_event', asbie),
    ('acceptance_transport_event', asbie),
    ('terminal_operator_party', asbie),
    ('customs_agent_party', asbie),
    ('estimated_transit_period', asbie),
    ('freight_allowance_charge', asbie),
    ('freight_charge_location', asbie),
    ('detention_transport_event', asbie),
    ('requested_departure_transport_event', asbie),
    ('requested_arrival_transport_event', asbie),
    ('requested_waypoint_transport_event', asbie),
    ('planned_departure_transport_event', asbie),
    ('planned_arrival_transport_event', asbie),
```

```
('planned_waypoint_transport_event', asbie),
    ('actual_departure_transport_event', asbie),
    ('actual_waypoint_transport_event', asbie),
    ('actual_arrival_transport_event', asbie),
    ('transport_event', asbie),
    ('estimated_departure_transport_event', asbie),
    ('estimated_arrival_transport_event', asbie),
    ('passenger_person', asbie),
    ('driver_person', asbie),
    ('reporting_person', asbie),
    ('crew_member_person', asbie),
    ('security_officer_person', asbie),
    ('master_person', asbie),
    ('ships_surgeon_person', asbie),
],
    ('id', identifier),
    ('note', text),
    ('validation_date', datetime_),
    ('validation_time', datetime_),
    ('validator', identifier),
    ('canonicalization_method', text),
    ('signature method', text),
    ('signatory_party', asbie),
    ('digital_signature_attachment', asbie),
    ('original document reference', asbie),
],
    ('id', identifier),
    ('note', text),
    ('uuid', identifier),
    ('balance brought forward indicator', indicator),
    ('debit_line_amount', amount),
    ('credit line amount', amount),
    ('balance amount', amount),
    ('payment_purpose_code', code),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('originator_customer_party', asbie),
    ('accounting_customer_party', asbie),
    ('accounting_supplier_party', asbie),
    ('payee_party', asbie),
    ('invoice_period', asbie),
    ('billing_reference', asbie),
    ('document_reference', asbie),
    ('exchange_rate', asbie),
    ('allowance_charge', asbie),
    ('collected_payment', asbie),
],
```

```
('condition code', code),
    ('reference_date', datetime_),
    ('reference_time', datetime_),
    ('description', text),
    ('status_reason_code', code),
    ('status_reason', text),
    ('sequence_identifier', identifier),
    ('text', text),
    ('indication_indicator', indicator),
    ('percent', numeric),
    ('reliability_percent', numeric),
    ('condition', asbie),
],
('id', identifier),
    ('note', text),
    ('quantity', quantity),
    ('value', amount),
    ('availability_date', datetime_),
    ('availability_status_code', code),
    ('item', asbie),
],
Γ
    ('location_identifier', identifier),
    ('location', text),
    ('measurement dimension', asbie),
],
    ('rate', numeric),
    ('unknown_price', indicator),
    ('description', text),
    ('amount', amount),
    ('subcontracting_conditions_code', code),
    ('maximum_percent', numeric),
    ('minimum percent', numeric),
],
    ('consumption identifier', identifier),
    ('specification_type_code', code),
    ('note', text),
    ('total_metered_quantity', quantity),
    ('subscriber_party', asbie),
    ('utility_consumption_point', asbie),
    ('on_account_payment', asbie),
    ('consumption', asbie),
    ('supplier_consumption', asbie),
],
('description', text),
    ('utility_supplier_party', asbie),
    ('utility_customer_party', asbie),
    ('consumption', asbie),
```

```
('contract', asbie),
    ('consumption_line', asbie),
],
    ('customer_assigned_account_identifier', identifier),
    ('additional_account_identifier', identifier),
    ('data_sending_capability', text),
    ('party', asbie),
    ('despatch_contact', asbie),
    ('accounting_contact', asbie),
    ('seller_contact', asbie),
],
    ('id', identifier),
    ('name', name),
    ('percent', numeric),
    ('base_unit_measure', measure),
    ('per_unit_amount', amount),
    ('tax_exemption_reason_code', code),
    ('tax_exemption_reason', text),
    ('tier_range', text),
    ('tier_rate', numeric),
    ('tax scheme', asbie),
],
    ('id', identifier),
    ('name', name),
    ('tax_type_code', code),
    ('currency_code', code),
    ('jurisdiction_region_address', asbie),
],
Γ
    ('taxable_amount', amount),
    ('tax_amount', amount),
    ('calculation_sequence', numeric),
    ('transaction_currency_tax_amount', amount),
    ('percent', numeric),
    ('base_unit_measure', measure),
    ('per_unit_amount', amount),
    ('tier_range', text),
    ('tier_rate', numeric),
    ('tax_category', asbie),
],
('tax_amount', amount),
    ('rounding_amount', amount),
    ('tax_evidence_indicator', indicator),
    ('tax_included_indicator', indicator),
    ('tax_subtotal', asbie),
],
('id', identifier),
```

```
('call date', datetime ),
    ('call_time', datetime_),
    ('service_number_called', text),
    ('telecommunications_service_category', text),
    ('telecommunications_service_category_code', code),
    ('movie_title', text),
    ('roaming_partner_name', name),
    ('pay_per_view', text),
    ('quantity', quantity),
    ('telecommunications service call', text),
    ('telecommunications_service_call_code', code),
    ('call_base_amount', amount),
    ('call_extension_amount', amount),
    ('price', asbie),
    ('country', asbie),
    ('exchange_rate', asbie),
    ('allowance_charge', asbie),
    ('tax_total', asbie),
    ('call_duty', asbie),
    ('time_duty', asbie),
],
    ('telecommunications supply type', text),
    ('telecommunications_supply_type_code', code),
    ('privacy_code', code),
    ('description', text),
    ('total_amount', amount),
    ('telecommunications_supply_line', asbie),
1,
Γ
    ('id', identifier),
    ('phone number', text),
    ('description', text),
    ('line extension amount', amount),
    ('exchange rate', asbie),
    ('allowance_charge', asbie),
    ('tax_total', asbie),
    ('telecommunications service', asbie),
],
    ('attribute_identifier', identifier),
    ('measure', measure),
    ('description', text),
],
('id', identifier),
    ('note', text),
    ('quantity', quantity),
    ('line_extension_amount', amount),
    ('total_tax_amount', amount),
    ('orderable_unit', text),
    ('content_unit', quantity),
```

```
('order quantity increment', numeric),
    ('minimum_order_quantity', quantity),
    ('maximum_order_quantity', quantity),
    ('warranty_information', text),
    ('pack_level_code', code),
    ('document_reference', asbie),
    ('item', asbie),
    ('offered_item_location_quantity', asbie),
    ('replacement_related_item', asbie),
    ('warranty_party', asbie),
    ('warranty_validity_period', asbie),
    ('sub_tender_line', asbie),
    ('call_for_tenders_line_reference', asbie),
    ('call_for_tenders_document_reference', asbie),
],
    ('tender_envelope_identifier', identifier),
    ('tender envelope type code', code),
    ('description', text),
    ('open_tender_identifier', identifier),
    ('procurement_project_lot', asbie),
    ('document_tender_requirement', asbie),
1,
Γ
    ('name', name),
    ('description', text),
    ('template_document_reference', asbie),
],
Γ
    ('tender_result_code', code),
    ('description', text),
    ('advertisement', amount),
    ('award_date', datetime_),
    ('award_time', datetime_),
    ('received tender', quantity),
    ('lower_tender', amount),
    ('higher_tender', amount),
    ('start_date', datetime_),
    ('received_electronic_tender_quantity', quantity),
    ('received_foreign_tender_quantity', quantity),
    ('contract', asbie),
    ('awarded_tendered_project', asbie),
    ('contract_formalization_period', asbie),
    ('subcontract_terms', asbie),
    ('winning_party', asbie),
],
Γ
    ('variant', identifier),
    ('fee', amount),
    ('fee description', text),
    ('tender_envelope_identifier', identifier),
    ('tender_envelope_type_code', code),
```

