We have a tool to create BPMN 2.0 models, called “*BPMN designer*”. The tool is built upon Eclipse Ecore metamodels and utilizes Sirius features. The metamodel is designed to model BPMN flow objects (Events, activities, gateways), connecting objects (sequence flow, message flow, association), swim lanes (Pool, lane, dark pool), and artifacts (data object, group, annotation). These four categories enable creation of simple business process diagrams (BPDs). BPDs also permit making new types of flow object or artifact, to make the diagram more understandable.

This is the “BPMN designer” metamodel:

<?xml version="1.0" encoding="UTF-8"?>

<ecore:EPackage xmi:version="2.0" xmlns:xmi="http://www.omg.org/XMI" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:ecore="http://www.eclipse.org/emf/2002/Ecore" name="bpmn2" nsURI="http://www.omg.org/spec/BPMN/20100524/MODEL-XMI"

nsPrefix="bpmn">

<eAnnotations source="http://www.obeonetwork.com/bpmn2/addons" references="#//BaseElement/description #//Process/decomposedBy #//Process/decomposes"/>

<eClassifiers xsi:type="ecore:EClass" name="Interface" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="operations" ordered="false"

lowerBound="1" upperBound="-1" eType="#//Operation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="implementationRef" ordered="false"

eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="RootElement" abstract="true" eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="BaseElement" abstract="true">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="extensionDefinitions" ordered="false"

upperBound="-1" eType="#//ExtensionDefinition"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="extensionValues" ordered="false"

upperBound="-1" eType="#//ExtensionAttributeValue" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="documentation" ordered="false"

upperBound="-1" eType="#//Documentation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="description" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ExtensionDefinition">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="extensionAttributeDefinitions"

ordered="false" upperBound="-1" eType="#//ExtensionAttributeDefinition" containment="true"

eOpposite="#//ExtensionAttributeDefinition/extensionDefinition"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ExtensionAttributeDefinition">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="type" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isReference" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="extensionDefinition" ordered="false"

lowerBound="1" eType="#//ExtensionDefinition" eOpposite="#//ExtensionDefinition/extensionAttributeDefinitions"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ExtensionAttributeValue">

<eStructuralFeatures xsi:type="ecore:EReference" name="valueRef" ordered="false"

eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="value" ordered="false"

eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="extensionAttributeDefinition"

ordered="false" eType="#//ExtensionAttributeDefinition"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Documentation" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="text" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="textFormat" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"

defaultValueLiteral="text/plain"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Operation" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="inMessageRef" ordered="false"

lowerBound="1" eType="#//Message"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outMessageRef" ordered="false"

eType="#//Message"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="errorRefs" ordered="false"

upperBound="-1" eType="#//Error"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="implementationRef" ordered="false"

eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Message" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="itemRef" ordered="false"

eType="#//ItemDefinition"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ItemDefinition" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="itemKind" ordered="false"

lowerBound="1" eType="#//ItemKind"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="structureRef" ordered="false"

lowerBound="1" eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isCollection" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="import" ordered="false"

eType="#//Import"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="ItemKind">

<eLiterals name="Physical"/>

<eLiterals name="Information" value="1"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Import">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="importType" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="location" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="namespace" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Error" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="structureRef" ordered="false"

eType="#//ItemDefinition"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="errorCode" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="EndPoint" eSuperTypes="#//RootElement"/>

<eClassifiers xsi:type="ecore:EClass" name="Auditing" eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="GlobalTask" eSuperTypes="#//CallableElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="resources" ordered="false"

upperBound="-1" eType="#//ResourceRole" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CallableElement" abstract="true" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="ioSpecification" ordered="false"

eType="#//InputOutputSpecification" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="supportedInterfaceRefs"

ordered="false" upperBound="-1" eType="#//Interface"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="ioBinding" ordered="false"

upperBound="-1" eType="#//InputOutputBinding" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="InputOutputSpecification" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="inputSets" ordered="false"

upperBound="-1" eType="#//InputSet" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputSets" ordered="false"

upperBound="-1" eType="#//OutputSet" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataInputs" ordered="false"

upperBound="-1" eType="#//DataInput" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataOutputs" ordered="false"

upperBound="-1" eType="#//DataOutput" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="InputSet" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataInputRefs" ordered="false"

upperBound="-1" eType="#//DataInput" resolveProxies="false" eOpposite="#//DataInput/inputSetRefs"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="optionalInputRefs" ordered="false"

upperBound="-1" eType="#//DataInput" resolveProxies="false" eOpposite="#//DataInput/inputSetWithOptional"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="whileExecutingInputRefs"

ordered="false" upperBound="-1" eType="#//DataInput" resolveProxies="false"

eOpposite="#//DataInput/inputSetWithWhileExecuting"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputSetRefs" ordered="false"

upperBound="-1" eType="#//OutputSet" resolveProxies="false" eOpposite="#//OutputSet/inputSetRefs"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataInput" eSuperTypes="#//ItemAwareElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isCollection" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="inputSetWithOptional" ordered="false"

upperBound="-1" eType="#//InputSet" transient="true" derived="true" eOpposite="#//InputSet/optionalInputRefs"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="inputSetWithWhileExecuting"

ordered="false" upperBound="-1" eType="#//InputSet" transient="true" derived="true"

eOpposite="#//InputSet/whileExecutingInputRefs"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="inputSetRefs" ordered="false"

upperBound="-1" eType="#//InputSet" transient="true" derived="true" eOpposite="#//InputSet/dataInputRefs"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ItemAwareElement" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="itemSubjectRef" ordered="false"

eType="#//ItemDefinition"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataState" ordered="false"

eType="#//DataState" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataState" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="OutputSet" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="dataOutputRefs" ordered="false"

upperBound="-1" eType="#//DataOutput" resolveProxies="false" eOpposite="#//DataOutput/outputSetRefs"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="optionalOutputRefs" ordered="false"

upperBound="-1" eType="#//DataOutput" resolveProxies="false" eOpposite="#//DataOutput/outputSetWithOptional"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="whileExecutingOutputRefs"

ordered="false" upperBound="-1" eType="#//DataOutput" derived="true" resolveProxies="false"

eOpposite="#//DataOutput/outputSetWithWhileExecuting"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="inputSetRefs" ordered="false"

upperBound="-1" eType="#//InputSet" eOpposite="#//InputSet/outputSetRefs"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataOutput" eSuperTypes="#//ItemAwareElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isCollection" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputSetWithOptional"

ordered="false" upperBound="-1" eType="#//OutputSet" transient="true" derived="true"

eOpposite="#//OutputSet/optionalOutputRefs"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputSetWithWhileExecuting"

ordered="false" upperBound="-1" eType="#//OutputSet" transient="true" derived="true"

eOpposite="#//OutputSet/whileExecutingOutputRefs"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputSetRefs" ordered="false"

upperBound="-1" eType="#//OutputSet" transient="true" derived="true" eOpposite="#//OutputSet/dataOutputRefs"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="InputOutputBinding">

