

LESSONS LEARNED FOR THE SPACE EEE SUPPLY CHAIN WRT COVID-19

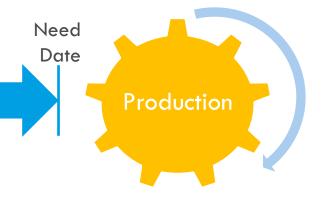
JENS HAALA — MARCH 2021



EEE Lead Time

Determining EEE Lead Time:

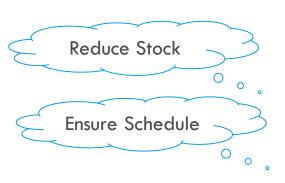
- Vendor Information
- Experience
- Stock







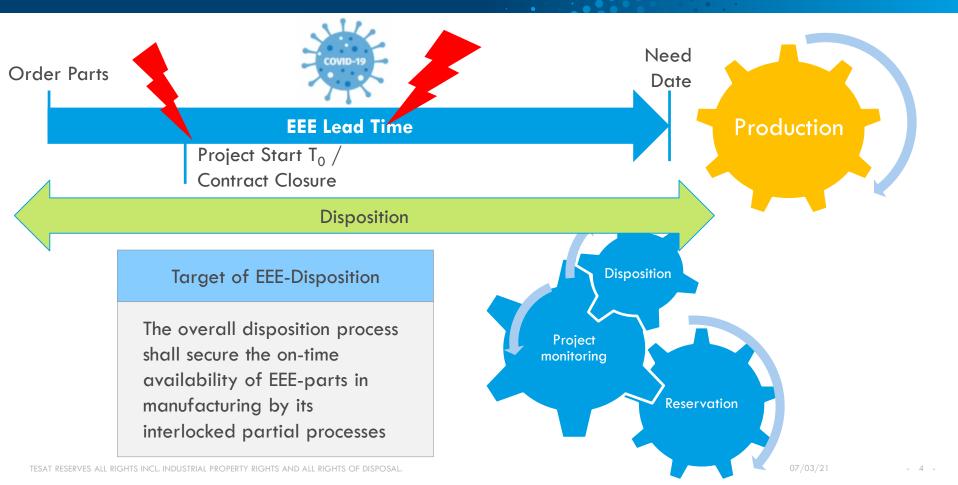
- Ordering Parts at T₀ may be too late
- EEE Lead Time not secured



Production

Date



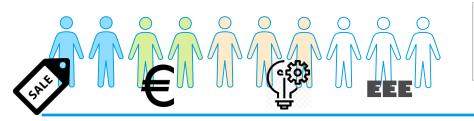




DISPOSITION







Committee consisting of sales, finance, development and EEE

Disposition meeting

Disposition decision

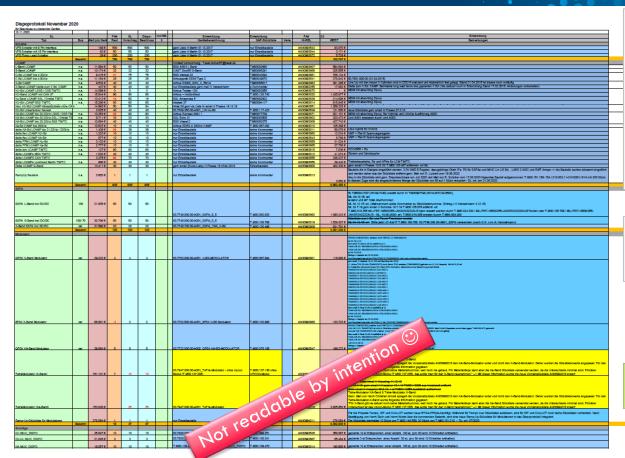
Disposition Protocol

The rolling forecast of sales for the coming ~ 12 months is discussed

Common decision of forecast is made

DISPOSITION — PROTOCOL





Frame bill of materials (BoM) represent product portfolio

Basis for quotations/projects Contain only EEE-parts

Forecast for the BoMs is essential for plant stock procurement.

