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/* Freek Keijzer, myBrand, 30.08.2020
Based on standard SAP cube-view I_GoodsMovementDocument.

Only 1 custom enhancement: field CostEstimate added.
Is required to calculate goods movement & stock values using current price.
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Change-log:
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@EndUserText.label: 'MM: Goods Movements'
@AbapCatalog.sqlViewName: 'ZIGOODSMVMTDOC'

@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK

define view ZP_I_GoodsMovementDocument
  as select from I_MaterialDocumentRecord
  association[1..1] to I_StockChangeCategory as _StockChangeCategory on $projection.StockChangeCategory = _StockChangeCategory.StockChangeCategory
  // The following associations are only required because of the CAST workaround below. Can be removed once MATDOC uses the correct data type.
  association [0..1] to I_Plant                     as _IssuingOrReceivingPlant      on  $projection.IssuingOrReceivingPlant =
_IssuingOrReceivingPlant.Plant
  association [0..1] to I_InventorySpecialStockType as _IssgOrRcvgSpclStockInd       on  $projection.IssgOrRcvgSpclStockInd =
_IssgOrRcvgSpclStockInd.InventorySpecialStockType
  association [0..1] to I_InventoryStockType        as _IssuingOrReceivingStockType  on  $projection.IssuingOrReceivingStockType =
_IssuingOrReceivingStockType.InventoryStockType
{

  @Semantics.calendar.year: true
  key MaterialDocumentYear,
  key MaterialDocument,
  key MaterialDocumentItem,
  key MaterialDocumentRecordType,

//----------------------------------------------------------------------------------------------
//------Start of custom enhancement, part 1/1
//----------------------------------------------------------------------------------------------
//--Additional field for determination of current price
    CostEstimate,                                 // Cost Estimate Number - Product Costing (matdoc.kalnr)
//----------------------------------------------------------------------------------------------
//------End of custom enhancement, part 1/1
//----------------------------------------------------------------------------------------------


      Plant,
      StorageLocation,
      Material,
      Batch,
      InventorySpecialStockType,
      InventoryStockType,
      StockOwner,
      CompanyCode,
      InventorySpecialStockValnType,
      @Semantics.currencyCode: true
      CompanyCodeCurrency,
      @Semantics.unitOfMeasure: true
      MaterialBaseUnit,
      @Semantics.unitOfMeasure: true
      EntryUnit,
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    IsReversalMovementType,
    InventoryTransactionType,

    // Stock Transfers
    cast(IssuingOrReceivingPlant as nsdm_umwrk preserving type) as IssuingOrReceivingPlant, // remove cast once MATDOC data type is changed
    IssuingOrReceivingStorageLoc,
    IssgOrRcvgMaterial,
    IssgOrRcvgBatch,
    cast (IssgOrRcvgSpclStockInd as nsdm_umsok preserving type) as IssgOrRcvgSpclStockInd, // remove cast once MATDOC data type is changed
    cast (IssuingOrReceivingStockType as nsdm_lbbsa_cid preserving type) as IssuingOrReceivingStockType,
    IssuingOrReceivingValType,

    // Cancellation information
    GoodsMovementIsCancelled,
    ReversedMaterialDocument,
    ReversedMaterialDocumentItem,
    ReversedMaterialDocumentYear,

    // Periods & Times
    @Semantics.businessDate.at: true
    DocumentDate,
    AccountingDocumentType,
    CreationDate,
    CreationTime,

    PostingDate,
    @Semantics.fiscal.yearVariant: true
    FiscalYearVariant,
    FiscalYear,
    @Semantics.fiscal.yearPeriod: true
    FiscalYearPeriod,
    YearDay,
    @Semantics.calendar.yearWeek: true
    YearWeek,
    @Semantics.calendar.yearMonth: true
    YearMonth,
    @Semantics.calendar.yearQuarter: true
    YearQuarter,
    @Semantics.calendar.quarter: true
    CalendarQuarter,
    @Semantics.calendar.month: true
    CalendarMonth,
    @Semantics.calendar.week: true
    CalendarWeek,
    @Semantics.calendar.dayOfYear: true
    CalendarDay,
    WeekDay,

