Continental
The Future in Motion

SupplyOn Problem Solver

The SupplyOn Problem Solver helps suppliers to manage customer complaints based on the 8D process, the standard procedure for the quick and effective correction of defects.

PROBLEM SOLVING / 8D

Guideline for harmonized High Quality 8D in SupplyOn

links.conti.de/quality_first

1 QUALITY FIRST

GUIDELINE CONTENT

How to reach High Quality 8D in SupplyOn

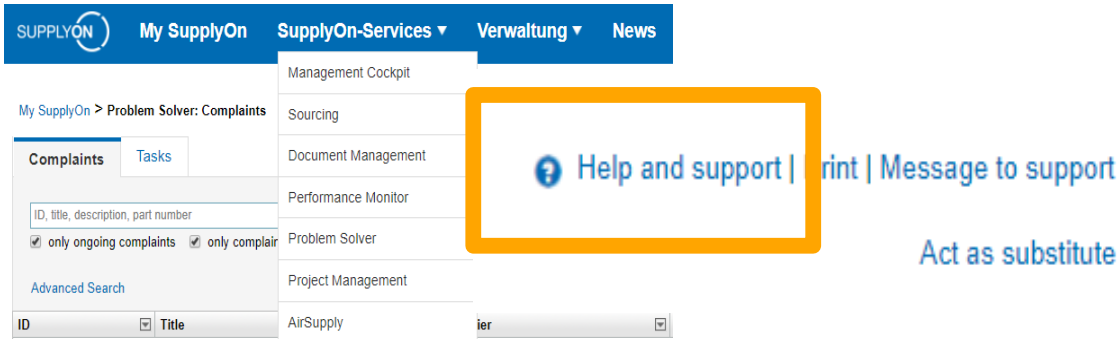
1 QUALITY FIRST

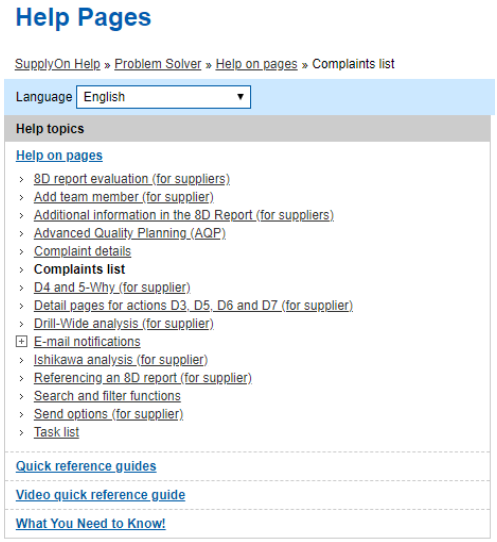
- This guideline is intended to support improving 8D Quality, reporting, evaluation and harmonizing 8D requirements in SupplyOn. Available in SupplyOn Document Manager for all registered Suppliers.
- As SupplyOn does not offer exact fields for all questions from the 8D Checklist, this guideline supports to bridge the differences.
- The **qualified content** of the 8D input to SupplyOn from supplier is considered as pre-requisite in this guideline.
- Also 8D training (Internal, COE Academy, Formel D, Others) is considered as pre-requisite.
- Note: Questionnaire in 8D Checklist is fulfilling the IATF and VDA requirements “8D Problem Solving in 8 disciplines”.

GENERAL SUPPORT

Use the SupplyOn Help & Self Learning functions

- SupplyOn provides many learnings which can be used.
- SupplyOn Helpdesk feature can be used, it is part of the payed service.





PURPOSE & GENERAL PRINCIPLE

Structure of following slides

In this area, you can find the mandatory questions from the 8D Checklist.
***Asterix (Bonus) questions are highlighted in bold letters.**

8D Checklist Link to process center

In this area, you can find supporting information and screenshots, to show the SupplyOn section, which has to be filled by the supplier.

Don´t forget: The **qualified content** of the 8D input to SupplyOn from supplier is considered as pre-requisite in this presentation.

In this presentation “Continental” covers requirements from Continental and Vitesco Technologies for a transition period.

In this area, you can find supporting and guiding information

In this area, you can find the possible rating of the 8D phases:
All mandatory questions from complete 8D checklist answered with Y(es): result 70% (partly ok)
Mandatory + Bonus answered with Y(es): 100%
Target: > 90%
One mandatory question rated with “N” leads to 0 points in the related 8D discipline.

NAVIGATION PAGE

Links to the respective disciplines (Ctrl+link)

BASIC DATA

D1: TEAM

D2: PROBLEM DESCRIPTION

D3: CONTAINMENT ACTIONS

D4: ROOT CAUSES

D5: PLANNED CORRECTIVE ACTIONS

D6: IMPLEMENTED CORRECTIVE ACTIONS

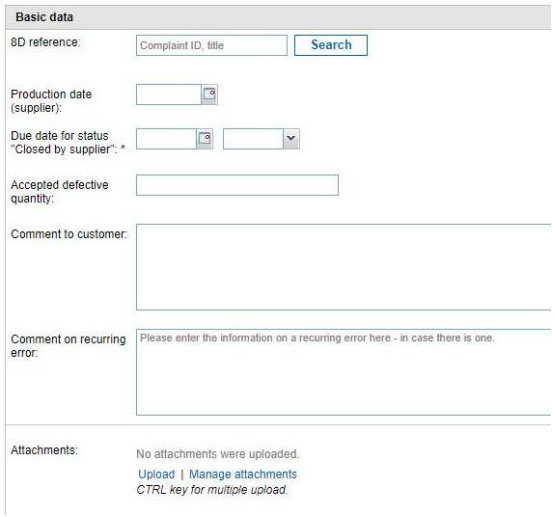
D7: PREVENTIVE ACTIONS

D8: CLOSURE

REPORT

BASIC DATA

- No question explicitly related to this area in 8D checklist, but references in other disciplines.

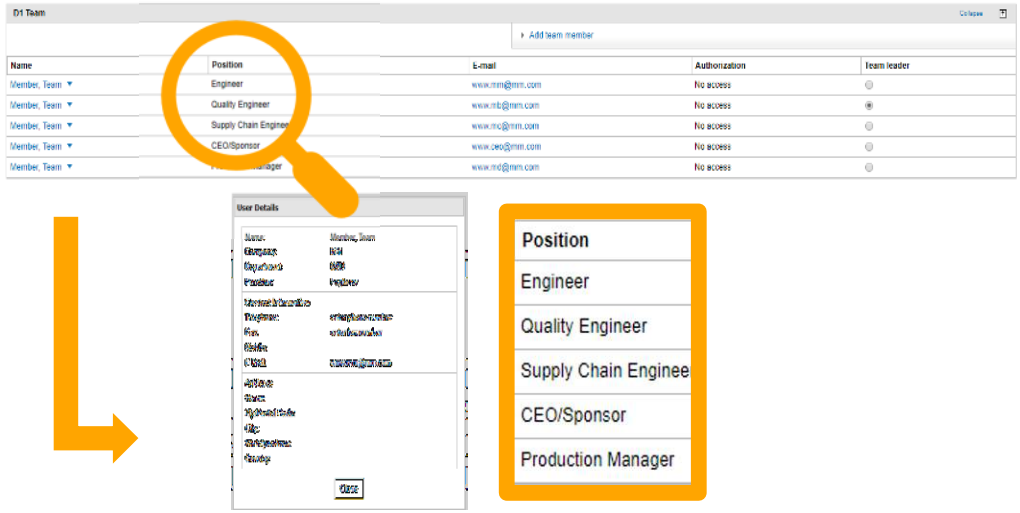


Basic data supplier response can be used for general discussions.
8D reference: Supplier may reference to already existing complaint(s) in SupplyOn.
Production date supplier: self-explaining information, should be **mandatory**.
Due date for status closed by supplier: Supplier has to plan the closure. No sending possible without this information.
Accepted defective quantity: Supplier feedback based on quantity of complaint.
Comment to customer: useful e.g. to communicate about “shipping status and arrival” for complaint parts.
Comment on recurring error: supplier has to put a comment here in any case, see explanation in D2.

