CHARTER
VERSION 3.4

Charter - REST Services NPC Product Configurations SDD

Services Design Document

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1   Overview

This Service Design Document (SDD) provides service implementation design details for the product-configurations REST.

The Product Configurations REST is called after the user finishes configuring all the products, and enables the user to validate the configuration and save it in the Ordering system for all the products.

The input of the Product Configurations REST includes all the active order actions in the order, and the configuration changes made for each product, to validate and save all products in the order via the Ordering system.

1.1   Related Documentation

Charter - COP Order Flow - HLS: 2424229

1.2   Assumptions

#	Assumption
1	As a result of MEC and BPT Data Gathering Valid Values may be refined.
2	As a result of Detail Design, Additional Error Message(s) may be added (section 3.1.12.4)
3	Fields that are of 'Date' data type in the request and in the response will be expected in Long format. for Example: "Tuesday, August 4, 2015 6:50:20 AM GMT" is translated to: "1438671020480"

2 Service Definition

2.1 Service Name

Product configurations

2.2 Service Endpoints

Environment	Endpoint
Dev	Not available
QA	Not available
UAT	Not available
Prod	Not available

2.3 Required Projects

The REST URL that will be used is:

PUT/commerce/customer/{customer-id}/product-order-id/{product-order-id}/product-configurations.

2.4 Service WSDL - N/A

3   Operation Definition

Name	Request Parameters	Response	Status
productConfigurations	ImplProductsConfigurationRequest	ImplProductConfigurationsResponse	

3.1   productConfigurations

This service returns available order actions for a given product/s assigned products for given customer

3.1.1   Request Parameters

3.1.1.1   ImplProductsConfigurationRequest

Field Name	Data Type	Valid values	Mandatory/Optional	Description
implValidateAndUpdateMultiProductsConfigurationRequest	ImplValidateAndUpdateMultiProductsConfigurationRequest	N/A	Mandatory	Main input
serviceabilityObject	ServiceabilityObject	N/A	Mandatory	Additional information to support serviceability

3.1.1.2   ImplValidateAndUpdateMultiProductsConfigurationRequest

Field Name	Data Type	Valid Values	Mandatory/Optional	Description
Links	Link[]	N/A	Not in use	Not in use
activityForConfiguration	String	BPT Values defined by MEC	Mandatory	If empty then it is taken from configuration parameter. Out of Box this is the Negotiate Product Configuration
configurationLevel	ConfigurationLevelFilter	N/A	Mandatory	The level of configuration to be returned. Charter must always send FULL
settingsView	SettingsViewFilter	N/A	Mandatory	The Settings View Filter of the ProductSpecifications. Charter should always send 'FULL'

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
ReturnConfiguration	ReturnedConfiguration	N/A	Not in use	If set to ALL: PRODUCT_CONFIGURAT ION, CATALOG_DATA and SUMMARY. Otherwise: SUMMARY
ReturnConfigurationMasks	UpdateProductConfigura tionMask[]	N/A	Not in use	Not in use
ReturnRemovedItems	Boolean	True/Fa lse	Not in use	Indicates whether to return removed ProductSpecifications
productOrderItems	ChangedProductOrderIte m[]	N/A	Optional	Product order items that have been changed
confirmationMessagesApp roved	Boolean	True/Fa lse	Mandatory	Indication whether the user approved rule messages (productConfiguration.mess ages) with CONFIRMATION as {@PATH RuleExecutionMessage#sev erity}. Default is false

3.1.1.3   Link – not in use

Field Name	Data Type	Valid Value s	Mandatory /Optional	Description
rel	String	N/A	Not in use	Not in use
href	String	N/A	Not in use	Not in use

3.1.1.4   ConfigurationLevelFilter

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ FULL, ▪ NOT_SELECTE D	Mandatory	Please use a value from the valid values list.

3.1.1.5   SettingsViewFilter

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ FULL ▪ QUICK_SETTIN GS	Mandatory	Please use a value from the valid values list.

3.1.1.6   ReturnedConfiguration – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	- ALL, - NONE, - NOT_VALI D	Mandatory	Use a value from the valid values list.

3.1.1.7   UpdateProductConfigurationMask – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	- CATALOG_DATA, - CROSS_PRODUCTS_DISCOUNTS_DATA, - PRODUCT_CONFIGURATION, - QUOTED_PRICES, - QUOTED_PRORATION, - QUOTED_TAX, - SUMMARY	Mandatory	Use a value from the valid values list.

3.1.1.8   ChangedProductOrderItem

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productOrderItemID	String	N/A	Mandatory	IDs of all product order items that needs to be validated
productID	String	N/A	Mandatory	Product order ID
productChanges	ProductConfigurationChanges	N/A	Optional	Configurations that require change.

3.1.1.9   ProductConfigurationChanges

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
suspendedContainedProducts	SuspendContainedProduct[]	N/A	Optional	Contained Products that were suspended
changedSimpleProducts	ChangedSimpleProduct[]	N/A	Optional	Simple Products that were modified
implNewAssignedPricePlan	ImplAddedAssignedPricePlan []	N/A	Optional	new AssignedPricePlan that were added to the Product configuration

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
newSimpleProducts	AddedSimpleProduct[]	N/A	not in use	New simple Products that were added to the Product configuration.
resumedContainedProducts	ResumeContainedProduct[]	N/A	not in use	Contained Products that were resumed
changedContainedProducts	ChangedContainedProduct[ ]	N/A	Optional	Contained Products that were modified (configuration changes)
removedSimpleProducts	RemovedSimpleProduct[]	N/A	not in use	Hold information required for removed simple products.
implRemovedAssignedPricePlan	ImplRemovedAssignedPricePlan []	N/A	Optional	AssignedPricePlan that were removed from the Product configuration
removedContainedProducts	RemovedContainedProduct []	N/A	Optional	Contained Products that were removed from the Product configuration
newContainedProducts	AddedContainedProduct[]	N/A	Optional	new contained Products that were added to the Product configuration

3.1.1.10   SuspendContainedProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	Product ID

3.1.1.11   ChangedSimpleProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	Product ID

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
parentTemporaryID	String	N/A	not in use	Used if a contained product is added/changed in quantity and each instance needs to be updated differently but the contained product instance is not assigned yet (meaning there is no AP ID). The parentTemporaryID is generated by the consumer (same as temporaryID)
productSpecContainmentID	String	N/A	not in use	The ID of the ProductSpecContainment. Used if the change is done on a contained Product added by default and not assigned yet. Must be sent if productID is not sent as input
temporaryID	String	N/A	not in use	It is a unique ID generated by the consumer that enables the consumer to IDentify the added component in the output. it serves as the consumer IDentifier for entities that do not have an ID yet.
changedCharacteristics	CharacteristicValueChange[]	N/A	Optional	Characteristics that have been changed by ID and value.
simpleProductSpecID	String	N/A	Mandatory	Unique IDentifier of the simple product specification
parentProductSpecContainmentID	String	N/A	not in use	The ID of the relation to the parent of the added contained product. Used when Contained Products need to be added in quantity with different configuration

3.1.1.12 CharacteristicValueChange

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
characteristicID	String	N/A	Mandatory	Characteristic ID
value	String	N/A	Mandatory	Characteristic value

3.1.1.13 ImplAddedAssignedPricePlan

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
parentTemporaryID	String	N/A	Mandatory, must be sent if the parent component was added in quantity and there is no assigned instance of the parent component yet, else Optional	This temporary ID is generated by the consumer
productSpecPricingID	String	N/A	Mandatory	It is the ID of the ProductSpecPricing. The specification of pricing for the ProductSpecification. For example associated price plans or activity charges. The definition of the pricing is in the associated PriceSchema or ActivityCharge

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
parentProductSpecContainmentID	String	N/A	Mandatory, Must be sent if the parent component was added in quantity and there is no assigned instance of the parent component yet else Optional.	This is the catalog ID of the relation between price and its parent component
parentProductID	String	N/A	Mandatory, Must be sent if the parent component was added in quantity and there is assigned instance of the parent component else Optional.	Assigned Parent component ID.

3.1.1.14   AddedSimpleProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
parentTemporaryID	String	N/A	Mandatory	Used if a contained product is added/changed in quantity and each instance needs to be updated differently but the contained product instance is not assigned yet (meaning there is no AP ID). The parentTemporaryID is generated by the consumer (same as temporaryID)
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment of the ProductSpecification to be added.
temporaryID	String	N/A	Mandatory	It is a unique ID generated by the consumer that enables the consumer to IDentify the added component in the output. it serves as the consumer IDentifier for entities that do not have an ID yet.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
changedCharacteristics	CharacteristicValueChange[]	N/A	Optional	Characteristics that have been changed by ID and value.
businessType	ProductBusinessType	N/A	Mandatory	Indicates the SimpleProduct type. The relevant values are:
simpleProductSpecID	String	N/A	Mandatory	Unique IDentifier of the simple product specification
parentProductSpecContainmentID	String	N/A	Mandatory	The ID of the relation to the parent of the added contained product. Used when Contained Products need to be added in quantity with different configuration
parentProductID	String	N/A	Mandatory	The parent product ID

3.1.1.15   ProductBusinessType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	■ DEVICE, ■ FRIENDS_AND_FAMILY, ■ TV_CHANNEL, ■ TV_PACKAGE	Mandatory	Please use one of the valid values list.

3.1.1.16   ResumeContainedProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	Product ID
changedCharacteristics	CharacteristicValueChange[]	N/A	Optional	Characteristics that have been changed by ID and value.