    // Reference Documents
    SalesOrder,
    SalesOrderItem,
    SalesOrderScheduleLine,
    PurchaseOrder,
    cast(PurchaseOrderItem as nsdm_ebelp preserving type) as PurchaseOrderItem,
    ProjectNetwork,
    DeliveryDocument,
    cast(DeliveryDocumentItem as nsdm_posnr_vl preserving type) as DeliveryDocumentItem,
    WBSElementInternalID,
    ManufacturingOrder,
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```
    ManufacturingOrderItem,
    SpecialStockIdfgSalesOrder,
    SpecialStockIdfgSalesOrderItem,
    SpecialStockIdfgWBSElement,
    ReferenceDocument,

    // Other
    GoodsMovementType,
    InventoryValuationType,
    CreatedByUser,
    Supplier,
    Customer,
    IsMaterialDocumentHeader,
    MaterialDocumentHeaderText,
    MaterialDocumentItemText,
    IsCompletelyDelivered,
    GoodsRecipientName,
    UnloadingPointName,
    GoodsMovementRefDocType,
    GoodsMovementReasonCode,
    ShelfLifeExpirationDate,
    ManufactureDate,

    // Accounting information
    AccountAssignmentCategory,
    CostCenter,
    ControllingArea, // required to fulfill requirement to expose the full key (for cost center association)
    CostObject,
    GLAccount,
    FunctionalArea,
    ProfitabilitySegment,
    ProfitCenter,

    MasterFixedAsset,
    FixedAsset,
    FundsCenter,
    Fund,
    CommitmentItem,
    GrantID,

    // Reservation
    Reservation,
    ReservationItem,
    ReservationIsFinallyIssued,

    DebitCreditCode,

    // Amounts
    @Semantics.amount.currencyCode: 'CompanyCodeCurrency'
    @DefaultAggregation: #NONE
    TotalGoodsMvtAmtInCCCrcy,
    @Semantics.amount.currencyCode: 'CompanyCodeCurrency'
    @DefaultAggregation: #NONE
    GoodsMovementStkAmtInCCCrcy,
    @Semantics.amount.currencyCode: 'CompanyCodeCurrency'
    @DefaultAggregation: #NONE
    GoodsMvtCnsmpnAmtInCCCrcy,
    @Semantics.amount.currencyCode: 'CompanyCodeCurrency'
    @DefaultAggregation: #NONE
```

```
  GdsMvtExtAmtInCoCodeCrcy,
  @Semantics.amount.currencyCode: 'CompanyCodeCurrency'
  @DefaultAggregation: #NONE
  SlsPrcAmtInclVATInCoCodeCrcy,
  @Semantics.amount.currencyCode: 'CompanyCodeCurrency'
  @DefaultAggregation: #NONE
  EnteredSlsAmtInCoCodeCrcy,

  // Quantities
  @Semantics.quantity.unitOfMeasure: 'MaterialBaseUnit'
  @DefaultAggregation: #NONE
  MatlStkChangeQtyInBaseUnit,
  @Semantics.quantity.unitOfMeasure: 'MaterialBaseUnit'
  @DefaultAggregation: #NONE
  MatlCnsmpnQtyInMatlBaseUnit,
  @Semantics.quantity.unitOfMeasure: 'MaterialBaseUnit'
  @DefaultAggregation: #NONE
  QuantityInBaseUnit,
  @DefaultAggregation: #NONE
  QuantityInEntryUnit,

  @Consumption.hidden: true
  TransactionCode,
  @Consumption.hidden: true
  IsAutomaticallyCreated,
  @Consumption.hidden: true
  MaterialDocumentLine,
  @Consumption.hidden: true
  MaterialDocumentParentLine,
  @Consumption.hidden: true
  HierarchyNodeLevel,

