

INTERNAL

**SAP Business Network**

**Integration Solution Blueprint**

|  |
| --- |
| KNORR-BREMSE |



**IS/DS – Make a Copy of this Blueprint for Each Trading Partner**

**Purpose**

1. IR suppliers can start with the *Solution Blueprint*, no need for PowerPoint KO Deck as they should already be familiar with integration process.
2. IQ suppliers will still use the PowerPoint KO Deck for information sharing only. All project requirements are to be captured in the *Supplier Solution Blueprint*
3. IL will create the *Solution Blueprint* template based on the Buyer’s requirements (scope, business rules, mapping requirements, outcome of scoping session, transaction specifics, known limitations etc.)
4. IS/DS to use a copy of this template for all supplier projects. All project requirements between Buyer & Supplier are to be captured in the copy of this document.

Document includes multiple “talking points” that should be discussed with both parties, and results documented in the Solution Blueprint.

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# Version History

This log is updated each time an update is made to this guide. The log identifies the version number, the date the version was completed, the author of the changes, and a brief description of the changes.

**IS/DS** – When assigned a project, create a copy of this document and name it <Buyer Name Blueprint\_Supplier Name>

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| Version | Date | Description |
| --- | --- | --- |
| 1 | September 2023 | Initial Version of Document |

# Document Purpose and Uses

This document defines the scope of the project and documents various business and technical aspects that relate to trading integration.

The aim is to identify all possible integration requirements from both parties to facilitate a smooth and swift implementation.

Any exceptions and areas of concern are analyzed and documented prior to the beginning of the design phase.

Assumptions:

There will be a single primary point of contact with each Trading Partner for Project Management activities.

It is assumed that assigned resources have the required skillset, appropriate system accesses, and availability to fulfil all responsibilities:

* Knowledge of business operations with customer
* Experienced Developers

The success rate of the project highly depends on proper and timely identification of all business/transaction scenarios to be covered during testing. It is imperative for trading partners to work with their Buyer and SAP Business Network integration resources to proactively identify any such cases and make sure they are documented and validated through testing.

# Business overview

The purpose of undertaking this initiative is to increase efficiency and effectiveness of the organization with targeted business benefits such as:

* Simpler and more efficient E2E process experience
* Reduced data maintenance & improved data quality
* Enhanced user catalog experience
* Catalog and supplier enablement services
* Improved insight from shared real time data
* Functional gaps closure, process automation
* Improved enforcement of legal compliance
* Step-change in vendor self-service
* Step change in “touchless” payment
* Tail end management in user self-service
* Integrated contingent and industrial workforce management

# Technical Landscape

| Description Environment Infrastructure | Buyer Specific Details |
| --- | --- |
| ERP | SAP ECC 6.0 |
| Middleware | Cloud platform integration |
| Solutions Purchased | **Exact Naming from SAP Contract:**  SAP Ariba Strategic Sourcing Suite (SLP, Sourcing, Contracts)  SAP ARIBA Buying  SAP Ariba Commerce Automation Membership |
| UoM Classification | ISO |
| Commodity Codes | Custom |

# Project Scope

The following tables outline the requirements unique to this buyer procurement environment, as detailed in the Excel Transactions Samples Requirements. Not all required elements outlined in the DTD are represented below, as this is meant to only highlight information that is important to your Buyer.

| Description Documents in Scope Summary | Mandatory | Optional | Out of Scope |
| --- | --- | --- | --- |
| Purchase Order | X |  |  |
| Change Order |  | X |  |
| Order Confirmation |  | X |  |
| Advance Ship Notification |  | X |  |
| Receipt Notification |  |  | X |
| Service Entry Sheet |  |  | X |
| Service Entry Sheet Response |  |  | X |
| Invoice |  |  | X |
| Remittance Advice |  |  | X |

**IS/DS** – Add more rows for multiple supplier ANIDs that will be covered in this effort. Ex: if US & CA are being scoped together and managed by the same buyer/supplier teams.