3.1.1.17   ChangedContainedProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	Product ID (ap id of this component)
parentTemporaryID	String	N/A	Mandatory (only in case there is no productID)	Used if a contained product is added/changed in quantity and each instance needs to be updated differently but the contained product instance is not assigned yet (meaning there is no AP ID). The parentTemporaryID is generated by the consumer (same as temporaryID)
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment. Used if the change is made on a contained product, added by default and not assigned yet.
temporaryID	String	N/A	Mandatory (only in case there is no productID)	It is a unique ID generated by the consumer that enables the consumer to identify the added component in the output. It serves as the consumer identifier for entities that do not have an ID yet.
changedCharacteristics	CharacteristicValueChange[]	N/A	Optional	Characteristics that have been changed by ID and value.
parentProductSpecContainmentID	String	N/A	Mandatory	The ID of the relation to the parent of the added contained product. Used when Contained Products need to be added in quantity with different configuration

3.1.1.18 RemovedSimpleProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	Product ID
parentTemporaryID	String	N/A	Mandatory	Parent temporary ID
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment. Used if the change is done on a contained Product added by default and not assigned yet. Must be sent if productID is not sent as input
simpleProductSpecID	String	N/A	Mandatory	Uniqueidentifier of the new simple ProductSpecification.

3.1.1.19 ImplRemovedAssignedPricePlan

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
parentTemporaryID	String	N/A	Mandatory, Must be sent if the parent product was added in quantity and there is no assigned instance of the parent product yet. This field is generated by the consumer else Optional.	Operation extension attribute. Used as the consumer technical Identifier of a parent product entity.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
assignedPricePlanID	String	N/A	Mandatory	The ID of an assigned instance of ProductSpecPricing. Mandatory if RemovedAssignedPricePlan #productSpecPricingID is not provided. To be used if an assigned ProductSpecPricing needs to be removed. If there are two assigned instances of the same ProductSpecPricing in the Product configuration the first one with this ID is removed
productSpecPricingID	String	N/A	Mandatory	the catalog ID of the relation between the component and the assigned profile

3.1.1.20   RemovedContainedProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	Product ID
parentTemporaryID	String	N/A	Mandatory	Parent temporary ID
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment. Used if the change is done on a contained Product added by default and not assigned yet. Must be sent if productID is not sent as input

3.1.1.21   AddedContainedProduct

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
parentTemporaryID	String	N/A	Mandatory	Used if a contained product is added/changed in quantity and each instance needs to be updated differently but the contained product instance is not assigned yet (meaning there is no AP ID). The parentTemporaryID is generated by the consumer (same as temporaryID)
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment of the ProductSpecification to be added.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
temporaryID	String	N/A	Mandatory	It is a unique ID generated by the consumer that enables the consumer to IDentify the added component in the output. It serves as the consumer IDentifier for entities that do not have an ID yet. Should start with 'C'.
changedCharacteristics	CharacteristicValueChange[]	N/A	Optional	Characteristics that have been changed by ID and value.
parentProductSpecContainmentID	String	N/A	Mandatory	The ID of the relation to the parent of the added contained product. Used when Contained Products need to be added in quantity with different configuration
productSpecID	String	N/A	Mandatory	The ID of the ProductSpecification that needs to be added. Should be populated if AddedContainedProduct#productSpecContainmentID is not sent as input. This attribute is used by consumers if there is only one instance of the ProductSpecification in the catalog tree. If more than one instance exists, the ProductSpecification will be added as a first found instance
parentProductID	String	N/A	Mandatory	Parent product ID

3.1.1.22 Link – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Rel	String	N/A	Not in use	Not in use
Href	String	N/A	Not in use	Not in use

3.1.1.23 ServiceabilityObject

Field Name	Data Type	Valid values	Mandatory/Optional	Description
sys	String	N/A	Mandatory	Value of sys
prin	String	N/A	Mandatory	Value of prin
agent	String	N/A	Mandatory	Value of agent
LOBServiceability	lobServiceability[]	N/A	Mandatory	LOB name and status
availablityGroup	String	BPT Values defined by MEC	Mandatory	Parameter used for phone

Field Name	Data Type	Valid values	Mandatory/Optional	Description
dwellType	String	BPT Values defined by MEC	Mandatory	Type used for competitive areas
customerIsNew	Boolean	Default value - false	Mandatory	Indicator to indicate whether this is a new or existing customer
customerHasActiveAccount	Boolean	Default value - true	Mandatory	Indicator to indicate whether the customer has an active account.
customerType	String	'Business', 'Residential'	Mandatory	Business, Residential – Currently all implementation are Residential
orderActionType	String	CH- Change CE – Cease SU – Suspend HM – Change Move RT – Restart CR – Cease Restart PR – Provide	Mandatory	ActionType - Provide, Change, Cease, etc.
userRole	String	BPT Values defined by MEC	Mandatory	User roles: manager, CSR
offerCode	String[]	N/A	Mandatory	Offer code
additionalAttribute []	AdditionalAttribute	N/A	Optional	If some of the parameters for eligibility rules/serviceability are necessary (and were not in the initial list) can be added here

3.1.1.24 AdditionalAttribute

Field Name	Data Type	Valid values	Mandatory/Optional	Description
name	String	N/A	Mandatory	Attribute name.
value	String	N/A	Mandatory	Attribute value.

3.1.1.25   LOBServiceability

Field Name	Data Type	Valid values	Mandatory/Optional	Description
LOBName	String	BPT Values defined by MEC	Mandatory	LOB Name
LOBServicableStatus	String	true, false	Mandatory	An indication whether the LOB is serviceable or not

3.1.2   Request Sample

TBD

3.1.3   Response

3.1.3.1   ImplProductConfigurationsResponse

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
implValidateMultiProductConfigurationsResponse	ImplValidateMultiProductConfigurationsResponse	N/A	Optional	Main output
transactionId	String	N/A	Mandatory	A unique ID for a certain REST call
timeStamp	Date as Long	N/A	Mandatory	The time of the response Expected Date as Long. see assumption #3
implErrorInfo	ImplErrorInfo[]	N/A	Optional	Used for business errors (for technical/unexpected error – HTTP error codes will be returned). See section 3.1.10.1

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without specific permission will be subject to severe disciplinary action, as well as any other sanctions applicable by law.

3.1.3.2 ImplValidateMultiProductConfigurationsResponse

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productConfigurations	ValidateProductConfigurationResponse[]	N/A	Mandatory	Product configurations

3.1.3.3 Link – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Rel	String	N/A	Not in use	Not in use
Href	String	N/A	Not in use	Not in use

3.1.3.4 ValidateProductConfigurationResponse

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
productOrderID	String	N/A	Mandatory	Product order ID
productOrderItemID	String	N/A	Mandatory	The ID of the ProductOrderItem
productOrderItemReferenceNumber	String	N/A	Mandatory	The reference number of the ProductOrderItem
ProductOrderReferenceNumber	String	N/A	Not in use	Not in use
productConfiguration	TopLevelProductConfiguration	N/A	Mandatory	Product configurations
productID	String	N/A	Mandatory	The ID of the Product
otherProductsCrossProductsDiscounts	ProductDiscountsDisplay[]	N/A	Not in use	Not in use

3.1.3.5 TopLevelProductConfiguration

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
TotalOneTimeCalculatedPrice	TotalOneTimeCalculatedPrice	N/A	Not in use	Not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Prices for the TopLevelProductConfiguration as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine.
TotalRecurringCalculatedPrice	TotalRecurringCalculatedPrice	N/A	Not in use	Not in use
displayableItems	ProductDisplay[]	N/A	Optional	Contains Products and CharacteristicValues that are defined as related to this configuration group
compatibilityStatus	CompatibilityStatus	N/A	Optional	Compatibility status after applying the changes
DisplayableSimpleProductReferences	SimpleProductReferenceDisplay[]	N/A	Not in use	Represent a Simple Product that can be added to a Product, or that is already part of a Product.
productID	String	N/A	Mandatory	Catalog Product ID.
temporaryID	String	N/A	Mandatory	Operation extension attribute. This attribute is used differently on an operation by operation basis when an operation requires non business data as a parameter to the operation. The operation must document explicitly how it is used. An example of its use is for the consumer technical IDentifier of new anonymous data types instances such as a product instance that has not been created yet
serviceID	String	N/A	Optional	service ID
messages	RuleExecutionMessage[]	N/A	Optional	A message resulting from the execution of a rule-based operation. The results of these operations typically include an array of these messages

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Steps	ConfigurationStepDisplay[]	N/A	Not in use	Contains Products and CharacteristicValues that are defined as related to this configuration group
productSpecification	ProductSpecification	N/A	Optional	general catalog information and implemented information for a product
displayableActivityCharge	ActivityChargeDisplay	N/A	not in use	Context ActivityCharge of this Product.
effectiveCatalogVersion	String	N/A	Mandatory	The effective catalog version of the ProductSpecification this Product belongs to.
lineOfBusiness	String	BPT Values defined by MEC	Optional	Describes which LineOfBusiness the ProductSpecifications associated to this category belong to.
quoteStatus	QuoteStatus	N/A	Not in use	Status of quote call
productOffering	ProductOffering	N/A	Optional	Entity that defines the elements that can be sold.

