



FRTB Accelerator (Standard Approach) Input File Formats Version 2.1

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FRTB Accelerator (Standard Approach) Input File Formats

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1. Overview

This document contains the file formats for the CSV files that can be used by clients as input to the ActivePivot FRTB (SA) Accelerator Reference Implementation.

Sample input files are included in the source distribution. These files are loaded during testing of the reference implementation and provide examples of each of the file types.

Firstly, the format of the Trade Attributes file is shown, together with the definitions of all the fields within each 'record' (i.e. row). This file is common between the SA and IMA Implementations.

The first table in this section contains an extract from a spreadsheet that indicates the Risk Classes for which each field is valid and meaningful.

Following this, there is table that provides the definitions of all of the fields within each Trade Input record.

Next there is a section which contains spreadsheets and tables for each of the sensitivities, Delta, Vega and Curvature.

For each sensitivity, there is a table that shows each field and the Risk Classes for which this field is valid and required.

Below the information for each of these sensitivities (Delta, Vega and Curvature), there is a table that shows every field, together with a general definition for that field. It also provides, where applicable, specific definitions for the field, related to each of the Risk Classes for which the field is required.

The sets of files for SA include:

- Configuration files
- SBM sensitivity-specific files
- Buckets
- DRC trade level files
- Currency files

Note on glob: The FRTB Accelerator uses glob patterns with the (*) asterisk wildcard character to identify the relevant file names for each category of input file. For example, the pattern `**/FXData*.csv` matches all CSV files with names beginning with the string "FXData" in any subdirectory.

In this guide, the File Pattern Match section for each of the input files specifies the glob pattern used. However, the glob prefix is omitted as it is now injected automatically.

You can customize the glob patterns in the `frtb-data-load.properties` file.

1.1 Configuration Files

These files are shared between IMA, IMA Summary and SA and are included in this document for completeness for those clients only implementing SA:

- Trade Attributes Input File (see chapter 2 – Trade Attributes Input File Format)
- Legal Entity Parent Child Input File (see chapter 6 – Portfolio Input File Formats Portfolio Input File Formats)
- Book Parent Child Input File (see chapter 6 – Portfolio Input File Formats)
- FX Rates Input File (see chapter 7 – FX Rates File Formats)

1.2 SBM Sensitivity-specific Files

See chapter 3 - SBM Sensitivity-specific Input Files

- Delta Input File
- Vega Input File
- Curvature Input File

1.3 Bucket Files

See chapter 4 - Buckets

- CSR non-Sec Buckets
- CSR Sec CTP Buckets
- CSR Sec non-CTP Buckets
- CSR non-Sec Bucket Descriptions File
- CSR Sec CTP Bucket Descriptions File
- CSR Sec non-CTP Bucket Descriptions File
- Equity Buckets
- Commodity Buckets

1.4 DRC Trade Level Files

See chapter 5 - DRC Trade Level Input File Formats

- DRC Trade Level Input File

- Instrument to LGD File
- DRC non-Sec Default Risk Weights File
- DRC Buckets File
- DRC Seniority Description File
- DRC non-Sec Obligor Weight Override File
- DRC Sec non-CTP ERBA Risk Weight File

1.5 Currency Files

- GIRR Major Currency Input File (see chapter 8 – Currency File Formats)

2. Trade Attributes Input File Format

2.1 The File Pattern Match

The pattern match for the Trade Attributes file is: ****{Trade_Attributes,SA_Trades}*.csv** (see “Note on glob” in the Overview section)

2.2 File Purpose

This file describes the trade, including book and legal entity, notional and prevent value.

2.3 The Input Fields

The Trades/Positions input fields are shown within the following table:

	AsOfDate	TradeId	Book	Legal Entity	Notional	Notional Ccy	Present Value	PVCcy	ResidualRisk	ExoticUnderlying	OtherResidualRiskType	
Component												Component
SBM	✓	✓	✓	✓			Opt	Opt				SBM
RRAO	✓	✓	✓	✓	✓	✓			✓	✓	Opt	RRAO
DRC non-Sec	✓	✓	✓	✓	✓	✓	✓	✓				DRC non-Sec
DRC Sec non-CTP	✓	✓	✓	✓	✓	✓	✓	✓				DRC Sec non-CTP

Three cells are marked as ‘Opt’ meaning Optional. For SBM Curvature only, if PVApplied is ‘No’ (within a Curvature Sensitivities row), then ‘PresentValue’ and ‘PVCcy’ are required. The definitions of the above fields are as follows:

Field	Field Type	Description
AsOfDate	Date ‘YYYY-MM-DD’	Timestamp (at close of business) for the data.
TradeId	String	(e.g. “IR_IRSWAP_LIBOR3M”, “EQ_12345677”, etc.) – if coming from multiple systems may need to prepend source system to the id for uniqueness
Book	Alphanumeric String	The book to map the trade to (must match the node in the Book Hierarchy)
Legal Entity	Alphanumeric String	Legal Entity to map the trade to (must match the node in the Legal Entity Hierarchy)

Field	Field Type	Description
Notional	Double	Notional of trade/position (used for RRAO and DRC)
NotionalCcy	String	Currency of notional
PresentValue	Double	Current present value of trade/position (used in curvature and DRC)
PVCcy	String	Currency of present value
ResidualRisk	'Y' or 'N'	Indicates trade/position subject to residual risk add-on
ExoticUnderlying	'Y' or 'N'	If yes and residual risk, risk weight = 1% otherwise if residual risk, weight = .1%
OtherResidualRiskType	String	Optional data - valid if ExoticUnderlying = 'N'. Suggested valid values are "GAP", "CORRELATION", "BEHAVIORIAL", "OTHER"

3. SBM Sensitivity-specific Input Files

The following section provides screenshots and tables containing descriptions of the required input files specific to Delta, Vega and Curvature.

3.1 Delta Input File Formats

3.1.1 The File Pattern Match

The pattern match for the Delta file is: ****/SB*_Delta_Sensitivities*.csv**
(see **“Note on glob”** in the Overview section)

3.1.2 File Purpose

This file defines the Delta sensitivities, including a description of the risk factor.