No rating planned here. Rating in other disciplines.

D1 (1/3): TEAM

- The team has more than two members?
- The team has people from different departments?
- **The names of the team members are available?***
- The team members have the necessary process and product knowledge to solve the issue?



Team size shall be in relation to the problem.

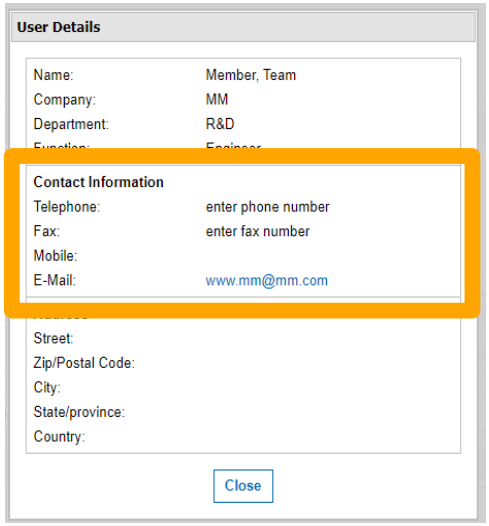
Names and positions (functions) must be stated (may be pre-defined at supplier and edited).

Process and product knowledge to be evaluated according listed team names and roles. Competence can only be assessed during the 8D process or personal relationship, in case of doubt answer “Y”. In case of improvement required, clear feedback to supplier management / sponsor necessary.

Evaluation result 0, 4 or 5

D1 (2/3): TEAM

- **The phone numbers of all team members are mentioned?***
- **The email addresses of all team members are mentioned, if exist?***
- **The functions of all team members are available?***
- The team has a leader/coordinator tracking the team activities and progresses?



Leader can be chosen

Phone number in SupplyOn only visible with link, but in *pdf.
Email address to be listed consequently for all members.
Position/Function must be listed to cross-check for all involved roles.

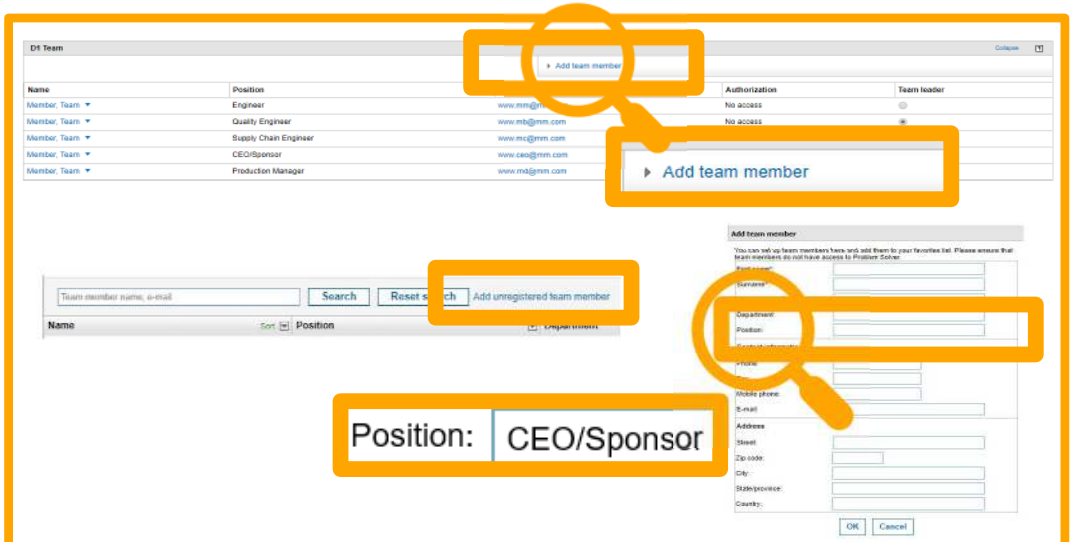
Team Leader must have extended knowledge of 8D method (must be marked in SupplyOn), recommended is a member of Quality department or with an evidence of a moderator competence.

Team members can be pre-defined and used for further 8D.

Evaluation result 0, 4 or 5

D1 (3/3): TEAM

- The team has a sponsor (from the management) named with the authority to solve conflicts, eliminate barriers, approve budget and the final 8D report?
- Are there as minimum the complete contact data from the team leader and the sponsor included?



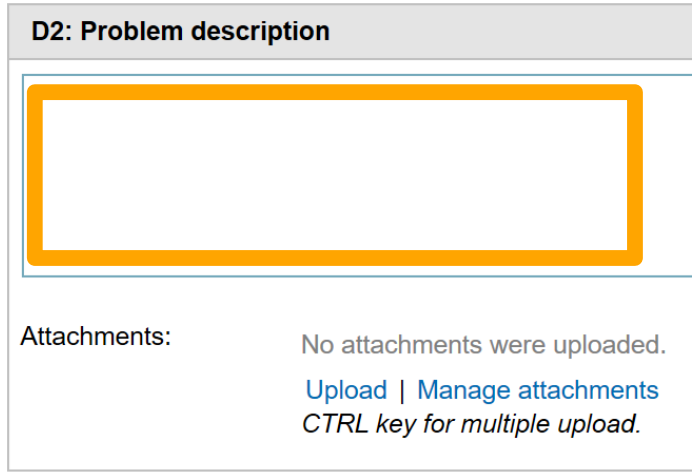
There is currently no field to identify the 8D Sponsor.
Remember: 8D Sponsor is not mandatory part of the team but needs to release the required investments.
Guideline: place name of 8D Sponsor in the Team with a clear function description as sponsor.

To add a sponsor, you may need to add an (unregistered) team member and clearly fill the field POSITION with SPONSOR and all contact data to ensure contact in case of escalation.

Evaluation result 0, 4 or 5

D2 (1/3): PROBLEM DESCRIPTION

- The Continental part number and the quantity of affected parts are in the problem description included? In addition for Firmware/Software:
  The Firmware/Software identification number in the problem description is included?
- Is the Continental complaint number included?
- Is a traceability code (lot, batch, date code) mentioned? If not, an explanation for the missing information is included?



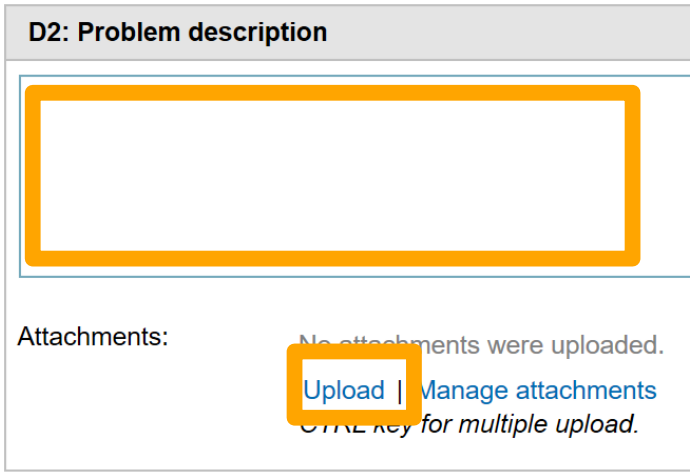
Supplier shall describe the problem in own words.
Part number, complaint number, recurrence information, commodity, part name and quantity of claimed parts are listed already in customer complaint details as well. Some data are already provided from Continental via the customer complaint details.

Delivery note (lot/batch) and date code should be supported as precise as possible by Continental.

