# **FSP** Overview

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

# Solid's Workflow:



# **Scheduling Gran/Spray - Description**

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

```
It consists of the following Measurement(s):
```

Utilization

It delivers the following Service(s):

• Plan

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

The task consumes information flow from:

"FSP + SCO KA + Intercompany + Subcontracting Receives Master Schedule Plan"

It provides service flow to:

- "Granulation KA"
- "Granulation BA"

The time used on the task is estimated at "1-37 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):

Global Planning

# **Scheduling Ferm/Rec - Description**

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

It consists of the following Measurement(s):

- Utilization
- It delivers the following Service(s):
  - Plan

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

The task consumes information flow from:

"FSP + SCO KA + Intercompany + Subcontracting Receives Master Schedule Plan"

It provides service flow to:

- "Fermentation KA"
- "Fermentation FU"

The time used on the task is estimated at "1-37 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):

Global Planning, Coordination

# **Usage Decision - Description**

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

It consists of the following Measurement(s):

• "<mark>…</mark>"

It delivers the following Service(s):

UD Code

The task has a maturity of 1 for variant Yes, and a maturity 0 for variant No.

The task consumes information flow from:

- "Step OK?"
- "Approval of Sample (Yes)"

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

The yes variant provides information flow to:

"Usage Decision"

The no variant provides information flow to:

"Usage Decision"

The time used on the task is estimated at "30 minutes – 30 days" 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):

Coordinator/GCC

### **ROBEX Detail Planning Downstream - Description**

The objective of this task is to realise the plan through detail planning. It is part of the solid workflow and is an event.

It consists of the following Measurement(s):

• "<mark>"</mark>

It delivers the following Service(s):

Gantt Chart plan

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

The task consumes information flow from:

"Step OK"

It provides service flow to:

- "Recovery AD"
- "Recovery ACT"
- "Recovery ACD"
- "Recovery BE"

The time used on the task is estimated at "0.5-20 hours" with an estimated rework of "50%".

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

- Issues in production
- Off spec
- Logistics

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):

- Scheduler
- Production
- Granulation

# Plan for Rework/Rad - Description

The objective of this task is to rework as fast as possible. It is part of the solid workflow.

It consists of the following Measurement(s):

- Number of rework (with/without batch recipe.)
- Average waiting time on rework.

It delivers the following Service(s):

Rework plan

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

The task consumes information flow from:

"DISP (No)"

It provides service flow to:

"Granulation BA"

• "SG"

The time used on the task is estimated at "Ongoing" with an estimated rework of "50%".

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

• "<mark>"</mark>

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):

- Coordinator
- Production
- GP
- GCC

# **Usage Decision - Description**

The objective of this task is to close order. It is part of the Solid workflow.

```
It consists of the following Measurement(s):
```

```
•"…"
```

```
It delivers the following Service(s):
```

UD Code

The task's yes variant has a maturity of 1, and the no variant has a maturity of 0.

The task consumes information flow from:

- "Step OK?"
- "Approval of Sample (Yes)"
- "Usage Decision"

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

The yes variant provides information flow to:

"Tankyard"

The no variant provides information flow to:

### • "DISP"

The time used on the task is estimated at "30 minutes – 30 days" with an estimated rework of "50%".

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

- Off spec
- Waiting time analysis
- Ingoing OK
- Response time GCC
- Reanalysis
- Step OK
- Simplify usage of GCC

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):

- Lab
- GCC
- Production Chemist

# **Create + Plan Blend - Description**

The objective of this task is to Deliver on time, coordinate with WC3 in EC to optimize labour. It is part of the Solid workflow.

It consists of the following Measurement(s):

• "<u>..</u>"

It delivers the following Service(s):

• Plan

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

The task consumes information flow from:

"Check Possibility for Product Availability"

It provides service flow to:

"Blend KA"

The time used on the task is estimated at "1 week" 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):

Coordinator

• "<u>"</u>"

# **Usage Decision - Description**

The objective of this task is to close order. It is part of the Solid workflow.

It consists of the following Measurement(s):



- It delivers the following Service(s):
  - UD Code

The task's yes variant has a maturity of 1, while it's no variant has a maturity of 0.