3.1.3 The Input Fields

The Delta input fields are shown within the following table:

	AsOfDate	Tradeld	DeltaCcy	DeltaSensitivities	RiskClass	SensitivityDates	RiskFactor	RiskFactorType	RiskFactorCcy	Underlying	CSRQuality	CSRSector	CSRTranche	EquityEconomy	EquityMarketCap	EquitySector	ComtyLocation	ComtyTime	ComtyGrade	ComtyRoute	FXCounterCurrency	Optionality	CSRRating	FXComplexDelta	FXOtherCcy	FXDivisorEligibility		
Risk Class																												Risk Class
GIRR	✓	✓	✓	✓	✓	✓	Opt	✓	✓	✓												✓						GIRR
CSR non-Sec	✓	✓	✓	✓	✓	✓	Opt	✓		✓	✓	✓										✓	✓					CSR non-Sec
CSR Sec CTP	✓	✓	✓	✓	✓	✓	Opt	✓		✓	✓	✓										✓	✓					CSR Sec CTP
CSR Sec non-CTP	✓	✓	✓	✓	✓	✓	Opt	✓		✓	✓	✓	✓									✓	✓					CSR Sec non-CT
Equity	✓	✓	✓	✓	✓		Opt	✓						✓	✓	✓						✓						Equity
Commodity	✓	✓	✓	✓	✓	✓	Opt	Opt		✓	✓	✓					✓	✓	✓	✓		✓					Commodity	
FX	✓	✓	✓	✓	✓		Opt															✓	✓		Opt	Opt	Opt	FX

The definitions/ meanings of the Delta input fields shown above are as follows:

Field	Field Type	Risk Class	Description
AsOfDate	Date 'YYYY-MM-DD'		Timestamp (at close of business) for the data.
Tradeld	String		(e.g. "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.) – if coming from multiple systems may need to prepend source system to the id for uniqueness
DeltaCcy	String		Currency of the Delta sensitivities provided
DeltaSensitivities	Double Array or Double,		Single value or vector of delta sensitivities
		GIRR	Vector of Sensitivities
		CSR non-Sec	Vector of Sensitivities

Field	Field Type	Risk Class	Description
	separated by semicolons	CSR Sec CTP	Vector of Sensitivities
		CSR Sec non-CTP	Vector of Sensitivities
		Equity	Sensitivity (single value)
		Commodity	Vector of Sensitivities
		FX	Sensitivity (single value)
RiskClass	String		Defines the risk class that the delta data represents
		GIRR	"GIRR"
		CSR non-Sec	"CSR non-Sec"
		CSR Sec CTP	"CSR Sec CTP"
		CSR Sec non-CTP	"CSR Sec non-CTP"
		Equity	"Equity"
		Commodity	"Commodity"
SensitivityDates	String Array or String with set format, separated by semicolons		Vector of dates that correspond to the Delta sensitivities. If dates are not provided, Delta Sensitivities are assumed to map to prescribed vertices. For FX and Equity, this value should be NULL
		GIRR	See description above. Note: For inflation and basis curves, this field can be left empty.
		CSR non-Sec	See description above
		CSR Sec CTP	See description above
		CSR Sec non-CTP	See description above
		Commodity	See description above
RiskFactor	String		Underlying risk factor (may be more than one) of the risk class. It is expected that the risk factor name encompasses the definition of the risk factor per the FRTB specification (paragraphs 59-66). This field is optional. If not provided, it must be generated from the 'Underlying' column
		GIRR	Name of underlying curve (e.g. UsdLibor3m). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).
		CSR non-Sec	Name of issuer credit spread curve plus basis (Bond or CDS). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).
		CSR Sec CTP	Name of issuer credit spread curve plus basis (Bond or CDS). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).

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Field	Field Type	Risk Class	Description
		CSR Sec non-CTP	Name of issuer tranche, credit spread curve. If RiskFactor is not provided in the input file, then it is calculated as (Underlying + Tranche + RiskFactorType).
		Equity	Name of equity plus type (spot or repo) (e.g. "IBM_SPOT"). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).
		Commodity	Unique commodity name should include commodity name, grade, and delivery time. If RiskFactor is not provided in the input file, then it is calculated as (Underlying + Grade + Location).
		FX	A currency pair (the exchange rate used in the calculation of the sensitivity). If omitted, it is generated from the underlying and FXCounterCurrency. Note: For Delta and Curvature, BCBS 547 defines the risk factor as only a single currency. To support multiple jurisdictions, the accelerator also needs to be able to distinguish Delta and Curvature risk factors by their reporting currency, hence a currency pair is used.
RiskFactorType	String		Type of underlying risk factor. Needed for some risk classes.
		GIRR	Defines type of underlying curve. Valid values are: "Yield", "Basis", or "Inflation"
		CSR non-Sec	Defines basis of CSR "BOND" or "CDS"
		CSR Sec CTP	Defines basis of CSR "BOND" or "CDS"
		CSR Sec non-CTP	Defines basis of CSR "BOND" or "CDS"
		Equity	Equity type: "Spot" or "Repo" (OR must contain "Spot" or "Repo")
		Commodity	Commodity Type. Proposed list is as follows: 'Energy-Solid' 'Energy-Liquid' 'Energy-Electric and carbon trading' 'Freight' 'Gaseous Combustibles' 'Non-precious Metals' 'Precious Metals' 'Grains & Oilseed' 'Livestock & Dairy' 'Softs and other agriculturals' 'Other'
RiskFactorCcy	String		Valid for GIRR Only

Field	Field Type	Risk Class	Description
		GIRR	This is the currency of the curve and equals the bucket.
Underlying	String		Represents the primary component of the risk factor. For example, a risk factor for commodity might include commodity name, grade, time etc. In this sense, we want to capture just the name of the commodity
		GIRR	Name of curve (may be the same as risk factor)
		CSR non-Sec	Name of issuer credit spread curve
		CSR Sec CTP	Name of issuer credit spread curve
		CSR Sec non-CTP	Name of issuer credit spread curve
		Equity	Name of equity issuer
		Commodity	Unique commodity name without any additional identifying data such as delivery time, freight route, etc.
		FX	This should be a single currency. It is the risk factor (as defined in BCBS 457).
CSRQuality	String		Valid only for the CSR RiskClasses: "CSR non-Sec" "CSR Sec CTP" "CSR Sec non-CTP" - needed for Vega bucket
		CSR non-Sec	Values must match "Buckets" file
		CSR Sec CTP	Values must match "Buckets" file
		CSR Sec non-CTP	Values must match "Buckets" file
CSRSector	String		Valid only for the CSR RiskClasses: "CSR non-Sec" "CSR Sec CTP" "CSR Sec non-CTP" - needed for Vega bucket
		CSR non-Sec	Values must match "Buckets" file Example values are: 'Sovereign' 'Local Govt' 'Financials' 'Basic Materials' 'CSG' (consumer goods and services) 'Tech' 'Health and Utilities' 'Covered Bonds' 'Other'
		CSR Sec CTP	Values must match "Buckets" file Example values are: 'Sovereign'

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Field	Field Type	Risk Class	Description
			'Local Govt' 'Financials' 'Basic Materials' 'CSG' (consumer goods and services) 'Tech' 'Health and Utilities' 'Covered Bonds' 'Other'
		CSR Sec non-CTP	Values must match "Buckets" file Example values are: 'RMBS-Prime' 'RMBS-Mid-Prime' 'RMBS-Sub-Prime' 'CMBS' 'ABS-Student Loans' 'ABS-Credit Cards' 'ABS-Auto' 'CLO-non-CTP' 'Other'
CSRTranche	String (for now)		Required only for RiskClass: "CSR Sec non-CTP" - needed for correlation
		CSR Sec non-CTP	Tranche (needed for correlation calculation)
EquityEconomy	String		Valid for Equity only - needed for Vega bucket
		Equity	Valid values are 'Emerging Market', 'Advanced Economy', or 'Other'
EquityMarketCap	String		Valid for Equity only - needed for Vega bucket
		Equity	Valid values are 'Large' 'Small', or 'Other'
EquitySector	String		Valid for Equity only - needed for Vega bucket
		Equity	Value can be anything but must match the "Buckets" file Example values are "CSG" "Telecommunications-Industrials" "Basic Materials" "Financials" "Other"
CmtyLocation	String		Valid for Commodity only - needed for correlation
		Commodity	String describing delivery location (e.g. "Northeast")
CmtyTime	String		Valid for Commodity only - needed for correlation
		Commodity	String to determine time of delivery (e.g. 'Summer', 'Q2')