Evaluation result 0, 5 or 7

D2 (2/3): PROBLEM DESCRIPTION

- The problem description includes the customer name, location and failed area? (incoming, production, 0km-final customer, field)?
- In case of firmware/software: Compatibility matrix (explain term, maybe as legend) for affected Firmware/SW/HW variants is included?
- Is the Continental complaint description included?
- **Are there pictures and/ or measurement results available?***



Supplier shall describe the problem in own words.
Customer name, location and failed area? (incoming, production, 0km - final customer, field) are listed in complaint details.
Be aware: Some failure types (e.g. LC is shown as “others” in SupplyOn on from Continental side)

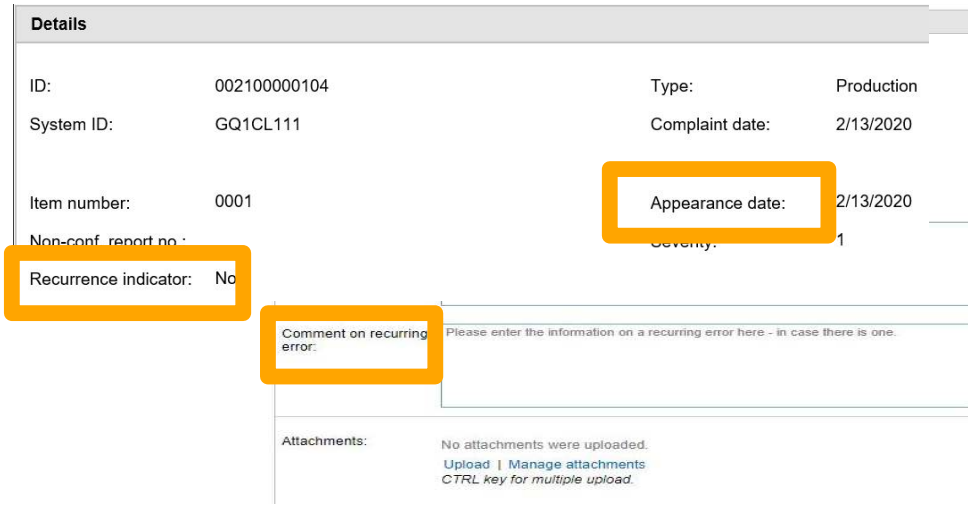
Software: self explaining as per question, maybe as attachment

Generally: The complaint description should describe the problem as precise as possible for a common understanding (What happened? Where? How many? Which project? Which location?…

Evaluation result 0, 5 or 7

D2 (3/3): PROBLEM DESCRIPTION

- Is information about recurrence included?
- Is the date for the first detection included?



Recurrence information may come from Continental problem description
“Recurrence indicator”: “YES “
and a statement from supplier in basic data.

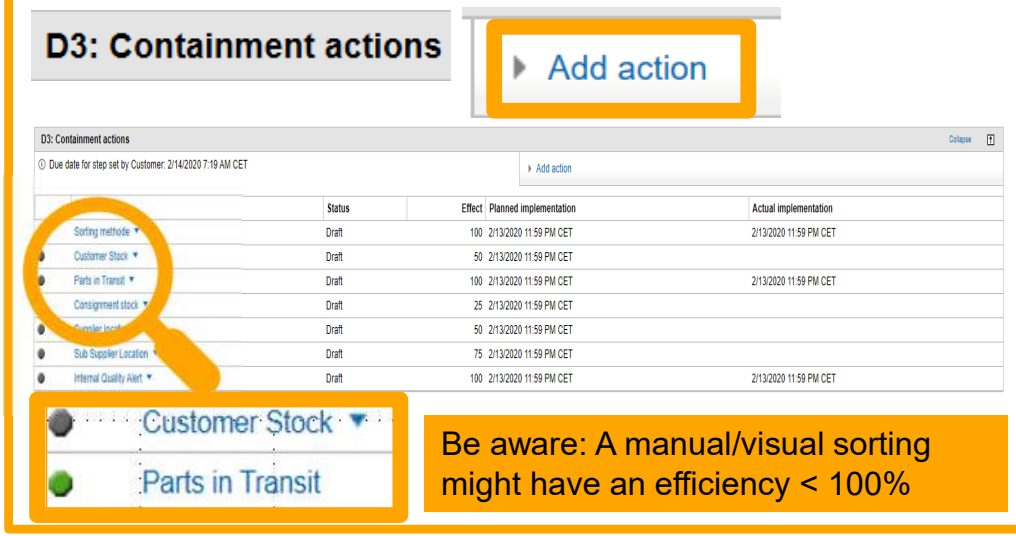
Supplier shall **always** put a comment in the recurrence section in basic data: e.g. NO (means first occurrence) or YES, last occurrence DDMMYYYY

First detection date from Continental perspective (related to the parts detected at this complaint) is available as appearance date. Supplier shall put information of own investigations, too.

Evaluation result 0, 5 or 7

D3 (1/6): CONTAINMENT ACTIONS

- The sorting method and containment actions are approved by Continental?
- Information about the amount of defective and non-defective parts at the Continental location is included? If not, an explanation for the missing information is included?
- The report contains information about the deliveries in transit to Continental?



Be aware: A manual/visual sorting might have an efficiency < 100%

Blocked parts and sorting method to be listed as own element, agreement by offline communication and documented by uploaded documentation e.g. Sorting Work Instruction. Responding time for D3 actions is within 24hours.

Amount of parts here:

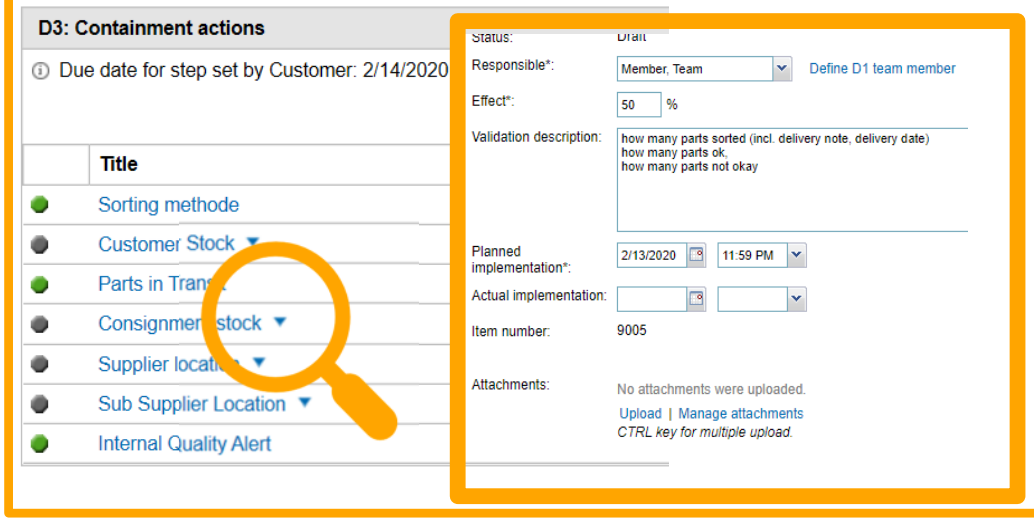
1st step: POTENTIAL EFFECTED in different areas and planned,
2nd step: implemented incl. number of parts after sorting.

Clicking on it opens detailed information.
Supplier shall fill information about first delivery with OK parts. (information about labeling and batch number in attachment)
Example for each area (in- transit,…)

Evaluation result 0, 7 or 10

D3 (2/6): CONTAINMENT ACTIONS

- Information about the amount of defective and non defective parts in external warehouses is included? (e.g. consignment stock)
  If not, an explanation for the missing information is included?
- Information about the amount of defective and non defective parts in the supplier location is included? (e.g. production, WIP, warehouse, block stock) If not, an explanation for the missing information is included?