```
('procurement project lot', asbie),
    ('evidence_document_reference', asbie),
    ('tax_total', asbie),
    ('legal_monetary_total', asbie),
    ('tender_line', asbie),
    ('awarding_criterion_response', asbie),
],
[
    ('interested_procurement_project_lot', asbie),
    ('main_qualifying_party', asbie),
    ('additional_qualifying_party', asbie),
],
    ('company_legal_form_code', code),
    ('company_legal_form', text),
    ('personal_situation', text),
    ('operating_years', quantity),
    ('employee', quantity),
    ('description', text),
    ('required_business_classification_scheme', asbie),
    ('technical evaluation criterion', asbie),
    ('financial_evaluation_criterion', asbie),
    ('specific tenderer requirement', asbie),
    ('economic_operator_role', asbie),
],
Γ
    ('name', name),
    ('tenderer_requirement_type_code', code),
    ('description', text),
    ('legal_reference', text),
    ('suggested_evidence', asbie),
1,
Γ
    ('id', identifier),
    ('original contracting system', identifier),
    ('description', text),
    ('negotiation description', text),
    ('procedure_code', code),
    ('urgency_code', code),
    ('expense_code', code),
    ('part_presentation_code', code),
    ('contracting_system_code', code),
    ('submission_method_code', code),
    ('candidate_reduction_constraint', indicator),
    ('government_agreement_constraint', indicator),
    ('document_availability_period', asbie),
    ('tender_submission_deadline_period', asbie),
    ('invitation_submission_period', asbie),
    ('participation_request_reception_period', asbie),
    ('notice_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('process_justification', asbie),
```

```
('economic_operator_short_list', asbie),
    ('open_tender_event', asbie),
    ('auction_terms', asbie),
    ('framework_agreement', asbie),
],
    ('awarding_method_type_code', code),
    ('price_evaluation_code', code),
    ('maximum_variant_quantity', quantity),
    ('variant_constraint', indicator),
    ('accepted_variants_description', text),
    ('price_revision_formula_description', text),
    ('funding_program_code', code),
    ('funding_program', text),
    ('maximum_advertisement', amount),
    ('note', text),
    ('payment_frequency_code', code),
    ('economic_operator_registry_uri', identifier),
    ('required_curricula', indicator),
    ('other_conditions', indicator),
    ('additional_conditions', text),
    ('latest_security_clearance_date', datetime_),
    ('documentation fee amount', amount),
    ('penalty_clause', asbie),
    ('required_financial_guarantee', asbie),
    ('procurement legislation document reference', asbie),
    ('fiscal_legislation_document_reference', asbie),
    ('environmental_legislation_document_reference', asbie),
    ('employment legislation document reference', asbie),
    ('contractual_document_reference', asbie),
    ('call_for_tenders_document_reference', asbie),
    ('warranty_validity_period', asbie),
    ('payment_terms', asbie),
    ('tenderer_qualification_request', asbie),
    ('allowed_subcontract_terms', asbie),
    ('tender_preparation', asbie),
    ('contract_execution_requirement', asbie),
    ('awarding_terms', asbie),
    ('additional_information_party', asbie),
    ('document_provider_party', asbie),
    ('tender_recipient_party', asbie),
    ('contract_responsible_party', asbie),
    ('tender_evaluation_party', asbie),
    ('tender_validity_period', asbie),
    ('contract_acceptance_period', asbie),
    ('appeal_terms', asbie),
    ('language', asbie),
    ('budget_account_line', asbie),
    ('replaced_notice_document_reference', asbie),
],
('id', identifier),
```

```
('financing instrument code', code),
    ('contract_document_reference', asbie),
    ('document_reference', asbie),
    ('financing_party', asbie),
    ('financing_financial_account', asbie),
    ('clause', asbie),
],
('information', text),
    ('reference', text),
    ('applicable_address', asbie),
],
Γ
    ('id', identifier),
    ('action_code', code),
    ('description', text),
    ('document_reference', asbie),
],
    ('id', identifier),
    ('referenced_consignment_identifier', identifier),
    ('transport_equipment_type_code', code),
    ('provider type code', code),
    ('owner_type_code', code),
    ('size_type_code', code),
    ('disposition code', code),
    ('fullness_indication_code', code),
    ('refrigeration_on_indicator', indicator),
    ('information', text),
    ('returnability_indicator', indicator),
    ('legal_status_indicator', indicator),
    ('air flow percent', numeric),
    ('humidity_percent', numeric),
    ('animal food approved indicator', indicator),
    ('human food approved indicator', indicator),
    ('dangerous_goods_approved_indicator', indicator),
    ('refrigerated_indicator', indicator),
    ('characteristics', text),
    ('damage_remarks', text),
    ('description', text),
    ('special_transport_requirements', text),
    ('gross_weight', measure),
    ('gross_volume', measure),
    ('tare_weight', measure),
    ('tracking_device_code', code),
    ('power', indicator),
    ('trace_id', identifier),
    ('measurement_dimension', asbie),
    ('transport_equipment_seal', asbie),
    ('minimum_temperature', asbie),
    ('maximum_temperature', asbie),
    ('provider_party', asbie),
```

```
('loading_proof_party', asbie),
    ('supplier_party', asbie),
    ('owner_party', asbie),
    ('operating_party', asbie),
    ('loading_location', asbie),
    ('unloading_location', asbie),
    ('storage_location', asbie),
    ('positioning_transport_event', asbie),
    ('quarantine_transport_event', asbie),
    ('delivery_transport_event', asbie),
    ('pickup_transport_event', asbie),
    ('handling_transport_event', asbie),
    ('loading_transport_event', asbie),
    ('transport_event', asbie),
    ('applicable_transport_means', asbie),
    ('haulage_trading_terms', asbie),
    ('hazardous_goods_transit', asbie),
    ('packaged_transport_handling_unit', asbie),
    ('service_allowance_charge', asbie),
    ('freight_allowance_charge', asbie),
    ('attached_transport_equipment', asbie),
    ('delivery', asbie),
    ('pickup', asbie),
    ('despatch', asbie),
    ('shipment_document_reference', asbie),
    ('contained in transport equipment', asbie),
    ('package', asbie),
    ('goods_item', asbie),
1,
Γ
    ('id', identifier),
    ('seal issuer type code', code),
    ('condition', text),
    ('seal_status_code', code),
    ('sealing_party_type', text),
],
    ('identification', identifier),
    ('occurrence_date', datetime_),
    ('occurrence_time', datetime_),
    ('transport_event_type_code', code),
    ('description', text),
    ('completion_indicator', indicator),
    ('reported_shipment', asbie),
    ('current_status', asbie),
    ('contact', asbie),
    ('location', asbie),
    ('signature', asbie),
    ('period', asbie),
],
('transport_user_special_terms', text),
```

```
('transport service provider special terms', text),
    ('change_conditions', text),
    ('payment_terms', asbie),
    ('delivery_terms', asbie),
    ('bonus_payment_terms', asbie),
    ('commission_payment_terms', asbie),
    ('penalty_payment_terms', asbie),
    ('environmental_emission', asbie),
    ('notification_requirement', asbie),
    ('service_charge_payment_terms', asbie),
],
    ('id', identifier),
    ('transport_handling_unit_type_code', code),
    ('handling_code', code),
    ('handling_instructions', text),
    ('hazardous_risk_indicator', indicator),
    ('total goods item quantity', quantity),
    ('total_package_quantity', quantity),
    ('damage_remarks', text),
    ('shipping_marks', text),
    ('trace_id', identifier),
    ('handling unit despatch line', asbie),
    ('actual_package', asbie),
    ('received_handling_unit_receipt_line', asbie),
    ('transport equipment', asbie),
    ('transport_means', asbie),
    ('hazardous_goods_transit', asbie),
    ('measurement dimension', asbie),
    ('minimum_temperature', asbie),
    ('maximum_temperature', asbie),
    ('goods item', asbie),
    ('floor_space_measurement_dimension', asbie),
    ('pallet space measurement dimension', asbie),
    ('shipment document reference', asbie),
    ('status', asbie),
    ('customs declaration', asbie),
    ('referenced shipment', asbie),
    ('package', asbie),
],
Γ
    ('journey_identifier', identifier),
    ('registration_nationality_identifier', identifier),
    ('registration_nationality', text),
    ('direction_code', code),
    ('transport_means_type_code', code),
    ('trade_service_code', code),
    ('stowage', asbie),
    ('air_transport', asbie),
    ('road_transport', asbie),
    ('rail_transport', asbie),
    ('maritime_transport', asbie),
```

```
('owner_party', asbie),
    ('measurement_dimension', asbie),
],
    ('sequence', numeric),
    ('reference_date', datetime_),
    ('reference_time', datetime_),
    ('reliability_percent', numeric),
    ('remarks', text),
    ('status_location', asbie),
    ('actual_arrival_transport_event', asbie),
    ('actual_departure_transport_event', asbie),
    ('estimated_departure_transport_event', asbie),
    ('estimated_arrival_transport_event', asbie),
    ('planned_departure_transport_event', asbie),
    ('planned_arrival_transport_event', asbie),
],
    ('sequence', numeric),
    ('transport_execution_plan_reference', identifier),
    ('transportation_service', asbie),
    ('transport_service_provider_party', asbie),
    ('referenced consignment', asbie),
    ('shipment_stage', asbie),
],
Γ
    ('transport_service_code', code),
    ('tariff_class_code', code),
    ('priority', text),
    ('freight_rate_class_code', code),
    ('transportation_service_description', text),
    ('transportation_service_details_uri', identifier),
    ('nomination_date', datetime_),
    ('nomination_time', datetime_),
    ('name', name),
    ('sequence', numeric),
    ('transport_equipment', asbie),
    ('supported_transport_equipment', asbie),
    ('unsupported_transport_equipment', asbie),
    ('commodity_classification', asbie),
    ('supported_commodity_classification', asbie),
    ('unsupported_commodity_classification', asbie),
    ('total_capacity_dimension', asbie),
    ('shipment_stage', asbie),
    ('transport_event', asbie),
    ('responsible_transport_service_provider_party', asbie),
    ('environmental_emission', asbie),
    ('estimated_duration_period', asbie),
    ('scheduled_service_frequency', asbie),
],
('price_amount', amount),
```