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Field	Field Type	Risk Class	Description
CmtyGrade	String		This field is ignored in the calculations. Note: If two risk factors differed by the grade, they will now be the same risk factor.
		Commodity	
CmtyRoute	String		Valid for Commodity only
		Commodity	Defines the route used for delivery (e.g. "dry-bulk")
FXCounterCurrency	String		Valid for FX only
		FX	This should be set to the "reporting currency" or the "base currency" if the base currency approach is being used.
Optionality	'Y' or 'N'		Indicates whether the instrument has optionality (See BCBS 457 [MAR21.2]). It is set to 'Y' for instruments with optionality (and hence with Vega and Curvature risk); set to 'N' for trades without optionality (with no Vega and Curvature risk).
CSRRating	String		Valid for CSR non-Sec only
		CSR non-Sec	Set to "high" for covered bonds with rating AA- or above; otherwise set to "low" or leave blank
FxComplexDelta	String		Valid for FX only
		FX	Set to "Y" if the trade is too complex to automatically translate the sensitivities from the base currency or between jurisdictions; otherwise set to "N" or leave blank.
FxOtherCcy	String		Valid for FX only
		FX	If this currency involves a currency pair, the other currency in the pair.
FXDivisorEligibility	String		Valid for FX only
		FX	Y/N flag indicating whether the divisor specified in [MAR21.98] can be applied. <ul style="list-style-type: none"> Y: The trade does not reference the "reporting currency" (or "base currency" if the base currency approach is being used). N: The trade references the "reporting currency" (or "base currency" if the base currency approach is being used).

3.2 Vega Input File Formats

3.2.1 The File Pattern Match

The pattern match for the Vega file is: ****/SB*_Vega_Sensitivities*.csv**
(see "Note on glob" in the Overview section)

3.2.2 File Purpose

This file defines the Vega sensitivities, including a description of the risk factor.

3.2.3 The Input Fields

The Vega input fields are shown within the following table:

	AsOfDate	Tradeld	RiskClass	OptionMaturity	UnderlyingMaturity	VegaSensitivities	VegaCcy	Risk Factor	RiskFactorType	RiskFactorCcy	Underlying	CSRQuality	CSRSector	CSRTranche	EquityEconomy	EquityMarketCap	EquitySector	CmtyLocation	CmtyTime	CmtyGrade	CmtyRoute	FXCounterCurrency	
Risk Class																							Risk Class
GIRR	✓	✓	✓	✓	✓	✓	✓	Opt		✓	✓												GIRR
CSR non-Sec	✓	✓	✓	✓	✓	✓	✓	Opt		✓	✓	✓	✓										CSR non-Sec
CSR Sec CTP	✓	✓	✓	✓	✓	✓	✓	Opt	✓		✓	✓	✓										CSR Sec CTP
CSR Sec non-CTP	✓	✓	✓	✓	✓	✓	✓	Opt	✓		✓	✓	✓	✓									CSR Sec non-CTP
Equity	✓	✓	✓	✓	✓	✓	✓	Opt			✓				✓	✓	✓						Equity
Commodity	✓	✓	✓	✓	✓	✓	✓	Opt	Opt		✓							✓	✓	✓	✓		Commodity
FX	✓	✓	✓	✓	✓	✓	✓	Opt			✓											✓	FX

The definitions/meanings of the fields for Vega shown above are as follows:

Field	Field Type	Risk Class	Description
AsOfDate	Date 'YYYY-MM-DD'		Timestamp (at close of business) for the data.
Tradeld	String		(e.g. "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.) – if coming from multiple systems may need to prepend source system to the id for uniqueness
RiskClass	String		Defines the risk class that the Vega data represents
		GIRR	"GIRR"
		CSR non-Sec	"CSR non-Sec"
		CSR Sec CTP	"CSR Sec CTP"
		CSR Sec non-CTP	"CSR Sec non-CTP"
		Equity	"Equity"
		Commodity	"Commodity"
FX	"FX"		
OptionMaturity	String Array or String with set format, separated by semicolons		Vega sensitivities are mapped to the vertex of maturity (expiry) dates of the options. If dates are blank then we assume it maps to the 5 vertices defined in the FRTB specification
UnderlyingMaturity	String Array or String with set		Represents the residual maturity of the underlying of the option

Field	Field Type	Risk Class	Description
	format, separated by semicolons	GIRR	Valid for GIRR Only. Vega sensitivity is further mapped to the vertices of underlying points along the risk free curve. If dates are blank then we assume Vega sensitivities map to one or two vertices defined in the FRTB specification.
VegaSensitivities	Double Array or Double, separated by semicolons		Sensitivity values
		GIRR	If OptionMaturity is empty the sensitivities must map exactly to the sensitivity dates specified in the FRTB specification (5 values) or 5 (values) x (5 values) for GIRR. For example, assuming GIRR, there are 5 expiry dates and 5 underlying maturity dates, the vector would have 25 values (5 x 5) where the first 5 values represent the vegas by underlying maturity for the first expiry date
		CSR non-Sec	If OptionMaturity is empty, the list must map to the sensitivity vertices specified in the FRTB specification (e.g. 5 values)
		CSR Sec CTP	If OptionMaturity is empty, the list must map to the sensitivity vertices specified in the FRTB specification (e.g. 5 values)
		CSR Sec non-CTP	If OptionMaturity is empty, the list must map to the sensitivity vertices specified in the FRTB specification (e.g. 5 values)
		Equity	If OptionMaturity is empty, the list must map to the sensitivity vertices specified in the FRTB specification (e.g. 5 values)
		Commodity	If OptionMaturity is empty, the list must map to the sensitivity vertices specified in the FRTB specification (e.g. 5 values)
		FX	If OptionMaturity is empty, the list must map to the sensitivity vertices specified in the FRTB specification (e.g. 5 values)
VegaCcy	String		Currency of the Vega sensitivities
RiskFactor	String		Underlying risk factor (may be more than one) of the risk class. It is expected that the risk factor name encompasses the definition of the risk factor per the FRTB specification (paragraphs 59-66)
		GIRR	Name of underlying curve (e.g. UsdLibor3m). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).
		CSR non-Sec	Name of issuer credit spread curve plus basis (Bond or CDS). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).