<eStructuralFeatures xsi:type="ecore:EReference" name="inputDataRef" ordered="false"

lowerBound="1" eType="#//InputSet"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputDataRef" ordered="false"

lowerBound="1" eType="#//OutputSet"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="operationRef" ordered="false"

lowerBound="1" eType="#//Operation"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ResourceRole" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="resourceRef" ordered="false"

eType="#//Resource"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="resourceParameterBindings"

ordered="false" upperBound="-1" eType="#//ResourceParameterBinding" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="resourceAssignmentExpression"

ordered="false" eType="#//ResourceAssignmentExpression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Resource" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="resourceParameters" ordered="false"

upperBound="-1" eType="#//ResourceParameter" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ResourceParameter" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isRequired" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="type" ordered="false" eType="#//ItemDefinition"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ResourceParameterBinding">

<eStructuralFeatures xsi:type="ecore:EReference" name="expression" ordered="false"

lowerBound="1" eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="parameterRef" ordered="false"

lowerBound="1" eType="#//ResourceParameter"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Expression" eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="ResourceAssignmentExpression">

<eStructuralFeatures xsi:type="ecore:EReference" name="expression" ordered="false"

lowerBound="1" eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Monitoring" eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="Performer" eSuperTypes="#//ResourceRole"/>

<eClassifiers xsi:type="ecore:EClass" name="Process" eSuperTypes="#//CallableElement #//FlowElementsContainer">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="processType" ordered="false"

lowerBound="1" eType="#//ProcessType"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isClosed" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="auditing" ordered="false"

eType="#//Auditing" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="monitoring" ordered="false"

eType="#//Monitoring" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="properties" ordered="false"

upperBound="-1" eType="#//Property" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="supports" ordered="false"

upperBound="-1" eType="#//Process"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="definitionalCollaborationRef"

ordered="false" eType="#//Collaboration"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isExecutable" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="resources" ordered="false"

upperBound="-1" eType="#//ResourceRole" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="artifacts" ordered="false"

upperBound="-1" eType="#//Artifact" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationSubscriptions"

ordered="false" upperBound="-1" eType="#//CorrelationSubscription" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="decomposedBy" upperBound="-1"

eType="#//Process" containment="true" eOpposite="#//Process/decomposes"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="decomposes" eType="#//Process"

eOpposite="#//Process/decomposedBy"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="FlowElementsContainer" abstract="true"

eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="flowElements" ordered="false"

upperBound="-1" eType="#//FlowElement" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="laneSets" ordered="false"

upperBound="-1" eType="#//LaneSet" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="FlowElement" abstract="true" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="auditing" ordered="false"

eType="#//Auditing" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="monitoring" ordered="false"

eType="#//Monitoring" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="categoryValueRef" ordered="false"

upperBound="-1" eType="#//CategoryValue" transient="true" resolveProxies="false"

eOpposite="#//CategoryValue/categorizedFlowElements"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CategoryValue" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="value" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="categorizedFlowElements"

ordered="false" upperBound="-1" eType="#//FlowElement" changeable="false"

transient="true" derived="true" resolveProxies="false" eOpposite="#//FlowElement/categoryValueRef"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="LaneSet" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="lanes" ordered="false"

upperBound="-1" eType="#//Lane" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Lane" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="childLaneSet" ordered="false"

eType="#//LaneSet" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="partitionElementRef" ordered="false"

eType="#//BaseElement"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="flowNodeRefs" ordered="false"

upperBound="-1" eType="#//FlowNode" resolveProxies="false" eOpposite="#//FlowNode/lanes"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="partitionElement" ordered="false"

eType="#//BaseElement" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="FlowNode" abstract="true" eSuperTypes="#//FlowElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="outgoing" upperBound="-1"

eType="#//SequenceFlow" eOpposite="#//SequenceFlow/sourceRef"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="incoming" ordered="false"

upperBound="-1" eType="#//SequenceFlow" eOpposite="#//SequenceFlow/targetRef"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="lanes" ordered="false"

upperBound="-1" eType="#//Lane" transient="true" derived="true" eOpposite="#//Lane/flowNodeRefs"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="SequenceFlow" eSuperTypes="#//FlowElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isImmediate" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="conditionExpression" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="targetRef" ordered="false"

eType="#//FlowNode" eOpposite="#//FlowNode/incoming"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="sourceRef" ordered="false"

eType="#//FlowNode" eOpposite="#//FlowNode/outgoing"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="ProcessType">

<eLiterals name="None"/>

<eLiterals name="Public" value="1"/>

<eLiterals name="Private" value="2"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Property" eSuperTypes="#//ItemAwareElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Collaboration" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isClosed" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="choreographyRef" ordered="false"

upperBound="-1" eType="#//Choreography"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="artifacts" ordered="false"

upperBound="-1" eType="#//Artifact" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantAssociations"

ordered="false" upperBound="-1" eType="#//ParticipantAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageFlowAssociations"

ordered="false" upperBound="-1" eType="#//MessageFlowAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="conversationAssociations"

ordered="false" eType="#//ConversationAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participants" ordered="false"

upperBound="-1" eType="#//Participant" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageFlows" ordered="false"

upperBound="-1" eType="#//MessageFlow" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationKeys" ordered="false"

upperBound="-1" eType="#//CorrelationKey" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="conversations" ordered="false"

upperBound="-1" eType="#//ConversationNode" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="conversationLinks" ordered="false"

upperBound="-1" eType="#//ConversationLink" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Choreography" eSuperTypes="#//Collaboration #//FlowElementsContainer"/>

<eClassifiers xsi:type="ecore:EClass" name="Artifact" abstract="true" eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="ParticipantAssociation" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="innerParticipantRef" ordered="false"

lowerBound="1" eType="#//Participant"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outerParticipantRef" ordered="false"

lowerBound="1" eType="#//Participant"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Participant" eSuperTypes="#//BaseElement #//InteractionNode">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="interfaceRefs" ordered="false"

upperBound="-1" eType="#//Interface"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantMultiplicity"

ordered="false" eType="#//ParticipantMultiplicity" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="endPointRefs" ordered="false"

upperBound="-1" eType="#//EndPoint"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="processRef" ordered="false"

eType="#//Process"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="InteractionNode" abstract="true">

<eStructuralFeatures xsi:type="ecore:EReference" name="incomingConversationLinks"

ordered="false" upperBound="-1" eType="#//ConversationLink" changeable="false"

transient="true" derived="true" eOpposite="#//ConversationLink/targetRef"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outgoingConversationLinks"

ordered="false" upperBound="-1" eType="#//ConversationLink" changeable="false"

transient="true" derived="true" eOpposite="#//ConversationLink/sourceRef"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ConversationLink" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="sourceRef" ordered="false"

lowerBound="1" eType="#//InteractionNode" transient="true" eOpposite="#//InteractionNode/outgoingConversationLinks"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="targetRef" ordered="false"

lowerBound="1" eType="#//InteractionNode" transient="true" eOpposite="#//InteractionNode/incomingConversationLinks"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ParticipantMultiplicity">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="minimum" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EInt"

defaultValueLiteral="0"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="maximum" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EInt" defaultValueLiteral="1"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="MessageFlowAssociation" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="innerMessageFlowRef" ordered="false"

lowerBound="1" eType="#//MessageFlow"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outerMessageFlowRef" ordered="false"

lowerBound="1" eType="#//MessageFlow"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="MessageFlow" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="sourceRef" ordered="false"