3.1.3.6   TotalOneTimeCalculatedPrice – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
OriginalAmount	BigDecimal	N/A	Mandatory	The original amount of the {@LABEL TotalCalculatedPrice} - before any discounts.
DiscountPercentage	BigDecimal	N/A	Mandatory	The percentage of discount amount that was reduced from {@LABEL TotalCalculatedPrice}. Calculated as {@LABEL TotalCalculatedPrice#discountAmount}/ {@LABEL TotalCalculatedPrice#originalAmount} * 100
FinalAmount	BigDecimal	N/A	Mandatory	The final amount of the {@LABEL TotalCalculatedPrice} after any discounts and override/waive

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
FinalTaxAmount	BigDecimal	N/A	Mandatory	The final tax amount of the {@LABEL TotalCalculatedPrice} after any discounts.
OriginalTaxAmount	BigDecimal	N/A	Mandatory	The original tax amount of the {@LABEL TotalCalculatedPrice} - before any discounts.
FinalAmountIncludingTax	BigDecimal	N/A	Mandatory	Final amount including tax
DiscountAmount	BigDecimal	N/A	Mandatory	The discount amount that was reduced from {@LABEL TotalCalculatedPrice}
Currency	String	N/A	Mandatory	The currency of the {@LABEL TotalCalculatedPrice}

3.1.3.7   TotalRecurringCalculatedPrice – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
OriginalAmount	BigDecimal	N/A	Mandatory	The original amount of the {@LABEL TotalCalculatedPrice} - before any discounts
ProratedAmount	BigDecimal	N/A	Not in use	The amount of the {@LABEL TotalRecurringCalculatedPrice} calculated proportionately to the required period of the first bill.
ProratedDiscountAmount	BigDecimal	N/A	Not in use	The discount amount of the {@LABEL TotalRecurringCalculatedPrice} calculated proportionately to the required period.
ProratedTaxAmount	BigDecimal	N/A	Not in use	The tax amount of the {@LABEL TotalRecurringCalculatedPrice} calculated proportionately to the required period of the first bill.
DiscountPercentage	BigDecimal	N/A	Mandatory	The percentage of discount amount that was reduced from {@LABEL TotalCalculatedPrice}. Calculated as {@LABEL TotalCalculatedPrice#discountAmount}/ {@LABEL TotalCalculatedPrice#originalAmount} * 100
FinalAmount	BigDecimal	N/A	Mandatory	The final amount of the {@LABEL TotalCalculatedPrice} after any discounts and override/waive
FinalTaxAmount	BigDecimal	N/A	Mandatory	The final tax amount of the {@LABEL TotalCalculatedPrice} after any discounts

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
OriginalTaxAmount	BigDecimal	N/A	Mandatory	The original tax amount of the {@LABEL TotalCalculatedPrice} - before any discounts
FinalAmountIncludingTax	BigDecimal	N/A	Mandatory	Final amount including tax
RecurringChargeFrequency	SimpleFrequency	N/A	Optional	The frequency of the TotalRecurringCalculatedPrice
DiscountAmount	BigDecimal	N/A	Mandatory	The discount amount that was reduced from {@LABEL TotalCalculatedPrice}.
Currency	String	N/A	Mandatory	The currency of the {@LABEL TotalCalculatedPrice}.

3.1.3.8   SimpleFrequency – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
frequencyUnit	TimeUnits	N/A	Optional	The frequency unit, for example {@LABEL WEEK} or {@LABEL MONTH}
frequencyFactor	Integer	N/A	Mandatory	The frequency factor, for example for the frequency 6 months the factor would be 6

3.1.3.9   TimeUnits – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	• SECOND, • MINUTE, • HOUR, • DAY, • WEEK, • MONTH, • YEAR	Mandatory	Valid Values for time units.

3.1.3.10   ProductDisplay

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
TotalOneTimeCalculatedPrice	TotalOneTimeCalculatedPrice	N/A	Not in use	Not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
TotalRecurringCalculatedPrice	TotalRecurringCalculatedPrice	N/A	Not in use	Not in use
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Total prices for the ProductDisplay as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine.
displayableItems	ProductDisplay[]	N/A	Optional	Products and CharacteristicValues that are defined as related to this configuration group
DisplayableSimpleProductReferences	SimpleProductReferenceDisplay[]	N/A	Not in use	Represent a Simple Product that can be added to a Product, or that is already part of a Product.
productID	String	N/A	Mandatory	Product ID
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment between this ProductDisplay and its parent product.
displayInformation	ProductSpecDisplay	N/A	Mandatory	how the ProductSpecification should be displayed in a user interface application
productSpecContainment	ProductSpecContainment	N/A	Optional	The details of the ProductSpecContainment leading to the parent product.
originalCatalogDisplayInformation	ProductSpecDisplay	N/A	Optional	The display information defined by in the product catalog
temporaryID	String	N/A	Mandatory	Temporary ID
implDisplayablePricePlan	ImplAssignedPricePlan[]	N/A	Optional	List of child AssignedPricePlan of this Product

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
displayableActivityCharges	ActivityChargeDisplay[]	N/A	not in use	List of child ActivityCharges of this Product
displayableCharacteristics	CharacteristicValueDisplay[]	N/A	Optional	Contains Products and CharacteristicValues that are defined as related to this configuration group
allowedActions	AllowedAction[]	N/A	Optional	Actions that may be done on the product
totalDeposit	TotalDepositCalculationResult	N/A	Optional	The total Deposits of the Product.
selected	Boolean	True/False	Mandatory	status
businessType	ProductBusinessType	N/A	Optional	The business type of the Product.
serviceID	String	N/A	Optional	The service ID of the Product.
name	String	N/A	Mandatory	Product name
action	ProductConfigurationActionType	N/A	Optional	Action that was taken on the Product.
status	ProductActivationStatus	N/A	Optional	The status of the Product. For example ordered, provisioned.

3.1.3.11   ProductSpecDisplay

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
enabled	Boolean	True/False	Mandatory	If value is True then the ProductSpecification is editable
dynamicProperties	FlexAttr[]	N/A	Optional	List of additional properties that were assigned to the ProductSpecDisplay
visible	Boolean	True/False	Mandatory	If value is True then the ProductSpecification should be displayed

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
mandatory	Boolean	True/False	Mandatory	If value is True then the ProductSpecification should be enforced as mandatory
showStructure	Boolean	True/False	Mandatory	If value is True, then consumer is expected to show the structure of the Product, including ProductCharacteristics, contained Products etc
If value is false, then consumer is expected to show the Product in abbreviated form, eg just the title

3.1.3.12   ProductSpecContainment

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
dynamicProperties	FlexAttr[]	N/A	Optional	List of additional properties that were assigned to the ProductSpecContainment. Core provider software does not use these properties but specific implementations may add such properties and change behavior accordingly
minimumQuantity	Integer	N/A	Mandatory	The minimum number of copies of ProductSpecification that must be instantiated as Products contained within the parent product.
containedProduct	ProductSpecification	N/A	Optional	Contained product
defaultQuantity	Integer	N/A	Mandatory	The default number of copies of the child product that are created contained within in the parent product. When ProductSpecContainment-containedProducts is an array of different ProductSpecifications then this value has no meaning.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
maximumQuantity	Integer	N/A	Mandatory	The maximum number of copies of ProductSpecification that can be instantiated as products contained within the parent product

3.1.3.13   ImplAssignedPricePlan

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
TotalOneTimeCalculatedPrice	TotalOneTimeCalculatedPrice	N/A	Not in use	Not in use
TotalRecurringCalculatedPrice	TotalRecurringCalculatedPrice	N/A	Not in use	Not in use
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Total prices by type as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine.
displayInformation	PriceSchemaDisplay	N/A	Optional	The display information of the AssignedPricePlan
allowedActions	AllowedAction[]	N/A	Optional	Actions that may be done on the AssignedPricePlan
selected	Boolean	True/False	Mandatory	This indicates whether the AssignedPricePlanDisplay is part of the Product configuration or not
assignedPricePlanID	String	N/A	Mandatory	A unique IDentifier of the AssignedPricePlanDisplay
productSpecPricingID	String	N/A	Mandatory	ID of the ProductSpecPricing
RecurringCalculatedPrices	RecurringCalculatedPrice[]	N/A	Not in use	Not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
crossProductDiscount	Boolean	True/False	Mandatory	Indicates whether this AssignedPricePlanDisplay was added to the Product as result of cross products discounts
productSpecPricing	ProductSpecPricing	N/A	Optional	The details of the ProductSpecPricing leading to the parent product
oneTimeCalculatedPrices	OneTimeCalculatedPrice[]	N/A	Not in use	Not in use
crossProductDiscountRuleDescription	String	N/A	Mandatory	Contain the description of the cross products discounts rule, that added this AssignedPricePlanDisplay. If the AssignedPricePlanDisplay was not added as result of cross products discounts rule - this field will be empty
name	String	N/A	Mandatory	A word, term, or phrase by which the PriceSchema is known and distinguished from other PriceSchemas
action	ProductConfigurationActionType	N/A	Optional	Actions that may be done on the AssignedPricePlanDisplay
status	ProductActivationStatus	N/A	Optional	The status of the AssignedPricePlanDisplay, For example Active, Cease, Suspended. When a Assigned AssignedPricePlanDisplay is not saved yet (catalog definition) this field will be empty.