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Field	Field Type	Risk Class	Description
		CSR Sec CTP	Name of issuer credit spread curve plus basis (Bond or CDS). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).
		CSR Sec non-CTP	Name of issuer tranche, credit spread curve. If RiskFactor is not provided in the input file, then it is calculated as (Underlying + Tranche + RiskFactorType).
		Equity	Name of equity plus type (spot or repo) (e.g. "IBM_SPOT"). If RiskFactor is not provided in the input file, then it is calculated as (Underlying + RiskFactorType).
		Commodity	Unique commodity name should include commodity name, grade, and delivery time. If RiskFactor is not provided in the input file, then it is calculated as (Underlying + Grade + Location).
		FX	A currency pair (the exchange rate used in the calculation of the sensitivity). If omitted, it is generated from the underlying and FXCounterCurrency.
RiskFactorType	String		Type of underlying risk factor. Needed for some risk classes.
		GIRR	Defines type of underlying curve. Valid values are: "Yield", "Basis", or "Inflation"
		CSR non-Sec	Defines basis of CSR "BOND" or "CDS"
		CSR Sec CTP	Defines basis of CSR "BOND" or "CDS"
		CSR Sec non-CTP	Defines basis of CSR "BOND" or "CDS"
		Commodity	Commodity Type. Proposed list is as follows: 'Energy-Solid' 'Energy-Liquid' 'Energy-Electric and carbon trading' 'Freight' 'Gaseous Combustibles' 'Non-precious Metals' 'Precious Metals' 'Grains & Oilseed' 'Livestock & Dairy' 'Softs and other agriculturals' 'Other'
RiskFactorCcy	String		Valid for GIRR Only
		GIRR	This is the currency of the curve and equals the bucket.

Field	Field Type	Risk Class	Description
Underlying	String		Represents the primary component of the risk factor. For example, a risk factor for commodity might include commodity name, grade, time etc. In this sense, we want to capture just the name of the commodity
		GIRR	Name of curve (may be the same as risk factor)
		CSR non-Sec	Name of issuer credit spread curve
		CSR Sec CTP	Name of issuer credit spread curve
		CSR Sec non-CTP	Name of issuer credit spread curve
		Equity	Name of Equity issuer
		Commodity	Unique commodity name without any additional identifying data such as delivery time, freight route, etc.
		FX	This should be a single currency. It is the risk factor (as defined in BCBS 457).
CSRQuality	String		Valid only for the CSR RiskClasses: "CSR non-Sec" "CSR Sec CTP" "CSR Sec non-CTP" - needed for Vega bucket
		CSR non-Sec	Must match "Buckets" file
		CSR Sec CTP	Must match "Buckets" file
		CSR Sec non-CTP	Must match "Buckets" file
CSRSector	String		Valid only for the CSR RiskClasses: "CSR non-Sec" "CSR Sec CTP" "CSR Sec non-CTP" - needed for Vega bucket
		CSR non-Sec	Must match "Buckets" file Example values are: 'Sovereign' 'Local Govt' 'Financials' 'Basic Materials' 'CSG' (consumer goods and services) 'Tech' 'Health and Utilities' 'Covered Bonds' 'Other'
		CSR Sec CTP	Must match "Buckets" file Example values are: 'Sovereign' 'Local Govt' 'Financials' 'Basic Materials' 'CSG' (consumer goods and services)

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Field	Field Type	Risk Class	Description
			'Tech' 'Health and Utilities' 'Covered Bonds' 'Other'
		CSR Sec non-CTP	Must match "Buckets" file Example values are: 'RMBS-Prime' 'RMBS-Mid-Prime' 'RMBS-Sub-Prime' 'CMBS' 'ABS-Student Loans' 'ABS-Credit Cards' 'ABS-Auto' 'CLO-non-CTP' 'Other'
CSRTranche	String (for now)		Required only for RiskClass: "CSR Sec non-CTP" - needed for correlation
		CSR Sec non-CTP	Tranche (needed for correlation calculation)
EquityEconomy	String		Valid for Equity only - needed for Vega bucket
		Equity	Valid values are: 'Emerging Market' 'Advanced Economy' 'Other'
EquityMarketCap	String		Valid for Equity only - needed for Vega bucket
		Equity	Valid values are: 'Large' 'Small' 'Other'
EquitySector	String		Valid for Equity only - needed for Vega bucket
		Equity	Can be anything, but must match "Buckets" file Example values are: "CSG" "Telecommunications-Industrials" "Basic Materials" "Financials" "Other"
CmtyLocation	String		Valid for Commodity only - needed for correlation
		Commodity	String describing delivery location (e.g. "Northeast")
CmtyTime	String		Valid for Commodity only - needed for correlation
		Commodity	String to determine time of delivery (e.g. 'Summer', 'Q2')

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Field	Field Type	Risk Class	Description
CmtyGrade	String		This field is ignored in the calculations. Note: If two risk factors differed by the grade, they will now be the same risk factor.
		Commodity	
CmtyRoute	String		Valid for Commodity only
		Commodity	Defines the route used for delivery (e.g. "dry-bulk")
FXCounterCurrency	String		Valid for FX only
		FX	String - contra / counter currency or currency term (e.g. right side of currency pair)

3.3 Curvature Input File Formats

3.3.1 The File Pattern Match

The pattern match for the Curvature file is: ****/SB*_Curvature_Sensitivities*.csv**
(see “**Note on glob**” in the Overview section)

3.3.2 File Purpose

This file defines the Curvature shocked prices, including a description of the risk factor.

3.3.3 The Input Fields

The Curvature input fields are shown within the following table:

	AsOfDate	TradeId	RiskClass	RiskFactor	Shift_Up_PV	Shift_Down_PV	CurvatureCcy	RiskWeight	PVApplied	RiskFactorType	RiskFactorCcy	Underlying	CSRQuality	CSRSector	CSRTranche	EquityEconomy	EquityMarketCap	EquitySector	CmtyLocation	CmtyTime	CmtyGrade	CmtyRoute	FXCounterCurrency	FXDivisorEligibility	
Risk Class																									Risk Class
GIRR	✓	✓	✓	Opt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											GIRR
CSR non-Sec	✓	✓	✓	Opt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											CSR non-Sec
CSR Sec CTP	✓	✓	✓	Opt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											CSR Sec CTP
CSR Sec non-CTP	✓	✓	✓	Opt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										CSR Sec non-CTP
Equity	✓	✓	✓	Opt	✓	✓	✓	✓	✓			✓				✓	✓	✓							Equity
Commodity	✓	✓	✓	Opt	✓	✓	✓	✓	✓	Opt		✓							✓	✓	✓	✓			Commodity
FX	✓	✓	✓	Opt	✓	✓	✓	✓	✓			✓											✓	Opt	FX

The definitions/ meanings of the fields for Curvature shown above are as follows:

Field	Field Type	Risk Class	Description
AsOfDate	Date 'YYYY-MM-DD'		Timestamp (at close of business) for the data.