```
('time amount', text),
            ],
                ('id', identifier),
                ('subscriber_identifier', identifier),
                ('subscriber_type', text),
                ('subscriber_type_code', code),
                ('description', text),
                ('pack_quantity', quantity),
                ('pack_size', numeric),
                ('consumption_type', text),
                ('consumption_type_code', code),
                ('current_charge_type', text),
                ('current_charge_type_code', code),
                ('one_time_charge_type', text),
                ('one_time_charge_type_code', code),
                ('tax_category', asbie),
                ('contract', asbie),
            ],
            ('uri', identifier),
                ('password', text),
                ('login', text),
            1,
            [('rank', text), ('party', asbie)],
                ('id', identifier),
                ('work_phase_code', code),
                ('work phase', text),
                ('progress_percent', numeric),
                ('start_date', datetime_),
                ('end date', datetime),
                ('work_order_document_reference', asbie),
            1,
        1)
        self.registry = dict(zip(ComponentRegistry, self.values))
class UBLDocumentRegistry:
    slots = 'registry', 'code', 'asbie', 'datetime ', \
                'measure', 'quantity', 'numeric', 'text', 'identifier', \
                'indicator', 'name', 'amount', 'values', '__weakref__'
    def init (self):
        self.code = CodeType.mock('SAMPLE', pattern=r'/(\w+)/', max_length=5)
        self.asbie = AssociatedBusinessEntity.mock()
        self.datetime_ = DateTimeType.mock()
        self.measure = MeasureType.mock(0.0, kwargs={})
        self.quantity = QuantityType.mock(0, kwargs={})
        self.numeric = NumericType.mock(0.0, kwargs={})
        self.text = TextType.mock('Sample', pattern=r'\w+', max_length=100)
        self.identifier = IdentifierType.mock('sample', pattern=r'/w+/')
```

```
self.indicator = IndicatorType.mock()
self.name = NameType.mock('Sample Name', pattern=r'\w+', max length=20)
self.amount = AmountType.mock(0.0, currency='NAIRA',
                              currency_code='NGN', version_id='2.1')
code = self.code
datetime_ = self.datetime_
asbie = self.asbie
measure = self.measure
quantity = self.quantity
numeric = self.numeric
text = self.text
identifier = self.identifier
indicator = self.indicator
name = self.name
amount = self.amount
self.values = iter([
    # Application Response
        ('ubl_version_id', identifier),
        ('customization_id', identifier),
        ('profile id', identifier),
        ('profile execution id', identifier),
        ('id', identifier),
        ('uuid', identifier),
        ('issue_date', datetime_),
        ('issue_time', datetime_),
        ('response date', datetime ),
        ('response_time', datetime_),
        ('note', text),
        ('version id', identifier),
        ('signature', asbie),
        ('sender_party', asbie),
        ('receiver party', asbie),
        ('document_response', asbie),
    ],
    Γ
        # Attached Document
        ('ubl version id', identifier),
        ('customization_id', identifier),
        ('profile_id', identifier),
        ('profile_execution_id', identifier),
        ('id', identifier),
        ('uuid', identifier),
        ('issue_date', datetime_),
        ('issue_time', datetime_),
        ('note', text),
        ('document_type_code', code),
        ('document type', text),
        ('parent_document_id', identifier),
        ('parent_document_type_code', code),
```

```
('parent document version id', identifier),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('attachment', asbie),
    ('parent_document_line_reference', asbie),
],
# Unawarded Notification
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('contract_name', name),
    ('note', text),
    ('signature', asbie),
    ('sender party', asbie),
    ('receiver_party', asbie),
    ('minutes_document_reference', asbie),
    ('additional document reference', asbie),
    ('tender_result', asbie),
    ('appeal_terms', asbie),
1,
Γ
    # Bill of Lading
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('carrier assigned id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('name', name),
    ('description', text),
    ('note', text),
    ('document_status_code', code),
    ('shipping_order_id', identifier),
    ('to_order_indicator', indicator),
    ('ad_valorem_indicator', indicator),
    ('declared_carriage_value_amount', numeric),
    ('other_instruction', text),
    ('consignor_party', asbie),
    ('carrier_party', asbie),
    ('freight_forwarder_party', asbie),
```

```
('shipment', asbie),
    ('document reference', asbie),
    ('exchange_rate', asbie),
    ('document_distribution', asbie),
    ('signature', asbie),
],
    # Call For Tenders
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('approval_date', datetime_),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('version id', identifier),
    ('previous_version_id', identifier),
    ('legal document reference', asbie),
    ('technical document reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('contracting_party', asbie),
    ('originator_customer_party', asbie),
    ('receiver party', asbie),
    ('tendering_terms', asbie),
    ('tendering_process', asbie),
    ('procurement project', asbie),
    ('procurement_project_lot', asbie),
],
Γ
    # Catalogue
    ('ubl version id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('uuid', identifier),
    ('action_code', code),
    ('name', name),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('revision_date', datetime_),
    ('revision_time', datetime_),
    ('note', text),
    ('description', text),
    ('version_id', identifier),
    ('previous_version_id', identifier),
```

```
('line count numeric', quantity),
    ('validity_period', asbie),
    ('referenced_contract', asbie),
    ('source_catalogue_reference', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
    ('provider_party', asbie),
    ('receiver_party', asbie),
    ('seller_supplier_party', asbie),
    ('contractor_customer_party', asbie),
    ('trading_terms', asbie),
    ('catalogue_line', asbie),
],
# Catalogue Deletion
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('uuid', identifier),
    ('name', name),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('effective_date', datetime_),
    ('effective time', datetime ),
    ('note', text),
    ('version_id', identifier),
    ('description', text),
    ('validity_period', asbie),
    ('deleted_catalogue_reference', asbie),
    ('referenced contract', asbie),
    ('signature', asbie),
    ('receiver party', asbie),
    ('provider_party', asbie),
    ('seller_supplier_party', asbie),
    ('contractor_customer_party', asbie),
],
Γ
    # Catalogue Item Specification Update
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('uuid', identifier),
    ('name', name),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('revision_date', datetime_),
    ('revision_time', datetime_),
    ('note', text),
```

```
('description', text),
    ('version_id', identifier),
    ('line_count_numeric', quantity),
    ('validity_period', asbie),
    ('related_catalogue_reference', asbie),
    ('referenced_contract', asbie),
    ('signature', asbie),
    ('provider_party', asbie),
    ('receiver_party', asbie),
    ('seller_supplier_party', asbie),
    ('contractor_customer_party', asbie),
    ('trading_terms', asbie),
    ('default_language', asbie),
    ('catalogue_item_specification_update_line', asbie),
],
    # Catalogue Pricing Update
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('uuid', identifier),
    ('name', name),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('revision_date', datetime_),
    ('revision_time', datetime_),
    ('note', text),
    ('description', text),
    ('version_id', identifier),
    ('line count numeric', quantity),
    ('validity_period', asbie),
    ('related catalogue reference', asbie),
    ('referenced contract', asbie),
    ('signature', asbie),
    ('provider_party', asbie),
    ('receiver_party', asbie),
    ('seller_supplier_party', asbie),
    ('contractor_customer_party', asbie),
    ('trading_terms', asbie),
    ('default_language', asbie),
    ('catalogue_pricing_update_line', asbie),
],
Γ
    # Catalogue Request
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('uuid', identifier),
```

