



ZF Escalation Model Supplier / Purchased parts

Supplier Management ZF Group | Materials Management



Agenda

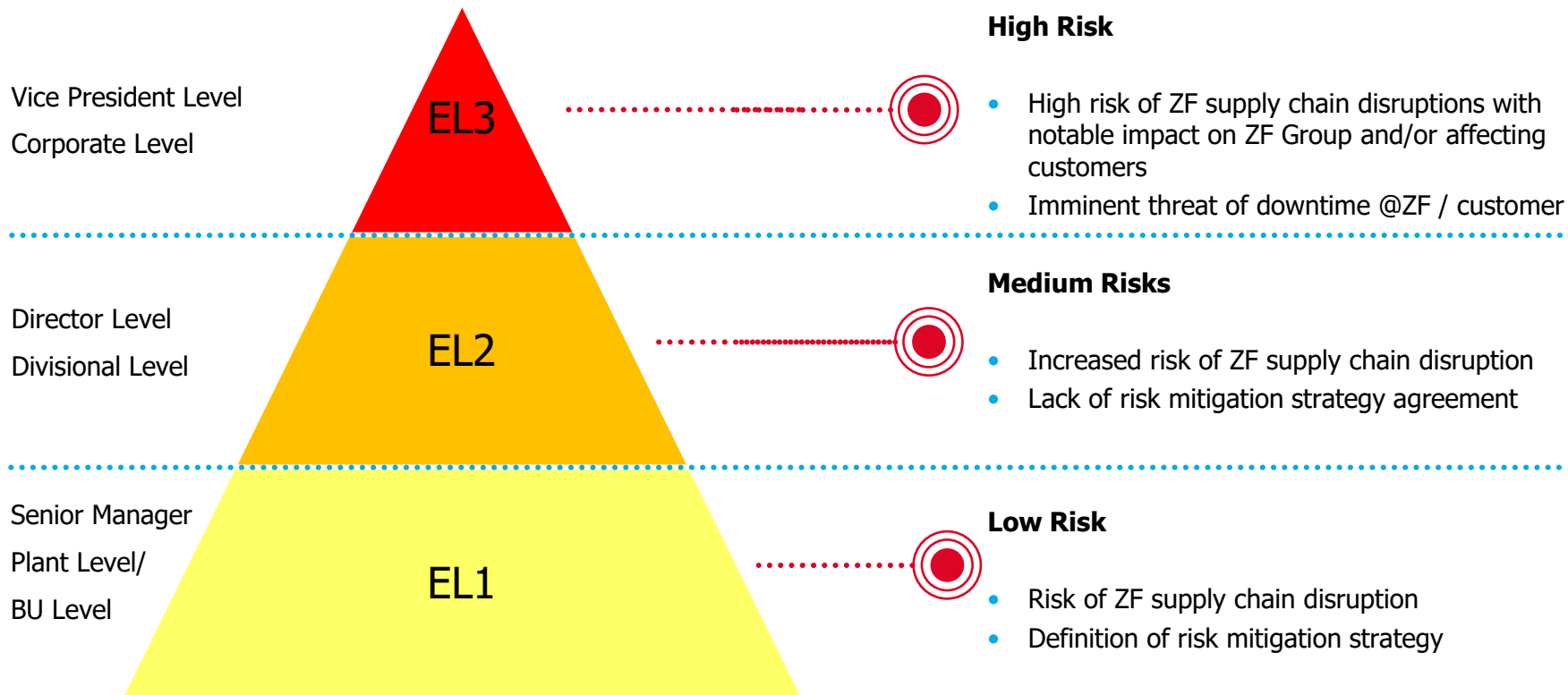
1. Definition and escalation criteria
2. Escalation level 1
3. Escalation level 2
4. Escalation level 3

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Definition and escalation criteria

Escalation levels

ZF Escalation Model General Overview



Escalation criteria

Performance Risks

Only a selection of escalation criteria, not comprehensive

EL	Escalation criteria Quality	Escalation criteria Logistics
1	<ul style="list-style-type: none"> Site supplier quality KPI's out of target > 3 months Not satisfactory reactivity time on the claim handling APQP fulfillment out of plan, impact on ZF milestones (applicable if APQP is managed by site quality) Non-compliance with mandatory ZF - or industry standards Recurring defects 	<ul style="list-style-type: none"> DPMI ZF <80% over 3months (ZF measurement method) Danger of premium freight within order horizon Delivery plan is not confirmed at all by supplier or reduced by up to 20% Installed capacity at supplier will fall below ZF demands and/or capacity commitment within the next 9 months
2	<ul style="list-style-type: none"> EL 1 status longer than 6 months or de-escalation criteria not fulfilled Unauthorized product- or process change, without pre-information, with negative impact on ZF and ZF's customer APQP fulfillment out of plan with impact on ZF's customer project milestones Supplier lost their certification to ISO 9001 and/or to IATF 16949 	<ul style="list-style-type: none"> DPMI ZF <70% over 3 months (ZF measurement method), trend negative Existing premium freight, one-time event, max. one week's demand Delivery plan is not confirmed at all or reduced by up to 30% Installed capacity at supplier will fall below ZF demands and/or capacity commitment within the next 6 months
3	<ul style="list-style-type: none"> EL 2 status longer than 3 months or de-escalation criteria not fulfilled Top Management of the supplier not committed or not capable to ensure ZF's supply with required quality level Supplier quality issues impacting product safety 	<ul style="list-style-type: none"> DPMI ZF <50% over 3 months, trend negative Existing premium freight, repeated, max. one week's demand Delivery plan is not confirmed at all or reduced by up to 40% Installed capacity at supplier will fall below ZF demands and/or capacity commitment within the next 3 months

Short Overview Escalation criteria and responsibilities

Performance Risks

Escalation Level 1 EL1	Escalation Level 2 EL2	Escalation Level 3 EL3
<p>Responsible:</p> <ul style="list-style-type: none"> • Head of plant Quality or Supply Chain Management <p>Typical triggers</p> <ul style="list-style-type: none"> • Delivery performance or quality below target > 3months <p>EXIT criteria</p> <ul style="list-style-type: none"> • EL1 exit criteria are reached 	<p>Responsible:</p> <ul style="list-style-type: none"> • Head of Divisional Supplier Management, Supply Chain Management, Program Purchasing <p>Typical triggers</p> <ul style="list-style-type: none"> • In EL1 > 6months • EL1 exit criteria not reached <p>EXIT criteria</p> <ul style="list-style-type: none"> • EL2 exit criteria are reached 	<p>Responsible:</p> <ul style="list-style-type: none"> • Commodity Level 1 – Cluster Head <p>Typical triggers</p> <ul style="list-style-type: none"> • In EL2 > 3months • EL2 exit criteria not reached <p>EXIT criteria</p> <ul style="list-style-type: none"> • 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



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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.

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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 foreseeable 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.

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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.