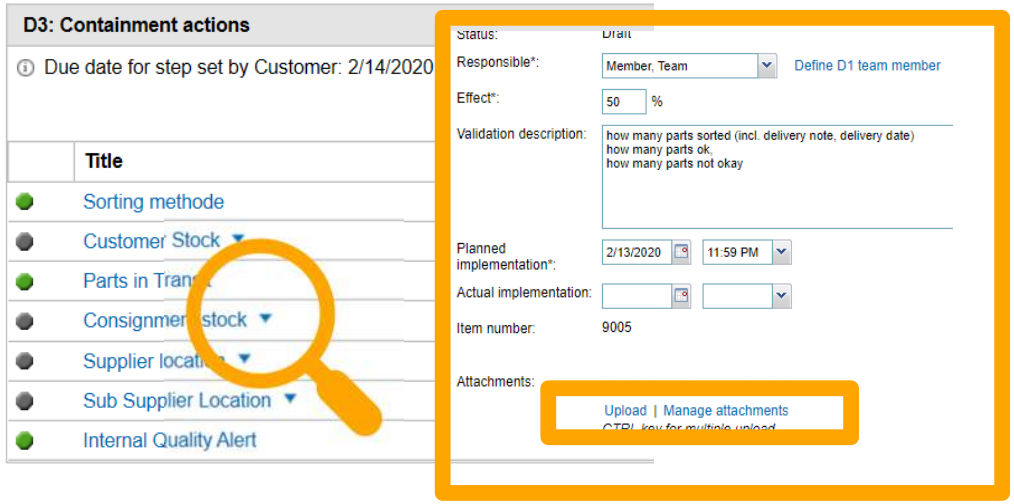
Each possible stock area should be listed and following same method of evaluation and reporting.

A stock area with Quantity “0” can be commented and considered with 100% effect. A combination of different areas in one answer (action) is recommended, if not effected.
In exceptional cases, a senseful combination in even one answer (action) can be accepted.

Evaluation result 0, 7 or 10

D3 (3/6): CONTAINMENT ACTIONS

- Information about the amount of defective and non defective parts in sub-supplier location is included? If not, an explanation for the missing information is included?
- **Are there results/attachments from the sorting processes?***



Each possible stock area should be listed and following same method of evaluation and reporting.

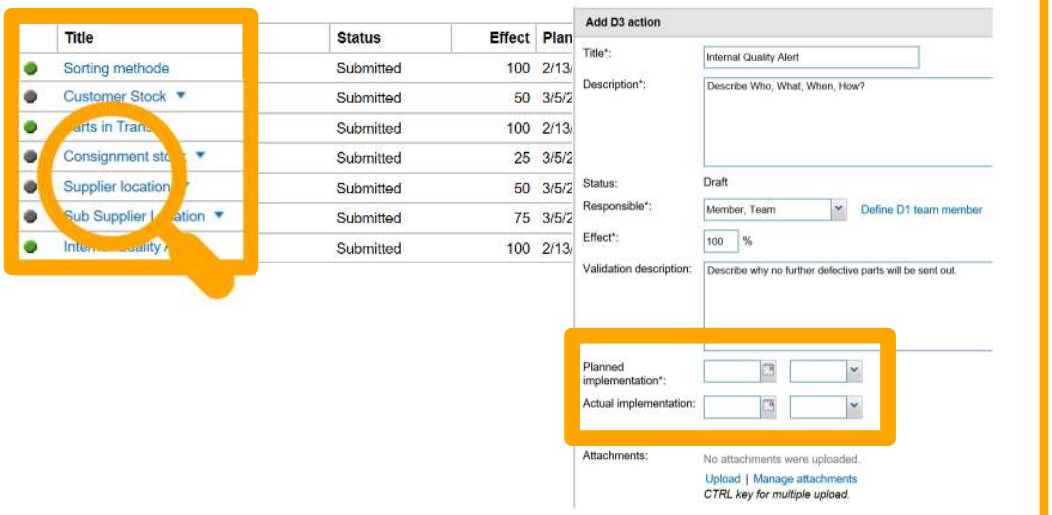
A stock area with Quantity “0” can be commented and considered with 100% effect.

For attachments, a good practice is to use the reports e.g. from external sorting companies or supplier internally created documents during containment process. This can be stored in the related area, or one summary for complete D3.

Evaluation result 0, 7 or 10

D3 (4/6): CONTAINMENT ACTIONS

- The report contains detailed information about the implementation of containment actions (who, what, when, how) in order to avoid deliveries of defective parts produced after the revision, and sorting process but before the implementation and validation from the corrective actions.*

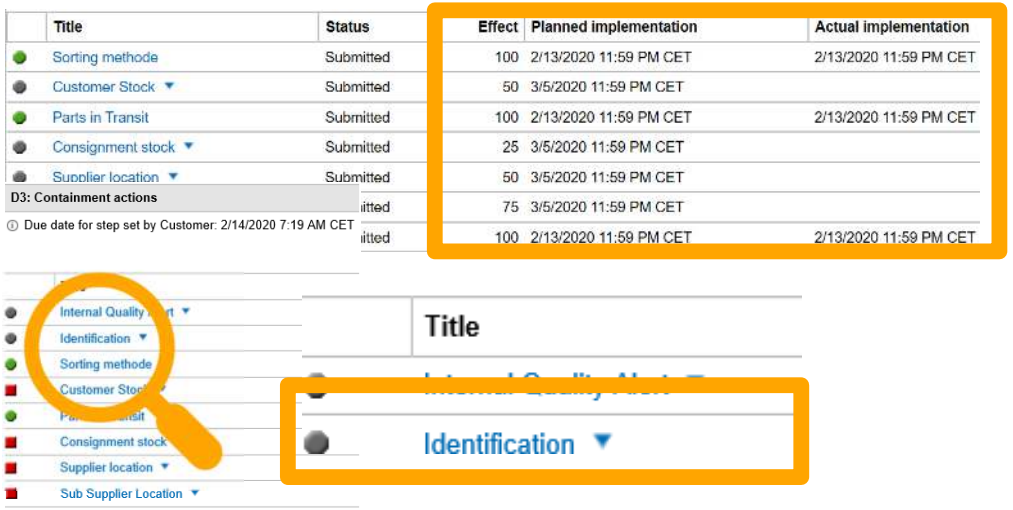


Combination of all D3 actions gives the final answer to the question. Protection of customers must be ensured.

Evaluation result 0, 7 or 10

D3 (5/6): CONTAINMENT ACTIONS

- Is the effectivity of all actions confirmed and documented?
- **Is there an information about the identification of parts delivered after the sorting and containment process (e.g. delivery note, quantity, Data Matrix Code/ DateCode and potential marking/ attachment of special label)?**



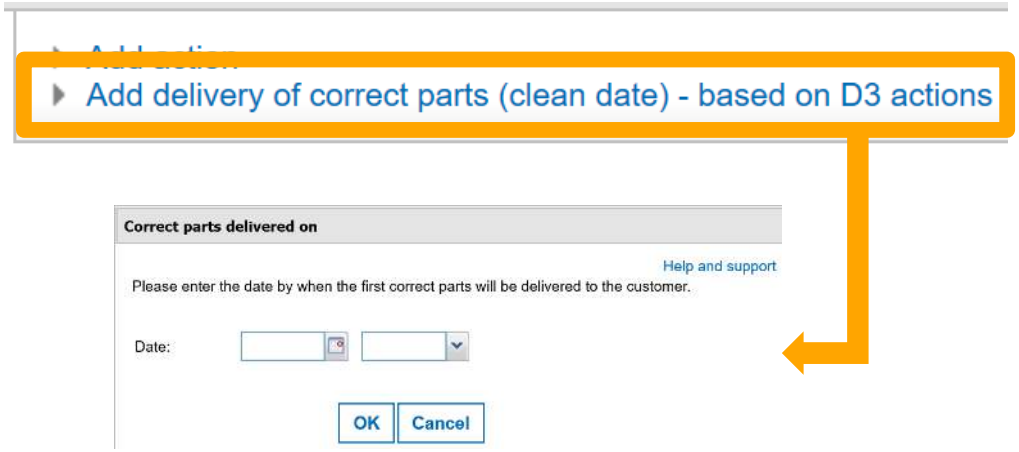
Report is showing planning and implementation date right side from each action.
Effect column explains the status of the action
Effect xx % = done, implemented with agreed sorting measure and effectivity.
Currently SupplyOn does not offer a field for “effectivity” alone. The confirmation has to be uploaded by supplier as attachment to each action, incl. how checked parts can be identified.