```
('name', name),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('description', text),
    ('pricing_update_request_indicator', indicator),
    ('item_update_request_indicator', indicator),
    ('line_count_numeric', quantity),
    ('validity_period', asbie),
    ('signature', asbie),
    ('receiver_party', asbie),
    ('provider_party', asbie),
    ('seller_supplier_party', asbie),
    ('contractor_customer_party', asbie),
    ('requested_catalogue_reference', asbie),
    ('referenced_contract', asbie),
    ('trading_terms', asbie),
    ('document reference', asbie),
    ('applicable_territory_address', asbie),
    ('requested_language', asbie),
    ('requested classification scheme', asbie),
    ('catalogue_request_line', asbie),
1,
Γ
    # Certificate Of Origin
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('description', text),
    ('note', text),
    ('version_id', identifier),
    ('signature', asbie),
    ('exporter party', asbie),
    ('importer_party', asbie),
    ('endorser_party', asbie),
    ('certificate_of_origin_application', asbie),
    ('issuer_endorsement', asbie),
    ('embassy_endorsement', asbie),
    ('insurance_endorsement', asbie),
],
    # Contract Award Notice
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
```

```
('copy indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('regulatory_domain', text),
    ('publish_award_indicator', indicator),
    ('previous_document_reference', asbie),
    ('minutes document reference', asbie),
    ('signature', asbie),
    ('contracting_party', asbie),
    ('originator_customer_party', asbie),
    ('receiver_party', asbie),
    ('tendering_terms', asbie),
    ('tendering_process', asbie),
    ('procurement_project', asbie),
    ('procurement project lot', asbie),
    ('tender_result', asbie),
],
    # Contract Notice
    ('ubl version id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('note', text),
    ('requested publication date', datetime ),
    ('regulatory domain', text),
    ('frequency_period', asbie),
    ('signature', asbie),
    ('contracting party', asbie),
    ('originator_customer_party', asbie),
    ('receiver_party', asbie),
    ('tendering_terms', asbie),
    ('tendering_process', asbie),
    ('procurement_project', asbie),
    ('procurement_project_lot', asbie),
],
    # Credit Note
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
```

```
('copy indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('tax_point_date', datetime_),
    ('credit_note_type_code', code),
    ('note', text),
    ('document_currency_code', code),
    ('tax_currency_code', code),
    ('pricing_currency_code', code),
    ('payment_currency_code', code),
    ('payment_alternative_currency_code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', numeric),
    ('line_count_numeric', numeric),
    ('buyer_reference', text),
    ('invoice_period', asbie),
    ('discrepancy response', asbie),
    ('order_reference', asbie),
    ('billing_reference', asbie),
    ('despatch_document_reference', asbie),
    ('receipt_document_reference', asbie),
    ('contract document reference', asbie),
    ('additional_document_reference', asbie),
    ('statement_document_reference', asbie),
    ('originator document reference', asbie),
    ('signature', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting customer party', asbie),
    ('payee_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller supplier party', asbie),
    ('tax_representative_party', asbie),
    ('delivery', asbie),
    ('delivery terms', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('payment_alternative_exchange_rate', asbie),
    ('allowance_charge', asbie),
    ('tax_total', asbie),
    ('legal_monetary_total', asbie),
    ('credit_note_line', asbie),
],
    # Debit Note
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
```

Γ

```
('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('tax_point_date', datetime_),
    ('document_currency_code', code),
    ('tax_currency_code', code),
    ('pricing_currency_code', code),
    ('payment_currency_code', code),
    ('payment_alternative_currency_code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', numeric),
    ('line_count_numeric', numeric),
    ('invoice_period', asbie),
    ('discrepancy_response', asbie),
    ('order_reference', asbie),
    ('billing_reference', asbie),
    ('despatch_document_reference', asbie),
    ('receipt_document_reference', asbie),
    ('statement_document_reference', asbie),
    ('contract document reference', asbie),
    ('additional document reference', asbie),
    ('signature', asbie),
    ('accounting supplier party', asbie),
    ('accounting_customer_party', asbie),
    ('payee_party', asbie),
    ('buyer customer party', asbie),
    ('seller_supplier_party', asbie),
    ('tax_representative_party', asbie),
    ('prepaid payment', asbie),
    ('allowance_charge', asbie),
    ('delivery', asbie),
    ('delivery terms', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('payment_alternative_exchange_rate', asbie),
    ('tax_total', asbie),
    ('requested_monetary_total', asbie),
    ('debit_note_line', asbie),
],
    # Despatch Advice
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
```

```
('copy indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('document_status_code', code),
    ('despatch_advice_type_code', code),
    ('note', text),
    ('line_count_numeric', numeric),
    ('order_reference', asbie),
    ('additional document reference', asbie),
    ('signature', asbie),
    ('despatch_supplier_party', asbie),
    ('delivery_customer_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('originator_customer_party', asbie),
    ('shipment', asbie),
    ('despatch_line', asbie),
],
# Document Status
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('note', text),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('document response', asbie),
    ('additional_document_response', asbie),
],
Γ
    # Document Status Request
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('u_u_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('tracking id', identifier),
    ('requested_document_reference', asbie),
    ('signature', asbie),
```

```
('sender party', asbie),
    ('receiver_party', asbie),
],
    # Exception Criteria
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('u_u_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('version_id', identifier),
    ('validity_period', asbie),
    ('document reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller supplier party', asbie),
    ('exception_criteria_line', asbie),
],
Γ
    # Exception Notification
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('note', text),
    ('exception observation period', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('exception_notification_line', asbie),
],
Γ
    # Forecast
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
```

```
('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('version_id', identifier),
    ('based_on_consensus_indicator', indicator),
    ('forecast_purpose_code', code),
    ('forecast_period', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('forecast_line', asbie),
],
    # Forecast Revision
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy indicator', indicator),
    ('u_u_id', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('note', text),
    ('sequence_number_id', identifier),
    ('revision status code', code),
    ('purpose_code', code),
    ('forecast period', asbie),
    ('original document reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('forecast_revision_line', asbie),
],
    # Forwarding Instructions
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('carrier assigned id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
```

```
('issue time', datetime ),
    ('name', name),
    ('description', text),
    ('note', text),
    ('document_status_code', code),
    ('shipping_order_id', identifier),
    ('to_order_indicator', indicator),
    ('ad_valorem_indicator', indicator),
    ('declared_carriage_value_amount', amount),
    ('other instruction', text),
    ('consignor_party', asbie),
    ('carrier_party', asbie),
    ('freight_forwarder_party', asbie),
    ('shipment', asbie),
    ('document_reference', asbie),
    ('exchange_rate', asbie),
    ('signature', asbie),
],
    # Freight Invoice
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('invoice_type_code', code),
    ('note', text),
    ('tax point date', datetime ),
    ('document_currency_code', code),
    ('tax currency code', code),
    ('pricing_currency_code', code),
    ('payment_currency_code', code),
    ('payment_alternative_currency_code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('invoice_period', asbie),
    ('shipment', asbie),
    ('order_reference', asbie),
    ('billing_reference', asbie),
    ('despatch_document_reference', asbie),
    ('receipt_document_reference', asbie),
    ('originator_document_reference', asbie),
    ('contract_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
```

```
('payee party', asbie),
    ('tax representative party', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('prepaid_payment', asbie),
    ('allowance_charge', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('payment_alternative_exchange_rate', asbie),
    ('tax_total', asbie),
    ('legal_monetary_total', asbie),
    ('invoice_line', asbie),
],
    # Fulfilment Cancellation
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('cancellation_note', text),
    ('despatch_document_reference', asbie),
    ('receipt document reference', asbie),
    ('order_reference', asbie),
    ('additional_document_reference', asbie),
    ('contract', asbie),
    ('signature', asbie),
    ('buyer customer party', asbie),
    ('seller supplier party', asbie),
    ('delivery_customer_party', asbie),
    ('despatch_supplier_party', asbie),
    ('originator customer party', asbie),
],
    # Goods Item Itinerary
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('note', text),
    ('version_id', identifier),
```

```
('transport execution plan reference id', identifier),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('referenced_consignment', asbie),
    ('referenced_transport_equipment', asbie),
    ('referenced_package', asbie),
    ('referenced_goods_item', asbie),
    ('transportation_segment', asbie),
],
# Guarantee Certificate
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('guarantee type code', code),
    ('purpose', text),
    ('liability_amount', amount),
    ('constitution code', code),
    ('note', text),
    ('applicable_period', asbie),
    ('applicable regulation', asbie),
    ('guarantee_document_reference', asbie),
    ('immobilized_security', asbie),
    ('signature', asbie),
    ('guarantor_party', asbie),
    ('interested party', asbie),
    ('beneficiary_party', asbie),
],
    # Instructions For Returns
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('u_u_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('document_reference', asbie),
    ('signature', asbie),
    ('seller_supplier_party', asbie),
    ('retailer_customer_party', asbie),
```