3.1.3.14 CharacteristicValueDisplay

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
ExternalWidget	ExternalWidget	N/A	not in use	Represents External widget that should capture data used for product configuration
displayInformation	CharacteristicDisplay	N/A	Mandatory	The display information of a Caracteristic defined by in the product catalog
originalCatalogDisplayInformation	CharacteristicDisplay	N/A	Optional	The display information of a Caracteristic defined by in the product catalog
ActionDisplay	CharacteristicActionDisplay	N/A	Not in use	Not in use
businessType	CharacteristicBusinessType	N/A	Not in use	Not in use
productSpecCharacteristicID	String	N/A	Optional	The ID of the ProductSpecCharacteristic
productSpecCharacteristic	ProductSpecCharacteristic	N/A	Mandatory	The ProductSpecCharacteristics used by a ProductSpecification.
resourceSpec	ResourceSpec	N/A	not in use	Represents the catalog resource information
value	String	N/A	Optional	A value that the Characteristic can take on. In the case of a range value, this represents the lower value of the range. See the class notes for the formatting rules for a value whose type is other than String

3.1.3.15 ResourceSpec – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
categoryDefaultValue	Option	N/A	Optional	Represents the default value of the resource category
categoryValues	Option	N/A	Optional	Category single value

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
categoryValues	Option[]	N/A	Optional	Represents the list of resource category valid values
type	String	N/A	Optional	Resource Type - derived from the Resource Type dynamic property

3.1.3.16 Option – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
value	String	N/A	Mandatory	Displayable string for the value
code	String	N/A	Mandatory	Code of value

3.1.3.17 CharacteristicBusinessType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	■ COMMITMENT_DURATION, ■ FRIENDS_AND_FAMILY, ■ RESOURCE_CATEGORY	Mandatory	List of valid values for business type

3.1.3.18 CharacteristicDisplay

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
enabled	Boolean	True/False	Mandatory	If True, then the Characteristic is editable.
showHelpText	Boolean	True/False	Mandatory	If True, then help text should be displayed with the Characteristic. The description of the Characteristic is typically used as the help text.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
dynamicProperties	FlexAttr[]	N/A	Optional	List of additional properties that were assigned to the CharacteristicDisplay.
visible	Boolean	True/False	Mandatory	If True, then the Characteristic should be displayed.
displayFormat	CharacteristicDisplayFormat	N/A	Mandatory	The format for display for the Charactersitic. Typically a user interface type of control such as a button or calendar widget.
numberOfLines	Integer	N/A	Mandatory	The vertical size that best suits the display of the Characteristic
mandatory	Boolean	True/False	Mandatory	If True, then the Characteristic must be assigned a value.
name	String	N/A	Mandatory	The name that should be used as a label for Characteristic. It is an alternative to the characteristic name.
mask	String	N/A	Mandatory	The display mask to be used for the Characteristic

3.1.3.19   CharacteristicDisplayFormat

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ CALENDAR, ▪ CALENDAR_AND_TIME, ▪ CHECKBOX, ▪ DATE_ONLY, ▪ DROPDOWN_LISTBOX, ▪ LISTBOX, ▪ MULTI_LINE_TEXTBOX, ▪ RADIO_BUTTON, ▪ TEXTBOX	Mandatory	List of valid values for display format.

3.1.3.20 CharacteristicActionDisplay – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
actionDisplayType	CharacteristicActionDisplay Type	N/A	Optional	The format for display for the CharacteristicActionDisplay. Typically a type of user interface control such as a button or hyperlink.
functionActionType	String	N/A	Optional	Indicates whether the function which is invoked for this CharacteristicActionDisplay sets single value or multiple values.
functionParameters	String	N/A	Optional	The list of parameters that is sent to the function which is invoked for this CharacteristicActionDisplay. Multiple values are separated by a comma.
enabled	Boolean	True/False	Optional	If True, then the CharacteristicActionDisplayed is enabled.
function	String	N/A	Optional	The name of the function that is invoked for this CharacteristicActionDisplay. The function is assumed to be accessible by the user interface and will be invoked according to the relevant technology of the user interface. For example, in a channel using HTML this might be the name of a JavaScript procedure Name
name	String	N/A	Optional	The name that should be used as a label for this CharacteristicActionDisplay.

3.1.3.21 CharacteristicActionDisplayType – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	BUTTON	Mandatory	List of valid values for display type.

3.1.3.22   AllowedAction

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
allowed	Boolean	N/A	Mandatory	Indicates whether the action is allowed or not for this Product
type	ProductConfigurationActionType	N/A	Optional	Indicates the type of the action.

3.1.3.23   TotalDepositCalculationResult

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
actualAmount	BigDecimal	N/A	Mandatory	The total amount to be used to when paying the {@LABEL TotalDepositCalculationResult}. This amount includes any waiving or overrides
overrideAmount	BigDecimal	N/A	Mandatory	The total of all the overrides and waives amount of the {@LABEL DepositCalculatedResult}.
originalAmount	BigDecimal	N/A	Mandatory	The total amount to be paid as a {@LABEL TotalDepositCalculationResult} recommended by the calculation.
currency	String	'USD'	Mandatory	The currency in which the money amounts are applied.

3.1.3.24   ProductBusinessType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ DEVICE, ▪ FRIENDS_AND_FAMILY, ▪ TV_CHANNEL, ▪ TV_PACKAGE	Mandatory	List of valid values for product business type.

3.1.3.25   ProductConfigurationActionType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	■ AD, ■ ES, ■ RM, ■ RS, ■ SU, ■ UP	Mandatory	"AD"- Add, "ES" – Reestablish, "RM" – Remove, "RS" – Resume, "SU" – Suspend, "UP"- Change

3.1.3.26   ProductActivationStatus

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	AC, CE, SU	Mandatory	"AC" – ACTIVE, "CE" – CEASED, "SU" - SUSPENDED

3.1.3.27   CompatibilityStatus

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	BLOCKING, COMPATIBLE, CONFIRMATION, INFORMATION, NOT_CHECKED	Mandatory	BLOCKING – If there is a compatibility error COMPATIBLE – All validations passed. NOT_CHECKED – Compatibility was not performed.

3.1.3.28   SimpleProductReferenceDisplay – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
TotalOneTimeCalculatedPrice	TotalOneTimeCalculatedPrice	N/A	Not in use	Not in use
TotalRecurringCalculatedPrice	TotalRecurringCalculatedPrice	N/A	Not in use	Not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Total prices by type as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine
productID	String	N/A	Mandatory	Product ID
productSpecContainmentID	String	N/A	Mandatory	The ID of the ProductSpecContainment between this ProductDisplay and its parent product
displayInformation	ProductSpecDisplay	N/A	Optional	The display information defined by in the product catalog Should be used by the consumer when adding new child productDisplay instance and the parent @LABEL ProductDisplay} can be added in quantity
productSpecContainment	ProductSpecContainment	N/A	Optional	The details of the ProductSpecContainment, leading to the parent product
originalCatalogDisplayInformation	ProductSpecDisplay	N/A	Optional	The display information defined by in the product catalog. Should be used by the consumer when adding new child productDisplay instance and the parent @LABEL ProductDisplay} can be added in quantity.
temporaryID	String	N/A	Mandatory	Temporary ID
implDisplayablePricePlan	ImplAssignedPricePlan []	N/A	Optional	List of child AssignedPricePlan of this Product
displayableActivityCharges	ActivityChargeDisplay[]	N/A	Optional	List of child ActivityCharges of this Product

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
displayableCharacteristics	CharacteristicValueDisplay[]	N/A	Optional	Contains Products and CharacteristicValues that are defined as related to this configuration group
allowedActions	AllowedAction[]	N/A	Optional	Actions that may be done on the product
totalDeposit	TotalDepositCalculationResult	N/A	Optional	The total deposits of the product
selected	Boolean	True/False	Mandatory	status
businessType	ProductBusinessType	N/A	Optional	The business type of the product
simpleProductSpecID	String	N/A	Mandatory	
serviceID	String	N/A	Mandatory	The service ID of the Product
productSpecRelationshipID	String	N/A	Mandatory	The ID that is used to select this mobile device
originalProductSpecification	ProductSpecification	N/A	Optional	
browsingCategory	BrowsingCategory	N/A	Optional	A category of catalog items
name	String	N/A	Mandatory	The name of the Product
default	Boolean	N/A	Mandatory	
action	ProductConfigurationActionType	N/A	Optional	Action that was taken on the Product.
status	ProductActivationStatus	N/A	Optional	The status of the product. For example ordered, provisioned.

3.1.3.29   TotalDepositCalculationResult

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
actualAmount	BigDecimal	N/A	Mandatory	The total amount to be used to when paying the {@LABEL TotalDepositCalculationResult}. This amount includes any waiving or overrides
overrideAmount	BigDecimal	N/A	Mandatory	The total of all the overrides and waives amount of the {@LABEL DepositCalculatedResult}.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
originalAmount	BigDecimal	N/A	Mandatory	The total amount to be paid as a {@LABEL TotalDepositCalculationResult} recommended by the calculation.
currency	String	'USD'	Mandatory	The currency in which the money amounts are applied.

3.1.3.30   BrowsingCategory – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
FilterFacets	FilterFacet[]	N/A	Not in use	Not in use
Lob	LineOfBusinessDetails[]	N/A	Not in use	represent LOB details
AdditionalProperties	FlexAttr[]	N/A	Not in use	Not in use
Comparable	Boolean	N/A	Not in use	Not in use
Name	String	N/A	Mandatory	Browsing category name
Type	BrowsingCategoryType	N/A	Not in use	Not in use
id	String	N/A	Mandatory	Browsing category ID
code	String	N/A	Mandatory	Browsing category code

3.1.3.31   FilterFacet – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
Lob	String[]	N/A	Optional	Line Of Business
Lob	String	N/A	Optional	Single value line of business.
ValueRestriction	CharacteristicValueRestrictionType	N/A	Optional	Defines how the possible set of values for the ValueType is restricted.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
AdditionalProperties	FlexAttr[]	N/A	Optional	List of additional properties that were assigned to the FilterFacet
ValueType	CharacteristicValueBasicType	N/A	Optional	The underlying (basic) type of values
Name	String	N/A	Optional	Free format short textual description
Id	String	N/A	Optional	A unique identifier.
Values	FilterFacetValue[]	N/A	Optional	list of values of the facet to be used for filtering
Code	String	N/A	Optional	A unique identifier that is human readable

3.1.3.32   CharacteristicValueRestrictionType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	DI, GE, RA	Mandatory	"DI" – DISCRETE, "GE" – GENERAL, "RA" - RANGE

3.1.3.33   CharacteristicValueBasicType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	BL, CH, CX, DB, DT, NU	Mandatory	"BL"- BOOLEAN, "CH" – STRING, "CX"- COMPLEX, "DB" – DOUBLE, "DT" – DATE, "NU" - INTEGER

3.1.3.34 FilterFacetValue – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
ValueTo	String	N/A	Optional	The upper range value that a range-type item property can take on.
Value	String	N/A	Optional	A value that the item can take on. In the case of a range value, this represents the lower value of the range.
Id	String	N/A	Optional	A unique identifier.