Information about labeling and batch number can be placed in one of the defined actions or as a separate action.

Evaluation result 0, 7 or 10

D3 (6/6): CONTAINMENT ACTIONS

- The date from the first delivery (clean-date) of parts after sorting and containment (clean date) is included in the report?*

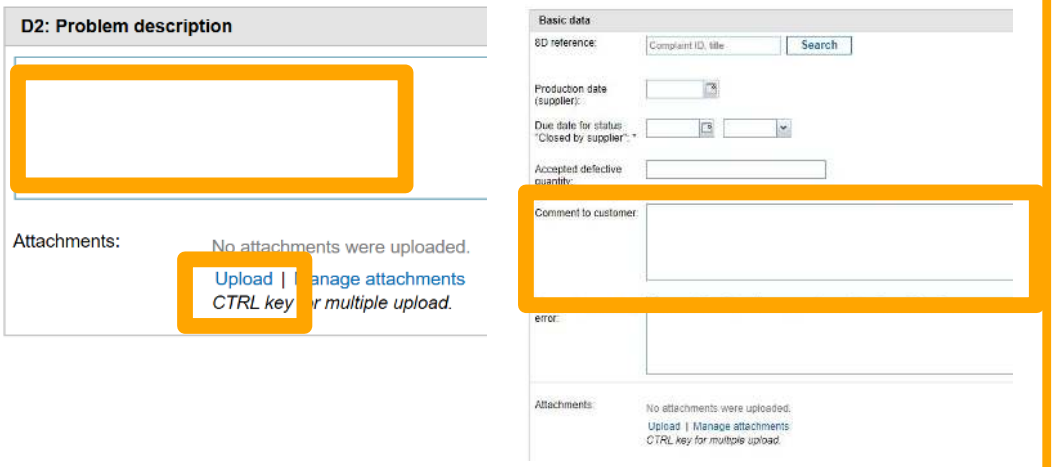


Supplier **has to** fill in information about first delivery with OK parts in shown area.

Evaluation result 0, 7 or 10

D4 (1/8): ROOT CAUSES

- **The report includes in which location (sub-supplier, supplier, other) the defect was created?***
- **The report includes in which location (sub-supplier, supplier, customer, final customer, other) the defect was detected?***
- **The report includes in which location (sub-supplier, supplier, other) the defect should have been detected?***



SupplyOn is currently not offering a place in D4 to answer this questions.

Depending on the defect type (location of creation/detection may be clear at the beginning) supplier should add the information, e.g. as attachment or as information in D2.

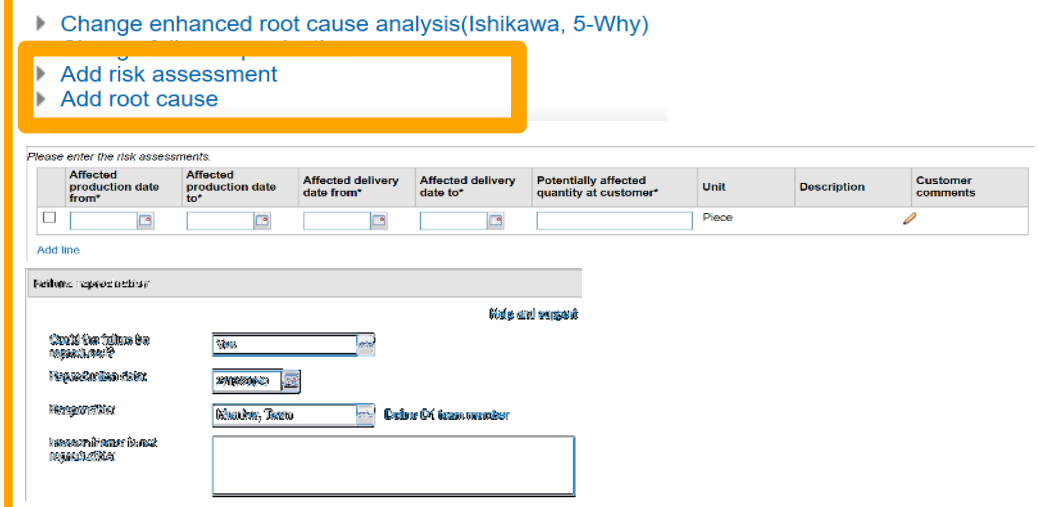
For more complex failure types, where the real root cause is identified during D4, information can be communicated in basic data: comment to customer.

An attachment with the related content is also acceptable.

Evaluation result 0, 7 or 10

D4 (2/8): ROOT CAUSES

- Is a fact-based risk assessment performed (based on data, no assumptions) and the documentation available?*
- Is there an information about the failure reproduction?*



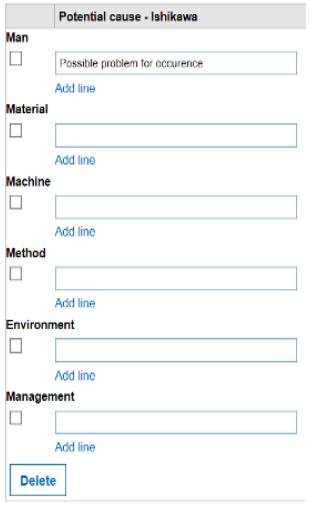
Questions can be answered by entering data in SupplyOn. Further explanation may be attached for better understanding or calculation method of risk.

Target for supplier is to show clear evidence for switch on/off the failure.