Field	Field Type	Risk Class	Description
TradeID	String		(e.g. "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.) – if coming from multiple systems may need to prepend source system to the id for uniqueness
RiskClass	String		Defines which risk class this file represents. Valid values are expected to be 'GIRR', 'CSR non-Sec', 'CSR Sec CTP', 'CSR Sec non-CTP', 'Equity', 'Commodity', or 'FX'
RiskFactor	String		Underlying risk factor (may be more than one) of the risk class. It is expected that the risk factor name encompasses the definition of the risk factor per the FRTB specification (paragraphs 59-66)
		GIRR	Name of underlying curve (e.g. UsdLibor3m). If RiskFactor is not provided in the input file, then it is calculated as (Underlying).
		CSR non-Sec	Name of issuer credit spread curve plus basis (Bond or CDS). If RiskFactor is not provided in the input file, then it is calculated as (Underlying).
		CSR Sec CTP	Name of issuer credit spread curve plus basis (Bond or CDS). If RiskFactor is not provided in the input file, then it is calculated as (Underlying).
		CSR Sec non-CTP	Name of issuer tranche, credit spread curve. If RiskFactor is not provided in the input file, then it is calculated as (Underlying).
		Equity	Name of equity plus type (spot or repo) (e.g. "IBM_SPOT"). If RiskFactor is not provided in the input file, then it is calculated as (Underlying).
		Commodity	Unique commodity name should include commodity name, grade, and delivery time. If RiskFactor is not provided in the input file, then it is calculated as (Underlying).
		FX	A currency pair (the exchange rate used in the calculation of the sensitivity). If omitted, it is generated from the underlying and FXCounterCurrency. Note: for Delta and Curvature, BCBS 457 defines the risk factor as only a single currency. To support multiple jurisdictions, the Accelerator also needs to be able to distinguish Delta and Curvature risk factors by their reporting currency, hence a currency pair is used.
Shift_Up_PV	Double		Numeric - Valuation resulting from parallel shocks up

Field	Field Type	Risk Class	Description
Shift_Down_PV	Double		Numeric - Valuation resulting from parallel shocks down
CurvatureCcy	String		String - currency code of sensitivities
RiskWeight	Double		Optional field to allow clients to send the risk weight to apply for curvature. If field is null, default value (most severe Delta weight) should be applied.
		GIRR	If the field is null, the default value (most severe Delta weight) should be applied.
		All other risk classes	If the field is null, the other risk classes use their corresponding bucket risk weights. The risk weight for the curvature risk charge should be the highest prescribed delta risk weight for each of the delta risk factors which are shocked together to determine the curvature risk charge.
PVApplied	String with set values		Boolean 'Y' or 'N' to indicate if PV has been removed from sensitivities or not. Default value = 'N'
RiskFactorType	String		Type of underlying risk factor. Needed for some risk classes.
		GIRR	Not needed for GIRR as Inflation and Basis have no curvature. Assumption is that RFTType = "Yield"
		CSR non-Sec	Defines basis of CSR "BOND" or "CDS"
		CSR Sec CTP	Defines basis of CSR "BOND" or "CDS"
		CSR Sec non-CTP	Defines basis of CSR "BOND" or "CDS"
		Equity	Not needed for Equity as Repo prices have no curvature. Assumption is that RFTType = "Spot", but it can also be "SPOT" or contain "SPOT"
		Commodity	Commodity Type. Proposed list is as follows: 'Energy-Solid' 'Energy-Liquid' 'Energy-Electric and carbon trading' 'Freight, 'Gaseous Combustibles' 'Non-precious Metals' 'Precious Metals' 'Grains & Oilseed' 'Livestock & Dairy' 'Softs and other agriculturals' 'Other'
RiskFactorCcy	String		Valid for GIRR and FX Only - to determine curvature bucket

Field	Field Type	Risk Class	Description
		GIRR	Currency of the GIRR sensitivity underlying the implied volatility. This is needed to determine the GIRR Vega bucket
		FX	Base currency of FX trade (e.g. left side of currency pair)
Underlying	String		Represents the primary component of the risk factor. It is particularly required where the risk factor value contains additional identifying data. For example, a risk factor for commodity might include commodity name, grade, time etc. In this sense, we want to capture just the name of the commodity
		GIRR	Name of curve (may be the same as risk factor)
		CSR non-Sec	Name of issuer credit spread curve
		CSR Sec CTP	Name of issuer credit spread curve
		CSR Sec non-CTP	Name of issuer credit spread curve
		Equity	Name of Equity issuer
		Commodity	Unique Commodity name without any additional identifying data such as delivery time, freight route, etc.
		FX	This should be a single currency. It is the risk factor (as defined in BCBS 457).
CSRQuality	String		Valid only for the CSR RiskClasses: "CSR non-Sec" "CSR Sec CTP" "CSR Sec non-CTP" - needed for Curvature bucket
		CSR non-Sec	Must match "Buckets" file
		CSR Sec CTP	Must match "Buckets" file
		CSR Sec non-CTP	Must match "Buckets" file
CSRSector	String		Valid only for the CSR RiskClasses: "CSR non-Sec" "CSR Sec CTP" "CSR Sec non-CTP" - needed for Curvature bucket
		CSR non-Sec	Must match "Buckets" file Example values are: 'Sovereign' 'Local Govt' 'Financials' 'Basic Materials' 'CSG' (consumer goods and services) 'Tech', 'Health and Utilities' 'Covered Bonds' 'Other'

Field	Field Type	Risk Class	Description
		CSR Sec CTP	Must match "Buckets" file Example values are: 'Sovereign', 'Local Govt', 'Financials', 'Basic Materials', 'CSG' (consumer goods and services), 'Tech', 'Health and Utilities', 'Covered Bonds', or 'Other'
		CSR Sec non-CTP	Must match "Buckets" file Example values are: 'RMBS-Prime' 'RMBS-Mid-Prime' 'RMBS-Sub-Prime' 'CMBS' 'ABS-Student Loans' 'ABS-Credit Cards' 'ABS-Auto' 'CLO-non-CTP' 'Other'
CSRTranche	String (for now)		Required for RiskClass: "CSR Sec non-CTP" - needed for correlation
		CSR Sec non-CTP	Tranche (needed for correlation calculation)
EquityEconomy	String		Valid for Equity only - needed for Curvature bucket
		Equity	Valid values are: 'Emerging Market' 'Advanced Economy' 'Other'
EquityMarketCap	String		Valid for Equity only - needed for Curvature bucket
		Equity	Valid values are: 'Large' 'Small' 'Other'
EquitySector	String		Valid for Equity only - needed for Curvature bucket
		Equity	Value can be anything, but must match "Buckets" file Example values are: "CSG" "Telecommunications-Industrials" "Basic Materials"

Field	Field Type	Risk Class	Description
			"Financials" "Other"
CmtyLocation	String		Valid for Commodity Only - needed for correlation
		Commodity	String describing delivery location (e.g. "Northeast")
CmtyTime	String		Valid for Commodity only - needed for correlation
		Commodity	String to determine time of delivery (e.g. 'Summer', 'Q2')
CmtyGrade	String	Commodity	This field is ignored in the calculations. Note: If two risk factors differed by the grade, they will now be the same risk factor
CmtyRoute	String		Valid for Commodity only
		Commodity	Defines the route used for delivery (e.g. "dry-bulk")
FXCounterCurrency	String		Valid for FX only
		FX	This should be set to the "reporting currency" or the "base currency" if the base currency approach is being used.
FXDivisorEligibility	String		Valid for FX only
		FX	Y/N flag indicating whether the divisor specified in [MAR21.98] can be applied. <ul style="list-style-type: none"> Y: The trade does not reference the "reporting currency" (or "base currency" if the base currency approach is being used). N: The trade references the "reporting currency" (or "base currency" if the base currency approach is being used).

