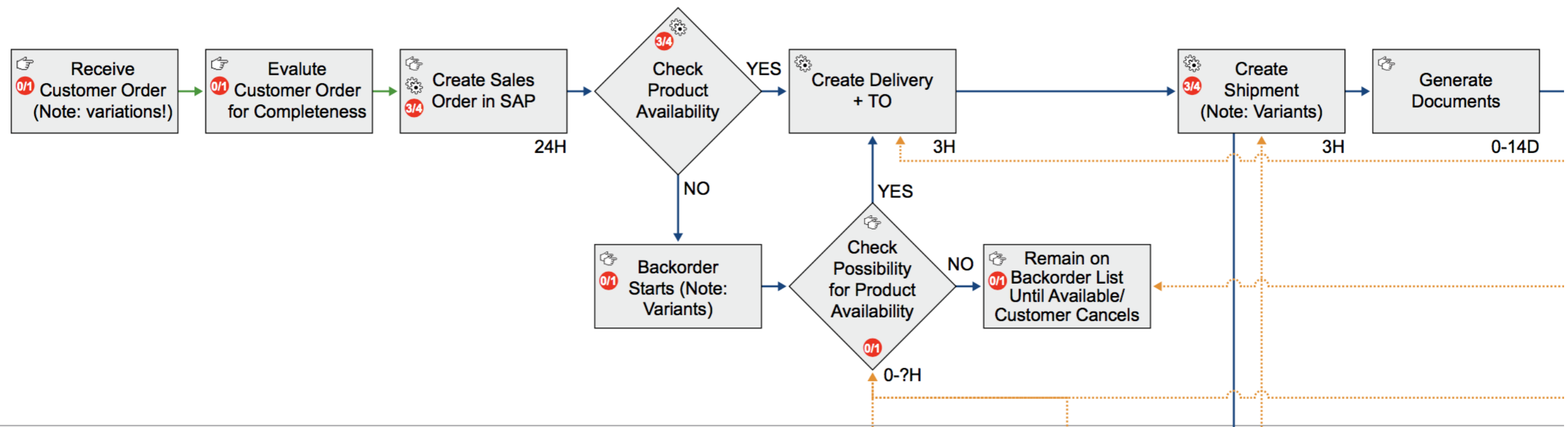


CSL EMA Overview

CSL EMA is in the SCO functional group are in the SO Business Area. The illustration below provides an overview of the End-to-End CSL EMA workflow. This document aims to describe all the tasks involved in the CSL EMA function.

Solid's Workflow:



Receive Customer Order - Description

The objective of this task is to **receive a product order from the customer**. It is part of the solid workflow.

It consists of the following Measurement(s):

- " ... "

It delivers the following Service(s):

- " ... "

The task has a maturity of 0.5.

The task consumes “...” flow from:

- “...”

It provides process flow to:

- “Evaluate Customer Order for Completeness”

The time used on the task is estimated at “...” with an estimated rework of “15%”.

The following are the issues or problems that the task has:

- Only 40% of the customers have a contract pricing.
 - Master data issue.
 - No Governance or Management.
- There’s no standard for how late the customer makes a commitment or changes. (Around 15% of late changes. About 40% of one or two day delays) The consequence of that, is that when the customer commits to an order, then a delivery date is set. But if the customer then changes the order, the delivery date is then not changed or communicated.

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Customer
- Account Manager

Evaluate Customer Order for Completeness - Description

The objective of this task is to evaluate whether the customer order fulfills the necessary requirements for order completion
It is part of the Solid workflow.

It consists of the following Measurement(s):

- “...”

It delivers the following Service(s):

- “...”

The task has a maturity of “...”.

The task consumes process flow from:

- “Receive Customer Order”

It provides process flow to:

- “Create Sales Order in SAP”

The time used on the task is estimated at “...” with an estimated rework of “95%”.

The following are the issues or problems that the task has:

- Customer sends an order and 95% of all orders are incomplete and incorrect.
- There’s no standard of how to communicate with the customer about orders.
- Customer complaints due to no communication about where their product is in the flow. (7 major complaints this year)

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Account Manager

Create Sales Order in SAP - Description

The objective of this task is to start order process in SAP for customer to receive products. It is part of the solid workflow.