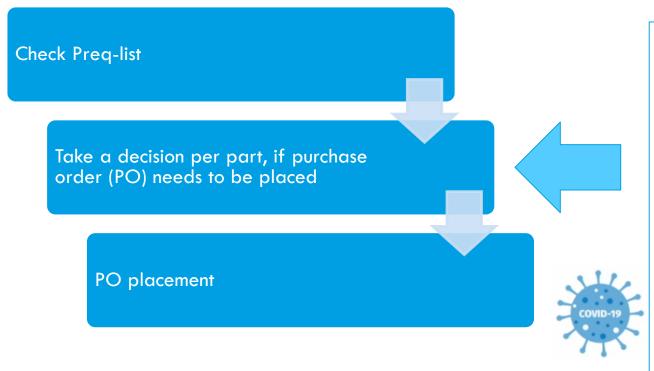
Maintenance of Frame BoM (Create/Change)



Purchase Requisition (Preq) List

DISPOSITION — PURCHASE PREQUISITION LIST





Basis for Decision:

Stock availability
Delivery Times

Aggresive ⇔ Conservative

Covid-19 Measures:

- Choose Conservative
 Stock Policy
- Delivery Times checked with Manufacturer
- Risc of Covid-19 raised
 & discussed
- Dependency on other vendors (Raw Materials)?



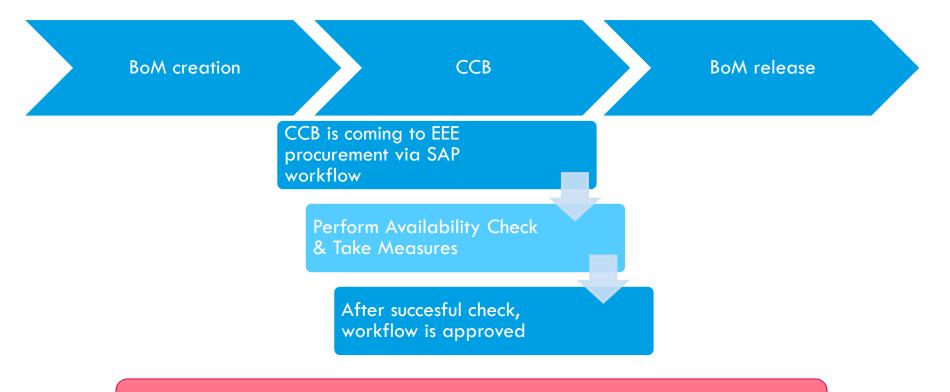


PROJECT MONITORING



PROJECT MONITORING — CONFIGURATION CONTROL BOARD (CCB)





Preliminary BOM is translated to final BOM
- any Risk taken into account -

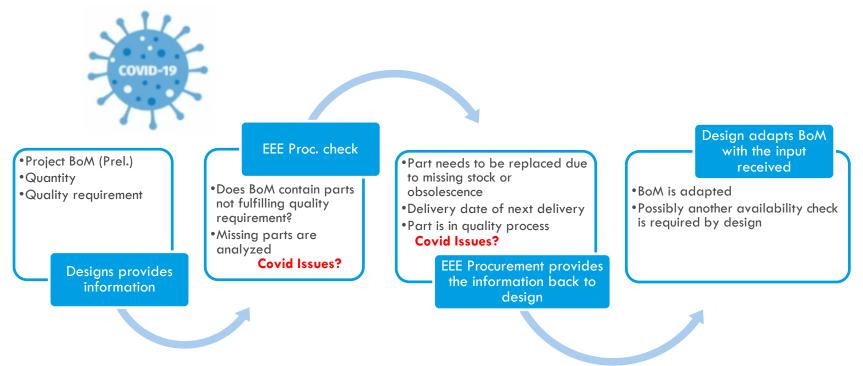
PROJECT MONITORING — AVAILABILITY CHECKS



Target

Performing availability checks for projects Identify Potential Issues and Risks

Early Mitigation





Kick-Off

Project Kick-off: Relevant Frame BoM told to EEE

Allocation of a project to a frame BoM

Development allocates project to a frame BoM (see disposition) The demand in the system will be adapted

Implementation of project BoM into SAP

Design implements the project BoM into SAP

Correct settlement of needs

The quantity of the corresponding frame BoM will be reduced by the quantity of the demand of the project BoM in order to secure the correct demand in SAP

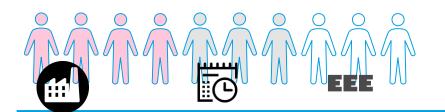






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Committee consisting of manufacturing, planing and EEE meets on a weekly basis

Run of reservation in SAP

Reservation meeting

Reservation protocol

Planning Department:

Reservation in SAP with the kit starting

Manufacturing, planning and EEE:

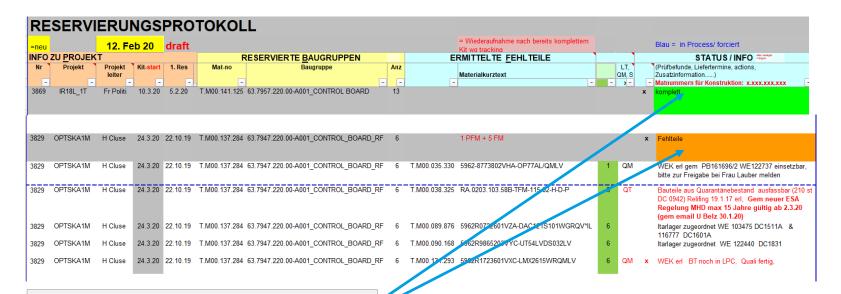
Check situation/info → Get complete Picture

EEE checks situation and missing parts

- → Influence on production
- → actions are triggered

RESERVATION — RESERVATION PROTOCOL





Information if equipment is completed or if there are missing parts

RESERVATION — CORONA MEASURES



- » Weekly Meeting
- » 12 weeks ahead of start of production

Corona-Measures

- » Weekly checks on Manufacturers:
 - » Delivery Date still valid
 - » Raw Materials; Force-Major @ Vendors etc; understand influence on production
 - » Track running Orders (NEW!)



- » Search for alternatives
- » Shift Production
- » Split Production



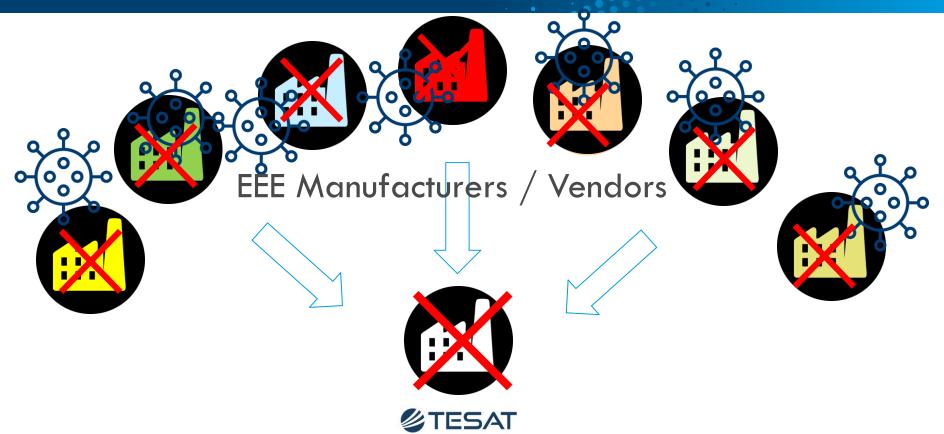




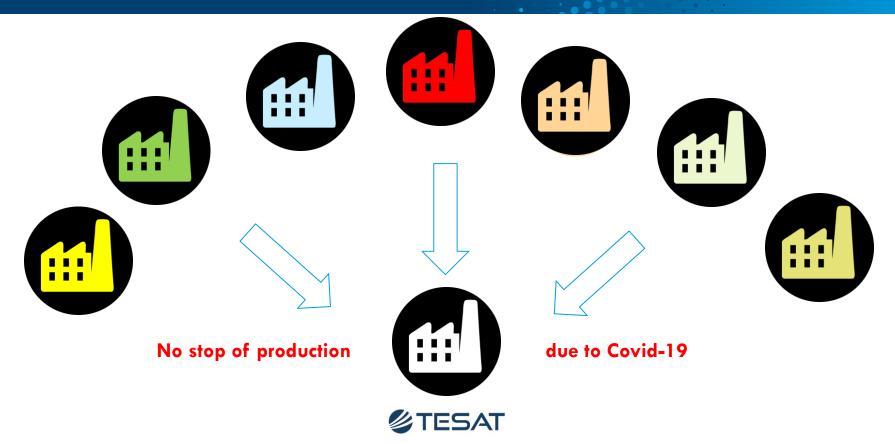
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WHAT WE WERE AFRAID OF...









CONCLUSION



- » Disposition Processes are key Including:
 - » Disposition
 - » Project Monitoring
 - » Reservation



- » Perform Availability Checks
- » Track EEE Orders closely

Thanks to

- » All Vendors for taking succesful Covid-19 measures
- » TESAT responsibles for taking succesful measures







THANK YOU FOR YOUR ATTENTION

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