3.1.3.35 LineOfBusinessDetails – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
DisplayIdentifier	String	N/A	Optional	Define the identifier for each lob; used for presentation; example for Wireless lob, Service ID (MSISDN) is used in UI, for TV the Address, etc. valid value: SERVICE_ID, ADDRESS
DisplaySPOName	Boolean	True/False	Optional	Define the logic whether to display the SPO name before to the plan name according to the implementation.
PlansCategoryStructureID	String	N/A	Optional	The associated category ID of the plans for the LOB
SmallPicture	String	N/A	Optional	Small Picture URL
BigPicture	String	N/A	Optional	Big Picture URL of the line of business
Name	String	N/A	Optional	line of business name
Code	String	N/A	Optional	line of business Identifier/code

3.1.3.36 BrowsingCategoryType – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Value	String	▪ LIST, ▪ NAVIGATION	Mandatory	List of values for browsing category type.

3.1.3.37 RuleExecutionMessage

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
objectId	String	N/A	Mandatory	Identifies the object that this message pertains to.
severity	String	BPT Values defined by MEC	Mandatory	The message severity
configurationStepSpecID	String	N/A	not in use	not in use
productSpecCharacteristicID	String	N/A	Mandatory	The ProductSpecCharacteristics used by a ProductSpecification.
messageId	String	N/A	Mandatory	Anidentifier that uniquelyidentifies this message. Used by certain applications in conjunction with RuleExecutionMessage parameters to create a truncated message suitable for some UI devices
ruleLevel	ConfigurationRuleLevel	N/A	Optional	Indicates the configuration level that the rule runs on. Default value will be Product.
objectName	String	N/A	Mandatory	

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
configurationStepSpecName	String	N/A	not in use	not in use
parameters	FlexAttr[]	N/A	Optional	Named values that were used to build the message text.Used by certain applications in conjunction with MessageId to create a truncated message suitable for some UI devices
text	String	N/A	Mandatory	The message formatted in the client's locale.

3.1.3.38 ConfigurationRuleLevel

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ A, ▪ P, ▪ S	Mandatory	"A" - ALL_STEPS, "P"- PRODUCT, "S" - STEP

3.1.3.39 FlexAttr

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
name	String	N/A	Mandatory	Attribute name
value	FlexAttrValue	N/A	Mandatory	Attribute value

3.1.3.40 FlexAttrValue

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
integerValue	Integer	N/A	Optional	Value as integer
stringValue	String	N/A	Optional	Value as string
dateValue	Date as Long	N/A	Optional	Value as date Expected Date as Long. see assumption #3
decimalValue	BigDecimal	N/A	Optional	Value as double
booleanValue	Boolean	N/A	Optional	Value as boolean
valueType	FlexAttrValueType	N/A	Mandatory	Value type

3.1.3.41   FlexAttrValueType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	■ BOOLEAN, ■ DATE, ■ DECIMAL, ■ INTEGER, ■ STRING	Mandatory	Valid Values list for flexible attribute value type

3.1.3.42   ConfigurationStepDisplay – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
DisplayableItems	ProductDisplay[]	N/A	Optional	Contains Products and CharacteristicValues that are defined as related to this configuration group
ExternalWidget	ExternalWidget	N/A	not in use	Represents External widget that should capture data used for product configuration
CompatibilityStatus	CompatibilityStatus	N/A	Optional	This indicates the compatibility status of the step. It takes into consideration all products related to the ConfigurationStepSpecification
PrerequisiteSteps	ConfigurationStepDisplay[]	N/A	Not in use	Contains products and characteristicvalues that are defined as related to this configuration group
DisplayableSimpleProductReferences	SimpleProductReferenceDisplay[]	N/A	Not in use	Represent a simple product that can be added to a product, or that is already part of a Product.
Enabled	Boolean	True/False	Mandatory	An indication of whether the Configuration Step should be enabled or disabled to the user. Default value is True. An example for a case where a step should be disabled is when the Point of No Return related to this Configuration Step had passed.
Name	String	N/A	Mandatory	Configuration step name
Message	String	N/A	Mandatory	A message that is related to the Configuration Step. Example: when there Step is disabled due to Point of No Return passing, then a message can be set on the step to be displayed to the user.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Type	String	N/A	Optional	Configuration step type
ID	String	N/A	Mandatory	Configuration step ID
Description	String	N/A	Mandatory	Configuration step description

3.1.3.43 ExternalWidget – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
LogicalName	String	N/A	Mandatory	The logical name of the external widget
PhysicalName	String	N/A	Mandatory	The physical name of the external widget
InputParameters	ExternalWidgetParameters[]	N/A	Optional	Represents parameter of external widget that should capture data used for product configuration

3.1.3.44 ExternalWidgetParameters – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
Name	String	N/A	Mandatory	Parameter name.
Value	String	N/A	Mandatory	parameter value. if type = CONSTANT: it contain the constant value if origin = PRODUCT_CHARACTERISTIC_VALUE: it contain the relation ID of the sub product and the characteristic caption. or only the characteristic caption - if the attribute is under the same component that its attribute caused opening the widget

3.1.3.45   ProductSpecification

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
RecurringPrice	RecurringCharge	N/A	Not in use	Not in use
OneTimePrice	OnetimeCharge	N/A	Not in use	Not in use
OfferingToProductId	String	N/A	Not in use	Offering to product relation ID.
Lob	String	N/A	Not in use	line of business code
plan	PriceSchema	N/A	Mandatory	pricing object
DetailsGroups	CatalogItemCharacteristicGroup	N/A	Not in use	Not in use
dynamicProperties	FlexAttr[]	N/A	Optional	List of additional properties that were assigned to the ProductSpecification
MinimumQuantity	Integer	N/A	Not in use	Not in use
MaximumQuantity	Integer	N/A	Not in use	Not in use
LobImage	String	N/A	Not in use	Not in use
attachments	Attachment[]	N/A	Optional	Documents associated to the ProductSpecification
characteristics	ProductSpecCharacteristic[]	N/A	Optional	The ProductSpecCharacteristics used by a ProductSpecification
SharedProduct	Boolean	True/False	Not in use	The shared product in the family
LobName	String	N/A	Not in use	line of business name according to the language
name	String	N/A	Mandatory	The reference number of the ProductOrderItem
id	String	N/A	Mandatory	The unique primary key of the ProductSpecification, together with the related ProductCatalogVersion . A ProductSpecification is always created or changed within a given ProductCatalogVersion, it is the combination that uniquely IDentifies the fixed attributes and relations of the ProductSpecification

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
type	String	N/A	Optional	The type of the ProductSpecification. A means of classification
level	String	BPT Values defined by MEC	Optional	Level of the product i.e. whether it is GLP or not
description	String	N/A	Mandatory	The ID of the ProductOrderItem
code	String	N/A	Mandatory	The ID of the Product

3.1.3.46   RecurringCharge – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
Max	BigDecimal	N/A	Mandatory	The maximum price that can be applied.
Min	BigDecimal	N/A	Mandatory	The minimum price that can be applied
ChargeFrequencyFactor	Integer	N/A	Optional	The factor number to be applied.
ChargeFrequencyUnit	TimeUnits	N/A	Optional	The frequency of the charge
OriginalAmount	BigDecimal	N/A	Mandatory	Original price before discounted were applied.
Amount	BigDecimal	N/A	Mandatory	Charge amount.
Description	String	N/A	Not in use	Charge description
Currency	String	N/A	Mandatory	The currency of the price.

3.1.3.47   OnetimeCharge – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
Max	BigDecimal	N/A	Mandatory	The maximum price that can be applied.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Min	BigDecimal	N/A	Mandatory	The minimum price that can be applied.
OriginalAmount	BigDecimal	N/A	Mandatory	Original charge amount before discounted were applied
Amount	BigDecimal	N/A	Mandatory	Charge amount.
Currency	String	N/A	Mandatory	The currency of the price.

3.1.3.48 CatalogItemCharacteristic

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
valueRestriction	CharacteristicValueRestrictionType	N/A	Optional	Defines how the possible set of values are restricted.
additionalProperties	FlexAttr[]	N/A	Optional	Additional properties list of the item
valueType	CharacteristicValueBasicType	N/A	Optional	The underlying (basic) type of value that the characteristic
name	String	N/A	Mandatory	Free format short textual description.
values	CatalogItemCharacteristicValue[]	N/A	Optional	A number, text, or date that can be assigned to an instance of characteristic

3.1.3.49 CatalogItemCharacteristicValue

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
valueTo	String	N/A	Optional	The upper range value that a range-type characteristic can take on.
value	String	N/A	Optional	A value that the characteristic can take on. In the case of a range value, this represents the lower value of the range.

3.1.3.50 CatalogItemCharacteristicGroup

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
characteristics	CatalogItemCharacteristic[]	N/A	Optional	A Characteristic of an item.
name	String	N/A	Mandatory	Free format short textual description.

