DDR Credit, Equity and Rates[1] Matrices

The DDR credit, equity and rates matrices included in Exhibit GG2,GG4 and GG6, respectively, set forth the data fields in the credit, equity and rates derivatives asset classes that reporting sides shall provide to DDR pursuant to Commission rules 901(c), (d), and (e) and according to DDR prescribed data formats and standards. In total, the credit asset class includes 127 data elements, the equity asset class includes 214 data elements and the rates asset class includes 142 data elements.

In the matrices, the data fields are organized according to the order set forth under rule 901, and the applicable SEC provisions are specified under the "SEC Rule" column. DDR will provide the matrices to its on-boarded customers ("User" or "Users") together with the DDR User guide.

Column Descriptions

The following provides a description of each of the columns in the matrices.

Category includes the following permissible values: *Primary*, *Secondary*, *Life Cycle*, and *GTR*. *Primary* relates to all of the data fields required under rule 901(c) related to primary trade information. *Secondary* relates to all of the required data fields under rule 901(d) related to secondary trade information. *Life Cycle* refers to the data elements required to satisfy the reporting of life cycle events pursuant to rule 901(e). *GTR* represents those data fields that DDR has identified as necessary for maintaining or processing the trade.

Public Dissemination indicates those fields that will be eligible for public dissemination as defined under rule 900(cc) and 902 and pursuant to SEC regulations.

Data Field represents DDR's label for a particular data element. For each data field in the matrices, DDR references the corresponding SEC rule and provides a Description of the data field.

Product (*applicable to equity matrix only*) indicates whether a particular data element is applicable to only certain types of equity transactions or all types of equity transactions. Product types include the following: cross-product, option, structured product, dividend swap, forward, variance swap, and ES-PSA-CFD. "Cross-product" means the data element applies to all equity transactions. "ES-PSA-CFD" means that the data element applies to equity swaps, portfolio swap agreements, and cash for difference transactions.

Conditionality defines whether a data field is *Required* ("R"), *Conditional* ("C"), or *Optional* ("O"). In the credit asset class, there are 34 Required, 59 Conditional, and 34 Optional data fields. In the equity asset class, there are 27 Required, 159 Conditional, and 28 Optional data fields. In the rates asset class, there are 25 Required, 85 Conditional, and 32 Optional data fields.

---

[1] DDR has included the Rates asset class based upon industry feedback advising of security-based product underliers.

- A designation of R means that, in order for a trade record to be accepted, the DDR User must (1) populate the data field, and (2) adhere to the data formats and valid values as prescribed in the matrices for the data element. Such requirements enable DDR to verify the completeness of the trade record and the validity of the data standards and formats contained in the trade record.

- A designation of C means that the data field is subject to a conditional rule that is triggered by the population of another field and would become a Required field if such other field is populated. For example, field A, categorized as a Conditional field tied to field B, would become a Required field if field B were to be populated.

- If a Required or Conditional data field is not complete or invalid according to the prescribed data format and valid values, DDR will reject the trade record and notify the User based upon its submission method and as described in the DDR User Guide. The User must provide to DDR both a complete and valid trade record in order for it to be ingested by DDR.

- A designation of O means that (1) the data field may or may not be applicable to a trade record; or (2) the User may not have the information to populate such data field. For example, DDR has categorized the data element "platform ID" as Optional because it may not apply to a particular trade. DDR will not reject trade records on the basis of Optional data elements. For any Optional field related to a Unique Identification Code as prescribed by SEC regulations, DDR will provide its Users with end-of-day reports with any missing information. DDR Users, reporting or non-reporting side, shall update the record to provide the missing data elements.

DDR data formats are prescribed by the following columns in the matrices: Data Type, Scale, Precision, Format, and Valid Values.

Data Type includes the following types: *Boolean* (applicable to Credit only), *Date*, *DateTime*, *Time* (applicable to Rates only), *Numeric*, and *Text*.

- Boolean permits solely two values—either "True" or "False" or Yes ("Y") or No ("N").

- Date means that the data element must conform to the following format: YYYY-MM-DD.

- DateTime requires a format of both date and time according to the Coordinated Universal Time (UTC) format.

- Numeric means that solely numerical values are acceptable and the extent of the numeric values are defined in the Precision and Scale columns.

- Text means that permissible values are alphanumeric and the extent of the alphanumeric values are defined in the Precision column.

Precision and Scale. For every numeric value, both Precision and Scale are prescribed. Precision indicates the number of digits in a number and Scale indicates the number of digits to the right of the decimal point in a number.

Format provides additional information regarding the data type and construct to generate a valid value. For example, under "date," the corresponding format is YYYY-MM-DD.

Valid Values indicates the acceptable inputs for a data element where only a specified list of values is permissible.

Sample provides an output example of the data element taking into account the prescribed data formats and valid values, if applicable.

Validation Rule describes the validation rule that DDR will apply to verify the completeness and validity of a trade record. The validation rules will verify whether applicable and relevant fields are populated according to the conditional value identified in the Conditionality column. With respect to the equity matrix, "Not Applicable" in this column means the particular data field will not be processed by DDR. "Not Allowed" means that the entire trade record would be rejected if that particular data field were to be included in a submission.

Narrative provides additional, explanatory information related to the data field or its use, which is not otherwise noted in the other columns.

Public Dissemination

As a preliminary matter, DDR Users shall submit price dissemination messages solely when it is instructing DDR to publicly disseminate such data fields pursuant to the applicable SEC regulations.

DDR will publicly disseminate data subject to the following conditions: (1) a User submits a public dissemination message (*i.e.,* a "real-time message" field) in a trade record; and (2) such record satisfies the prescribed data formats and includes the relevant flags.

Reporting Life Cycle Events and Corrections to Previously Submitted Information

If a correction is required to trade information, a User will instruct DDR of such correction through the message formats made available by DDR.

In particular, a User's submission of a trade record with a Valid Value of "Modify" under the "Action" data field and a "Yes" under "Public Dissemination" would instruct DDR to issue an updated price dissemination message as a correction with the corrected fields from the trade record. Alternatively, if a User seeks to cancel a prior publicly disseminated message, a User could submit a "Cancel" message under the "Action" data field.

Further, DDR would update transaction information with any updated secondary trade information that is included in the trade record.

Flags

In terms of flags that are applied to publicly disseminated reports to help prevent a distorted view of the market, DDR has established the following flags that indicate that additional information is needed to understand the publicly disseminated price: Inter-affiliate, Nonstandard flag, Off market flag, Pricing context, and Compressed trade. Further information regarding the flags is available in the matrices under the Narrative column.