

RnSpecInterdependence-v11

Issue 2.12: Incomplete PIDX/RN Standards Documentation

The RosettaNet specifications facilitate business process alignment between disparate organizations that adhere to the Partner Interface Processes (PIPs) specified by RosettaNet.

These processes are described in separate, interdependent documents:

- PIP specifications and their associated message guidelines
- Business and technical dictionaries that define elements of a RosettaNet message, and where they are used
- The RosettaNet Implementation Framework, version 2 (RNIF2)

To implement the business process alignment functionality provided by the RosettaNet specifications, integration software must implement specific PIPs that address processing goals, the business and technical dictionaries, and the implementation framework specifications. Figure 1 illustrates how trading partners use the specifications together to provide a public integration environment.

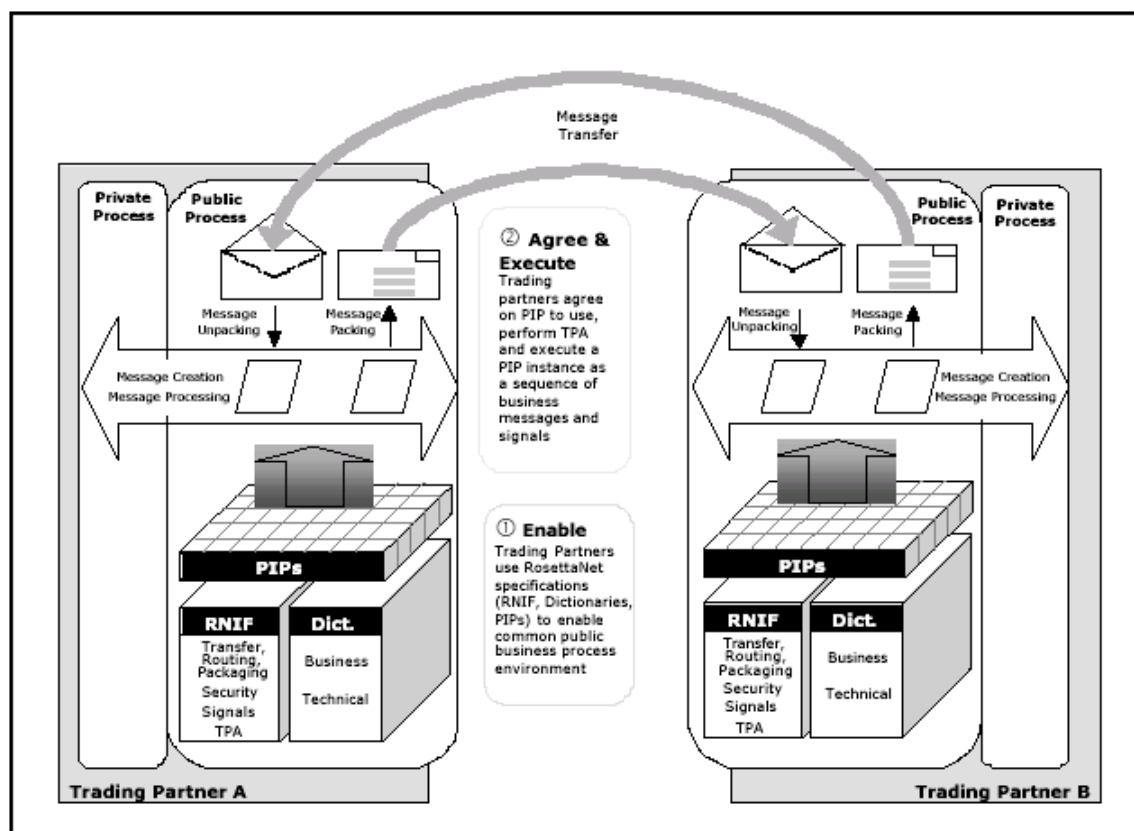


Figure 1: Interrelationships of RosettaNet Specifications (RosettaNet, 2004, p. 16)

PIPs and message guidelines

The RosettaNet PIP specifications define the trading partner roles, public processes, data, business rules, network components, preconditions and post-conditions necessary to align trading partner supply chain business processes. The documents that describe and define each PIP include the PIP specification, the business document, the Data Type Definitions (DTD) for the RosettaNet headers and service content, business and technical dictionaries, and message guidelines. The guidelines contain additional PIP-specific information that must be validated, but cannot be expressed in the DTDs. Each PIP includes:

- The specification of partner business roles
- The business activities executed by the roles
- The type, content, and sequence of business documents exchanged by the role - interactions while performing these activities.
- Business rules constraining the interactions, including the time, security, authentication, and performance constraints
- The structure and content of the business documents as specified in XML schemas, DTDs, and message guidelines specific to the PIP

The schemas, DTDs and the associated Message Guidelines for business actions (business messages) are specified as part of the corresponding PIP specification.

The RosettaNet specifications do not contain PIDX PIP documentation. Accordingly, PIDX/RN specifications should include a PIP specification and message guidelines for each PIDX PIP.

Business and technical dictionaries

The business and technical dictionaries provide a common vocabulary for aligning business processes in disparate organizations. The RosettaNet business dictionary defines business properties, business data entities, and fundamental business data entities found in PIP message guidelines. The RosettaNet technical dictionary (RNTD) provides properties used to define products and services. The RNTD eliminates the need for trading partners to use separate dictionaries when implementing multiple PIPs.

The business dictionaries do not include business concepts used in the oil and gas domain. Some PIDX artifacts such as the PIDXCodeLists.xsd do contain business definitions, but their content is incomplete. Additionally, these definitions are not included in the current RosettaNet dictionaries. Accordingly, the RosettaNet business dictionaries need to be augmented to include business entities used by organizations executing PIDX/RN compliant PIPs.

The RNTD does not contain appropriate elements for the oil and gas industries, and the PIDX standards do not include an equivalent of the RNTD. PIDX maintains a Petroleum Industry Data Dictionary (PIDD), but it is not widely distributed or consulted. Additionally, PIDX maintains a cataloging schema containing technical elements. The contents of the PIDD should be included in the PIDX/RN documentation in HTML and XML content.

RNIF2

The Implementation Framework is well documented in the RosettaNet specifications. The PIDX/RN specifications constrain and clarify the RosettaNet artifact.