3.1.3.51 Attachment

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
purpose	String	BPT Values defined by MEC	Optional	The purpose of the Attachment, valid values from Attachment Purpose. Examples might include: Marketing, Training
attachmentLocation	String	N/A	Optional	A URL (or some other location string) that defines the logical location of the Attachment within some external repository
type	String	BPT Values defined by MEC	Optional	A logical type for the Attachment, valid values from AttachmentType. Examples might include: Document, Picture Contrast with mime_type, which is the technical type of the content.

3.1.3.52 ProductSpecCharacteristic

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
enabled	Boolean	True/False	Optional	If True, then the Characteristic is editable.
showHelpText	Boolean	True/False	Optional	If True, then help text should be displayed with the Characteristic. The description of the Characteristic is typically used as the help text.
valueBasicType	CharacteristicValueBasicType	N/A	Mandatory	The underlying (basic) type of value that the CharacteristicValueType represents.
valueRestriction	CharacteristicValueRestrictionType	N/A	Mandatory	Defines how the possible set of values for the CharacteristicValueType are restricted.
ActionDisplay	CharacteristicActionDisplay	N/A	Not in use	Not in use
dynamicProperties	FlexAttr[]	N/A	Mandatory	List of additional properties that were assigned to the Characteristic
visible	Boolean	True/False	Optional	If True, then the Characteristic should be displayed.
displayFormat	CharacteristicDisplayFormat	N/A	Optional	The format for display for the Charactersitic. Typically a user interface type of control such as a button or calendar widget.
numberOfLines	Integer	N/A	Optional	The vertical size that best suits the display of the Characteristic.
mandatory	Boolean	True/False	Optional	If True, then the Characteristic should be assigned
name	String	N/A	Mandatory	Free format short textual description.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
defaultValue	Characterist icValue	N/A	Optional	Represents the default value that is placed into the CharacteristicValue when a ConfigurableCharacteristi c is instanciated.
length	Integer	N/A	Mandatory	Maximum length of the value
id	String	N/A	Mandatory	A unique IDentifier.
mask	String	N/A	Optional	The display mask to be used for the characteristic
values	Characterist icValue[]	N/A	Mandatory	Represents the set of valid values of a characteristic which valueType is DISCRETE or the set of valid ranges of a Characteristic}which valueType is RANGE
values	Characterist icValue	N/A	Mandatory	Represents the default value that is placed into the characteristicvalue when a ConfigurableCharacteristi c is instanciated
description	String	N/A	Mandatory	Characteristic description.
code	String	N/A	Mandatory	A value that the characteristic can take on. In the case of a range value, this represents the lower value of the range. See the class notes for the formatting rules for a value whose type is other than String.

3.1.3.53   CharacteristicValue

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
valueForDisplay	String	N/A	Mandatory	A representation of the value suitable for display to human users. For example in Amdocs Shared Product Information Model, represents the decode (translation into current national language) where the value is a code. For example, a codeAC might be used to represent Active state of a Product the English decode would be Active.
valueTo	String	N/A	Mandatory	The upper range value that a range-type Characteristic can take on. See the class notes for the formatting rules for a value whose type is other than String
value	String	N/A	Mandatory	A value that the Characteristic can take on. In the case of a range value, this represents the lower value of the range. See the class notes for the formatting rules for a value whose type is other than String.

3.1.3.54   ImplCalculatedPrices

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
sequenceId	Integer	N/A	Mandatory	Sequence ID
ppCid	String	N/A	Mandatory	the Price Plan Catalog ID (PP CID) automatically generated in MEC

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
ppName	String	N/A	Optional	the Price Plan description, free text for maintenance purposes
ppType	String	RP – retail price (regular price). Each Price Plan is associated to a retail price (the record with this PP TYPE is mandatory) DP – Percentage Discount (the record with this PP TYPE is optional) DF – Flat Discount (this amount overrides the regular price) (the record with this PP TYPE is optional) DD – Dollar Off Discount (the record with this PP TYPE is optional)	Mandatory	the Price Plan type
tierFrom	String	N/A	Optional	the discount tier's start (in month), for example 1, meaning from the 1 month, or 13, meaning from the second year
tierTo	String	N/A	Optional	The discount tier's end (in month), for example 12, meaning till the 12-th month (discount is applied for one year only). The value 999 will mean that discount is not limited in time
quantityAtt	String	N/A	Optional	The ID of the quantity attribute on the component. This code, which is defined in MEC for each attribute, will help the target application to find the quantity value set during the product configuration
quantityFrom	Integer	N/A	Optional	the number of the service instances from which the discount is applied
quantityTo	Integer	N/A	Optional	the number of the service instances to which the discount is applied. The value 999 will mean that discount is not limited in number of instances
amountType	String	OC – One-Time price RC – Recurring price DC – Discount	Mandatory	Type of the amount price in the next column

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
amount	BigDecimal	N/A	Mandatory	The value of dollar amount if the retail price, flat discount or dollar off discount, or percentage is a percentage discount
quantity	Integer	N/A	Optional	Number of related price plans
startDate	Date as Long	N/A	Mandatory	The Price Plan effective date Expected Date as Long. see assumption #3
endDate	Date as Long	N/A	Optional	The Price Plan expiration date. The empty field will mean that no expiration date was set Expected Date as Long. see assumption #3
biller	String	N/A	Mandatory	Name of the biller (CSG)
market	String	N/A	Mandatory	Name of the Market
subMarket	String	N/A	Mandatory	Name of the submarket
ftaFrom	String	N/A	Mandatory	FTA from
ftaTo	String	N/A	Mandatory	FTA to
custType	String	N/A	Mandatory	Type of customer
code	String	N/A	Mandatory	Value of the CSG code
codeType	String	I - Installation S - Service code P - Package code T - Tracking code D - Discount	Mandatory	type of the code to be sent to the Biller (for CSG maintenance use)
basicItemQuantity	Integer	N/A	Optional	Amount of instances of price entity

3.1.3.55 ActivityChargeDisplay – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
activityCharge	ActivityCharge	N/A	Optional	Link to the ActivityCharge
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Prices by type as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine
activityChargeID	String	N/A	Mandatory	A uniqueidentifier of the {@PATH ActivityCharge}.

3.1.3.56 ActivityCharge – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
dynamicProperties	FlexAttr[]	N/A	Optional	Dynamic properties
name	String	N/A	Mandatory	Activity charge name
id	String	N/A	Mandatory	Activity charge ID
description	String	N/A	Mandatory	Activity charge description
code	String	N/A	Mandatory	Activity charge code

3.1.3.57 OneTimeCalculatedPrice – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
OriginalAmount	BigDecimal	N/A	Mandatory	The original amount of the CalculatedPrice - before any discounts.
DiscountPercentage	BigDecimal	N/A	Mandatory	The percentage of discount amount of the CalculatedPrice}. Calculated as CalculatedPrice.discountAmount/CalculatedPrice.originalAmount * 100
FinalAmount	BigDecimal	N/A	Mandatory	The final amount of the CalculatedPrice after any discounts and override/waive.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
FinalTaxAmount	BigDecimal	N/A	Mandatory	The final tax amount of the CalculatedPrice after any discounts.
OriginalTaxAmount	BigDecimal	N/A	Mandatory	The original tax amount of the CalculatedPrice - before any discounts.
DiscountAmount	BigDecimal	N/A	Mandatory	The discount amount of the CalculatedPrice.
ChargeDescription	String	N/A	Not in use	The description of the actual charge, depending on the reference data model may differ from the description in the catalog definition.
Name	String	N/A	Mandatory	The catalog name of the originating PriceSchema or ActivityCharge.
Description	String	N/A	Mandatory	The catalog description of the originating PriceSchema or ActivityCharge.
Currency	String	N/A	Mandatory	The currency of the CalculatedPrice.

3.1.3.58   QuoteStatus – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Value	String	▪ FAILED, ▪ NOT_CALLED, ▪ SUCCESS	Mandatory	List of valid values for quote status

3.1.3.59   ProductOffering

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
CrossProductDiscounts	CustomerDiscounts[]	N/A	Not in use	Not in use
OneTimePrice	OnetimeCharge	N/A	Not in use	Not in use
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	One time charge of an item as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine.
dynamicProperties	FlexAttr[]	N/A	Optional	List of additional properties that are assigned to the ProductOffering
attachments	Attachment[]	N/A	Optional	Documents that are associated with the ProductOffering

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
name	String	N/A	Mandatory	The reference number of the ProductOrderItem
id	String	N/A	Mandatory	A unique IDentifier together with the related ProductOffering.version. Since a ProductOffering is always created or changed within a given CatalogVersion, it is the combination that uniquely IDentifies the fixed attributes and relations of the ProductOffering
bundle	Boolean	True/False	Mandatory	If value is True then the ProductOffering is a bundle. A bundle is a ProductOffering that is composed of more than one ProductSpecifications, regardless if it is more than one instance of the same product or instances of different products
description	String	N/A	Mandatory	The ID of the ProductOrderItem
code	String	N/A	Mandatory	The ID of the Product

3.1.3.60 CustomerDiscounts – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
ProductOfferingInstanceID	String	N/A	Optional	
ProductOfferingName	String	N/A	Optional	
SimpleProductOfferingName	String	N/A	Optional	

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
RecurringPrice	RecurringPriceForOrder	N/A	Optional	The result of a calculation of the money amount required to be paid for a product recurring.
OneTimePrice	OneTimePriceForOrder	N/A	Optional	The result of a calculation of the money amount required to be paid for a product one time.
ProductOrderItemID	String	N/A	Optional	
ProductServiceID	String	N/A	Optional	Service ID of the product for which the discount was given
ProductLineOfBusiness	String	N/A	Optional	Name of the product for which the discount was given
ProductName	String	N/A	Optional	
ProductCatalogID	String	N/A	Optional	Catalog ID of the discount
ActionID	String	N/A	Optional	A uniqueidentifier of the order item
DiscountCatalogID	String	N/A	Optional	The ID of the discount in the catalog
DiscountStatus	String	N/A	Optional	Status of the discount, can be new, removed, no change
RuleDescription	String	N/A	Optional	Description of the rule
Name	String	N/A	Optional	Name of discount