4. Buckets

4.1 CSR non-Sec Buckets

4.1.1 The File Pattern Match

The pattern match for the CSR non-Sec Buckets file is: ****/CSR_Bucket_NONSEC*.csv**
(see “**Note on glob**” in the Overview section)

4.1.2 File Purpose

This file provides a mapping from Credit Quality and Sector to CSR non-Sec bucket.

4.1.3 The Input Fields

The CSR non-Sec Bucket fields are shown within the following table:

	Bucket	Credit Quality	Sector	AsOfDate
CSR non-Sec Bucket	✓	✓	✓	✓

The definitions/ meanings of the fields for CSR non-Sec buckets shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 16)
CreditQuality	String	Must match "CSRQuality" in sensitivities file
Sector	String	Must match "CSRSector" in sensitivities file
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.2 CSR Sec CTP Buckets

4.2.1 The File Pattern Match

The pattern match for the CSR Sec CTP Buckets file is: ****/CSR_Bucket_SECCTP*.csv**
(see “**Note on glob**” in the Overview section)

4.2.2 File Purpose

This file provides a mapping from Credit Quality and Sector to CSR Sec CTP bucket.

4.2.3 The Input Fields

The CSR Sec CTP Bucket fields are shown within the following table:

	Bucket	Credit Quality	Sector	AsOfDate
CSR Sec CTP Bucket	✓	✓	✓	✓

The definitions/meanings of the fields for CSR Sec CTP buckets shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 16)
CreditQuality	String	Must match "CSRQuality" in sensitivities file
Sector	String	Must match "CSRSector" in sensitivities file
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.3 CSR Sec non-CTP Buckets

4.3.1 The File Pattern Match

The pattern match for the CSR Sec non-CTP Buckets file is: ****/CSR_Bucket_SECNONCTP*.csv** (see "Note on glob" in the Overview section).

4.3.2 File Purpose

This file provides a mapping from Credit Quality and Sector to CSR Sec non-CTP bucket.

4.3.3 The Input Fields

The CSR Sec non-CTP Bucket fields are shown within the following table:

	Bucket	Credit Quality	Sector	AsOfDate
CSR Sec non-CTP Bucket	✓	✓	✓	✓

The definitions/ meanings of the fields for CSR Sec non-CTP buckets shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 25)
CreditQuality	String	Must match "CSRQuality" in sensitivities file
Sector	String	Must match "CSRSector" in sensitivities file
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.4 CSR non-Sec Bucket Descriptions File

4.4.1 The File Pattern Match

The pattern match for the CSR non-Sec Bucket Descriptions file is:

****/CSR_Bucket_Description_NONSEC*.csv**

(see "Note on glob" in the Overview section)

4.4.2 File Purpose

This file provides a description of CSR non-Sec buckets, including canonical values for Credit Rating and Sector.

4.4.3 The Input Fields

The CSR non-Sec Bucket Descriptions fields are shown within the following table:

	Bucket	RatingCategory	SectorCategory	AsOfDate
CSR non-Sec Bucket Description	✓	✓	✓	✓

The definitions/ meanings of the fields for the CSR non-Sec bucket descriptions shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 16)
RatingCategory	String	Logical group of ratings
SectorCategory	String	Logical group of sectors
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.5 CSR Sec CTP Bucket Descriptions File

4.5.1 The File Pattern Match

The pattern match for the CSR Sec CTP Bucket Descriptions file is:

****/CSR_Bucket_Description_SECCTP*.csv**

(see “Note on glob” in the Overview section)

4.5.2 File Purpose

This file provides a description of CSR Sec CTP buckets, including canonical values for Credit Rating and Sector.

4.5.3 The Input Fields

The CSR Sec CTP Bucket Descriptions fields are shown within the following table:

	Bucket	RatingCategory	SectorCategory	AsOfDate
CSR Sec CTP Bucket Description	✓	✓	✓	✓

The definitions/ meanings of the fields for the CSR Sec CTP bucket descriptions shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 16)
RatingCategory	String	Logical group of ratings
SectorCategory	String	Logical group of sectors
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.6 CSR Sec non-CTP Bucket Descriptions File

4.6.1 The File Pattern Match

The pattern match for the CSR Sec non-CTP Bucket Descriptions file is:

****/CSR_Bucket_Description_SECNONCTP*.csv**

(see “**Note on glob**” in the Overview section)

4.6.2 File Purpose

This file provides a description of CSR Sec non-CTP buckets, including canonical values for Credit Rating and Sector.

4.6.3 The Input Fields

The CSR Sec non-CTP Bucket Descriptions fields are shown within the following table:

	Bucket	RatingCategory	SectorCategory	AsOfDate
CSR Sec non-CTP Bucket Description	✓	✓	✓	✓

The definitions/ meanings of the fields for the CSR Sec non-CTP bucket descriptions shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 25)
RatingCategory	String	Logical group of ratings
SectorCategory	String	Logical group of sectors
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.7 Equity Buckets

4.7.1 The File Pattern Match

The pattern match for the Equity file is: ****/Equity_Buckets*.csv**

(see “**Note on glob**” in the Overview section)

4.7.2 File Purpose

This file provides a mapping from Market Cap, Issuer Economy, and Issuer Sector to Equity Bucket.

4.7.3 The Input Fields

The Equity Bucket fields are shown within the following table:

	Market Cap	Issuer Economy	Issuer Sector	Bucket	AsOfDate
Equity Buckets	✓	✓	✓	✓	✓

The definitions/ meanings of the fields for Equity buckets shown above are as follows:

Field	Field Type	Description
MarketCap	String	Value must be "Large", "Small" or "Other" and must match "Sensitivities" file
IssuerEconomy	String	Value must be "Emerging economy", "Advanced economy", or "Other" and must match "Sensitivities" file
IssuerSector	String	Must match "EquitySector" of Sensitivities file
Bucket	String	Bucket number (1 -- 11)
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

4.8 Commodity Buckets

4.8.1 The File Pattern Match

The pattern match for the Commodity file is: ****/Commodity_Buckets*.csv**
(see "Note on glob" in the Overview section)

4.8.2 File Purpose

This file provides a mapping from Commodity to Commodity Bucket.