eType="#//InteractionNode"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="targetRef" ordered="false"

eType="#//InteractionNode"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageRef" ordered="false"

eType="#//Message"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ConversationAssociation" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="innerConversationNodeRef"

ordered="false" lowerBound="1" eType="#//ConversationNode"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outerConversationNodeRef"

ordered="false" lowerBound="1" eType="#//ConversationNode"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ConversationNode" abstract="true" eSuperTypes="#//BaseElement #//InteractionNode">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantRefs" ordered="false"

lowerBound="2" upperBound="-1" eType="#//Participant"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageFlowRefs" ordered="false"

upperBound="-1" eType="#//MessageFlow"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationKeys" ordered="false"

upperBound="-1" eType="#//CorrelationKey" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CorrelationKey" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationPropertyRef"

ordered="false" upperBound="-1" eType="#//CorrelationProperty"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CorrelationProperty" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationPropertyRetrievalExpression"

ordered="false" lowerBound="1" upperBound="-1" eType="#//CorrelationPropertyRetrievalExpression"

containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="type" ordered="false" eType="#//ItemDefinition"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CorrelationPropertyRetrievalExpression"

eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="messagePath" ordered="false"

lowerBound="1" eType="#//FormalExpression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageRef" ordered="false"

lowerBound="1" eType="#//Message"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="FormalExpression" eSuperTypes="#//Expression">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="language" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="body" ordered="false" lowerBound="1"

eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="evaluatesToTypeRef" ordered="false"

lowerBound="1" eType="#//ItemDefinition"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CorrelationSubscription" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationKeyRef" ordered="false"

lowerBound="1" eType="#//CorrelationKey"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationPropertyBinding"

ordered="false" upperBound="-1" eType="#//CorrelationPropertyBinding" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CorrelationPropertyBinding" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="dataPath" ordered="false"

lowerBound="1" eType="#//FormalExpression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationPropertyRef"

ordered="false" lowerBound="1" eType="#//CorrelationProperty"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="GlobalManualTask" eSuperTypes="#//GlobalTask"/>

<eClassifiers xsi:type="ecore:EClass" name="ManualTask" eSuperTypes="#//Task"/>

<eClassifiers xsi:type="ecore:EClass" name="Task" eSuperTypes="#//Activity"/>

<eClassifiers xsi:type="ecore:EClass" name="Activity" abstract="true" eSuperTypes="#//FlowNode #//InteractionNode">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isForCompensation" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="loopCharacteristics" ordered="false"

eType="#//LoopCharacteristics" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="resources" ordered="false"

upperBound="-1" eType="#//ResourceRole" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="default" ordered="false"

eType="#//SequenceFlow"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="properties" ordered="false"

upperBound="-1" eType="#//Property" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="ioSpecification" ordered="false"

eType="#//InputOutputSpecification" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="boundaryEventRefs" ordered="false"

upperBound="-1" eType="#//BoundaryEvent" eOpposite="#//BoundaryEvent/attachedToRef"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataInputAssociations"

ordered="false" upperBound="-1" eType="#//DataInputAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataOutputAssociations"

ordered="false" upperBound="-1" eType="#//DataOutputAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="startQuantity" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EInt"

defaultValueLiteral="1"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="completionQuantity" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EInt"

defaultValueLiteral="1"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="LoopCharacteristics" abstract="true"

eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="BoundaryEvent" eSuperTypes="#//CatchEvent">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="cancelActivity" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="attachedToRef" ordered="false"

lowerBound="1" eType="#//Activity" eOpposite="#//Activity/boundaryEventRefs"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CatchEvent" abstract="true" eSuperTypes="#//Event">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="parallelMultiple" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputSet" ordered="false"

eType="#//OutputSet" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="eventDefinitionRefs" ordered="false"

upperBound="-1" eType="#//EventDefinition"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataOutputAssociation"

ordered="false" upperBound="-1" eType="#//DataOutputAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataOutputs" ordered="false"

upperBound="-1" eType="#//DataOutput" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="eventDefinitions" ordered="false"

upperBound="-1" eType="#//EventDefinition" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Event" abstract="true" eSuperTypes="#//FlowNode #//InteractionNode">

<eStructuralFeatures xsi:type="ecore:EReference" name="properties" ordered="false"

upperBound="-1" eType="#//Property" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="EventDefinition" abstract="true" eSuperTypes="#//RootElement"/>

<eClassifiers xsi:type="ecore:EClass" name="DataOutputAssociation" eSuperTypes="#//DataAssociation"/>

<eClassifiers xsi:type="ecore:EClass" name="DataAssociation" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="transformation" ordered="false"

eType="#//FormalExpression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="assignment" ordered="false"

upperBound="-1" eType="#//Assignment" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="targetRef" ordered="false"

lowerBound="1" eType="#//ItemAwareElement"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="sourceRef" ordered="false"

upperBound="-1" eType="#//ItemAwareElement"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Assignment" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="from" ordered="false" lowerBound="1"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="to" ordered="false" lowerBound="1"

eType="#//Expression" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataInputAssociation" eSuperTypes="#//DataAssociation"/>

<eClassifiers xsi:type="ecore:EClass" name="UserTask" eSuperTypes="#//Task">

<eStructuralFeatures xsi:type="ecore:EReference" name="renderings" ordered="false"

upperBound="-1" eType="#//Rendering" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Rendering" eSuperTypes="#//BaseElement"/>

<eClassifiers xsi:type="ecore:EClass" name="HumanPerformer" eSuperTypes="#//Performer"/>

<eClassifiers xsi:type="ecore:EClass" name="PotentialOwner" eSuperTypes="#//HumanPerformer"/>

<eClassifiers xsi:type="ecore:EClass" name="GlobalUserTask" eSuperTypes="#//GlobalTask">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="renderings" ordered="false"

upperBound="-1" eType="#//Rendering" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Gateway" abstract="true" eSuperTypes="#//FlowNode">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="gatewayDirection" ordered="false"

lowerBound="1" eType="#//GatewayDirection" defaultValueLiteral="Unspecified"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="GatewayDirection">

<eLiterals name="Unspecified"/>

<eLiterals name="Converging" value="1"/>

<eLiterals name="Diverging" value="2"/>

<eLiterals name="Mixed" value="3"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="EventBasedGateway" eSuperTypes="#//Gateway">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="instantiate" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="eventGatewayType" ordered="false"

lowerBound="1" eType="#//EventBasedGatewayType"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="EventBasedGatewayType">

<eLiterals name="Parallel"/>

<eLiterals name="Exclusive" value="1"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ComplexGateway" eSuperTypes="#//Gateway">

<eStructuralFeatures xsi:type="ecore:EReference" name="activationCondition" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="default" ordered="false"

eType="#//SequenceFlow"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ExclusiveGateway" eSuperTypes="#//Gateway">

<eStructuralFeatures xsi:type="ecore:EReference" name="default" ordered="false"

eType="#//SequenceFlow"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="InclusiveGateway" eSuperTypes="#//Gateway">

<eStructuralFeatures xsi:type="ecore:EReference" name="default" ordered="false"

eType="#//SequenceFlow"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ParallelGateway" eSuperTypes="#//Gateway"/>