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Id	String	N/A	Optional	APID of the product the discount was given
Description	String	N/A	Optional	Description of the discount

3.1.3.61   RecurringPriceForOrder – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
OriginalAmount	BigDecimal	N/A	Optional	The original amount of the price - before any discounts
ProratedAmount	BigDecimal	N/A	Optional	The amount of the quoted recurring price, calculated proportionately to the required period of the first bill.
ProratedDiscountAmount	BigDecimal	N/A	Optional	The discount amount of the quoted recurring price, calculated proportionately to the required period.
ProratedTaxAmount	BigDecimal	N/A	Optional	The tax amount of the quoted recurring price calculated proportionately to the required period of the first bill.
DiscountPercentage	BigDecimal	N/A	Optional	Discount percentage
Frequency	String	N/A	Optional	The price frequency, for example: monthly, weekly, bi-weekly.
FinalAmount	BigDecimal	N/A	Optional	The final amount of the price after any discounts and override/waive.
FinalAmountWithTax	BigDecimal	N/A	Optional	The finalAmount + finalTaxAmount
FinalTaxAmount	BigDecimal	N/A	Optional	The final tax amount of the price after any discounts
OriginalTaxAmount	BigDecimal	N/A	Optional	The original tax amount of the price - before any discounts.
Currency	String	N/A	Optional	The currency of the price.

3.1.3.62 OneTimePriceForOrder – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
OriginalAmount	BigDecimal	N/A	Optional	The original amount of the price - before any discounts
DiscountPercentage	BigDecimal	N/A	Optional	Discount percentage
FinalAmount	BigDecimal	N/A	Optional	The final amount of the price after any discounts and override/waive
FinalAmountWithTax	BigDecimal	N/A	Optional	The finalAmount + finalTaxAmount
FinalTaxAmount	BigDecimal	N/A	Optional	The final tax amount of the price after any discounts.
OriginalTaxAmount	BigDecimal	N/A	Optional	The original tax amount of the price - before any discounts.
Description	String	N/A	Optional	One Time Price description such as activation fee, termination fee, installation fee
Currency	String	N/A	Optional	The currency of the price

3.1.3.63 ProductDiscountsDisplay – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Total prices by type as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine
productOfferingInstanceID	String	N/A	Mandatory	The ID of the parent productOfferingInstance
productOfferingName	String	N/A	Mandatory	The name of the parent productOffering
simpleProductOfferingName	String	N/A	Mandatory	The name of the parent simple ProductOffering
TotalOneTimeCalculatedPrice	TotalOneTimeCalculatedPrice	N/A	Not in use	Not in use
implCrossProductDiscounts	ImplAssignedPricePlan[ ]	N/A	Optional	List of child AssignedPricePlan of this Product.
totalRecurringCalculatedPrice	TotalRecurringCalculatedPrice	N/A	Not in use	Not in use
productID	String	N/A	Mandatory	The ID of the Product
productServiceID	String	N/A	Mandatory	The service ID of the Product
productLineOfBusiness	String	N/A	Optional	The LineOfBusiness of the Product
productName	String	N/A	Mandatory	The name of the Product
displayInformation	PriceSchemaDisplay	N/A	Optional	The display information of the AssignedPricePlan
allowedActions	AllowedAction[]	N/A	Optional	Actions that may be done on the AssignedPrice
selected	Boolean	True/False	Mandatory	This indicates whether the AssignedPricepart of the Product configuration.
assignedPricePlanID	String	N/A	Mandatory	A unique identifier of the AssignedPrice
productSpecPricingID	String	N/A	Mandatory	ID of the ProductSpecPricing
recurringCalculatedPrices	RecurringCalculatedPrice[]	N/A	Not in use	Not in use

Field Name	Data Type	Valid Values	Mandatory /Optional		Description
crossProductDiscount	Boolean	True/False	Mandatory		Indicates whether this AssignedPricewas added to the Product as result of cross products discounts.
productSpecPricing	ProductSpecPricing	N/A	Optional		The details of the ProductSpecPricing leading to the parent product.
OneTimeCalculatedPrices	OneTimeCalculatedPrice[]	N/A	Not in use		Not in use
crossProductDiscountRuleDescription	String	N/A	Mandatory		Contain the description of the cross products discounts rule, that added this AssignedPrice. If the AssignedPricewas not added as a result of the cross-products discounts rule, this field will be empty.
name	String	N/A	Mandatory		A word, term, or phrase by which the PriceSchema is known and distinguished from other PriceSchemas.
action	ProductConfigurationActionType	N/A	Optional		Action that was performed on the AssignedPrice.
status	ProductActivationStatus	N/A	Optional		The status of the AssignedPrice, For example Active, Cease, Suspended. When a AssignedPrice is not saved yet (catalog definition) this field will be empty.

3.1.3.64 PriceSchemaDisplay

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
enabled	Boolean	N/A	Mandatory	If value is True then the PriceSchema is editable
visible	Boolean	N/A	Mandatory	If value is True then the PriceSchema should be displayed

3.1.3.65 RecurringCalculatedPrice – not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
OriginalAmount	BigDecimal	N/A	Mandatory	The original amount of the CalculatedPrice - before any discounts.
ProratedAmount	BigDecimal	N/A	Not in use	The amount of the {@LABEL RecurringCalculatedPrice} calculated proportionately to the required period of the first bill.
ProratedDiscountAmount	BigDecimal	N/A	Not in use	The discount amount of the {@LABEL RecurringCalculatedPrice} calculated proportionately to the required period.
ProratedTaxAmount	BigDecimal	N/A	Not in use	The tax amount of the {@LABEL RecurringCalculatedPrice} calculated proportionately to the required period of the first bill.
DiscountPercentage	BigDecimal	N/A	Mandatory	The percentage of discount amount of the CalculatedPrice}. Calculated as CalculatedPrice.discountAmount/ CalculatedPrice.originalAmount * 100
FinalAmount	BigDecimal	N/A	Mandatory	The final amount of the CalculatedPrice after any discounts and override/waive
FinalTaxAmount	BigDecimal	N/A	Mandatory	The final tax amount of the CalculatedPrice after any discounts.

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
OriginalTaxAmount	BigDecimal	N/A	Mandatory	The original tax amount of the CalculatedPrice - before any discounts.
RecurringChargeFrequency	String	N/A	Optional	The currency of the {@LABEL RecurringCalculatedPrice}.
DiscountAmount	BigDecimal	N/A	Mandatory	The discount amount of the CalculatedPrice
ChargeDescription	String	N/A	Not in use	The description of the actual charge, depending on the reference data model may differ from the description in the catalog definition
Name	String	N/A	Mandatory	The catalog name of the originating PriceSchema or ActivityCharge.
Description	String	N/A	Mandatory	The catalog description of the originating PriceSchema or ActivityCharge.
Currency	String	N/A	Mandatory	The currency of the CalculatedPrice.

3.1.3.66   ProductSpecPricing

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
dynamicProperties	FlexAttr[]	N/A	Mandatory	List of additional properties that were assigned to the association.
includeByDefault	InclusionType	N/A	Optional	If value is True then the pricing is included when the Product is instantiated from the ProductSpecification.
childPricingSchema	PriceSchema	N/A	Optional	The PriceSchema that defines the pricing.
id	String	N/A	Mandatory	A unique identifier.

3.1.3.67   priceSchema

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Links	Link[]	N/A	Not in use	Not in use
CrossProductDiscounts	CustomerDiscounts[]	N/A	Not in use	Not in use
Summary	CatalogItemCharacteristic[]	N/A	Not in use	Not in use
DetailsGroups	CatalogItemCharacteristicGroup[]	N/A	Not in use	Not in use

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
Overview	CatalogItemCharacteristic[]	N/A	Not in use	Not in use
dynamicProperties	FlexAttr[]	N/A	Optional	List of additional properties that were assigned to the PriceSchema
implCalculatedPrices	ImplCalculatedPrices []	N/A	Optional	Total Charge of an item as configured and maintained in the CATALOG PRICE table. It will not be from price quoting engine.
PlanType	String	N/A	Not in use	Not in use
ContainingOfferDetailsGroup	CatalogItemCharacteristicGroup []	N/A	Not in use	Not in use
ChangeToThisPlanAllowed	Boolean	True/False	Not in use	Not in use
marketingDescription	String	N/A	Optional	URL to the marketing description of the plan
name	String	N/A	Mandatory	A word, term, or phrase by which the PriceSchema is known and distinguished from other PriceSchemas
id	String	N/A	Mandatory	A unique IDentifier.
type	PriceSchemaType	N/A	Optional	The type of the PriceSchema.
displayName	String	N/A	Not in use	Not in use
level	String	N/A	Optional	The level that the PriceSchema can be applied
image	String	N/A	Optional	URL to the image of the plan
description	String	N/A	Mandatory	A long textual description of the PriceSchema

3.1.3.68 PriceSchemaType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ ADDITIONAL, ▪ BASIC, ▪ DISCOUNT, ▪ PRIMARY	Mandatory	List of valid values for price schema type

3.1.3.69 InclusionType

Field Name	Data Type	Valid Values	Mandatory /Optional	Description
value	String	▪ INCLUDED_BY_DEFAULT, ▪ MANDATORY, ▪ NOT_INCLUDED_BY_DEFAULT	Mandatory	INCLUDED _BY_DEFA ULT- The element is included, but can be removed. MANDATO RY - The element is included and cannot be removed. NOT_INCL UDED_BY_ DEFAULT - The element is not included and can be added.