It consists of the following Measurement(s):

- Customer complaints

It delivers the following Service(s):

- Sales order confirmation

The task has a maturity of 3.5.

The task consumes service flow from:

- “Evaluate customer order for completeness”

It provides service flow to:

- “Check Product Availability”

The time used on the task is estimated at “24 hours” with an estimated rework of “25%”.

The following are the issues or problems that the task has:

- PO quality from customers, Missing customer master data, Missing Commercial terms e.g. Price, Lead time on order confirmation, Credit blocks, Issues with coordination of Phase in-/out.
- An order cannot be completed until all the order information is complete.

- Rush order is not properly defined. 4 days of delivery is a rush order. Rush order fee is not applied for many customers.
- Credit block/limit on the customers.

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- CSR
- Customer
- Demand planner
- Supply Coordinator
- Deployer
- AccM

Check Product Availability - Description

The objective of this task is to start order process in SAP for customer to receive products. It is part of the solid workflow.

It consists of the following Measurement(s):

- “..”

It delivers the following Service(s):

- Order availability (Yes variant)
- Backorder (No variant)

The task has a maturity of 3.5.

The task consumes service flow from:

- “Create sales order in SAP”

The task is a gateway and has two variants, Yes and No.

The yes variant provides service flow to:

- “Create Delivery + TO”

The no variant provides service flow to:

- “Backorder starts”

The time used on the task is estimated at “..” with an estimated rework of “..”.

The following are the issues or problems that the task has:

- “ ... ”

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- CSR
- Customer
- Demand planner
- Supply Coordinator
- Deployer
- AccM

Back Order Starts - Description

The objective of this task is to Find products for customer order. It is part of the Solid workflow.

It consists of the following Measurement(s):

- “ ... ”

It delivers the following Service(s):

- Unconfirmed order

The task has a maturity of 0.5.

The task consumes service flow from:

- “Check product availability (No)”

It provides service flow to:

- “Check Possibility for Product Availability”

The time used on the task is estimated at “1-? minutes” with an estimated rework of “25%”.

The following are the issues or problems that the task has:

- Better information flow
- Better communication flow
- Stress in NZ supply chain
- Improving master data
- Cross-functional KPI alignment
- Unconfirmed TO's
- Missing follow-up on DEV batches

- Missing forecast from customer
- Inability to run efficient bulk flow
- QC data issues and prioritization of rush analysis'
- Reduced focus on supply capability from 0-3 months

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Deployer
- Demand planning
- (MOH +NILL+QC+lab)
- Supply Coordinator
- AccM
- ISM
- LAB/QC
- IPG
- SCM Services

Create Delivery + TO - Description

The objective of this task is to **Find product for order (SO/PO)**. It is part of the solid workflow.

It consists of the following Measurement(s):

- **Shipped on time**
- **Complaints**

It delivers the following Service(s):

- **Delivery**
- **Transfer Order**

The task has a maturity of **"..."**.

The task consumes service/information flow from:

- **"Check possibility for product availability (yes)"**
- **"Check product availability (yes)"**
- **"Product available (yes)"**

It provides process flow to:

- **"Create shipment"**

The time used on the task is estimated at "3 hours" with an estimated rework of "25%".

The following are the issues or problems that the task has:

- Warehouse inaccuracy
- Production master data
- Capacity in tapping and warehouse
- Customer generated changes
- Warehouse capacity on e.g. robot's
- Ability to confirm TO's
- No warehouse strategy

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Deployer
- Demand planning
- (MOH +NILL+QC+lab)
- Supply Coordinator
- Customer
- AccM
- ISM
- Warehouse

Check Possibility for Product Availability - Description

The objective of this task is to "...". It is part of the solid workflow.

It consists of the following Measurement(s):

- "..."

It delivers the following Service(s):

- Order availability

The task has a maturity of 0.5.

The task consumes service flow from:

- "Back Order starts"
- "Retap Order List"

- "System Fail, Product Available, Lead Time OK, Capacity"
- "Create + Plan Blend "
- "FSP + SCO KA + 6P + Sub-contractual"

The task is a gateway and has two variants, Yes and No.