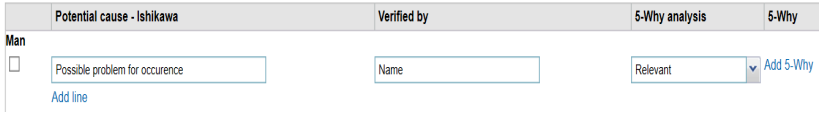
Evaluation result 0, 7 or 10

D4 (3/8): ROOT CAUSES

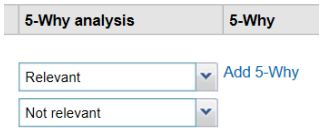
1 List possible causes in Ishikawa



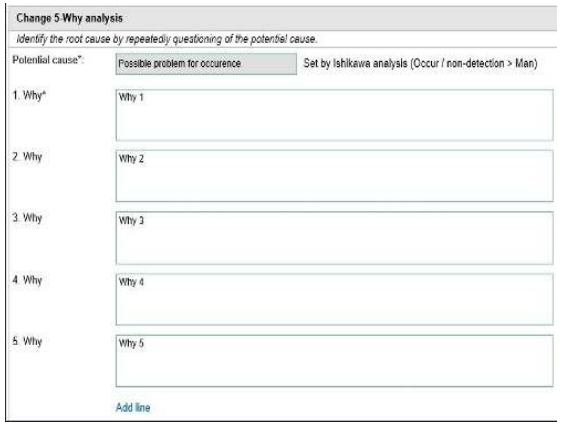
2 Chose potential cause from Ishikawa



3 Judge the Relevant

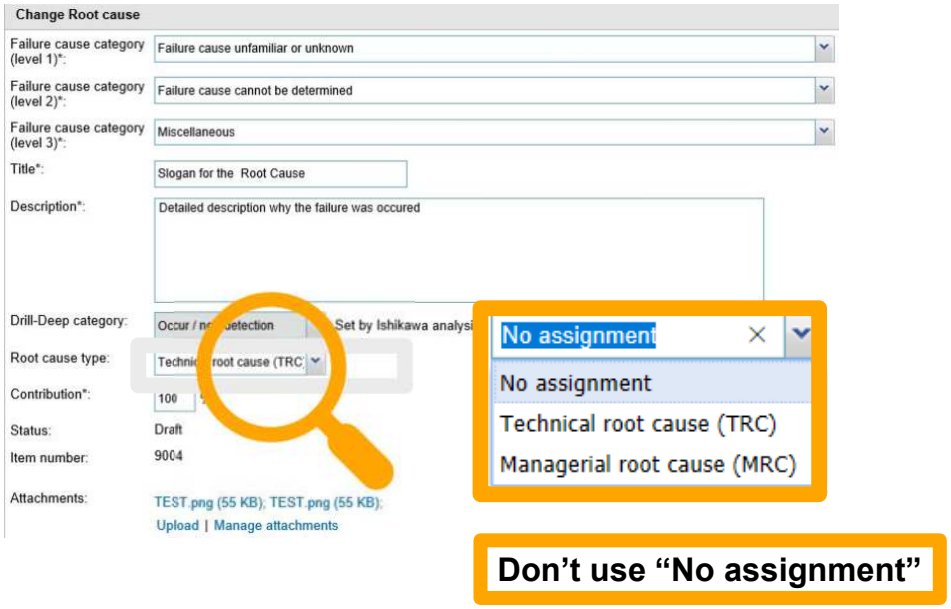


4 For Relevant causes, fill 5-Why



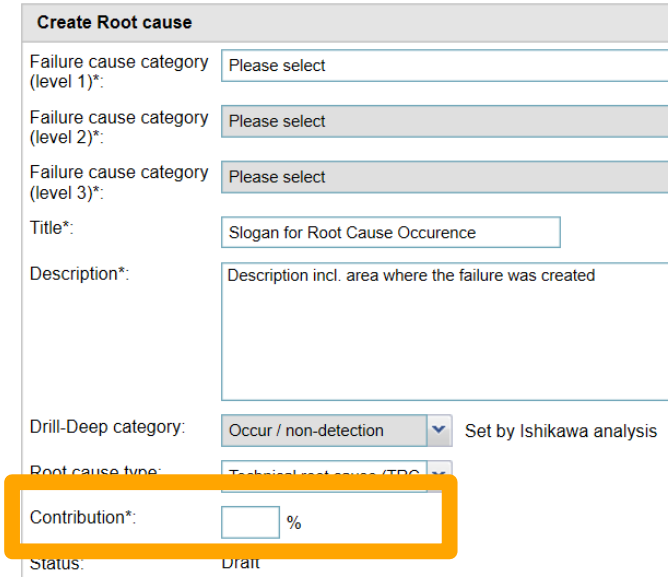
D4 (4/8): ROOT CAUSES

5 Create/Change Root cause



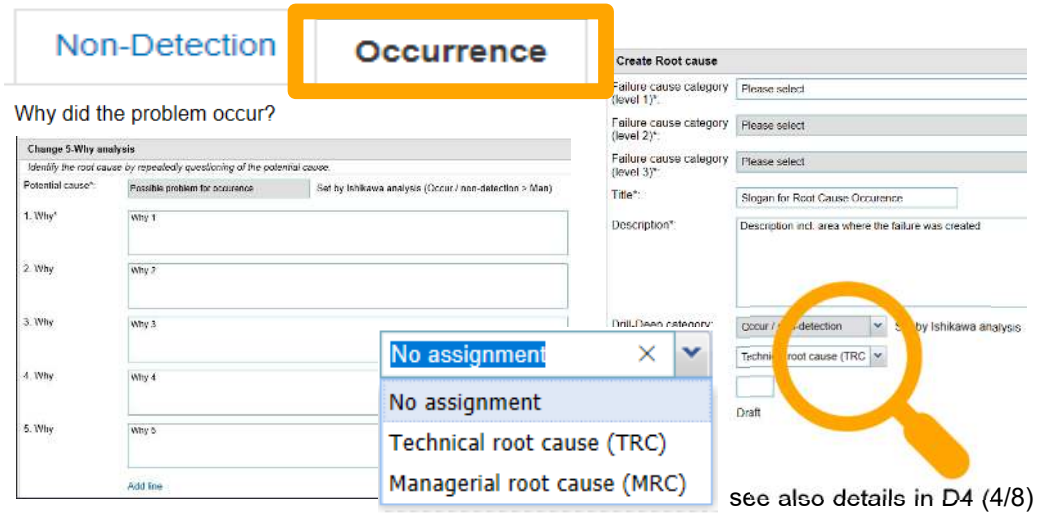
Don't use "No assignment"

6 Fill failure cause category, contribution etc.



D4 (5/8): ROOT CAUSES

- The report contains, as a minimum, the 5-Why analysis for occurrence to identify the actual/ real root cause (TRC – technical root cause)?
- The report contains at least one root cause that explains why the failure occurred?

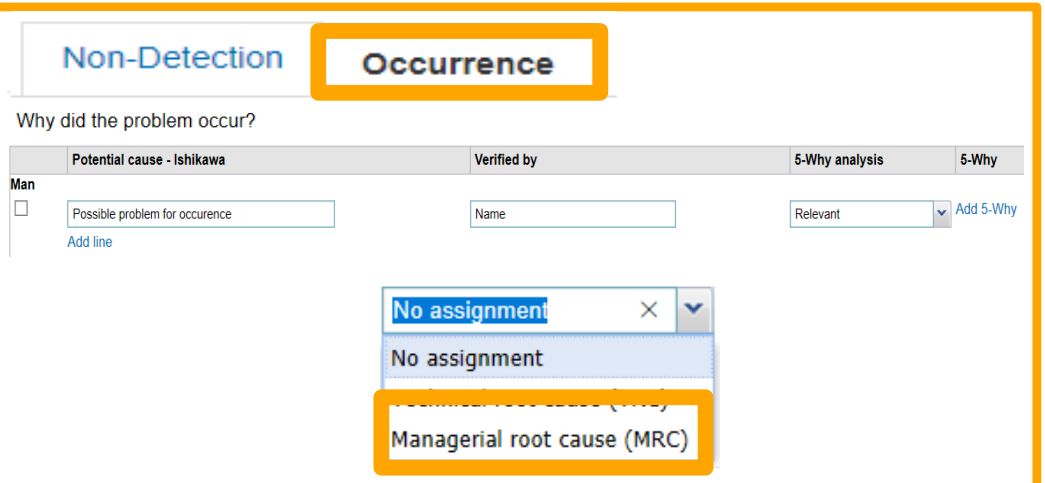


Report supports both **5-Why** for occurrence and detection.
SupplyOn offers complete range of 6M from ISHIKAWA.
ISHIKAWA is mandatory in case of 0km & field incidents & 8Dplus. Supplier must not copy all relevant ISHIKAWA facts inside SupplyOn if done internally. Only key elements must be transferred to follow 5-Why. A supplier owned "complete" Ishikawa (supplier internal document) can be uploaded as attachment alternatively.
Supplier to upload evidence for verification either here or at specific action as properly named attachment (Avoid: 1.jpg, 2.jpg, etc.).
Simulation, experiment results etc. shall be uploaded as attachment.