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| Description Business IDs | Company Name | ANID | DUNS | DUNS\_4 |
| --- | --- | --- | --- | --- |
| Buyer | Knorr-Bremse | AN11072800469 |  |  |
| Supplier |  |  |  |  |

| Description Business Units | Location  (City/State) | Business/Vendor ID | In Scope  (Y/N) | Unique Requirements |
| --- | --- | --- | --- | --- |
| Knorr-Bremse Rail Systems Budapest | Budapest | 265 (plant code) | Y |  |
| Knorr-Bremse Fékrendszerek Kft. | Budapest | 2601 (plant code) | Y |  |
| Knorr-Bremse Fékrendszerek Kft. | Kecskemét | 2603 (plant code) | Y |  |
|  |  |  |  |  |

## Orders

**IS/DS** - Supplier Supported should be marked as **No** for Out of Scope. If the document type is in scope enter the document format/method of, CSV online, email, cXML, D96A, x12, PIDX, etc. If the document is outside the Business Network mark column as **No**.

**Remove This Text Box**

| Description Type | Buyer Supported  (Y/N) | Supplier Supported/Format  (No or online, email, cXML, D96A, X12, CSV, PIDX, etc.) |
| --- | --- | --- |
| Catalog | Y |  |
| Non-Catalog/Free Text | Y |  |
| P-Card | N |  |
| Blanket Order – with release | N |  |
| Blanket Order – without release | N |  |
| Service PO (Service structure/without parent - child lines) | N |  |
| Service PO (Service structure/with parent - child lines) | N |  |
| Service PO (Material structure) | N |  |
| Change Order - catalog | Y |  |
| Change Order – non-catalog | Y |  |
| Change Order – P-Card | N |  |
| Cancel Order | Y |  |

**IS/DS -** Capture and document Supplier’s comments during the kickoff/scoping call.

**Remove This Text Box**

| Description Attributes | | Buyer Comments | Supplier Comments |
| --- | --- | --- | --- |
| General | Split Orders | Supplier, Supplier location, Payment Terms and Incoterms can cause an order to split. |  |
| Order Numbering | * Order numbers will start with 43 and 44 and will be followed by 8 digits (43XXXXXXXX/44XXXXXXXX). |  |
| Attachments | * Attachment can be sent on the PO. |  |
| Header | Bill To | * Will be sent on the POs |  |
| Ship To | * Will be sent on the POs |  |
| Payment Terms | * Payment terms are Optional and can be present on a PO |  |
| Need By Date | * Need by Date will be present on the PO, but does not need to be confirmed on Order confirmation and Advance Ship Notice |  |
| Comments | * Comments will be sent on the POs and can be large due to T&C/Instructions added |  |
| Extrinsic | * Refer vendors to Transactions Samples file for list of PO extrinsic fields and descriptions. |  |
| Line Item | Order Item Numbering | * No specific instruction – PO numbers will be numbered in the following way:1,2,3 etc. |  |
| Supplier Part ID | * Not Available will be sent on the Non-Catalog orders. |  |
| Unit Price | * [Precision Rounding on Invoices](https://support.ariba.com/Item/view/196374) * 2 decimal places - number of decimals supported |  |
| Unit of Measure | * ISO Standard |  |
| Ship To | * Ship to on line level is possible scenario. |  |
| Extrinsic Values | * Refer vendors to Transactions Samples file for list of PO extrinsic fields and descriptions. |  |

**IS/DS** - Order management process should be further reviewed, agreed upon during KO and/or dedicated scoping session with Supplier by IS/DS.

**Remove This Text Box**

| Description Order Processing Specifics | Buyer Comments | Supplier Comments |
| --- | --- | --- |
| How are change/cancel orders handled? Change order types: OC based; customer initiated etc. | OC can trigger the change of the PO, after OC is accepted. |  |
| Describe any process requiring manual validation/further contact with customer/supplier to complete processing. | For the Non-Catalog POs, there is a team validating the POs prior sent. |  |
| Will there be specific orders/special items requiring exception in processing?  Are there any other exceptions/specific processing instructions for this buyer? | N/A |  |
| Does the supplier have any comments on the reviewed buyer order management process? | If any questions on the POs sent, the supplier should contact the creator of the PO. Contact person is mentioned on the PO |  |
| Is buyer order management process in conflict with supplier order processing practices/automation capabilities? | N/A |  |
| Discuss process discrepancies between what the supplier supports and what the buyer is requesting. | If any questions on the POs sent, the supplier should contact the creator of the PO. Contact person is mentioned on the PO |  |

## Order Confirmation

**IS/DS** - Supplier Supported should be marked as **No** for Out of Scope. If the document type is in scope enter the document format/method of online, email, cXML, D96A, x12, CSV, PIDX, etc. If the document is outside the Business Network mark column as **No**.

