Process Modeling Notations

The following sections describe further process modeling notations.

Business process description (RACI-Notation)

For an initial process capture without a special modeling tool the Excel spreadsheet can be used. The following picture shows the first worksheet of the RACI where the overall process flow has to be captured:

The Business Process Description Excel spreadsheet basically collects or describes all the steps that have to be performed to fulfill a Business Process or it's Variant.

The most important parameters are:
1. Input and Output of each process steps
2. The involved roles and their relation to the step. I.e. that's where the RACI naming comes from a person can either be:
2.1. R: Responsible is the person who carries out the activity
2.2. A: Accountable; person who decides
2.3. C: Consulted; person asked before carrying out the activity or who supports the activity
2.4. I: Informed; person has to be informed
3. The Systems, Components and Business Objects involved

More information can be captured and the Excel spreadsheet can easily be enhanced and tailored to project needs. It is important to understand that on this level the process steps are addressed. If it is necessary to document single activities the spreadsheet can be enhanced by a column to indicate that level 6 of the process model is captured.

To transform a Business Process Description into an ARIS Model the EPC Model has to be used (because level 5 is documented). The respective connectors to build RACI oriented relations are provided in the chapter "Business Process Modeling - Event Driven Process Chain (EPC)".

**Business Process Modeling Notation (BPMN)**

BPMN is an abbreviation for Business Process Modeling Notation and represents a model type. Compared to the Event Driven Process Chain (EPC), BPMN is a rather modern notation. BPMN was developed and published in 2002 by Stephen A. White. Originally BPMN was developed by the Business Process Management Initiative (BPMI). However it was handed over to the Object Management Group (OMG) which is known for the development of other modeling specifications like UML, CORBA or Model Driven Architecture. OMG is still responsible for the BPMN specification.

BPMNs main purpose is also to visually model business processes. Even though the EPC is an accepted standard on business side it is not very popular when it comes to IT. BPMN tries to be more specific especially regarding IT relevant aspects like message flow. Another advantage is a possible translation of BPMN elements to the BPEL (Business Process Execution Language) specification. This provides the possibility to model executable business processes as also featured by NetWeaver BPM.

**Comparison to EPC**

In its current definition BPMN does provide some additional/different elements compared to EPC, however EPC does still provide a higher number of elements and symbols with business focus. EPC was developed in 1992 at the university of Saarland together with SAP-Employees and is the main process modeling notation within the ARIS Toolset. EPC mainly consists of Events and Functions. Together with logical operators and connectors this results in the definition of process flows. Additional satellite elements provide further process specification like Roles, Entities, Information Carriers, Systems etc. that can be assigned for example to a function as input or output information.

**Transformation between EPC and BPMN**

ARIS supports an automated transformation between EPCs and BPMN Model types. However since BPMN does define different elements one will face a loss of information and the BPMN model needs rework.

**Transfer of models between ARIS and NetWeaver BPM**

Currently there is no import feature available to import BPMN Models created in ARIS into NW BPM. One possible reason is, that the current BPMN specification does not define a serialization format (it is not defined how to actually store a BPMN model for example as an XML structure). However the OMG together with SAP are currently specifying the next version of BPMN which will then also provide a defined format for serialization. Having this in mind we hope that there will be an automated or at least technically supported import possible. Until then it is unfortunately necessary to manually redraw these models in NW BPM.