Evaluation result 0, 7 or 10

D4 (6/8): ROOT CAUSES

- The report includes at least one root cause that explains why the system did not prevent the failure (MRC – managerial root cause)?
- **The root cause(s) for occurrence is (are) verified by simulation, tests, experiments, analysis or other methods and is (are) included in the report?**



see also details in D4 (4/8)

Report supports both **5-Why** for occurrence and detection.
SupplyOn offers complete range of 6M from ISHIKAWA.
ISHIKAWA is mandatory in case of 0km & field incidents & 8Dplus. Supplier must not copy all relevant ISHIKAWA facts inside SupplyOn if done internally.
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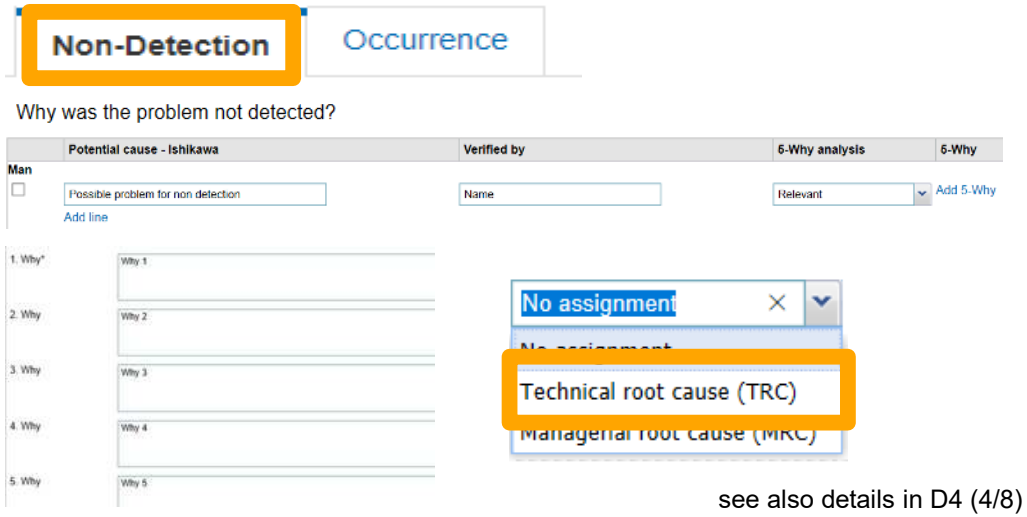
Simulation, experiment results etc. shall be uploaded as attachment.

Evaluation result 0, 7 or 10

D4 (7/8): ROOT CAUSES

- The report contains, as a minimum, the 5-Why analysis for non-detection to identify the actual / real root cause (TRC – technical root cause)?
- The report contains at least one root cause that explains why the failure was not detected?



see also details in D4 (4/8)

Report supports both **5-Why** for occurrence and detection.
SupplyOn offers complete range of 6M from ISHIKAWA.
ISHIKAWA is mandatory in case of 0km & field incidents & 8Dplus. Supplier must not copy all relevant ISHIKAWA facts inside SupplyOn if done internally.
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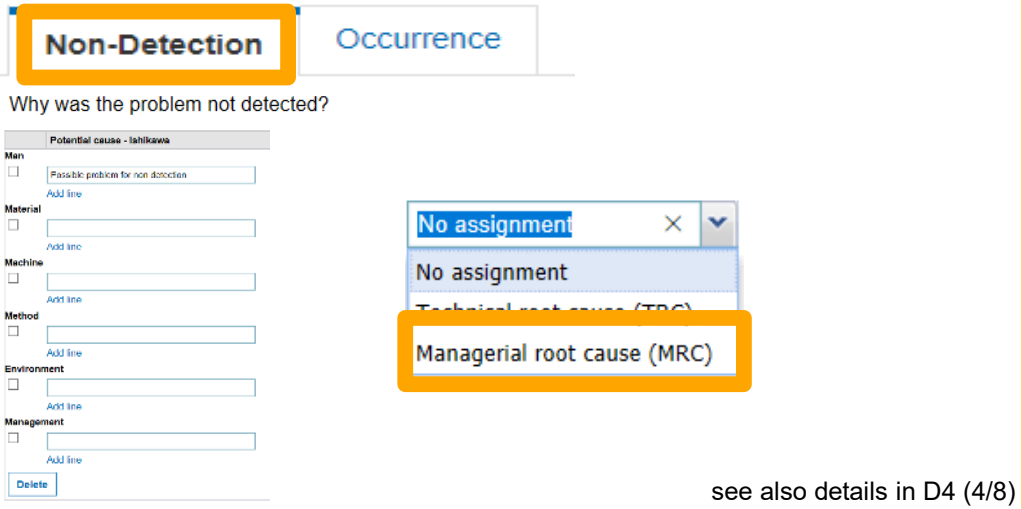
Simulation, experiment results etc. shall be uploaded as attachment.

Evaluation result 0, 7 or 10

D4 (8/8): ROOT CAUSES

- The report contains at least one root cause that explains why the system did not detect the issue (MRC – managerial root cause)?
- **The root cause(s) for non-detection is (are) verified by simulation, tests, experiments analysis or other methods and is (are) included in the report?**



see also details in D4 (4/8)

Report supports both **5-Why** for occurrence and detection.
SupplyOn offers complete range of 6M from ISHIKAWA.
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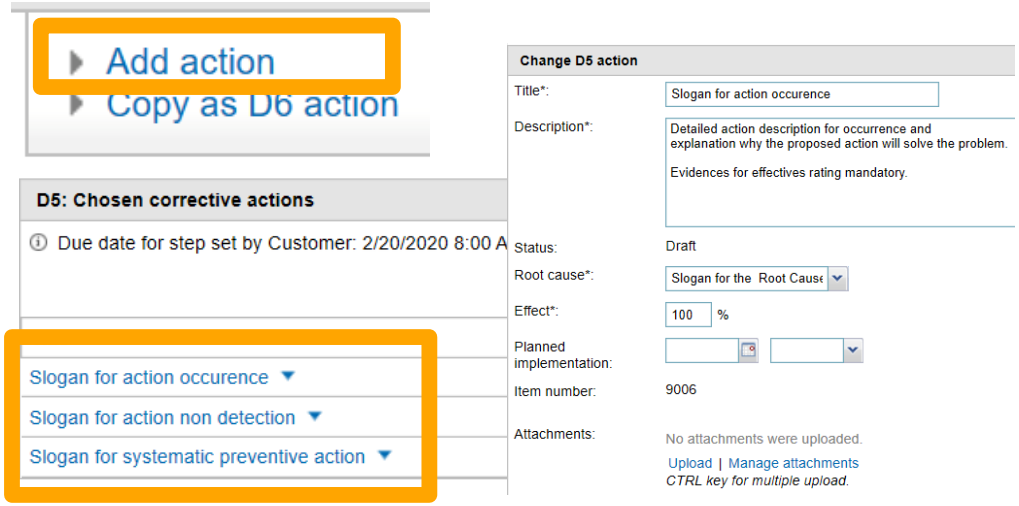
Supplier to upload evidence for verification either here or at specific action as properly named attachment (Avoid: 1.jpg, 2.jpg, etc.).
Simulation, experiment results etc. shall be uploaded as attachment.

Evaluation result 0, 7 or 10

D5 (1/3): PLANNED CORRECTIVE ACTIONS

- The report includes, at least, one action for occurrence?
- There is a clear explanation of why the proposed action for occurrence is going to solve the problem?
- The report includes, at least, one systematic preventive action to avoid recurrence (maintenance programs, training programs, etc.)?
- There is a clear explanation of why the proposed action for the preventive system will solve the issue?