**Remove This Text Box**

| Description Type | Buyer Supported  (Required/Optional/Out of Scope) | Supplier Supported/Format  (No or online, email, cXML, D96A, X12, CSV, PIDX, etc.) |
| --- | --- | --- |
| Header Level | Out of Scope |  |
| Line Level | Optional |  |

**IS/DS -** Capture and document Supplier’s comments for the attributes that the buyer has required to verify supplier acceptance and understanding of the requirement.

**Remove This Text Box**

| Description Attributes | | Buyer Supported  (Required/ Optional/  Out of Scope) | Buyer Comments | Supplier Comments |
| --- | --- | --- | --- | --- |
| General | Attachments | Optional |  |  |
| Change Orders | Optional | * Price change, Quantity change, Rejection or backorder on an OC can trigger a change PO. |  |
| OC updates | Optional |  |  |
| Header | Rejection Reason | Required | * Rejection Reason is required |  |
| Acceptance | Optional | * Acceptance of all items in the order is supported |  |
| Changes | Optional | * Partial acceptance of items/item quantity is supported |  |
| Line Level | Line Comments | Optional |  |  |
| Rejection Reason | Required | Reason for rejection is required at line level |  |
| Backorder | Optional |  |  |
| Delivery Date | Required |  |  |
| Shipment Date | Optional |  |  |
| Unit Price | Required |  |  |
| Unit Price Currency | Required |  |  |
| Item Description | Required |  |  |

## Advanced Shipping Notification (ASN)

**IS/DS** - Supplier Supported should be marked as **No** for Out of Scope. If the document type is in scope enter the document format/method of online, email, cXML, D96A, x12, CSV, PIDX, etc. If the document is outside the Business Network mark column as **No**.

**Remove This Text Box**

| Description Type | Buyer Supported  (Required/Optional/Out of Scope) | Supplier Supported/Format  (No or online, email, cXML, D96A, X12, CSV, PIDX, etc.) |
| --- | --- | --- |
| All | Optional |  |

**IS/DS -** Capture and document Supplier’s comments for the attributes that the buyer has required, to verify supplier acceptance and understanding of the requirement.

**Remove This Text Box**

| Description Attributes | | Buyer Supported  (Required/ Optional/  Out of Scope) | Buyer Comments | Supplier Comments |
| --- | --- | --- | --- | --- |
| General | Attachments | Optional |  |  |
| Order Confirmation | Optional | * Order Confirmation is optional before Ship Notice is sent |  |
| Header | Notice Date | Required |  |  |
| Shipping Date | Required | * Acceptance of all items in the order is supported |  |
| Delivery Date | Required |  |  |
| Delivery & Transport | Optional |  |  |
| Line Level | Quantity | Required |  |  |
| Asset Serial Number | Optional |  |  |
| Shipment Serial Numbers | Optional |  |  |
| Packing Slip | Optional |  |  |

# Additional information documents approach

For the most up to date Plant ID list, UOM list, as well as Incoterms and Commodity Codes lists, please refer to the Integration Specialist assigned to provide the required data.