<eClassifiers xsi:type="ecore:EClass" name="Relationship" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="type" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="direction" ordered="false"

lowerBound="1" eType="#//RelationshipDirection"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="sources" ordered="false"

lowerBound="1" upperBound="-1" eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="targets" ordered="false"

lowerBound="1" upperBound="-1" eType="ecore:EClass http://www.eclipse.org/emf/2002/Ecore#//EObject"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="RelationshipDirection">

<eLiterals name="None"/>

<eLiterals name="Forward" value="1"/>

<eLiterals name="Backward" value="2"/>

<eLiterals name="Both" value="3"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Extension">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="mustUnderstand" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="definition" ordered="false"

lowerBound="1" eType="#//ExtensionDefinition" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="IntermediateCatchEvent" eSuperTypes="#//CatchEvent"/>

<eClassifiers xsi:type="ecore:EClass" name="IntermediateThrowEvent" eSuperTypes="#//ThrowEvent"/>

<eClassifiers xsi:type="ecore:EClass" name="ThrowEvent" abstract="true" eSuperTypes="#//Event">

<eStructuralFeatures xsi:type="ecore:EReference" name="inputSet" ordered="false"

eType="#//InputSet" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="eventDefinitionRefs" ordered="false"

upperBound="-1" eType="#//EventDefinition"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataInputAssociation" ordered="false"

upperBound="-1" eType="#//DataInputAssociation" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="dataInputs" ordered="false"

upperBound="-1" eType="#//DataInput" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="eventDefinitions" ordered="false"

upperBound="-1" eType="#//EventDefinition" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="EndEvent" eSuperTypes="#//ThrowEvent"/>

<eClassifiers xsi:type="ecore:EClass" name="StartEvent" eSuperTypes="#//CatchEvent">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isInterrupting" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CancelEventDefinition" eSuperTypes="#//EventDefinition"/>

<eClassifiers xsi:type="ecore:EClass" name="ErrorEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EReference" name="errorRef" ordered="false"

eType="#//Error"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="TerminateEventDefinition" eSuperTypes="#//EventDefinition"/>

<eClassifiers xsi:type="ecore:EClass" name="EscalationEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EReference" name="escalationRef" ordered="false"

eType="#//Escalation"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Escalation">

<eStructuralFeatures xsi:type="ecore:EReference" name="structureRef" ordered="false"

eType="#//ItemDefinition"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="escalationCode" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="id" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString" iD="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CompensateEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="waitForCompletion" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="activityRef" ordered="false"

eType="#//Activity"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="TimerEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EReference" name="timeDate" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="timeCycle" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="timeDuration" ordered="false"

eType="#//Expression" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="LinkEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="target" ordered="false"

eType="#//LinkEventDefinition" eOpposite="#//LinkEventDefinition/source"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="source" ordered="false"

upperBound="-1" eType="#//LinkEventDefinition" eOpposite="#//LinkEventDefinition/target"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="MessageEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EReference" name="messageRef" ordered="false"

eType="#//Message"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="operationRef" ordered="false"

eType="#//Operation"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ConditionalEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EReference" name="condition" ordered="false"

lowerBound="1" eType="#//Expression" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="SignalEventDefinition" eSuperTypes="#//EventDefinition">

<eStructuralFeatures xsi:type="ecore:EReference" name="signalRef" ordered="false"

eType="#//Signal"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Signal" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="structureRef" ordered="false"

eType="#//ItemDefinition"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ImplicitThrowEvent" eSuperTypes="#//ThrowEvent"/>

<eClassifiers xsi:type="ecore:EClass" name="DataObject" eSuperTypes="#//FlowElement #//ItemAwareElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isCollection" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataStore" eSuperTypes="#//ItemAwareElement #//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="capacity" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EInt"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isUnlimited" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataStoreReference" eSuperTypes="#//FlowElement #//ItemAwareElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="dataStoreRef" ordered="false"

eType="#//DataStore"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="DataObjectReference" eSuperTypes="#//FlowElement #//ItemAwareElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="dataObjectRef" ordered="false"

lowerBound="1" eType="#//DataObject"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CallConversation" eSuperTypes="#//ConversationNode">

<eStructuralFeatures xsi:type="ecore:EReference" name="calledCollaborationRef"

ordered="false" eType="#//Collaboration"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantAssociations"

ordered="false" upperBound="-1" eType="#//ParticipantAssociation" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Conversation" eSuperTypes="#//ConversationNode"/>

<eClassifiers xsi:type="ecore:EClass" name="SubConversation" eSuperTypes="#//ConversationNode">

<eStructuralFeatures xsi:type="ecore:EReference" name="conversationNodes" ordered="false"

upperBound="-1" eType="#//ConversationNode" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="GlobalConversation" eSuperTypes="#//Collaboration"/>

<eClassifiers xsi:type="ecore:EClass" name="PartnerEntity" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantRef" ordered="false"

upperBound="-1" eType="#//Participant"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="PartnerRole" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantRef" ordered="false"

upperBound="-1" eType="#//Participant"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ChoreographyActivity" abstract="true"

eSuperTypes="#//FlowNode">

<eStructuralFeatures xsi:type="ecore:EReference" name="participantRefs" ordered="false"

upperBound="-1" eType="#//Participant"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="initiatingParticipantRef"

ordered="false" eType="#//Participant"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="correlationKeys" ordered="false"

upperBound="-1" eType="#//CorrelationKey" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="loopType" ordered="false"

lowerBound="1" eType="#//ChoreographyLoopType" defaultValueLiteral="None"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="ChoreographyLoopType">

<eLiterals name="None"/>

<eLiterals name="Standard" value="1"/>

<eLiterals name="MultiInstanceSequential" value="2"/>

<eLiterals name="MultiInstanceParallel" value="3"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CallChoreography" eSuperTypes="#//ChoreographyActivity">

<eStructuralFeatures xsi:type="ecore:EReference" name="calledChoreographyRef"

ordered="false" eType="#//Choreography"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="participantAssociations"

ordered="false" upperBound="-1" eType="#//ParticipantAssociation" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="SubChoreography" eSuperTypes="#//ChoreographyActivity #//FlowElementsContainer">

<eStructuralFeatures xsi:type="ecore:EReference" name="artifacts" ordered="false"

upperBound="-1" eType="#//Artifact" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ChoreographyTask" eSuperTypes="#//ChoreographyActivity">

<eStructuralFeatures xsi:type="ecore:EReference" name="messageFlowRef" ordered="false"

upperBound="2" eType="#//MessageFlow"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="GlobalChoreographyTask" eSuperTypes="#//Choreography">

<eStructuralFeatures xsi:type="ecore:EReference" name="initiatingParticipantRef"

ordered="false" lowerBound="1" eType="#//Participant"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="TextAnnotation" eSuperTypes="#//Artifact">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="text" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="textFormat" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"

defaultValueLiteral="text/plain"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Group" eSuperTypes="#//Artifact">

<eStructuralFeatures xsi:type="ecore:EReference" name="categoryValueRef" ordered="false"

eType="#//CategoryValue"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Association" eSuperTypes="#//Artifact">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="associationDirection" ordered="false"

lowerBound="1" eType="#//AssociationDirection"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="sourceRef" ordered="false"

eType="#//BaseElement"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="targetRef" ordered="false"

eType="#//BaseElement"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="AssociationDirection">