4.8.3 The Input Fields

The Commodity Bucket fields are shown within the following table:

	Bucket	Underlying Commodity	AsOfDate
Commodity Buckets	✓	✓	✓

The definitions/ meanings of the fields for Commodity buckets shown above are as follows:

Field	Field Type	Description
Bucket	String	Bucket number (1 -- 11)
UnderlyingCommodity	String	Underlying Column from Sensitivities file
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

5. DRC Trade Level Input File Formats

5.1 DRC Trade Level Input File (non-Sec and Sec non-CTP)

5.1.1 The File Pattern Match

The pattern match for the DRC Trade Level file is: ****/DRC_Trade_*.csv**
(see “**Note on glob**” in the Overview section)

5.1.2 File Purpose

This file defines fields for Jump to Default Risk for non-Sec and Sec non-CTP, including instrument description.

5.1.3 The Input Fields

The DRC Trade Level fields are shown within the following table:

Component	AsOfDate	Tradeld	RiskClass	ObligorId	ObligorCategory	InstrumentType	Seniority	Direction	Maturity	Rating	Notional	MarketValue	Gross/ID	Gross/IDCcy	Tranche	Region	AssetClass	Attachment	Detachment	RecoveryRates	RecoveryValues	Component
DRC non-Sec - Trade level file	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Opt	Opt	Opt	Opt								DRC non-Sec - Trade level
DRC Sec non-CTP - Trade level file	✓	✓	✓	✓		✓	✓	✓	✓	✓	Opt	Opt	Opt	Opt	✓	✓	✓	✓	✓	✓	✓	DRC Sec non-CTP - Trade level

The definitions/meanings of the fields for the DRC Trade Level Input File shown above are as follows:

Field	Field Type	Description
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.
Tradeld	String	String, alphanumeric (e.g. "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.) – if coming from multiple systems may need to prepend source system to the id for uniqueness
RiskClass	String	"DRC non-Sec" or "DRC Sec non-CTP"
ObligorId	String	Id of the Obligor
ObligorCategory	String	Obligor Category/Bucket (BCBS 457, [MAR22.22]). Any values allowed (but should be at most 3 distinct values)
InstrumentType	String	Instrument type for LGD (BCBS 457, [MAR22.12]). "equity", "junior debt", "senior debt", or "covered bond"
Seniority	String	Seniority of the exposure (matches values in seniority description file)
Direction	String	'long' or 'short'

Field	Field Type	Description
Maturity	String	Maturity of the trade (e.g. "1D", "2W", "12M", "1Y", or date "YYYY-MM-DD")
Rating	String	Credit Quality Category: <ul style="list-style-type: none"> For non-Sec, see BCBS 457, [MAR22.24] For Sec non-CTP, see BCBS 374, paras 66-68
Notional	Double	(optional) This is used to compute GrossJTD for non-Sec when not provided. This is an optional override for the 'Notional' in the Trade Attributes file.
MarketValue	Double	(optional) This is used to compute GrossJTD for Sec non-CTP when not provided. This is an optional override for the 'MarketValue' in the Trade Attributes file.
GrossJTD	String	(optional) Gross JTD value; providing this value skips the calculation (using market value and notional).
GrossJTDCcy	String	(optional) Currency code of Gross JTD, Notional, or MarketValue. Required if GrossJTD, Notional or MarketValue provided.
Tranche	String	ID of the Tranche
Region	String	Region for Bucket (BCBS 457, [MAR22.31](2)(b)). Values must match DRC Buckets file.
AssetClass	String	Asset class for Bucket (BCBS 457, [MAR22.31](2)(b)). Values must match DRC Buckets file.
Attachment	Double	Attachment point (Decimal values are expected).
Detachment	Double	Detachment point (Decimal values are expected).
RecoveryRates	Double	Recovery rate for the Obligor in the given scenario.
RecoveryValues	Double	Recovery values corresponding to the recovery rate.

5.2 Instrument to LGD File

5.2.1 The File Pattern Match

The pattern match for the Instrument to LGD file is: ****/Instrument_LGD*.csv**
(see “**Note on glob**” in the Overview section)

5.2.2 File Purpose

This file provides a mapping from instrument type to LGD.

5.2.3 The Input Fields

The Instrument to LGD fields are shown within the following table:

	Instrument	LGD	StartDate	ParameterSet
Instrument to LGD file	✓	✓	✓	✓

The definitions/meanings of the fields for the Instrument to LGD File shown above are as follows:

Field	Field Type	Description
Instrument	Alphanumeric String	Must match the Trade Level file
LGD	Double, between 0 and 1	The represents the percentage of LGD
StartDate	Date 'YYYY-MM-DD'	Indicates the start date for this property. Subsequent entries with later dates will apply an end to this date range.
ParameterSet	String	Specifies the parameter set to which the DRC non-Sec Default Risk Weight belongs.

5.3 DRC non-Sec Default Risk Weights File

5.3.1 The File Pattern Match

The pattern match for the DRC non-Sec Default Risk Weights file is:

****/Default_Risk_Weights*.csv**

(see “**Note on glob**” in the Overview section)

5.3.2 File Purpose

This file provides Risk Weights for DRC non-Sec.

5.3.3 The Input Fields

The DRC non-Sec Default Risk Weights fields are shown within the following table:

	Rating	DefaultRiskWeight	StartDate	ParameterSet
DRC non-Sec Default Risk Weights file	✓	✓	✓	✓

The definitions/meanings of the fields for the Default Risk Weights File shown above are as follows:

Field	Field Type	Description
Rating	Alphanumeric String	Credit Quality Category (See BCBS 457, [MAR22.24]).
DefaultRiskWeight	Double	Represents the risk weight to be used for the specific rating.
StartDate	Date 'YYYY-MM-DD'	Indicates the start date for this property. Subsequent entries with later dates will apply an end to this date range.
ParameterSet	String	Specifies the parameter set to which the DRC non-Sec Default Risk Weight belongs.

5.4 DRC Buckets

5.4.1 The File Pattern Match

The pattern match for the DRC Buckets file is: ****/DRC_Bucket_SECNONCTP*.csv**
(see “**Note on glob**” in the Overview section)

5.4.2 File Purpose

This file provides a mapping from Region and Asset Class to DRC Sec non-CTP Bucket.

5.4.3 The Input Fields

The DRC Buckets fields are shown within the following table:

	Bucket	Region	AssetClass	AsOfDate
DRC Sec non-CTP Bucket	✓	✓	✓	✓

The definitions/meanings of the fields for the DRC Buckets File shown above are as follows:

Field	Field Type	Description
Bucket	Alphanumeric String	The DRC Bucket
Region	Alphanumeric String	Region for Bucket (BCBS 457, [MAR22.31](2)(b)). Values must match DRC trades file.
AssetClass	Alphanumeric String	Asset class for Bucket (BCBS 457, [MAR22.31](2)(b)). Values must match DRC trades file.
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

5.5 DRC Seniority Description File

5.5.1 The File Pattern Match

The pattern match for the DRC Seniority Description file is: ****/Seniority_Description*.csv**
(see “**Note on glob**” in the Overview section)

5.5.2 File Purpose

This file provides a ranking of the seniorities used in the DRC.