# Error handling

**IS/DS –** Update **Supplier Comments** with any buyer requirements related to error handling.

**Remove This Text Box**

| Description Specifics | Buyer Comments | Supplier Comments |
| --- | --- | --- |
| Failed or Rejected Document Transmissions | Whenever a PO fails – Knorr-Bremse team is notified.  Whenever OC/ASN should be modified – will be Rejected. | * Who gets notified? * Are there any expectations as to how failed/rejected transactions are to be handled? |
| Failed Order Validation (wrong part number, price, UOM, etc.) | Whenever a PO fails – Knorr-Bremse team is notified. | * Who gets notified? * How is this corrected? * Does the supplier system automatically make substitutions? * What is the turn-around time to address failed orders? |

# Testing

**IS/DS** – Update Supplier Comments per the discussion in the kickoff call.

**Remove This Text Box**

| Description Specifics | In Scope (Y/N) | Phase (Pilot / Post) | Buyer Comments | Supplier Comments |
| --- | --- | --- | --- | --- |
| Test Central plan | N | Post | The assigned Supplier Integration Specialist will work one-on-one with suppliers through connectivity and testing. |  |
| Test Plan | Y | Pilot & Post | Provided as part of the integration kit. |  |

# Project Tracking

## Project Teams

**IS/DS** – Clarify project teams with Buyer and Supplier.

**Remove This Text Box**

| Roles & Responsibilities | Contact Name & E-mail |
| --- | --- |
| **Buyer** | |
| **Project Lead (Operational Lead)**   * Main contact for project coordination * Provide commitment to project timeline * Understand buyer's transaction validation rules * Participate in status meetings |  |
| **Buyer Technical (Developer)**   * Provide technical details for integration to backend systems * Perform data mapping * Assist in troubleshooting document failures * Coordinate go live with functional resource |  |
| **Testing Contact**   * Define & Validate catalogue content with buyer * Analyze incoming Orders * Generate Test Invoice * Assist in other testing activities, coordinate go-live * Download & validate applicable test transaction * load & process through ERP |  |
| **Supplier** | |
| **Project Lead (Supplier Enablement lead)**   * Main contact for project coordination * Enforce compliance of project timelines |  |
| **Technical (Developer)**   * Support of cXML/EDI Identified Supplier testing * Provide connection parameters to ERP systems * Assist in troubleshooting document errors from the   application/ERP |  |
| **Testing Contact**   * Define & Validate catalogue content with Supplier * Generate Test Orders * Reconcile and approve invoices * Assist in other testing activities, coordinate go-live Download & validate applicable test transactions, load & process through ERP |  |
| **SAP** | |
| **Integration Specialist**  **(IS)**   * Manage end-to-end supplier integration * Troubleshoot failed/rejected documents * Ensure timely completion of project milestones * Escalate issues to appropriate person/team |  |
| **Catalog Specialist**  **(CS)**   * Support Setup and testing of Catalogue with buyer and supplier * Troubleshoot failed/rejected catalogues * Ensure timely completion of project milestones * Escalate issues to appropriate person/team |  |
| **Network Deployment/Enablement Lead**  **(NDL/NEL)**   * Consolidates all supplier’s enablement status for reporting to the Buyer |  |

## Project Schedule

**IS/DS** – Discuss project schedule with Buyer and Supplier.

**Remove This Text Box**

| Description  Phase | Start Date | End Date | Contingency Plan  (If target date is missed) |
| --- | --- | --- | --- |
| Plan |  |  |  |
| Design |  |  |  |
| Build |  |  |  |
| Test |  |  |  |
| Deploy |  |  |  |
| Go Live |  |  |  |

## Sign Off

**IS/DS** – Approval from the Buyer and Supplier received post kick off call, once requirements have been scoped, timeline set, and there is agreement to move forward with integration effort.

**Remove This Text Box**

| Description  Name | Buyer or Supplier? | Date | Signature |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Risks

**IS/DS** - Document any items that may have a negative impact on the timeline. These would be considered ‘Project Risks’.

**Remove This Text Box**

| Description Specifics | | Buyer Mitigation Response | Supplier Mitigation Response |
| --- | --- | --- | --- |
| Competing Priorities | * Are other integration/capital projects running at the same time? |  |  |
| * Can this project start now or in the future? |  |  |
| * Is the PO Flip option a possibility in the interim, if the integration project cannot be completed in time? |  |  |
| System Maintenance Schedule | * Upgrades? |  |  |
| * System refresh? |  |  |
| Resource Constraints | * Vacations? |  |  |
| * Holidays? |  |  |
| * Knowledge? |  |  |
| Processes | * Updates/changes to code must be scheduled? |  |  |
| * Go live at certain points of the month? |  |  |
| 3rd Party Dependencies | * Are changes scheduled or added as needed? |  |  |
| * How are error notifications/failures communicated for inbound/outbound transactions? |  |  |
| * Is there a dedicated resource to support the project? |  |  |
| * Will they attend standing calls? |  |  |

# Supplemental Documentation

This document contains Knorr-Bremse specific information regarding transaction requirements. Information in this document does **NOT** cover the complete technical aspects of integrating with the SAP Business Network.