The yes variant provides service flow to:

- "Create Delivery + TO"

The no variant provides service flow to:

- "Remain on Backorder List until Available/Customer cancels"

The time used on the task is estimated at "0-? hours" with an estimated rework of "...".

The following are the issues or problems that the task has:

- "..."

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- "..."

Remain on Backorder list until available/Customer Cancels - Description

The objective of this task is to "...". It is part of the solid workflow.

It consists of the following Measurement(s):

- "..."

It delivers the following Service(s):

- "..."

The task has a maturity of 0.5.

The task consumes service/information flow from:

- "Check Possibility for Product Availability (No)"
- "Order Prioritization"

It provides process flow to:

- "Shipment is picked up"

The time used on the task is estimated at "... " with an estimated rework of "... ".

The following are the issues or problems that the task has:

- "... "

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- "... "

Create Shipment - Description

The objective of this task is to book freight forwarder. It is part of the solid workflow.

It consists of the following Measurement(s):

- Shipped on time

It delivers the following Service(s):

- Booking

The task has a maturity of 3.5.

The task consumes service/information flow from:

- "Create Delivery + TO"
- "Create Delivery and Retap Order"

It provides service flow to:

- "Generate Documents"

The time used on the task is estimated at "3 hours" with an estimated rework of "25%".

The following are the issues or problems that the task has:

- Availability of containers
- Timeliness of forwarders
- FCA forwarders

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Shipping responsible

- Freight forwarder
- Warehouse
- PEHA

Generate Documents - Description

The objective of this task is to **Create shipping documents**. It is part of the solid workflow.

It consists of the following Measurement(s):

- **Complaints**

It delivers the following Service(s):

- **Documents**

The task has a maturity of **"..."**.

The task consumes service flow from:

- **"Create Shipment"**

It provides process flow to:

- **"Shipment is Picked Up"**

The time used on the task is estimated at **"3 hours"** with an estimated rework of **"25%"**.

The following are the issues or problems that the task has:

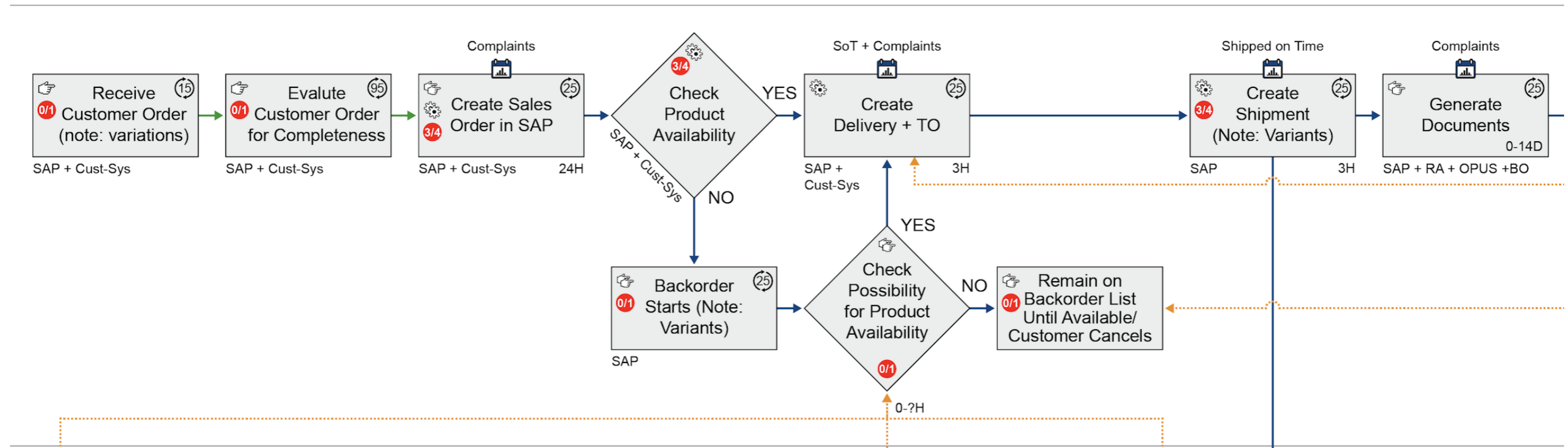
- **CSR**
- **Shipper**
- **Warehouse**
- **Freight Forwarders**
- **External authorities**
- **Banks**
- **RA**
- **QM**
- **AccM**
- **Transport Manager**

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- **Continuous changes on order**

- No screening of customer bank relations
- No screening of country specific requirements

Liquid's Workflow:



Receive Customer Order - Description

The objective of this task is to receive a product order from the customer. It is part of the liquid workflow.