```
('manufacturer party', asbie),
    ('shipment', asbie),
    ('instruction_for_returns_line', asbie),
],
# Inventory Report
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('document_currency_code', code),
    ('inventory period', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
    ('retailer_customer_party', asbie),
    ('inventory_reporting_party', asbie),
    ('seller supplier party', asbie),
    ('inventory_report_line', asbie),
],
Γ
    # Invoice
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('due_date', datetime_),
    ('invoice_type_code', code),
    ('note', text),
    ('tax_point_date', datetime_),
    ('document_currency_code', code),
    ('tax_currency_code', code),
    ('pricing_currency_code', code),
    ('payment_currency_code', code),
    ('payment_alternative_currency_code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('buyer_reference', text),
    ('invoice period', asbie),
    ('order_reference', asbie),
    ('billing_reference', asbie),
```

```
('despatch document reference', asbie),
    ('receipt_document_reference', asbie),
    ('statement_document_reference', asbie),
    ('originator_document_reference', asbie),
    ('contract_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('project_reference', asbie),
    ('signature', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
    ('payee_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('tax_representative_party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment_means', asbie),
    ('payment terms', asbie),
    ('prepaid_payment', asbie),
    ('allowance_charge', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment exchange rate', asbie),
    ('payment alternative exchange rate', asbie),
    ('tax_total', asbie),
    ('withholding tax total', asbie),
    ('legal_monetary_total', asbie),
    ('invoice_line', asbie),
1,
Γ
    # Item Information Request
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('period', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('item_information_request_line', asbie),
],
# Order
```

```
('ubl version id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('sales_order_id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('order_type_code', code),
    ('note', text),
    ('requested invoice currency code', code),
    ('document_currency_code', code),
    ('pricing_currency_code', code),
    ('tax_currency_code', code),
    ('customer_reference', text),
    ('accounting cost code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('validity_period', asbie),
    ('quotation_document_reference', asbie),
    ('order document reference', asbie),
    ('originator document reference', asbie),
    ('catalogue_reference', asbie),
    ('additional document reference', asbie),
    ('contract', asbie),
    ('project_reference', asbie),
    ('signature', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('originator customer party', asbie),
    ('freight_forwarder_party', asbie),
    ('accounting customer party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('transaction_conditions', asbie),
    ('allowance_charge', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('destination_country', asbie),
    ('tax_total', asbie),
    ('anticipated_monetary_total', asbie),
    ('order_line', asbie),
],
    # Order Cancellation
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
```

```
('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('cancellation_note', text),
    ('order reference', asbie),
    ('originator_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('contract', asbie),
    ('signature', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('originator_customer_party', asbie),
1,
    # Order Change
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('sales order id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('sequence_number_id', identifier),
    ('note', text),
    ('requested_invoice_currency_code', code),
    ('document currency code', code),
    ('pricing currency code', code),
    ('tax_currency_code', code),
    ('customer reference', text),
    ('accounting cost code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('validity_period', asbie),
    ('order_reference', asbie),
    ('quotation_document_reference', asbie),
    ('originator_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('contract', asbie),
    ('signature', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('originator_customer_party', asbie),
    ('freight_forwarder_party', asbie),
    ('accounting_customer_party', asbie),
```

```
('accounting supplier party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('transaction_conditions', asbie),
    ('allowance_charge', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('destination_country', asbie),
    ('tax_total', asbie),
    ('anticipated_monetary_total', asbie),
    ('order_line', asbie),
],
    # Order Response
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('sales order id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('order_response_code', code),
    ('note', text),
    ('document_currency_code', code),
    ('pricing_currency_code', code),
    ('tax currency code', code),
    ('total_packages_quantity', quantity),
    ('gross weight measure', measure),
    ('net weight measure', measure),
    ('net_net_weight_measure', measure),
    ('gross volume measure', measure),
    ('net volume measure', measure),
    ('customer_reference', text),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('validity_period', asbie),
    ('order_reference', asbie),
    ('order_document_reference', asbie),
    ('originator_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('contract', asbie),
    ('signature', asbie),
    ('seller_supplier_party', asbie),
    ('buyer_customer_party', asbie),
    ('originator_customer_party', asbie),
```

```
('freight forwarder party', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('allowance_charge', asbie),
    ('transaction_conditions', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('destination_country', asbie),
    ('tax_total', asbie),
    ('legal_monetary_total', asbie),
    ('order_line', asbie),
],
    # Order Response Simple
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('accepted_indicator', indicator),
    ('rejection_note', text),
    ('customer reference', text),
    ('accounting_cost_code', code),
    ('accounting cost', text),
    ('order reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('seller supplier party', asbie),
    ('buyer_customer_party', asbie),
    ('originator_customer_party', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
],
Γ
    # Packaging List
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
```

```
('issue time', datetime ),
    ('name', name),
    ('description', text),
    ('note', text),
    ('version_id', identifier),
    ('other_instruction', text),
    ('consignor_party', asbie),
    ('carrier_party', asbie),
    ('freight_forwarder_party', asbie),
    ('shipment', asbie),
    ('document_reference', asbie),
    ('document_distribution', asbie),
    ('signature', asbie),
],
    # Prior Information Notice
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('note', text),
    ('planned_date', datetime_),
    ('document reference', asbie),
    ('signature', asbie),
    ('contracting_party', asbie),
    ('originator customer party', asbie),
    ('receiver_party', asbie),
    ('tendering_terms', asbie),
    ('tendering process', asbie),
    ('procurement_project', asbie),
    ('procurement_project_lot', asbie),
],
[
    # Product Activity
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('document_currency_code', code),
    ('activity_period', asbie),
```

```
('document reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('supply_chain_activity_data_line', asbie),
],
    # Quotation
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('u_u_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('pricing_currency_code', code),
    ('line_count_numeric', numeric),
    ('validity_period', asbie),
    ('request_for_quotation_document_reference', asbie),
    ('additional document reference', asbie),
    ('contract', asbie),
    ('signature', asbie),
    ('seller supplier party', asbie),
    ('buyer_customer_party', asbie),
    ('originator_customer_party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment_means', asbie),
    ('transaction conditions', asbie),
    ('allowance_charge', asbie),
    ('destination country', asbie),
    ('tax total', asbie),
    ('quoted_monetary_total', asbie),
    ('quotation_line', asbie),
],
Γ
    # Receipt Advice
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('u_u_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('document_status_code', code),
    ('receipt_advice_type_code', code),
    ('note', text),
```

```
('line count numeric', numeric),
    ('order_reference', asbie),
    ('despatch_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('delivery_customer_party', asbie),
    ('despatch_supplier_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('shipment', asbie),
    ('receipt_line', asbie),
],
    # Reminder
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('reminder_type_code', code),
    ('reminder_sequence_numeric', numeric),
    ('note', text),
    ('tax_point_date', datetime_),
    ('document_currency_code', code),
    ('tax currency code', code),
    ('pricing_currency_code', code),
    ('payment_currency_code', code),
    ('payment alternative currency code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('line count numeric', numeric),
    ('reminder_period', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
    ('payee_party', asbie),
    ('tax_representative_party', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('prepaid_payment', asbie),
    ('allowance_charge', asbie),
    ('tax_exchange_rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('payment_alternative_exchange_rate', asbie),
    ('tax_total', asbie),
    ('legal_monetary_total', asbie),
```

```
('reminder line', asbie),
],
    # Remittance Advice
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime ),
    ('note', text),
    ('document_currency_code', code),
    ('total_debit_amount', amount),
    ('total_credit_amount', amount),
    ('total payment amount', amount),
    ('payment_order_reference', text),
    ('payer_reference', text),
    ('invoicing_party_reference', text),
    ('line_count_numeric', numeric),
    ('invoice period', asbie),
    ('billing_reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('accounting_customer_party', asbie),
    ('accounting_supplier_party', asbie),
    ('payee party', asbie),
    ('payment_means', asbie),
    ('tax_total', asbie),
    ('remittance advice line', asbie),
],
    # Request for Quotation
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('submission_due_date', datetime_),
    ('note', text),
    ('pricing_currency_code', code),
    ('line_count_numeric', numeric),
    ('requested_validity_period', asbie),
    ('catalogue document reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
```

```
('originator customer party', asbie),
    ('seller_supplier_party', asbie),
    ('buyer_customer_party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('destination_country', asbie),
    ('contract', asbie),
    ('request_for_quotation_line', asbie),
],
    # Retail Event
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('retail_event_name', name),
    ('retail event status code', code),
    ('seller_event_id', identifier),
    ('buyer_event_id', identifier),
    ('description', text),
    ('period', asbie),
    ('original_document_reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('buyer customer party', asbie),
    ('seller_supplier_party', asbie),
    ('event_comment', asbie),
    ('promotional event', asbie),
    ('miscellaneous_event', asbie),
],
Γ
    # Self Billed Credit Note
    ('ubl version id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('tax_point_date', datetime_),
    ('note', text),
    ('document_currency_code', code),
    ('tax_currency_code', code),
```