3.1.4 Response Sample

TBD

3.1.5 Sequence Diagram - N/A

3.1.6 Operation Synchronicity

Synchronous

3.1.7 Operation Type

Proxy

3.1.8　Related services - N/A

3.1.9　Operation Specific Header Information

3.1.9.1　Request Header

Field Name	Valid Values	Data Type	Type	Mandatory /Optional	Description
username	N/A	String	header	Mandatory	User name
password	N/A	String	header	Mandatory	Password
applicationId	N/A	String	header	Mandatory	For example, Charter Gateway
transactionId	N/A	String	header	Mandatory	A unique ID for a certain REST call
timeStamp	N/A	Date as Long	header	Mandatory	The time the REST was called Expected Date as Long. see assumption #3
sc (sales channel)	CC	String	Query	Mandatory	Sales channel
lo(locale)	en_US	String	Query	Mandatory	Locale
product-order-id	N/A	String	Path	Mandatory	Product order ID
customer-id	N/A	String	path	Mandatory	The customer Identification, in case of anonymous send '0'

3.1.10　Operation Specific Logging - N/A

3.1.11　Operation Specific Error Handling

#	Exception	Error Code	Description/Scenario
1	Unauthorized	401	Security issue
2	Forbidden	403	Security issue
3	BadRequest	400	The request could not be understood by the server
4	RequestTimeOut	408	Request timed out.
5	PreconditionFailed	412	Re-Authentication Failed
6	NotFound	404	Resource Not Found
7	InternalServerError	500	Server encountered problem
8	MissingMandatoryQueryParameter	400	Mandatory query parameters are missing
9	InvalidUsage	400	Thrown when the API is not used in the defined way
10	PartialContent	206	If the required PP CODE does not exist in the table or no effective record was found, the error message No valid record for the Price Plan <PP CODE> was found.

3.1.11.1 Error Code Structure

3.1.11.2 ImplErrorInfo

Field Name	Data Type	Mandatory /Optional	Description
errorCode	String	Mandatory	Error code, single string.
description	String	Mandatory	A description of the error.
errorMessage	String	Mandatory	Error message.
errorUUID	String	Mandatory	Unique number to identify the error.

3.1.11.3 Sample error code (401)

```
{
implErrorInfo:{
 errorCode: AuthorizationFailed,
 description: You are not Authorized,
 errorMessage: login of user {FAKE_USER} has failed: {status:4} {userStatus:0}
{error:User account is unknown or password is wrong},
 errorUUID: 1a719fd5-01eb-4b78-ad9d-b80296bc548a
}
}
```

3.1.11.4 Possible Error Messages

#	Exception	Scenario	Error Message
1	BadRequest	Entity locked	orderingLocalizedMessage
2	BadRequest	Entity not found	ProductNotFound
3	BadRequest	Mandatory parameter is missing	BadRequest
4	BadRequest	Inconsistent parameters	InvalidUsage
5	BadRequest	Invalid mask	InvalidFilter
6	InternalServerError	General exception in the BE system.	InternalServerError
7	PartialContent	If the required PP CODE does not exist in the table or no effective record was found	No valid record for the Price Plan <PP CODE> was found

4   Open Issues – N/A

Appendix A. Fields derived from MEC

The valid values for the following fields are BPT values, defined in MEC.

Field Name	Data Type	section
activityForConfiguration	ImplValidateAndUpdateMultiProductsConfigurationRequest	3.1.1.2
lineOfBusiness	TopLevelProductConfiguration	3.1.3.5
severity	RuleExecutionMessage	3.1.3.37
level	ProductSpecification	3.1.3.45
purpose	Attachment	3.1.3.51
type	Attachment	3.1.3.51
availablityGroup	ServiceabilityObject	3.1.1.23
dwellType	ServiceabilityObject	3.1.1.23
customerType	ServiceabilityObject	3.1.1.23
orderActionType	ServiceabilityObject	3.1.1.23
userRole	ServiceabilityObject	3.1.1.23
lobName	LOBServiceability	3.1.1.25

Document Release Information

Every change made to the document following the initial delivery MUST be shown in detail in this table

Software Version	Editor/Author	Application	Edit Date [Mmm-dd-yyyy]	Section	Changes	Sent to site	Approving Manager	DC Ver.
00.00	Malki Sabag		Jun-14-2015	Initial Version		N		00.00
	Jonathan Cohen	TechComm	Jun-15-2015	Initial TW review		N		
	Orit		Jun-15-2015		Finalize	Y		1.0
	Malki Sabag		Jul-01-2015	3.1.1.9	Updated this fields to 'not in use': - newSimpleProducts - resumedContainedProducts - removedSimpleProducts	N		1.16
	Malki Sabag		Jul-01-2015	3.1.1.11	Updated this fields to 'not in use': - parentTemporaryID - productSpecContainmentID - temporaryID - parentProductSpecContainmentID	N		1.16
	Malki Sabag		Jun-21-2015	3.1.11.4	Updated the error message for: BadRequest	N		1.17
	Malki Sabag		Jun-22-2015	3.1.1.13	Updated description for this field: - productSpecPricingID - parentProductSpecContainmentID	N		1.17
	Malki Sabag		Jun-22-2015	3.1.1.17	Updated description for this field: - productID - parentTemporaryID - temporaryID	N		1.17
	Malki Sabag		Jun-22-2015	3.1.3.23, 3.1.3.29	Added valid value for the field: currency	N		1.17

Soft ware Vers ion	Editor/Au thor	Applicat ion	Edit Date [Mmm-dd-yyyy]	Section	Changes	Se nt to sit e	Ap pro vin g Ma na ger	DC Ver.
	Tammy Shalev		Jul-05-2015	3.1.3.54	Changed 'amount' field type to be BigDecimal from Integer. - Added 2 new fields (quantity, provisioningDate)	N		1.18
	Tammy Shalev		Jul-05-2015	3.1.1	Added the 'ServiceabilityObject' to the request	N		1.19
	Tammy Shalev		Jul-05-2015	All	Updated section numbers	N		1.20
	Tammy Shalev		Jul-07-2015	3.1.1.2 3.1.3.5 3.1.3.37 3.1.3.45 3.1.3.51 3.1.1.23 3.1.1.25	Updated valid values to - BPT Values defined by MEC for this fields: - activityForConfiguration - lineOfBusiness - severity - level - purpose - type - availablityGroup - dwellType - customerType - orderActionType - userRole - LOBName	N		1.21
	Malki Sabag		Jul-13-2015	3.1.3.45	Removed implCaluculatedPrices object Marked price schema to be in use	Y		1.22
	Orit Sarfaty Preisler		July-23-2015	ALL	**Doc Signed off** Accept all changes and promote to Major version.	Y		2.0
	Malki Sabag	REST	Jul-23-2015	3.1.3.54	Added new fields ppName,startDate, endDate. Removed provisioningDate	N		2.1
	Malki Sabag	REST	Jul-23-2015	3.1.1.23	Updated valid values for fields: customerType and orderActionType	N		2.2
	Malki Sabag	REST	Jul-29-2015	3.1.1.23	Added new valid value PR-provide for orderActionType	N		2.3

Soft ware Vers ion	Editor/Au thor	Applicat ion	Edit Date [Mmm-dd-yyyy]	Section	Changes	Se nt to sit e	Ap pro vin g Ma na ger	DC Ver.
	Tammy shalev	REST	Aug-04-2015	All	Added assumption for Date fields and updated description for all Date fields in the document	N		2.4
	Malki Sabag	REST	Aug-05-2015	3.1.1.23 3.1.3.54	The field sysPrinAgent was split into 3 separate fields. ImplCalculatedPrices object was updated with new fields.	N		2.5
	Roman Rapaport	REST	Aug-05-2015	3.1.1.23	Sys,prin,agent fields changed to be mandatory.	N		2.5
	Tammy shalev	REST	Aug-11-2015	3.1.9.1	Changed the valid value for the locale field	N		2.6
	Malki Sabag	REST	Aug-18-2015	3.1.3.5 3.1.3.10	Changed serviceId to be optional.	N		2.7
	Harel Madar	REST	Aug-19-2015	3.1.3, 3.1.3.71	Removed ImplBaseResponse from response because the response extends it and not have it as field	N		2.8
	Tammy shalev	REST	Aug-20-2015	3.1.3.1	Added 3 base fields to the response and changed transactionId and timestamp to be Mandatory	N		2.9
	Harel Madar	Rest	Aug-21-2015	3.1.1.1	Changed the implValidateAndUpdateMultiProductsConfigurationRequest field to be mandatory in order to align with core implementation	N		3.0
	Harel Madar	Rest	Aug-21-2015	3.1.1.2	Removed unused fields from the request, the fields related to the old pricing APIs and will not be use in the new implementation. The fields: RetrieveComponentPricing retrieveSchemaPricing	N		3.1
	Harel Madar	Rest	Aug-21-2015	3.1.3.64	double section removed 3.1.3.64 already exist in 3.1.3.13	N		3.2

Software Version	Editor/Author	Application	Edit Date [Mmm-dd-yyyy]	Section	Changes	Sent to site	Approving Manager	DC Ver.
	Harel Madar	Rest	Aug-24-2015	3.1.1.23, 3.1.1.25, 4	Update fields names to align with the names in the code	N		3.3
	Harel Madar	Rest	Aug-24-2015	3.1.3.59	Removed two fields that doesn't exist in core object	N		3.4