<eLiterals name="None"/>

<eLiterals name="One" value="1"/>

<eLiterals name="Both" value="2"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Category" eSuperTypes="#//RootElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="categoryValue" ordered="false"

upperBound="-1" eType="#//CategoryValue" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" lowerBound="1"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ServiceTask" eSuperTypes="#//Task">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="operationRef" ordered="false"

eType="#//Operation"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="SubProcess" eSuperTypes="#//Activity #//FlowElementsContainer">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="triggeredByEvent" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="artifacts" ordered="false"

upperBound="-1" eType="#//Artifact" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="MultiInstanceBehavior">

<eLiterals name="None"/>

<eLiterals name="One" value="1"/>

<eLiterals name="All" value="2"/>

<eLiterals name="Complex" value="3"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="MultiInstanceLoopCharacteristics" eSuperTypes="#//LoopCharacteristics">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="isSequential" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="behavior" ordered="false"

lowerBound="1" eType="#//MultiInstanceBehavior" defaultValueLiteral="All"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="loopCardinality" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="loopDataInputRef" ordered="false"

eType="#//ItemAwareElement"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="loopDataOutputRef" ordered="false"

eType="#//ItemAwareElement"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="inputDataItem" ordered="false"

eType="#//DataInput" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="outputDataItem" ordered="false"

eType="#//DataOutput" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="completionCondition" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="complexBehaviorDefinition"

ordered="false" upperBound="-1" eType="#//ComplexBehaviorDefinition" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="oneBehaviorEventRef" ordered="false"

eType="#//EventDefinition"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="noneBehaviorEventRef" ordered="false"

eType="#//EventDefinition"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ComplexBehaviorDefinition" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EReference" name="condition" ordered="false"

lowerBound="1" eType="#//FormalExpression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="event" ordered="false"

eType="#//ImplicitThrowEvent" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="StandardLoopCharacteristics" eSuperTypes="#//LoopCharacteristics">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="testBefore" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="loopCondition" ordered="false"

eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="loopMaximum" ordered="false"

eType="#//Expression" containment="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="CallActivity" eSuperTypes="#//Activity">

<eStructuralFeatures xsi:type="ecore:EReference" name="calledElementRef" ordered="false"

eType="#//CallableElement"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="SendTask" eSuperTypes="#//Task">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="operationRef" ordered="false"

eType="#//Operation"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageRef" ordered="false"

eType="#//Message"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ReceiveTask" eSuperTypes="#//Task">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="instantiate" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="false"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="operationRef" ordered="false"

eType="#//Operation"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="messageRef" ordered="false"

eType="#//Message"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="ScriptTask" eSuperTypes="#//Task">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="scriptFormat" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="script" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="BusinessRuleTask" eSuperTypes="#//Task">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="AdHocSubProcess" eSuperTypes="#//SubProcess">

<eStructuralFeatures xsi:type="ecore:EReference" name="completionCondition" ordered="false"

lowerBound="1" eType="#//Expression" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="ordering" ordered="false"

lowerBound="1" eType="#//AdHocOrdering"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="cancelRemainingInstances"

ordered="false" lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EBoolean"

defaultValueLiteral="true"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EEnum" name="AdHocOrdering">

<eLiterals name="Parallel"/>

<eLiterals name="Sequential" value="1"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Transaction" eSuperTypes="#//SubProcess">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="protocol" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="method" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="GlobalScriptTask" eSuperTypes="#//GlobalTask">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="scriptLanguage" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="script" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="GlobalBusinessRuleTask" eSuperTypes="#//GlobalTask">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="implementation" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

<eClassifiers xsi:type="ecore:EClass" name="Definitions" eSuperTypes="#//BaseElement">

<eStructuralFeatures xsi:type="ecore:EAttribute" name="name" ordered="false" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="targetNamespace" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="expressionLanguage" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"

defaultValueLiteral="http://www.w3.org/1999/XPath"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="typeLanguage" ordered="false"

lowerBound="1" eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"

defaultValueLiteral="http://www.w3.org/2001/XMLSchema"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="imports" ordered="false"

upperBound="-1" eType="#//Import" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="extensions" ordered="false"

upperBound="-1" eType="#//Extension" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="relationships" ordered="false"

upperBound="-1" eType="#//Relationship" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="rootElements" ordered="false"

upperBound="-1" eType="#//RootElement" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EReference" name="diagrams" ordered="false"

upperBound="-1" eType="ecore:EClass BPMNDI.ecore#//BPMNDiagram" containment="true"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="exporter" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

<eStructuralFeatures xsi:type="ecore:EAttribute" name="exporterVersion" ordered="false"

eType="ecore:EDataType http://www.eclipse.org/emf/2002/Ecore#//EString"/>

</eClassifiers>

</ecore:EPackage>

This is an example model based on “BPMN-Designer” metamodel:

<?xml version="1.0" encoding="ASCII"?>

<bpmn:Definitions xmi:version="2.0" xmlns:xmi="http://www.omg.org/XMI" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:bpmn="http://www.omg.org/spec/BPMN/20100524/MODEL-XMI" id="\_Tk7dwY8DEe-v648egk3nxQ">

<rootElements xsi:type="bpmn:Process" id="\_Tk7dwI8DEe-v648egk3nxQ">

<flowElements xsi:type="bpmn:StartEvent" id="\_LC20YI8WEe-v648egk3nxQ" name="Job Vacancy" outgoing="\_O92DQI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:UserTask" id="\_NYl8sI8WEe-v648egk3nxQ" name="write description" outgoing="\_UwjowI8WEe-v648egk3nxQ" incoming="\_O92DQI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_O92DQI8WEe-v648egk3nxQ" targetRef="\_NYl8sI8WEe-v648egk3nxQ" sourceRef="\_LC20YI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:UserTask" id="\_R2sfsI8WEe-v648egk3nxQ" name="Complete Advertisement" outgoing="\_btRjQI8WEe-v648egk3nxQ" incoming="\_UwjowI8WEe-v648egk3nxQ \_dvR3QI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_UwjowI8WEe-v648egk3nxQ" targetRef="\_R2sfsI8WEe-v648egk3nxQ" sourceRef="\_NYl8sI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:UserTask" id="\_Z41KII8WEe-v648egk3nxQ" name="Approve Advertisement" outgoing="\_dOjIwI8WEe-v648egk3nxQ" incoming="\_btRjQI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_btRjQI8WEe-v648egk3nxQ" targetRef="\_Z41KII8WEe-v648egk3nxQ" sourceRef="\_R2sfsI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:ExclusiveGateway" id="\_c1qusI8WEe-v648egk3nxQ" outgoing="\_dvR3QI8WEe-v648egk3nxQ \_jHAJ4I8WEe-v648egk3nxQ" incoming="\_dOjIwI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_dOjIwI8WEe-v648egk3nxQ" targetRef="\_c1qusI8WEe-v648egk3nxQ" sourceRef="\_Z41KII8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_dvR3QI8WEe-v648egk3nxQ" name="No" targetRef="\_R2sfsI8WEe-v648egk3nxQ" sourceRef="\_c1qusI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:ParallelGateway" id="\_inrwoI8WEe-v648egk3nxQ" outgoing="\_p2WWwI8WEe-v648egk3nxQ \_qOE6QI8WEe-v648egk3nxQ" incoming="\_jHAJ4I8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_jHAJ4I8WEe-v648egk3nxQ" name="Yes" targetRef="\_inrwoI8WEe-v648egk3nxQ" sourceRef="\_c1qusI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:ServiceTask" id="\_lp9O0I8WEe-v648egk3nxQ" name="Publish on homepage" outgoing="\_23yMwI8WEe-v648egk3nxQ" incoming="\_p2WWwI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:BusinessRuleTask" id="\_n7IAMI8WEe-v648egk3nxQ" name="Select other platforms" outgoing="\_4alcQI8WEe-v648egk3nxQ" incoming="\_qOE6QI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_p2WWwI8WEe-v648egk3nxQ" targetRef="\_lp9O0I8WEe-v648egk3nxQ" sourceRef="\_inrwoI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_qOE6QI8WEe-v648egk3nxQ" targetRef="\_n7IAMI8WEe-v648egk3nxQ" sourceRef="\_inrwoI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:ServiceTask" id="\_sV8lsI8WEe-v648egk3nxQ" name="Publish on other platform" outgoing="\_35jLwI8WEe-v648egk3nxQ" incoming="\_4alcQI8WEe-v648egk3nxQ">