```
('pricing currency code', code),
    ('payment_currency_code', code),
    ('payment_alternative_currency_code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('invoice_period', asbie),
    ('discrepancy_response', asbie),
    ('order_reference', asbie),
    ('billing reference', asbie),
    ('despatch_document_reference', asbie),
    ('receipt_document_reference', asbie),
    ('contract document reference', asbie),
    ('statement_document_reference', asbie),
    ('originator_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('accounting customer party', asbie),
    ('accounting_supplier_party', asbie),
    ('payee_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('tax representative party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment means', asbie),
    ('payment_terms', asbie),
    ('allowance_charge', asbie),
    ('tax exchange rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('payment alternative exchange rate', asbie),
    ('tax_total', asbie),
    ('legal monetary total', asbie),
    ('credit note line', asbie),
],
    # Self Billed Invoice
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('tax_point_date', datetime_),
    ('invoice_type_code', code),
    ('note', text),
    ('document_currency_code', code),
    ('tax_currency_code', code),
```

```
('pricing currency code', code),
    ('payment_currency_code', code),
    ('payment_alternative_currency_code', code),
    ('accounting_cost_code', code),
    ('accounting_cost', text),
    ('line_count_numeric', numeric),
    ('invoice_period', asbie),
    ('order_reference', asbie),
    ('billing_reference', asbie),
    ('contract document reference', asbie),
    ('despatch_document_reference', asbie),
    ('receipt_document_reference', asbie),
    ('statement document reference', asbie),
    ('originator_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('accounting_customer_party', asbie),
    ('accounting supplier party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('payee_party', asbie),
    ('tax_representative_party', asbie),
    ('delivery', asbie),
    ('delivery_terms', asbie),
    ('payment_means', asbie),
    ('payment terms', asbie),
    ('prepaid_payment', asbie),
    ('allowance_charge', asbie),
    ('tax exchange rate', asbie),
    ('pricing_exchange_rate', asbie),
    ('payment_exchange_rate', asbie),
    ('payment alternative exchange rate', asbie),
    ('tax_total', asbie),
    ('legal monetary total', asbie),
    ('invoice line', asbie),
],
    # Statement
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('document_currency_code', code),
    ('total_debit_amount', amount),
    ('total_credit_amount', amount),
    ('total_balance_amount', amount),
```

```
('line count numeric', numeric),
    ('statement_type_code', code),
    ('statement_period', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('accounting_supplier_party', asbie),
    ('accounting_customer_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('originator_customer_party', asbie),
    ('payee_party', asbie),
    ('payment_means', asbie),
    ('payment_terms', asbie),
    ('allowance_charge', asbie),
    ('tax_total', asbie),
    ('statement_line', asbie),
],
    # Stock Availability Report
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('document_currency_code', code),
    ('inventory_period', asbie),
    ('document reference', asbie),
    ('signature', asbie),
    ('seller supplier party', asbie),
    ('retailer customer party', asbie),
    ('inventory_reporting_party', asbie),
    ('stock_availability_report_line', asbie),
],
Γ
    # Tender
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('tender_type_code', code),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('contract_name', name),
```

```
('note', text),
    ('validity period', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
    ('tenderer_party', asbie),
    ('tenderer_qualification_document_reference', asbie),
    ('subcontractor_party', asbie),
    ('contracting_party', asbie),
    ('originator_customer_party', asbie),
    ('tendered_project', asbie),
],
    # Tender Oualification
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('note', text),
    ('version_id', identifier),
    ('previous version id', identifier),
    ('signature', asbie),
    ('tenderer_party_qualification', asbie),
    ('contracting party', asbie),
    ('evidence', asbie),
    ('additional_document_reference', asbie),
1,
Γ
    # Tenderer Qualification Response
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('contract_name', name),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('resolution_document_reference', asbie),
    ('qualification resolution', asbie),
    ('appeal_terms', asbie),
    ('signature', asbie),
```

```
1,
Γ
    # Tender Receipt
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('contract_folder_id', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('contract_name', name),
    ('note', text),
    ('registered_date', datetime_),
    ('registered_time', datetime_),
    ('tender document reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
],
Γ
    # Tender Item Location Profile
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('note', text),
    ('profile status code', code),
    ('period', asbie),
    ('document reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('buyer_customer_party', asbie),
    ('seller_supplier_party', asbie),
    ('item_management_profile', asbie),
],
    # Transportation Status
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('carrier_assigned_id', identifier),
```

```
('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('name', name),
    ('description', text),
    ('note', text),
    ('shipping_order_id', identifier),
    ('other_instruction', text),
    ('transportation_status_type_code', code),
    ('transport execution status code', code),
    ('consignment', asbie),
    ('transport_event', asbie),
    ('document reference', asbie),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('transportation_status_request_document_reference', asbie),
    ('transport execution plan document reference', asbie),
    ('updated_pickup_transport_event', asbie),
    ('updated_delivery_transport_event', asbie),
    ('status location', asbie),
    ('status_period', asbie),
1,
Γ
    # Transportation Status Request
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('carrier_assigned_id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('name', name),
    ('description', text),
    ('note', text),
    ('shipping order id', identifier),
    ('other_instruction', text),
    ('transportation_status_type_code', code),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('transport_execution_plan_document_reference', asbie),
    ('consignment', asbie),
    ('document_reference', asbie),
    ('signature', asbie),
    ('requested_status_location', asbie),
    ('requested_status_period', asbie),
],
Γ
    # Transport Execution Plan
    ('ubl_version_id', identifier),
```

```
('customization id', identifier),
    ('profile id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('version_id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('document_status_code', code),
    ('document_status_reason_code', code),
    ('document_status_reason_description', text),
    ('note', text),
    ('transport_user_remarks', text),
    ('transport_service_provider_remarks', text),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('transport user party', asbie),
    ('transport_service_provider_party', asbie),
    ('bill_to_party', asbie),
    ('signature', asbie),
    ('transport_execution_plan_request_document_reference', asbie),
    ('transport execution plan document reference', asbie),
    ('transport service description document reference', asbie),
    ('additional_document_reference', asbie),
    ('transport contract', asbie),
    ('transport service provider response required period', asbie),
    ('transport_user_response_required_period', asbie),
    ('validity period', asbie),
    ('main_transportation_service', asbie),
    ('additional_transportation_service', asbie),
    ('service start time period', asbie),
    ('service_end_time_period', asbie),
    ('from location', asbie),
    ('to location', asbie),
    ('at_location', asbie),
    ('transport execution terms', asbie),
    ('consignment', asbie),
],
    # Transport Execution Plan Request
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('version_id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('document_status_code', code),
```

```
('document status reason code', code),
    ('document_status_reason_description', text),
    ('note', text),
    ('transport_user_remarks', text),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('transport_user_party', asbie),
    ('transport_service_provider_party', asbie),
    ('payee_party', asbie),
    ('signature', asbie),
    ('transport_execution_plan_document_reference', asbie),
    ('transport_service_description_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('transport_contract', asbie),
    ('transport_service_provider_response_deadline_period', asbie),
    ('main_transportation_service', asbie),
    ('additional_transportation_service', asbie),
    ('service start time period', asbie),
    ('service_end_time_period', asbie),
    ('from_location', asbie),
    ('to_location', asbie),
    ('at_location', asbie),
    ('transport execution terms', asbie),
    ('consignment', asbie),
],
Γ
    # Transport Progress Status
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue date', datetime ),
    ('issue_time', datetime_),
    ('note', text),
    ('status available indicator', indicator),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('source_issuer_party', asbie),
    ('transport_progress_status_request_document_reference', asbie),
    ('transport_means', asbie),
    ('transport_schedule', asbie),
],
Γ
    # Transport Progress Status Request
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
```

```
('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
    ('transport_means', asbie),
    ('status_location', asbie),
],
    # Transport Service Description
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue time', datetime ),
    ('note', text),
    ('service_name', name),
    ('response code', code),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver party', asbie),
    ('transport_service_description_request_document_reference',
    asbie),
    ('transport service provider party', asbie),
    ('service_charge_payment_terms', asbie),
    ('validity period', asbie),
    ('transportation service', asbie),
],
    # Transport Service Description Request
    ('ubl_version_id', identifier),
    ('customization id', identifier),
    ('profile id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('note', text),
    ('service_information_preference_code', code),
    ('signature', asbie),
    ('sender_party', asbie),
    ('receiver_party', asbie),
```