It consists of the following Measurement(s):

- "..."

It delivers the following Service(s):

- "..."

The task has a maturity of 0.5.

The task consumes "... flow from:

- "..."

It provides process flow to:

- "Evaluate Customer Order for Completeness"

The time used on the task is estimated at "..." with an estimated rework of "15%".

The following are the issues or problems that the task has:

- Only 40% of the customers have a contract pricing.
 - Master data issue.
 - No Governance or Management.
- There's no standard for how late the customer makes a commitment or changes. (Around 15% of late changes. About 40% of one or two day delays) The consequence of that, is that when the customer commits to an order, then a delivery date is set. But if the customer then changes the order, the delivery date is then not changed or communicated.

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Customer
- Account Manager

Evaluate Customer Order for Completeness - Description

The objective of this task is to evaluate whether the customer order fulfills the necessary requirements for order completion

It is part of the Liquid workflow.

It consists of the following Measurement(s):

- "..."

It delivers the following Service(s):

- "..."

The task has a maturity of 0.5.

The task consumes process flow from:

- "Receive Customer Order"

It provides process flow to:

- "Create Sales Order in SAP"

The time used on the task is estimated at "..." with an estimated rework of "95%".

The following are the issues or problems that the task has:

- Customer sends an order and 95% of all orders are incomplete and incorrect.
- There's no standard of how to communicate with the customer about orders.
- Customer complaints due to no communication about where their product is in the flow. (7 major complaints this year)

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Account Manager

Create Sales Order in SAP - Description

The objective of this task is to start order process in SAP for customer to receive products. It is part of the Liquid workflow.

It consists of the following Measurement(s):

- Customer complaints

It delivers the following Service(s):

- Sales order confirmation

The task has a maturity of 3.5.

The task consumes service flow from:

- "Evaluate customer order for completeness"

It provides service flow to:

- "Check Product Availability"

The time used on the task is estimated at "24 hours" with an estimated rework of "25%".

The following are the issues or problems that the task has:

- PO quality from customers, Missing customer master data, Missing Commercial terms e.g. Price, Lead time on order confirmation, Credit blocks, Issues with coordination of Phase in-/out.
- An order cannot be completed until all the order information is complete.
- Rush order is not properly defined. 4 days of delivery is a rush order. Rush order fee is not applied for many customers.
- Credit block/limit on the customers.

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- CSR
- Customer
- Demand planner
- Supply Coordinator
- Deployer
- AccM

Check Product Availability - Description

The objective of this task is to start order process in SAP for customer to receive products. It is part of the liquid workflow.

It consists of the following Measurement(s):

- “...”

It delivers the following Service(s):

- Order availability (Yes variant)
- Backorder (No variant)

The task has a maturity of 3.5.

The task consumes service flow from:

- “Create sales order in SAP”

The task is a gateway and has two variants, Yes and No.

The yes variant provides service flow to:

- “Create Delivery + TO”

The no variant provides service flow to:

- “Backorder starts”

The time used on the task is estimated at “...” with an estimated rework of “...”.

The following are the issues or problems that the task has:

- “...”

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- CSR

- Customer
- Demand planner
- Supply Coordinator
- Deployer
- AccM

Back Order Starts - Description

The objective of this task is to Find products for customer order. It is part of the liquid workflow.

It consists of the following Measurement(s):

- “...”

It delivers the following Service(s):

- Unconfirmed order

The task has a maturity of 0.5.

The task consumes service flow from:

- “Check product availability (No)”

It provides service flow to:

- “Check Possibility for Product Availability”

The time used on the task is estimated at “1-? minutes” with an estimated rework of “25%”.