<loopCharacteristics xsi:type="bpmn:MultiInstanceLoopCharacteristics" id="\_xKQpQI8WEe-v648egk3nxQ"/>

</flowElements>

<flowElements xsi:type="bpmn:ParallelGateway" id="\_0Ej3MI8WEe-v648egk3nxQ" outgoing="\_43zjwI8WEe-v648egk3nxQ" incoming="\_23yMwI8WEe-v648egk3nxQ \_35jLwI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:EndEvent" id="\_01x4wI8WEe-v648egk3nxQ" name="Vacancy advertisement" incoming="\_43zjwI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_23yMwI8WEe-v648egk3nxQ" targetRef="\_0Ej3MI8WEe-v648egk3nxQ" sourceRef="\_lp9O0I8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_35jLwI8WEe-v648egk3nxQ" targetRef="\_0Ej3MI8WEe-v648egk3nxQ" sourceRef="\_sV8lsI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_4alcQI8WEe-v648egk3nxQ" targetRef="\_sV8lsI8WEe-v648egk3nxQ" sourceRef="\_n7IAMI8WEe-v648egk3nxQ"/>

<flowElements xsi:type="bpmn:SequenceFlow" id="\_43zjwI8WEe-v648egk3nxQ" targetRef="\_01x4wI8WEe-v648egk3nxQ" sourceRef="\_0Ej3MI8WEe-v648egk3nxQ"/>

<laneSets id="\_UznecY8DEe-v648egk3nxQ" name="Eu Bank">

<lanes id="\_UzoFgI8DEe-v648egk3nxQ" name="Hiring Manager" flowNodeRefs="\_LC20YI8WEe-v648egk3nxQ \_NYl8sI8WEe-v648egk3nxQ \_Z41KII8WEe-v648egk3nxQ \_c1qusI8WEe-v648egk3nxQ">

<extensionValues id="\_PoBosI8WEe-v648egk3nxQ">

<value xsi:type="bpmn:DataObject" id="\_PoBosY8WEe-v648egk3nxQ" name="Description"/>

</extensionValues>

<partitionElement xsi:type="bpmn:InputOutputSpecification" id="\_JRrxsI8WEe-v648egk3nxQ">

<dataInputs id="\_JRrxsY8WEe-v648egk3nxQ" name="Role Required"/>

<dataInputs id="\_esTgMI8WEe-v648egk3nxQ" name="Advertisement"/>

</partitionElement>

</lanes>

<lanes id="\_GxPOMI8WEe-v648egk3nxQ" name="Recruitment" flowNodeRefs="\_R2sfsI8WEe-v648egk3nxQ \_inrwoI8WEe-v648egk3nxQ \_lp9O0I8WEe-v648egk3nxQ \_n7IAMI8WEe-v648egk3nxQ \_sV8lsI8WEe-v648egk3nxQ \_0Ej3MI8WEe-v648egk3nxQ \_01x4wI8WEe-v648egk3nxQ">

<extensionValues id="\_VnVfwI8WEe-v648egk3nxQ">

<value xsi:type="bpmn:DataObject" id="\_VnVfwY8WEe-v648egk3nxQ" name="Advertisement"/>

</extensionValues>

<extensionValues id="\_xzvrII8WEe-v648egk3nxQ">

<value xsi:type="bpmn:DataObject" id="\_xzwSMI8WEe-v648egk3nxQ" name="Selected Platform"/>

</extensionValues>

</lanes>

</laneSets>

<artifacts xsi:type="bpmn:Association" id="\_Q-tHwI8WEe-v648egk3nxQ" sourceRef="\_NYl8sI8WEe-v648egk3nxQ" targetRef="\_PoBosY8WEe-v648egk3nxQ"/>

<artifacts xsi:type="bpmn:Association" id="\_TqOS0I8WEe-v648egk3nxQ" sourceRef="\_PoBosY8WEe-v648egk3nxQ" targetRef="\_R2sfsI8WEe-v648egk3nxQ"/>

<artifacts xsi:type="bpmn:Association" id="\_YPoXsI8WEe-v648egk3nxQ" sourceRef="\_R2sfsI8WEe-v648egk3nxQ" targetRef="\_VnVfwY8WEe-v648egk3nxQ"/>

<artifacts xsi:type="bpmn:Association" id="\_gAKUwI8WEe-v648egk3nxQ" sourceRef="\_Z41KII8WEe-v648egk3nxQ" targetRef="\_esTgMI8WEe-v648egk3nxQ"/>

<artifacts xsi:type="bpmn:Association" id="\_g0HhQI8WEe-v648egk3nxQ" sourceRef="\_VnVfwY8WEe-v648egk3nxQ" targetRef="\_Z41KII8WEe-v648egk3nxQ"/>

</rootElements>

</bpmn:Definitions>

This is the XES trace file representing the modeling step done when we created the example BPMN model based on “BPMN Designer” metamodel:

**event Process laneSets ADD**

**event LaneSet lanes ADD**

**event LaneSet name SET**

**event Lane name SET**

**event LaneSet lanes ADD**

**event Lane name SET**

**event Lane name SET**

**event Lane partitionElement SET**

**event InputOutputSpecification dataInputs ADD**

**event DataInput name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event StartEvent name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event UserTask name SET**

**event Process flowElements ADD**

**event StartEvent outgoing ADD**

**event SequenceFlow sourceRef SET**

**event UserTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Lane extensionValues ADD**

**event ExtensionAttributeValue value SET**

**event DataObject name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event UserTask name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process flowElements ADD**

**event UserTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event UserTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Lane extensionValues ADD**

**event ExtensionAttributeValue value SET**

**event DataObject name SET**

**event DataObject name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event UserTask name SET**

**event Process flowElements ADD**

**event UserTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event UserTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event Process flowElements ADD**