```
('transport service provider party', asbie),
    ('transportation_service', asbie),
],
    # Utility Statement
    ('ubl_version_id', identifier),
    ('customization_id', identifier),
    ('profile_id', identifier),
    ('profile_execution_id', identifier),
    ('id', identifier),
    ('copy_indicator', indicator),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('utility_statement_type_code', code),
    ('note', text),
    ('document_currency_code', code),
    ('accounting cost code', code),
    ('accounting_cost', text),
    ('parent_document_reference', asbie),
    ('additional_document_reference', asbie),
    ('signature', asbie),
    ('sender party', asbie),
    ('receiver_party', asbie),
    ('customer_party', asbie),
    ('subscriber party', asbie),
    ('main_on_account_payment', asbie),
    ('subscriber_consumption', asbie),
1,
Γ
    # Waybill
    ('ubl version id', identifier),
    ('customization_id', identifier),
    ('profile id', identifier),
    ('profile execution id', identifier),
    ('id', identifier),
    ('carrier assigned id', identifier),
    ('uuid', identifier),
    ('issue_date', datetime_),
    ('issue_time', datetime_),
    ('name', name),
    ('description', text),
    ('note', text),
    ('shipping_order_id', identifier),
    ('ad_valorem_indicator', indicator),
    ('declared_carriage_value_amount', amount),
    ('other_instruction', text),
    ('consignor_party', asbie),
    ('carrier_party', asbie),
    ('freight_forwarder_party', asbie),
    ('shipment', asbie),
    ('document_reference', asbie),
```

```
('exchange rate', asbie),
                ('document_distribution', asbie),
                ('signature', asbie),
            ],
            # Awarded Notification
                ('ubl_version_id', identifier),
                ('customization_id', identifier),
                ('profile_id', identifier),
                ('profile execution id', identifier),
                ('id', identifier),
                ('copy_indicator', indicator),
                ('uuid', identifier),
                ('contract_folder_id', identifier),
                ('issue_date', datetime_),
                ('issue_time', datetime_),
                ('contract_name', name),
                ('note', text),
                ('sender_party', asbie),
                ('receiver_party', asbie),
                ('minutes document reference', asbie),
                ('additional_document_reference', asbie),
                ('tender result', asbie),
                ('final financial guarantee', asbie),
                ('signature', asbie),
            1
        1)
        self.registry = dict(zip(DocumentRegistry, self.values))
class UBLSchemaRegistry:
    def init (self):
        base url = 'http://docs.oasis-open.org/ubl/os-UBL-2.1/UBL-2.1.html'
        values = iter([
            '%s%s' % (base url, '#T-APPLICATION-RESPONSE'),
            '%s%s' % (base url, '#T-ATTACHED-DOCUMENT'),
            '%s%s' % (base_url, '#T-UNAWARDED-NOTIFICATION'),
            '%s%s' % (base url, '#T-BILL-OF-LADING'),
            '%s%s' % (base url, '#T-CALL-FOR-TENDERS'),
            '%s%s' % (base_url, '#T-CATALOGUE'),
            '%s%s' % (base_url, '#T-CATALOGUE-DELETION'),
            '%s%s' % (base_url, '#T-CATALOGUE-ITEM-SPECIFICATION-UPDATE'),
            '%s%s' % (base_url, '#T-CATALOGUE-PRICING-UPDATE'),
            '%s%s' % (base_url, '#T-CATALOGUE-REQUEST'),
            '%s%s' % (base_url, '#T-CERTIFICATE-OF-ORIGIN'),
            '%s%s' % (base_url, '#T-CONTRACT-AWARD-NOTICE'),
            '%s%s' % (base_url, '#T-CONTRACT-NOTICE'),
            '%s%s' % (base url, '#T-CREDIT-NOTE'),
            '%s%s' % (base_url, '#T-DEBIT-NOTE'),
            '%s%s' % (base_url, '#T-DESPATCH-ADVICE'),
```

```
'%s%s' % (base url, '#T-DOCUMENT-STATUS'),
    '%s%s' % (base_url, '#T-DOCUMENT-STATUS-REQUEST'),
    '%s%s' % (base_url, '#T-EXCEPTION-CRITERIA'),
    '%s%s' % (base url, '#T-EXCEPTION-NOTIFICATION'),
    '%s%s' % (base_url, '#T-FORECAST'),
    '%s%s' % (base_url, '#T-FORECAST-REVISION'),
    '%s%s' % (base_url, '#T-FORWARDING-INSTRUCTIONS'),
    '%s%s' % (base_url, '#T-FREIGHT-INVOICE'),
    '%s%s' % (base_url, '#T-FULFILMENT-CANCELLATION'),
    '%s%s' % (base url, '#T-GOODS-ITEM-ITINERARY'),
    '%s%s' % (base_url, '#T-GUARANTEE-CERTIFICATE'),
    '%s%s' % (base_url, '#T-INSTRUCTION-FOR-RETURNS'),
    '%s%s' % (base url, '#T-INVENTORY-REPORT'),
    '%s%s' % (base_url, '#T-INVOICE'),
    '%s%s' % (base_url, '#T-ITEM-INFORMATION-REQUEST'),
    '%s%s' % (base url, '#T-ORDER'),
    '%s%s' % (base_url, '#T-ORDER-CANCELLATION'),
    '%s%s' % (base url, '#T-ORDER-CHANGE'),
    '%s%s' % (base url, '#T-ORDER-RESPONSE'),
    '%s%s' % (base_url, '#T-ORDER-RESPONSE-SIMPLE'),
    '%s%s' % (base url, '#T-PACKING-LIST'),
    '%s%s' % (base_url, '#T-PRIOR-INFORMATION-NOTICE'),
    '%s%s' % (base_url, '#T-PRODUCT-ACTIVITY'),
    '%s%s' % (base_url, '#T-QUOTATION'),
    '%s%s' % (base_url, '#T-RECEIPT-ADVICE'),
    '%s%s' % (base url, '#T-REMINDER'),
    '%s%s' % (base_url, '#T-REMITTANCE-ADVICE'),
    '%s%s' % (base_url, '#T-REQUEST-FOR-QUOTATION'),
    '%s%s' % (base url, '#T-RETAIL-EVENT'),
    '%s%s' % (base_url, '#T-SELF-BILLED-CREDIT-NOTE'),
    '%s%s' % (base_url, '#T-SELF-BILLED-INVOICE'),
    '%s%s' % (base url, '#T-STATEMENT'),
    '%s%s' % (base_url, '#T-STOCK-AVAILABILITY-REPORT'),
    '%s%s' % (base url, '#T-TENDER'),
    '%s%s' % (base url, '#T-TENDER-RECEIPT'),
    '%s%s' % (base_url, '#T-TENDERER-QUALIFICATION-RESPONSE'),
    '%s%s' % (base url, '#T-TENDERER-QUALIFICATION'),
    '%s%s' % (base url, '#T-TRADE-ITEM-LOCATION-PROFILE'),
    '%s%s' % (base_url, '#T-TRANSPORT-EXECUTION-PLAN'),
    '%s%s' % (base url, '#T-TRANSPORT-EXECUTION-PLAN-REQUEST'),
    '%s%s' % (base url, '#T-TRANSPORT-PROGRESS-STATUS'),
    '%s%s' % (base_url, '#T-TRANSPORT-PROGRESS-STATUS-REQUEST'),
    '%s%s' % (base url, '#T-TRANSPORT-SERVICE-DESCRIPTION'),
    '%s%s' % (base_url, '#T-TRANSPORT-SERVICE-DESCRIPTION-REQUEST'),
    '%s%s' % (base_url, '#T-TRANSPORTATION-STATUS'),
    '%s%s' % (base_url, '#T-TRANSPORTATION-STATUS-REQUEST'),
    '%s%s' % (base_url, '#T-UTILITY-STATEMENT'),
    '%s%s' % (base_url, '#T-WAYBILL'),
    '%s%s' % (base_url, '#T-AWARDED-NOTIFICATION'),
self.registry = dict(zip(DocumentRegistry, values))
```

1)

```
class BaseIterator(Iterable):
   def __init__(self):
        self.registry = dict()
    def __getitem__(self, item):
        return self.registry.get(item)
    def contains (self, item):
        return item in self.registry
    def __setitem__(self, key, value):
        alias = self.__class__.__name__
        raise RuntimeError('%s definitions, key: %s and value: %s cannot be '
                           'modified' % alias, key, value)
    def delattr (self, item):
       alias = self.__class__.__name__
        raise RuntimeError('%s attribute, %s cannot be deleted' % alias, item)
    def __iter__(self):
        for entry in self.registry:
            yield entry
   @classmethod
    def get(cls, item):
        return cls().registry.get(item)
class ComponentIterator(BaseIterator):
   def __init__(self):
        super(ComponentIterator, self).__init__()
        self.registry = UBLComponentRegistry().registry
class DocumentIterator(BaseIterator):
    def __init__(self):
        super(DocumentIterator, self).__init__()
        self.registry = UBLDocumentRegistry().registry
class SchemaIterator(BaseIterator):
   def __init__(self):
        super(SchemaIterator, self).__init__()
        self.registry = UBLSchemaRegistry().registry
class Descriptor:
```