5.5.3 The Input Fields

The DRC Seniority Description fields are shown within the following table:

	Seniority	Ranking	StartDate
DRC -Seniority Description file	✓	✓	✓

The definitions of the fields for the DRC Seniority Description File shown above are as follows:

Field	Field Type	Description
Seniority	String	Seniority of the exposure (matches values in DRC trade level file)
Ranking	String	Integer value, represents the ranking to be used in determining whether it's possible to net long vs short JTD. Lower values for more senior exposure; higher values for more junior exposure; highest value for equity.
StartDate	Date “YYYY-MM-DD”	Indicates the start date for this property. Subsequent entries with later dates will apply an end to this date range.

5.6 DRC non-Sec Obligor Weight Override

5.6.1 The File Pattern Match

The pattern match for the DRC non-Sec Obligor Weight Override file is:
****/Obligor_Risk_Weights.csv**
(see “**Note on glob**” in the Overview section)

5.6.2 File Purpose

This file provides overrides to risk weights by obligor (according to [MAR22.7]).

5.6.3 The Input Fields

The DRC non-Sec Obligor Weight Override fields are shown within the following table:

	ObligorId	RiskWeight	StartDate	ParameterSet
DRC non-Sec Obligor Weight Override	✓	✓	✓	✓

The definitions of the fields for the DRC non-Sec Obligor Weight Override shown above are as follows:

Field	Field Type	Description
ObligorId	String	Id of the Obligor.
RiskWeight	Double	Weight override for the Obligor.
StartDate	Date 'YYYY-MM-DD'	Indicates the start date for this property. Subsequent entries with later dates will apply an end to this date range.
ParameterSet	String	Specifies the parameter set to which the Obligor Weight Override belongs.

5.7 DRC Sec non-CTP ERBA Risk Weight

5.7.1 The File Pattern Match

The pattern match for the DRC Sec non-CTP ERBA Risk Weight file is:

****/ERBA_Risk_Weight*.csv**

(see “**Note on glob**” in the Overview section)

5.7.2 File Purpose

This file provides the SEC-ERBA risk weights.

5.7.3 The Input Fields

The DRC Sec non-CTP ERBA Risk Weight fields are shown within the following table:

	Rating	Seniority	DefaultRiskWeight	RatingType	StartDate	ParameterSet
DRC Sec non-CTP ERBA Rating	✓	✓	✓	✓	✓	✓

The definitions/meanings of the fields for the DRC Sec non-CTP ERBA Risk Weight File shown above are as follows:

Field	Field Type	Description
Rating	String	Credit Quality Category: <ul style="list-style-type: none"> For Sec non-CTP, see BCBS 374, paras 66-68
Seniority	String	Seniority of the exposure (matches values in seniority description file).
DefaultRiskWeight	Double	Represents the risk weight to be used for the specified rating.
RatingType	String	'Long' or 'Short'
StartDate	Date 'YYYY-MM-DD'	Indicates the start date for this property. Subsequent entries with later dates will apply an end to this date range.
ParameterSet	String	Specifies the parameter set to which the DRC Sec non-CTP ERBA Risk Weight Override belongs.

6. Portfolio Input File Formats

6.1 Legal Entity and Book Input File Formats

6.1.1 The Legal Entity File Pattern Match

The pattern match for the Legal Entity file is: ****/LegalEntityParentChild*.csv**
 (see “**Note on glob**” in the Overview section)

6.1.2 File Purpose

This file provides a description of the Group's Legal Entity structure, using a parent/child relationship.

6.1.3 The Input Fields

The Legal Entity Parent Child input fields are shown within the following table:

	Name	Parent	AsOfDate
Legal Entity Parent Child file	✓	✓	✓

The definitions of the above fields are as follows:

Field	Field Type	Description
Name	String	Name of the Legal Entity
Parent	String	Name of the parent Legal Entity (or null if there is no parent)
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

6.1.4 The Book File Pattern Match

The pattern match for the Book file is: ****/BookParentChild*.csv**
 (see “**Note on glob**” in the Overview section)

6.1.5 File Purpose

This file provides a description of the organisation's book structure, using a parent/child relationship, including identification and description of desks.

6.1.6 The Input Fields

The Book Parent Child input fields are shown within the following table:

	Name	Parent	FRTBDesk	Category	FRTBApproach	IMAEligible	AsOfDate
Book Parent Child file	✓	✓	✓	✓	✓	✓	✓

The definitions of the above fields are as follows:

Field	Field Type	Description
Name	String	Name of the node in the Book/Desk hierarchy.
Parent	String	Name of the parent node (or null if there is no parent).
FRTBDesk	'Y' or 'N'	This is set to 'Y' if this node is a desk for the purposes of FRTB. If so, then 'FRTBApproach' and 'IMAEligible' are populated – otherwise they are empty.
Category	String	Optional category for the node (and all Descendant nodes).
FRTBApproach	'SA' or 'IMA'	For FRTB desks, this field indicates which model (i.e. approach) should be used for calculating the Risk Charge (either 'SA' or 'IMA'). If not an FRTB desk, this field is empty.
PLA Zone	'R', 'A', or 'G'	For FRTB desks, this field indicates whether which zone the desk falls into according to the PLA test metrics [MAR32.42]. If not an FRTB desk, this field is empty.
AsOfDate	Date 'YYYY-MM-DD'	Timestamp (at close of business) for the data.

7. FX Rates File Formats

7.1 The File Pattern Match

The pattern match for the FX file is: ****/FXData*.csv**
(see “**Note on glob**” in the Overview section)

7.1.1 File Purpose

This file provides FX spot rates used for currency conversion.

7.2 The Input Fields

The FX Rates input fields are shown within the following table:

	BaseCurrency	CounterCurrency	Rate	AsOfDate
FX Rates	✓	✓	✓	✓

The definitions of the above fields are as follows:

Field	Field Type	Description
BaseCurrency	String	The left side of the currency pair.
CounterCurrency	String	The right side of the currency pair
Rate	Double	Forex rate between the two currencies.
AsOfDate	Date“YYYY-MM-DD”	Timestamp (at close of business) for the data.

8. Currency File Formats

8.1 GIRR Major Currency Input File Formats

8.1.1 The File Pattern Match

The pattern match for the GIRR Major Currency file is: ****/GIRR_Major_Currency*.csv**
(see “**Note on glob**” in the Overview section)

8.1.2 File Purpose

This file provides a list of major currencies, for GIRR risk weight adjustment

8.1.3 The Input Fields

The GIRR Major Currency input fields are shown within the following table:

	FRTB Selected CCY	StartDate	ParameterSet
GIRR Major Currency file	✓	✓	Opt

The definitions of the above fields are as follows:

Field	Field Type	Description
FRTB Selected CCY	String	Currency to be considered Major for adjustment purposes.
StartDate	Date 'YYYY-MM-DD'	Indicates the start date for this currency. Subsequent entries with later dates will apply an end to this date range.
ParameterSet	String	Specifies the parameter set to which the GIRR Major Currency belongs. Note: If no ParameterSet is defined within the file, it will default to BCBS.

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