**event UserTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ExclusiveGateway incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event UserTask incoming ADD**

**event SequenceFlow targetRef SET**

**event InputOutputSpecification dataInputs ADD**

**event DataInput name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event SequenceFlow name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ParallelGateway incoming ADD**

**event SequenceFlow targetRef SET**

**event SequenceFlow name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event ServiceTask name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event BusinessRuleTask name SET**

**event Process flowElements ADD**

**event ParallelGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ServiceTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event ParallelGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event BusinessRuleTask incoming ADD**

**event SequenceFlow targetRef SET**

**event BusinessRuleTask name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event ServiceTask name SET**

**event ServiceTask loopCharacteristics SET**

**event MultiInstanceLoopCharacteristics isSequential SET**

**event Lane extensionValues ADD**

**event ExtensionAttributeValue value SET**

**event DataObject name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event EndEvent name SET**

**event Process flowElements ADD**

**event ServiceTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ParallelGateway incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event ServiceTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ParallelGateway incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event BusinessRuleTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ServiceTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event ParallelGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event EndEvent incoming ADD**

**event SequenceFlow targetRef SET**

This is another example model based on “BPMN-Designer” metamodel:

**<?xml version="1.0" encoding="ASCII"?>**

**<bpmn:Definitions xmi:version="2.0" xmlns:xmi="http://www.omg.org/XMI" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:bpmn="http://www.omg.org/spec/BPMN/20100524/MODEL-XMI" id="\_ZfvPUY8DEe-v648egk3nxQ">**

**<rootElements xsi:type="bpmn:Process" id="\_ZfvPUI8DEe-v648egk3nxQ">**

**<flowElements xsi:type="bpmn:StartEvent" id="\_Gd2isI8XEe-v648egk3nxQ" name="Vacation Request Received" outgoing="\_LLYo0I8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:ServiceTask" id="\_JGTysI8XEe-v648egk3nxQ" name="Fetch Vacation Information" outgoing="\_W-6hQI8XEe-v648egk3nxQ" incoming="\_LLYo0I8XEe-v648egk3nxQ" boundaryEventRefs="\_MCeB0I8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_LLYo0I8XEe-v648egk3nxQ" targetRef="\_JGTysI8XEe-v648egk3nxQ" sourceRef="\_Gd2isI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:BoundaryEvent" id="\_MCeB0I8XEe-v648egk3nxQ" outgoing="\_P9iTwI8YEe-v648egk3nxQ" attachedToRef="\_JGTysI8XEe-v648egk3nxQ">**

**<eventDefinitions xsi:type="bpmn:ErrorEventDefinition" id="\_M5nFMI8XEe-v648egk3nxQ"/>**

**</flowElements>**

**<flowElements xsi:type="bpmn:BusinessRuleTask" id="\_VKyRMI8XEe-v648egk3nxQ" name="Vacation Approval" outgoing="\_evgvwI8XEe-v648egk3nxQ" incoming="\_W-6hQI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_W-6hQI8XEe-v648egk3nxQ" targetRef="\_VKyRMI8XEe-v648egk3nxQ" sourceRef="\_JGTysI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:ExclusiveGateway" id="\_de74sI8XEe-v648egk3nxQ" outgoing="\_h6EnQI8XEe-v648egk3nxQ \_lvqYwI8XEe-v648egk3nxQ \_qxFrQI8XEe-v648egk3nxQ" incoming="\_evgvwI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_evgvwI8XEe-v648egk3nxQ" targetRef="\_de74sI8XEe-v648egk3nxQ" sourceRef="\_VKyRMI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SendTask" id="\_ftgCAI8XEe-v648egk3nxQ" name="Notify Employee of approval" outgoing="\_wLsSwI8XEe-v648egk3nxQ" incoming="\_h6EnQI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_h6EnQI8XEe-v648egk3nxQ" name="Approved" targetRef="\_ftgCAI8XEe-v648egk3nxQ" sourceRef="\_de74sI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:UserTask" id="\_ihRxMI8XEe-v648egk3nxQ" name="Manually Approve Vacation" outgoing="\_tVC1wI8XEe-v648egk3nxQ" incoming="\_lvqYwI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_lvqYwI8XEe-v648egk3nxQ" name="Manual Validation Required" targetRef="\_ihRxMI8XEe-v648egk3nxQ" sourceRef="\_de74sI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SendTask" id="\_oUwLsI8XEe-v648egk3nxQ" name="Notify Employee of Refusal" outgoing="\_N1wu8I8YEe-v648egk3nxQ" incoming="\_qxFrQI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_qxFrQI8XEe-v648egk3nxQ" name="Refused" targetRef="\_oUwLsI8XEe-v648egk3nxQ" sourceRef="\_de74sI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:ExclusiveGateway" id="\_sVZ9sI8XEe-v648egk3nxQ" outgoing="\_0yVtwI8XEe-v648egk3nxQ \_8nlywI8XEe-v648egk3nxQ" incoming="\_tVC1wI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_tVC1wI8XEe-v648egk3nxQ" targetRef="\_sVZ9sI8XEe-v648egk3nxQ" sourceRef="\_ihRxMI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:ServiceTask" id="\_uK6GwI8XEe-v648egk3nxQ" name="Update Remaining Vacation" outgoing="\_G8ETQI8YEe-v648egk3nxQ" incoming="\_wLsSwI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_wLsSwI8XEe-v648egk3nxQ" targetRef="\_uK6GwI8XEe-v648egk3nxQ" sourceRef="\_ftgCAI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SendTask" id="\_xZYN4I8XEe-v648egk3nxQ" name="Notify Employee of Approval" outgoing="\_3o1ZwI8XEe-v648egk3nxQ" incoming="\_0yVtwI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_0yVtwI8XEe-v648egk3nxQ" targetRef="\_xZYN4I8XEe-v648egk3nxQ" sourceRef="\_sVZ9sI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:ServiceTask" id="\_1cNxMI8XEe-v648egk3nxQ" name="Update Remaining Vacation" outgoing="\_HX\_aQI8YEe-v648egk3nxQ" incoming="\_3o1ZwI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_3o1ZwI8XEe-v648egk3nxQ" targetRef="\_1cNxMI8XEe-v648egk3nxQ" sourceRef="\_xZYN4I8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SendTask" id="\_5pTcsI8XEe-v648egk3nxQ" name="Notify Employee of Refusal" outgoing="\_K-3aUI8YEe-v648egk3nxQ" incoming="\_8nlywI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_8nlywI8XEe-v648egk3nxQ" targetRef="\_5pTcsI8XEe-v648egk3nxQ" sourceRef="\_sVZ9sI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:EndEvent" id="\_BfjAMI8YEe-v648egk3nxQ" name="Vacation approved Automatically" incoming="\_G8ETQI8YEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:EndEvent" id="\_D3HUgI8YEe-v648egk3nxQ" name="Vacation Approved by Manager" incoming="\_HX\_aQI8YEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_G8ETQI8YEe-v648egk3nxQ" targetRef="\_BfjAMI8YEe-v648egk3nxQ" sourceRef="\_uK6GwI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_HX\_aQI8YEe-v648egk3nxQ" targetRef="\_D3HUgI8YEe-v648egk3nxQ" sourceRef="\_1cNxMI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:EndEvent" id="\_Hw2mMI8YEe-v648egk3nxQ" name="Vacation Refused by Manager" incoming="\_K-3aUI8YEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_K-3aUI8YEe-v648egk3nxQ" targetRef="\_Hw2mMI8YEe-v648egk3nxQ" sourceRef="\_5pTcsI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:EndEvent" id="\_MabZYI8YEe-v648egk3nxQ" name="Vacation Refused Automatically" incoming="\_N1wu8I8YEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_N1wu8I8YEe-v648egk3nxQ" targetRef="\_MabZYI8YEe-v648egk3nxQ" sourceRef="\_oUwLsI8XEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:EndEvent" id="\_OdjHsI8YEe-v648egk3nxQ" name="Employee not found" incoming="\_P9iTwI8YEe-v648egk3nxQ"/>**