```
registry = None
    def __get__(self, instance, owner):
        if instance or owner:
            return self._registry
    def __set__(self, instance, value):
        alias = instance.__class__.__name__
        raise RuntimeError('%s definitions cannot be modified' % alias)
   def __delete__(self, instance):
        alias = instance.__class__.__name__
        raise RuntimeError('%s definitions cannot be modified' % alias)
class ComponentDescriptor(Descriptor):
    def init (self):
        self._registry = UBLComponentRegistry().registry
class DocumentDescriptor(Descriptor):
   def init (self):
        self. registry = UBLDocumentRegistry().registry
class SchemaDescriptor(Descriptor):
   def __init__(self):
        self. registry = UBLSchemaRegistry().registry
class Components(ComponentIterator):
    __registry__ = Descriptor()
   def init (self):
        super(Components, self).__init__()
    @classmethod
    def field_definition(cls, component, field):
        data = None
        entries = cls.get(component)
        if entries:
            check = itertools.filterfalse(lambda x, y: x != field,
                                          entries.keys())
            if check:
                _, data = check.pop()
        return type(data)
class Documents(DocumentIterator):
    __registry__ = DocumentDescriptor()
```

```
@classmethod
    def is_valid(cls, document, definition=None):
        # determine if a given document meets the specified or
        # default definition
        # definition should be an iterable of fields and respective values
        document_map = cls.get(document)
        return document_map == definition
    @classmethod
    def document_definition(cls, document):
        document_map = cls.get(document)
        if document map:
            return dict(document_map)
class Schemas(SchemaIterator):
    # URI schema definition for listed documents
    __registry__ = SchemaDescriptor()
    def init (self):
        super(Schemas, self).__init__()
    def __iter__(self):
        schemas = itertools.filterfalse(lambda x: x == 'base_url',
                                        self.registry)
        for schema in schemas:
            yield schema
    @classmethod
    def schemas(cls):
        return itertools.filterfalse(lambda x: x == 'base url',
                                     cls().registry)
    @classmethod
    def document_schema(cls, name):
        return cls().registry.get(name)
class BusinessProcesses(DocumentIterator):
    def __init__(self):
        super(BusinessProcesses, self).__init__()
        bd = DocumentRegistry
        self.registry = dict(zip(
                ProcessRegistry.BILLING,
                ProcessRegistry.CATALOGUE,
                ProcessRegistry.CERTIFICATE_OF_ORIGIN_OF_GOODS,
                ProcessRegistry.CHANGES TO THE ARTICLE CATALOGUE,
                ProcessRegistry.CHANGES_TO_THE_ITEM_CATALOGUE,
                ProcessRegistry.COLLABORATIVE_PLANNING,
```

```
ProcessRegistry.CREATE CATALOGUE,
    ProcessRegistry.CYCLIC REPLENISHMENT PROGRAM,
    ProcessRegistry.DELETE CATALOGUE,
    ProcessRegistry.FORECASTING,
    ProcessRegistry.FREIGHT_BILLING,
    ProcessRegistry.FREIGHT_MANAGEMENT,
    ProcessRegistry.FREIGHT_STATUS_REPORTING,
    ProcessRegistry.FULFILLMENT,
    ProcessRegistry.FULFILMENT_WITH_DESPATCH_ADVICE,
    ProcessRegistry.FULFILMENT WITH RECEIPT ADVICE,
    ProcessRegistry.INITIAL_STOCKING_OF_THE_AREA_BY_PRODUCER,
    ProcessRegistry.INTERMODAL_FREIGHT_MANAGEMENT,
    ProcessRegistry.ORDERING,
    ProcessRegistry.PAYMENT_NOTIFICATION,
    ProcessRegistry.PERMANENT_REPLENISHMENT,
    ProcessRegistry.PRICE ADJUSTMENTS,
    ProcessRegistry.QUOTATION,
    ProcessRegistry.REPLENISHMENT,
    ProcessRegistry.TENDERING,
    ProcessRegistry.TRANSFER_OF_BASE_ITEM_CATALOGUE,
    ProcessRegistry.UPDATE CATALOGUE ITEM SPECIFICATION,
    ProcessRegistry.UPDATE_CATALOGUE_PRICING,
    ProcessRegistry.UTILITY_BILLING,
    ProcessRegistry. VENDOR INVENTORY,
),
    (bd.APPLICATION RESPONSE, bd.ATTACHED DOCUMENT,
    bd.DOCUMENT_STATUS,
    bd.DOCUMENT STATUS REQUEST),
    (bd.CREDIT NOTE, bd.DEBIT NOTE, bd.INVOICE, bd.REMINDER,
    bd.SELF_BILLED_CREDIT_NOTE, bd.SELF_BILLED_INVOICE,
    bd.STATEMENT),
    (bd.CATALOGUE, bd.CATALOGUE DELETION,
    bd.CATALOGUE ITEM SPECIFICATION UPDATE,
    bd.CATALOGUE PRICING UPDATE, bd.CATALOGUE REQUEST),
    (bd.CERTIFICATE OF ORIGIN, ),
    (bd.CATALOGUE, ),
    (bd.CATALOGUE, ),
    (bd.EXCEPTION_CRITERIA, bd.EXCEPTION_NOTIFICATION, bd.FORECAST,
    bd.ITEM INFORMATION REQUEST, bd.PRODUCT ACTIVITY,
    bd.TRADE ITEM LOCATION PROFILE),
    (bd.CATALOGUE, ),
    (bd.INSTRUCTION_FOR_RETURNS, bd.INVENTORY_REPORT,
    bd.RETAIL EVENT, bd.STOCK AVAILABILITY REPORT),
    (bd.CATALOGUE, ),
    (bd.EXCEPTION CRITERIA, ),
    (bd.FREIGHT_INVOICE, ),
    (bd.BILL_OF_LADING, ),
    (bd.TRANSPORTATION_STATUS, ),
    (bd.DESPATCH ADVICE, bd.ORDER CANCELLATION, bd.ORDER CHANGE,
    bd.RECEIPT_ADVICE, ),
    (bd.FULFILMENT_CANCELLATION, ),
```

```
(bd.FULFILMENT CANCELLATION, ),
            (bd.CATALOGUE, ),
            (bd.GOODS ITEM ITINERARY, bd.TRANSPORT EXECUTION PLAN,
             bd.TRANSPORT EXECUTION PLAN REQUEST,
             bd.TRANSPORT PROGRESS STATUS,
             bd.TRANSPORT_PROGRESS_STATUS_REQUEST,
             bd.TRANSPORT SERVICE DESCRIPTION,
             bd.TRANSPORT_SERVICE_DESCRIPTION_REQUEST),
            (bd.ORDER, bd.ORDER_CANCELLATION, bd.ORDER_CHANGE,
             bd.ORDER RESPONSE, bd.ORDER RESPONSE SIMPLE),
            (bd.REMITTANCE_ADVICE, ),
            (bd.CATALOGUE, ),
            (bd.CATALOGUE, ),
            (bd.QUOTATION, bd.REQUEST_FOR_QUOTATION),
            (bd.EXCEPTION_CRITERIA, bd.EXCEPTION_NOTIFICATION, bd.FORECAST,
             bd.FORECAST REVISION, bd.FORECAST REVISION,
             bd.ITEM_INFORMATION_REQUEST,
             bd.PRODUCT ACTIVITY, bd.TRADE ITEM LOCATION PROFILE),
            (bd.AWARDED NOTIFICATION, bd.CALL FOR TENDERS,
             bd.CONTRACT_AWARD_NOTICE,
             bd.CONTRACT NOTICE, bd.GUARANTEE CERTIFICATE,
             bd.PRIOR INFORMATION NOTICE, bd.TENDER,
             bd.TENDERER QUALIFICATION,
             bd.TENDERER QUALIFICATION RESPONSE, bd.TENDER RECEIPT,
             bd.UNAWARDED NOTIFICATION),
            (bd.CATALOGUE, ),
            (bd.CATALOGUE, ),
            (bd.CATALOGUE, ),
            (bd.UTILITY STATEMENT, ),
            (bd.PRODUCT ACTIVITY, ),
        )
    ))
@staticmethod
def document lookup(self, process, documents=None):
    transaction_docs = self.registry.get(process, None)
    if transaction docs and isinstance(documents, list):
        return itertools.chain(transaction docs, (x for x in documents if
                                                  x in ComponentRegistry))
    else:
        return iter(transaction docs)
```