The following are the issues or problems that the task has:

- Better information flow
- Better communication flow
- Stress in NZ supply chain
- Improving master data
- Cross-functional KPI alignment
- Unconfirmed TO's
- Missing follow-up on DEV batches
- Missing forecast from customer
- Inability to run efficient bulk flow
- QC data issues and prioritization of rush analysis'
- Reduced focus on supply capability from 0-3 months

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Deployer
- Demand planning
- (MOH +NILL+QC+lab)
- Supply Coordinator
- AccM
- ISM
- LAB/QC
- IPG
- SCM Services

Create Delivery + TO - Description

The objective of this task is to **Find product for order (SO/PO)**. It is part of the liquid workflow.

It consists of the following Measurement(s):

- **Shipped on time**
- **Complaints**

It delivers the following Service(s):

- **Delivery**
- **Transfer Order**

The task has a maturity of **"..."**.

The task consumes service/information flow from:

- **"Check possibility for product availability (yes)"**
- **"Check product availability (yes)"**
- **"Product available (yes)"**

It provides process flow to:

- **"Create shipment"**

The time used on the task is estimated at **"3 hours"** with an estimated rework of **"25%"**.

The following are the issues or problems that the task has:

- **Warehouse inaccuracy.**

- Production master data.
- Capacity in tapping and warehouse.
- Customer generated changes.
- Warehouse capacity on e.g. robot's.
- Ability to confirm TO's.
- No warehouse strategy.

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Deployer
- Demand planning
- (MOH +NILL+QC+lab)
- Supply Coordinator
- Customer
- AccM
- ISM
- Warehouse

Check Possibility for Product Availability - Description

The objective of this task is to "...". It is part of the liquid workflow.

It consists of the following Measurement(s):

- "..."

It delivers the following Service(s):

- Order availability

The task has a maturity of 0.5.

The task consumes service flow from:

- "Back Order starts"
- "Retap Order List"
- "System Fail, Product Available, Lead Time OK, Capacity"
- "Create + Plan Blend"
- "FSP + SCO KA + 6P + Sub-contractual"

The task is a gateway and has two variants, Yes and No.

The yes variant provides service flow to:

- "Create Delivery + TO"

The no variant provides service flow to:

- "Remain on Backorder List until Available/Customer cancels"

The time used on the task is estimated at "0-? hours" with an estimated rework of "...".

The following are the issues or problems that the task has:

- "..."

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- "..."

Remain on Backorder list until available/Customer Cancels - Description

The objective of this task is to "...". It is part of the liquid workflow.

It consists of the following Measurement(s):

- "..."

It delivers the following Service(s):

- "..."

The task has a maturity of 0.5.

The task consumes service/information flow from:

- "Check Possibility for Product Availability (No)"
- "Order Prioritization"

It provides "... flow to:

- "..."

The time used on the task is estimated at "..." with an estimated rework of "...".

The following are the issues or problems that the task has:

- "..."

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- “..”

Create Shipment - Description

The objective of this task is to book freight forwarder. It is part of the liquid workflow.

It consists of the following Measurement(s):

- Shipped on time

It delivers the following Service(s):

- Booking

The task has a maturity of 3.5.

The task consumes service/information flow from:

- "Create Delivery + TO"
- "Create Delivery and Retap Order"

It provides service flow to:

- "Generate Documents"

The time used on the task is estimated at "3 hours" with an estimated rework of "25%".

The following are the issues or problems that the task has:

- Availability of containers
- Timeliness of forwarders
- FCA forwarders

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- Shipping responsible
- Freight forwarder
- Warehouse
- PEHA

Generate Documents - Description

The objective of this task is to **Create shipping documents**. It is part of the Liquid workflow.

It consists of the following Measurement(s):

- **Complaints**

It delivers the following Service(s):

- **Documents**

The task has a maturity of **"..."**.

The task consumes service flow from:

- **"Create Shipment"**

It provides service flow to:

- **"Shipment is Picked Up"**

The time used on the task is estimated at **"3 hours"** with an estimated rework of **"25%"**.

The following are the issues or problems that the task has:

- **CSR**
- **Shipper**
- **Warehouse**
- **Freight Forwarders**
- **External authorities**
- **Banks**
- **RA**
- **QM**
- **AccM**
- **Transport Manager**

If you have any questions, comments, changes or need to interact with the accountable of the task, these are the responsible (Novozymes contact acronyms are applied):

- **Continuous changes on order**
- **No screening of customer bank relations**
- **No screening of country specific requirements**