Below are several sections for supplemental documentation to be used with this document for cXML, EDI

D96A / X12 or PIDX transaction formats. Only refer to the section that pertains to the format your organization will be sending or receiving.

## SAP Help Portal

SAP maintains a complete and rich documentation library with Administration and How-To guides.

Here at [**SAP Help Porta**l](https://help.sap.com/viewer/index), you can find the information you need to administer and provision our products.

All guides within our Help Library are downloadable and accessible by entering the document you are looking for in the search bar of SAP Help Portal.

Below are some helpful shortcuts to guidelines you might benefit from:

[cXML Solutions Guide](https://help.sap.com/products/ARIBA_NETWORK/11ee0faf55c74bf49379485c2ca588a9/dd97df0ea699431d96dfd47ea0a553a0.html?locale=en-US)

[cXML User’s Guide](http://cxml.org/downloads.html)

[SAP Business Network guide to invoicing](https://help.sap.com/docs/business-network-for-procurement/business-network-invoicing/sap-business-network-guide-to-invoicing?locale=en-US&source=redirect)

## cXML Supplemental Documentation

New cXML supplier to SAP Business Network must:

1. Support a DTD (document type definition) validation tool internally and download the document type definitions (DTD’s) for all supported transactions.
2. Support **HTTPS** protocol. SAP Business Network supports **HTTPS (not HTTP)** only for cXML transactions.
3. Review the **cXML Solutions Guide** and **cXML User’s Guides**.

cXML Document Type Definitions (DTD’s)

* <http://cxml.org> Download [InvoiceDetail.zip](http://xml.cxml.org/current/InvoiceDetail.zip) for the InvoiceDetailRequest.dtd.
* <http://cxml.org> Download cXML.DTD for the OrderRequest
* <http://cxml.org> Download Fulfill.dtd for ConfirmationRequest/ShipNoticeRequest

## EDI Supplemental Documentation via SAP Cloud Integration Gateway

EDI D96A/X12 Supplemental Documentation   
[All EDI Supplier Guides](https://integration.ariba.com/#/resources)

## PIDX Supplemental Documentation via SAP Cloud Integration Gateway

PIDX Supplemental Documentation   
[All PIDX Supplier Guides](https://integration.ariba.com/#/resources)

# SAP Business Network customer support for Suppliers

## Post Go Live Support

**Supplier Integrators** provide two weeks support of Post Go Live starting with the first transaction in **Production**. After the two-week period, a **Service Request** should be created for any assistance.

## How to utilize Help Center and request assistance

At **SAP**, our goal is to empower Suppliers with the information and tools they need to seamlessly navigate through **SAP Business Network Solutions**. You can find the answers you need about SAP Business Network products in the **SAP Help Center**. You can also contact **SAP Support** directly through the **Help Center**, when necessary.

## Access the Help Center

[Sign into your account](https://service.ariba.com/) and look to the right-hand side of your screen  to view the **Help Center panel**. If the panel collapses and you cannot see any articles, click  icon to expand.

## Using SAP Business Network Help Center

The Help Center is the first place to start if you have questions about any **SAP** **Business Network Solution.**

Please watch this short[Tutorial](https://sapvideoa35699dc5.hana.ondemand.com/?entry_id=1_j6gwv8ex)on how to navigate **SAP Help Center to:**

* Find informational documents and FAQs created and curated by support or product documentation from [SAP Help Portal](https://help.sap.com/viewer/index)
* Find information on new releases, upcoming webcasts, and events, as well as easy access to Supplier Release Readiness Portal.
* Contact us to submit a case for support.