Agenda

1. Definition and escalation criteria
2. Escalation level 1
3. Escalation level 2
4. Escalation level 3
Definition and escalation criteria
### Escalation levels
#### ZF Escalation Model General Overview

**EL3**

- **High Risk**
  - High risk of ZF supply chain disruptions with notable impact on ZF Group and/or affecting customers
  - Imminent threat of downtime @ZF / customer

**EL2**

- **Medium Risks**
  - Increased risk of ZF supply chain disruption
  - Lack of risk mitigation strategy agreement

**EL1**

- **Low Risk**
  - Risk of ZF supply chain disruption
  - Definition of risk mitigation strategy

- **Vice President Level**
- **Corporate Level**
- **Director Level**
- **Divisional Level**
- **Senior Manager**
- **Plant Level / BU Level**
## Escalation criteria

### Performance Risks

<table>
<thead>
<tr>
<th>EL</th>
<th>Escalation criteria Quality</th>
<th>Escalation criteria Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- Site supplier quality KPI's out of target &gt; 3 months</td>
<td>- DPMI ZF &lt;80% over 3 months (ZF measurement method)</td>
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<tr>
<td></td>
<td>- Not satisfactory reactivity time on the claim handling</td>
<td>- Danger of premium freight within order horizon</td>
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<td></td>
<td>- APQP fulfillment out of plan, impact on ZF milestones (applicable if APQP is managed by site quality)</td>
<td>- Delivery plan is not confirmed at all by supplier or reduced by up to 20%</td>
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<tr>
<td></td>
<td>- Non-compliance with mandatory ZF - or industry standards</td>
<td>- Installed capacity at supplier will fall below ZF demands and/or capacity commitment within the next 9 months</td>
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<td></td>
<td>- Recurring defects</td>
<td></td>
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<tr>
<td>2</td>
<td>- EL 1 status longer than 6 months or de-escalation criteria not fulfilled</td>
<td>- DPMI ZF &lt;70% over 3 months (ZF measurement method), trend negative</td>
</tr>
<tr>
<td></td>
<td>- Unauthorized product- or process change, without pre-information, with negative impact on ZF and ZF’s customer</td>
<td>- Existing premium freight, one-time event, max. one week's demand</td>
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<td></td>
<td>- APQP fulfillment out of plan with impact on ZF’s customer project milestones</td>
<td>- Delivery plan is not confirmed at all or reduced by up to 30%</td>
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<td></td>
<td>- Supplier lost their certification to ISO 9001 and/or to IATF 16949</td>
<td>- Installed capacity at supplier will fall below ZF demands and/or capacity commitment within the next 6 months</td>
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<tr>
<td>3</td>
<td>- EL 2 status longer than 3 months or de-escalation criteria not fulfilled</td>
<td>- DPMI ZF &lt;50% over 3 months, trend negative</td>
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<td></td>
<td>- Top Management of the supplier not committed or not capable to ensure ZF's supply with required quality level</td>
<td>- Existing premium freight, repeated, max. one week's demand</td>
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<td></td>
<td>- Supplier quality issues impacting product safety</td>
<td>- Delivery plan is not confirmed at all or reduced by up to 40%</td>
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<tr>
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<td></td>
<td>- Installed capacity at supplier will fall below ZF demands and/or capacity commitment within the next 3 months</td>
</tr>
</tbody>
</table>
# Short Overview Escalation criteria and responsibilities

## Performance Risks

<table>
<thead>
<tr>
<th>Escalation Level 1</th>
<th>Escalation Level 2</th>
<th>Escalation Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL1</td>
<td>EL2</td>
<td>EL3</td>
</tr>
</tbody>
</table>

### Responsible:
- Head of plant Quality or Supply Chain Management

### Typical triggers
- Delivery performance or quality below target > 3months

### EXIT criteria
- EL1 exit criteria are reached

### Responsible:
- Head of Divisional Supplier Management, Supply Chain Management, Program Purchasing

### Typical triggers
- In EL1 > 6months
- EL1 exit criteria not reached

### EXIT criteria
- EL2 exit criteria are reached

### Responsible:
- Commodity Level 1 – Cluster Head

### Typical triggers
- In EL2 > 3months
- EL2 exit criteria not reached

### EXIT criteria
- Fulfill the requirements of Top Management Meeting
- EL3 exit criteria are reached
Escalation Model “Supplier / Purchased Parts”

Main reasons for escalation:

- Supply of defective parts (quality)
- Inadequate delivery reliability (quantity and/or timing)
- Lack of supplier production capacities endangering future supply
- Failure to implement corrective actions
- Insufficient collaboration in APQP, Supplier Readiness and launch

Note: other reasons might be possible.