  // Classifications
  @ObjectModel.foreignKey.association: '_StockChangeCategory'
  cast(case when MatlStkChangeQtyInBaseUnit > 0 and IsReversalMovementType = '' or
            MatlStkChangeQtyInBaseUnit < 0 and IsReversalMovementType = 'X'
    then 'GR'
    else case
        when MatlStkChangeQtyInBaseUnit < 0 and IsReversalMovementType = '' or
             MatlStkChangeQtyInBaseUnit > 0 and IsReversalMovementType = 'X'
        then 'GI'
        else '' end
  end as nsdm_stock_change_category preserving type) as StockChangeCategory,

  cast( case when GoodsMovementIsCancelled <> 'X' and
                  GoodsMovementCancellationType <> '2' and
                  GoodsMovementCancellationType <> '3'
             then 'X'
             else ''
  end as nsdm_is_effective_goods_mvt preserving type) as IsEffectiveGoodsMovement,

  cast(case when MatlCnsmpnQtyInMatlBaseUnit > 0 and IsReversalMovementType = '' or
            MatlCnsmpnQtyInMatlBaseUnit < 0 and IsReversalMovementType = 'X'
    then 'X'
    else ''
  end as nsdm_is_consumption_mvt preserving type) as IsConsumptionMovement,

  cast(case when IssuingOrReceivingPlant <> '' and IssuingOrReceivingPlant <> Plant
    then 'X'
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      else ''
  end as nsdm_cross_plant_transfer preserving type) as IsCrossPlantTransfer,

  cast(case when IssuingOrReceivingPlant <> '' and IssuingOrReceivingStorageLoc <> StorageLocation
    then 'X'
    else ''
  end as nsdm_sloc_change_by_transfer preserving type) as IsStorageLocChangeByTransf,

  cast(case when IssuingOrReceivingPlant <> '' and IssgOrRcvgMaterial <> Material
    then 'X'
    else ''
  end as nsdm_material_change_by_trans preserving type) as IsMaterialChangeByTransf,

  cast(case when IssuingOrReceivingPlant <> '' and IssgOrRcvgBatch <> Batch
    then 'X'
    else ''
  end as nsdm_batch_change_by_transf preserving type) as IsBatchChangeByTransf,

  cast(case when IssuingOrReceivingPlant <> '' and IssgOrRcvgSpclStockInd <> InventorySpecialStockType
    then 'X'
    else ''
  end as nsdm_sobkz_change_by_transf preserving type) as IsSpclStkTypeChangeByTransf,

  cast(case when IssuingOrReceivingStockType <> '' and IssuingOrReceivingStockType <> InventoryStockType
    then 'X'
    else ''
  end as nsdm_lbbsa_change_by_transf preserving type) as IsStockTypeChangeByTransf,

// Associations
_Plant,
_StorageLocation,
_Material,
_InventorySpecialStockType,
_InventoryStockType,
_Supplier,
_Customer,
@Consumption.hidden: true
_SupplierCompanyByPlant,
@Consumption.hidden: true
_CustomerCompanyByPlant,
_BPStockOwner,
_IssgOrRcvgMaterial,
_IssuingOrReceivingPlant,
_IssuingOrReceivingStorageLoc,
_IssgOrRcvgSpclStockInd,
_IssuingOrReceivingStockType,
_CostCenter,
_ControllingArea,
_AccountAssignmentCategory,
_FunctionalArea,
_ProfitCenter,
_GLAccount,
_GoodsMovementType,
_GoodsMovementReasonCode,
_InventoryValuationType,
_CompanyCode,
_SalesOrder,
_SalesOrderItem,
_SalesOrderScheduleLine,
```

```
      _PurchaseOrder,
      _PurchaseOrderItem,
      _DeliveryDocument,
      _DeliveryDocumentItem,
      _WBSElement,
      _MfgOrder,
      _MfgOrderItem,
      _SpecialStockIdfgWBSElement,
      _Currency,
      _MaterialBaseUnit,
      _StockChangeCategory,
      _AccountingDocumentType
}
where
      MaterialDocumentRecordType = 'MDOC'
   or MaterialDocumentRecordType = 'MDOC_CP'
```