The task consumes information flow from:

Approval of Sample (Yes)

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

The yes variant provides information flow to:

"Warehouse (Internal & External)"

The no variant provides information flow to:

• "DISP"

The time used on the task is estimated at "30 minutes – 12 days" with an estimated rework of "50%".

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

- Off spec
- Waiting time analysis
- Ingoing OK
- Response time GCC
- Reanalysis
- Step OK

Simplify usage of GCC

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):

- Lab
- GCC
- Production Chemist

# **Usage Decision - Description**

The objective of this task is to close order. It is part of the Solid workflow.

It consists of the following Measurement(s):

• "<u>"</u>"

It delivers the following Service(s):

UD Code

The task's yes variant has a maturity of 1, while it's no variant has a maturity of 0.

The task consumes information flow from:

"Approval of Sample (Yes)"

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

The yes variant provides information flow to:

"Warehouse (Internal & External)"

The no variant provides information flow to:

• "DISP"

The time used on the task is estimated at "30 minutes – 12 days" with an estimated rework of "50%".

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

- Off spec
- Waiting time analysis
- Ingoing OK
- Response time GCC
- Reanalysis

Step OK

Simplify usage of GCC

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):

- Lab
- GCC
- Production Chemist

# Liquid's Workflow:



# **Scheduling Gran/Spray - Description**

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

It consists of the following Measurement(s):

Utilization

It delivers the following Service(s):

• Plan

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

The task consumes "...." flow from: • "…" It provides <mark>"…"</mark> flow to: • "…"

The time used on the task is estimated at "1-37 hours" with an estimated rework of "...".

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

• "<mark>…</mark>"

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):

Global Planning

# **Scheduling Ferm/Rec - Description**

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

It consists of the following Measurement(s):

Utilization

It delivers the following Service(s):

Plan

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

The task consumes information flow from:

"FSP + SCO KA + Intercompany + Subcontracting Receives Master Schedule Plan"

It provides service flow to:

- "Production (Fermentation KA)"
- "ROBEX Detail Planning Downstream"

The time used on the task is estimated at "1-37 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):

Global Planning, Coordination

# **Usage Decision Fermentation - Description**

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

It consists of the following Measurement(s):

•"…"

It delivers the following Service(s):

UD Code

The task has a maturity of 1 for variant Yes, and a maturity 0 for variant No.

The task consumes information flow from:

- "Step OK?"
- "Approval of Sample (Yes)"

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

The yes variant provides information flow to:

"Usage Decision Recovery"

The no variant provides information flow to:

"Step OK?"

The time used on the task is estimated at "30 minutes – 30 days" 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):

Coordinator/GCC

# **ROBEX Detail Planning Downstream - Description**

The objective of this task is to realise the plan through detail planning. It is part of the liquid workflow and is an event.

It consists of the following Measurement(s):

• "…"

It delivers the following Service(s):

Gantt Chart plan

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

The task consumes information flow from:

- "Step OK"
- "Scheduling Ferm/Rec"

It provides service flow to:

- "Recovery AD"
- "Recovery ACT"
- "Recovery ACD"
- "Recovery BE"

The time used on the task is estimated at "0.5-20 hours" with an estimated rework of "50%".

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

- Issues in production
- Off spec
- Logistics

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):

- Scheduler
- Production
- Granulation

### **Usage Decision Recovery - Description**

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

It consists of the following Measurement(s):

• "<mark>…</mark>"

It delivers the following Service(s):

UD Code

The task's yes variant has a maturity of 1, and the no variant has a maturity of 0.

The task consumes information flow from:

- "Step OK?"
- "Approval of Sample (Yes)"
- "Usage Decision"

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

The yes variant provides service flow to:

"Change MPS"

The no variant provides information flow to:

- "DISP"
- "Step OK?"

The time used on the task is estimated at "30 minutes – 30 days" with an estimated rework of "50%".

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

- Off spec
- Waiting time analysis
- Ingoing OK
- Response time GCC
- Reanalysis
- Step OK
- Simplify usage of GCC

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):

- Lab
- GCC
- Production Chemist