Terms and Definitions:

- APQP: Advanced Product Quality Planning
- DPI: Delivery Performance Inbound
- EL: Escalation Level
- NBH: New Business Hold
- ZAMS: ZF Audit Management System
02

Escalation level 1
Escalation level 1 (EL1)

Performance risks

- If an affected function identifies escalation trigger or thresholds, the escalation process EL1 will be triggered
- The supplier will be informed officially in written form by EL1 Escalation Letter
- The case is documented in ZAMS (ZF-Audit Managements System)
- Aim to end EL1 escalation within 6 months for performance, otherwise upwards escalation

The escalation team defines the following:

- **affected ZF plant and supplier**
- **reason(s) for escalation**
  - Parts affected
  - Characteristics of the parts affected
- **inspection & sorting** activities (QM):
  - Type of inspection
  - Marking of certified product and shipment in accordance with the QD83
  - Sorting process to be conducted by supplier, by ZF, or an approved third party

- Set short-term **actions incl. due dates** to ensure supply to ZF as well as to ZF customers, e.g., 100% goods inspection, examination of all products at affected ZF plant(s), special transport
- **type and scope of documentation** (to be implemented by supplier)
- Quantifiable and measurable **de-escalation criteria** ("exit criteria")
- **method of confirmation** for the corrective actions implementation (e.g., GMMOG, line walk, run@rate, VDA 6.3 audit)
- Specify additional documentation, if required
**Escalation level 1 (EL1)**

The supplier is required to submit the signed escalation checklist to ZF and to **undertake all necessary actions** to graduate from the escalation as soon as possible.

The progress of escalation measures must be **reported by the supplier** to ZF on regular basis.

If the **exit criteria are sustainably** reached, the escalation lead, after consultation with the steering team, de-escalates the supplier and terminates the escalation.

In general, the maximum period for a supplier to remain on EL1 is **6 months**.

If the exit criteria are not reached or can foreseeably not be reached despite deployment of all defined actions, the escalation lead must promptly **escalate the case to a higher level**.

At the **supplier**, the responsibility for the escalation activities lies with the executive management, who is requested to take direct ownership of the case. Furthermore, the supplier must **define a formal project organization** and **identify an escalation coordinator** who has adequate decision-making power to effectively drive the requested improvements.

Costs incurred by applying the Escalation Model have to be covered by the supplier.
03

Escalation level 2
Escalation level 2 (EL2)

- If the exit criteria in EL1 are not reached on time or the verification process/support is inefficient, then EL2 can be introduced
- The supplier will be informed officially in written form by EL2 Escalation Letter
- Additionally, the case is to be updated in ZAMS (ZF-Audit Managements System)
- The supplier is required to submit the signed escalation checklist to ZF and to undertake all necessary actions to graduate from the escalation as soon as possible

A face-to-face meeting/online meeting must be realized with ZF, where the supplier is required present and commit to an effective action plan. The progress of escalation measures must be reported by the supplier to ZF at regular basis.

Further actions in EL2:
- ZF relocates partial volumes to mitigate supply risk
- ZF builds up safety stocks / end-of-life stocks
- Optional: The supplier status is set to NBH -new business on hold
- Optional: ZF notifies supplier’s “IATF 16949 / ISO 9001” certification body of supplier issue and ZF impact
- Optional: ZF notifies customer of supplier-driven issue (in case of contractual obligation)
## Escalation level 2 (EL2)

If the exit criteria are sustainably reached, the escalation leader de-escalates the supplier to a lower level or ends the escalation.

The maximum period for a supplier to remain on EL2 is 3 months, if no different decision is taken.

If the exit criteria are not reached or can foreseeably not be reached despite deployment of all defined actions, the escalation lead must promptly escalate the case to EL3.

At the supplier, the responsibility for the escalation activities lies with the executive management, who is requested to take direct ownership of the case. Furthermore, the supplier must define a formal project organization and identify an escalation coordinator who has adequate decision-making power to effectively drive the requested improvements.

Costs incurred by applying the Escalation Model have to be covered by the supplier.
04

Escalation level 3
Escalation level 3 (EL3)

- If the exit criteria in EL2 are not reached on time or the verification process/support is inefficient, then EL3 can be introduced
- The supplier will be informed officially in written form by EL3 Escalation Letter
- Additionally, the case is to be updated in ZAMS (ZF-Audit Managements System)
- The supplier is required to submit the signed escalation checklist to ZF and to undertake all necessary actions to graduate from the escalation as soon as possible

A face-to-face meeting/online meeting with supplier’s top management must be realized at ZF, where the supplier is required present and commit to an effective action plan. The progress of escalation measures must be reported by the supplier to the escalation on agreed high frequency basis.

Further actions in EL3:

- ZF builds up dual-sourcing and/or actively applies phase-out strategy as a risk mitigation method for supply continuity
- The supplier status is set to “New Business Hold” (NBH)
- Optional: ZF notifies supplier’s „IATF 16949 / ISO 9001” certification body of supplier issue and ZF impact
- Optional: ZF notifies customer of supplier-driven issue (in case of contractual obligation)
Escalation level 3 (EL3)

If the exit criteria are sustainably reached, the escalation leader de-escalates the supplier to a lower level or ends the escalation.

At the supplier, the responsibility for the escalation activities lies with the executive management, who is requested to take direct ownership of the case. Furthermore, the supplier must define a formal project organization and identify an escalation coordinator who has adequate decision-making power to effectively drive the requested improvements.

Costs incurred by applying the Escalation Model have to be covered by the supplier.