**<flowElements xsi:type="bpmn:SequenceFlow" id="\_P9iTwI8YEe-v648egk3nxQ" targetRef="\_OdjHsI8YEe-v648egk3nxQ" sourceRef="\_MCeB0I8XEe-v648egk3nxQ"/>**

**<laneSets id="\_bFJt8Y8DEe-v648egk3nxQ">**

**<lanes id="\_bFJt8o8DEe-v648egk3nxQ" flowNodeRefs="\_Gd2isI8XEe-v648egk3nxQ \_JGTysI8XEe-v648egk3nxQ \_MCeB0I8XEe-v648egk3nxQ \_VKyRMI8XEe-v648egk3nxQ \_de74sI8XEe-v648egk3nxQ \_ftgCAI8XEe-v648egk3nxQ \_ihRxMI8XEe-v648egk3nxQ \_oUwLsI8XEe-v648egk3nxQ \_sVZ9sI8XEe-v648egk3nxQ \_uK6GwI8XEe-v648egk3nxQ \_xZYN4I8XEe-v648egk3nxQ \_1cNxMI8XEe-v648egk3nxQ \_5pTcsI8XEe-v648egk3nxQ \_BfjAMI8YEe-v648egk3nxQ \_D3HUgI8YEe-v648egk3nxQ \_Hw2mMI8YEe-v648egk3nxQ \_MabZYI8YEe-v648egk3nxQ \_OdjHsI8YEe-v648egk3nxQ">**

**<extensionValues id="\_Qx5lYI8XEe-v648egk3nxQ">**

**<value xsi:type="bpmn:DataObject" id="\_Qx5lYY8XEe-v648egk3nxQ" name="Current Vacation Status"/>**

**</extensionValues>**

**<partitionElement xsi:type="bpmn:InputOutputSpecification" id="\_NyOIMI8XEe-v648egk3nxQ">**

**<dataInputs id="\_NyOIMY8XEe-v648egk3nxQ" name="Employee Badge Number"/>**

**<dataInputs id="\_X-nDsI8XEe-v648egk3nxQ" name="Vacation Approval"/>**

**<dataInputs id="\_ZwTDwI8XEe-v648egk3nxQ" name="Reason"/>**

**</partitionElement>**

**</lanes>**

**</laneSets>**

**<artifacts xsi:type="bpmn:Association" id="\_P-E7wI8XEe-v648egk3nxQ" sourceRef="\_NyOIMY8XEe-v648egk3nxQ" targetRef="\_JGTysI8XEe-v648egk3nxQ"/>**

**<artifacts xsi:type="bpmn:Association" id="\_TA2wQI8XEe-v648egk3nxQ" sourceRef="\_JGTysI8XEe-v648egk3nxQ" targetRef="\_Qx5lYY8XEe-v648egk3nxQ"/>**

**<artifacts xsi:type="bpmn:Association" id="\_a8-SQI8XEe-v648egk3nxQ" sourceRef="\_VKyRMI8XEe-v648egk3nxQ" targetRef="\_X-nDsI8XEe-v648egk3nxQ"/>**

**<artifacts xsi:type="bpmn:Association" id="\_baQrMI8XEe-v648egk3nxQ" sourceRef="\_VKyRMI8XEe-v648egk3nxQ" targetRef="\_ZwTDwI8XEe-v648egk3nxQ"/>**

**</rootElements>**

**</bpmn:Definitions>**

This is the XES trace file representing the modeling step done when we created the example BPMN model based on “BPMN Designer” metamodel:

**event Process laneSets ADD**

**event LaneSet lanes ADD**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event StartEvent name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event ServiceTask name SET**

**event Process flowElements ADD**

**event StartEvent outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ServiceTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event ServiceTask boundaryEventRefs ADD**

**event BoundaryEvent attachedToRef SET**

**event Lane flowNodeRefs ADD**

**event BoundaryEvent eventDefinitions ADD**

**event Lane partitionElement SET**

**event InputOutputSpecification dataInputs ADD**

**event DataInput name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Lane extensionValues ADD**

**event ExtensionAttributeValue value SET**

**event DataObject name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event BusinessRuleTask name SET**

**event Process flowElements ADD**

**event ServiceTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event BusinessRuleTask incoming ADD**

**event SequenceFlow targetRef SET**

**event InputOutputSpecification dataInputs ADD**

**event DataInput name SET**

**event InputOutputSpecification dataInputs ADD**

**event DataInput name SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process artifacts ADD**

**event Association sourceRef SET**

**event Association targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event Process flowElements ADD**

**event BusinessRuleTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ExclusiveGateway incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event SendTask name SET**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event SendTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event UserTask name SET**

**event SequenceFlow name SET**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event UserTask incoming ADD**

**event SequenceFlow targetRef SET**

**event SequenceFlow name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event SendTask name SET**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event SendTask incoming ADD**

**event SequenceFlow targetRef SET**

**event SequenceFlow name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event Process flowElements ADD**

**event UserTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ExclusiveGateway incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event ServiceTask name SET**

**event Process flowElements ADD**

**event SendTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ServiceTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event SendTask name SET**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event SendTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event ServiceTask name SET**

**event Process flowElements ADD**

**event SendTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event ServiceTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event SendTask name SET**

**event Process flowElements ADD**

**event ExclusiveGateway outgoing ADD**

**event SequenceFlow sourceRef SET**

**event SendTask incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event EndEvent name SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event EndEvent name SET**

**event Process flowElements ADD**

**event ServiceTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event EndEvent incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event ServiceTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event EndEvent incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event EndEvent name SET**

**event Process flowElements ADD**

**event SendTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event EndEvent incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event EndEvent name SET**

**event Process flowElements ADD**

**event SendTask outgoing ADD**

**event SequenceFlow sourceRef SET**

**event EndEvent incoming ADD**

**event SequenceFlow targetRef SET**

**event Process flowElements ADD**

**event Lane flowNodeRefs ADD**

**event EndEvent name SET**

**event Process flowElements ADD**

**event BoundaryEvent outgoing ADD**

**event SequenceFlow sourceRef SET**

**event EndEvent incoming ADD**

**event SequenceFlow targetRef SET**

Now you are a business process expert, you have to use “BPMN Designer” tool.

<PROBLEM>

Generate the BPMN model (write on screen, not on file) compliant with the given “BPMN Designer” metamodel