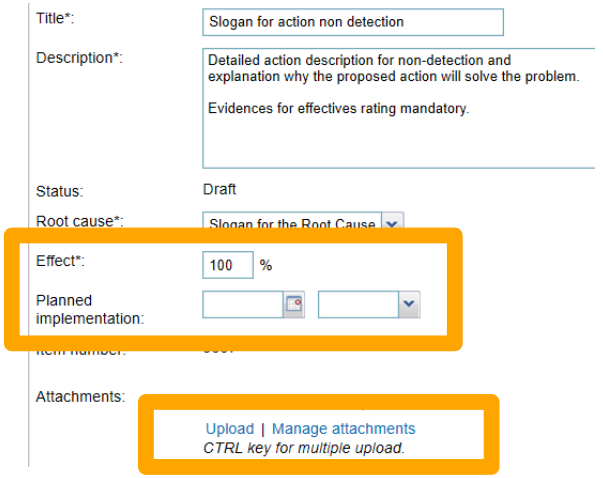


Supplier has to define actions acc. D4 and classify of occurrence, non-detection and systematic (**see title of action**) In SupplyOn: Details of action is only visible by clicking on it and included in the PDF file. Supplier has to state title, description, root cause, effect and planned implementation date (realistic, also in future possible)
All ideas of potential improvement can be listed and if not verified positive, can be closed as not efficient later.
Again attachments shall be uploaded.

Evaluation result 0, 7 or 10

D5 (2/3): PLANNED CORRECTIVE ACTIONS

- The report includes, at least, one action for non-detection?
- There is a clear explanation of why the proposed action for non-detection will solve the problem?
- Is there a corrective action incl. a timeline for each relevant root cause defined?
- **The efficiency results with evidence or explanation of occurrence actions are included in the report?***

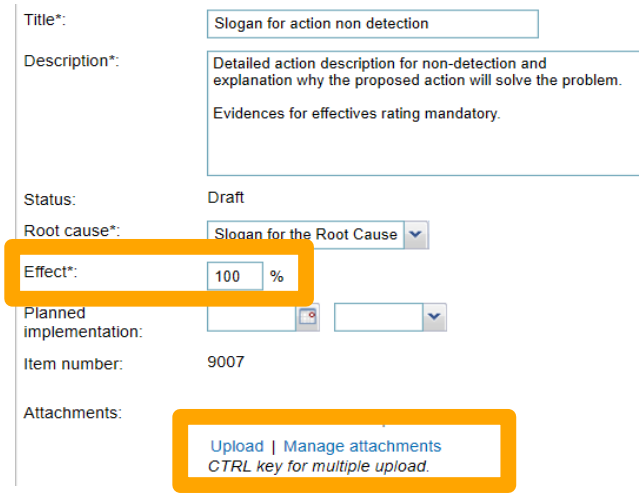


Supplier has to define actions acc. D4 and classify of occurrence, non-detection and systematic (**see title of action**) In SupplyOn: Details of action is only visible by clicking on it and included in the PDF file. Supplier has to state title, description, root cause, effect and planned implementation date (realistic, also in future possible)
All ideas of potential improvement can be listed and if not verified positive, can be closed as not efficient later.
Again attachments shall be uploaded.

Evaluation result 0, 7 or 10

D5 (3/3): PLANNED CORRECTIVE ACTIONS

- The efficiency results with evidence or explanation of non-detection actions are included in the report?*
- For Continental Internal: *If all necessary questions (D1-D5) have positive answers, the 8D cycletime must be stopped. Please check the closing date!*



The efficiency is followed until all internal results from supplier internal experiments, test, trials, etc. are available…

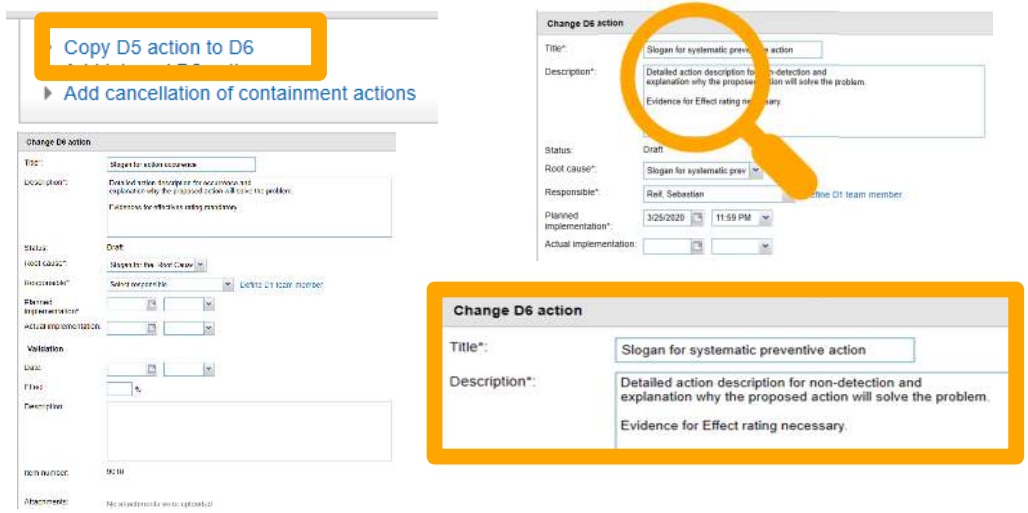
Important: This is linked to mandatory other questions from D5 for “clear explanation”

Cycle time stop, if relevant and qualified information send. Some efficiency checks may be ongoing…

Evaluation result 0, 7 or 10

D6 (1/3): IMPLEMENTED CORRECTIVE ACTIONS

- The report contains detailed information about the implementation of the action(s) for occurrence?
- The report includes the validation results (method of validation, date, effectivity) of the occurrence action(s)?
- The report contains detailed information about the implementation of the preventive system action(s)?
- The report includes the validation results (method of validation, date, effectivity) of the preventive system action(s)?



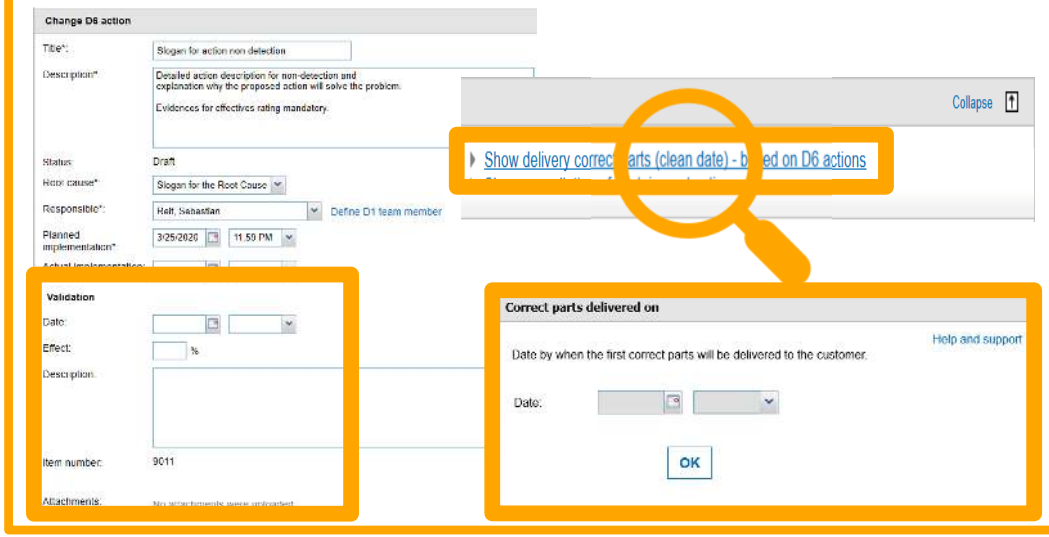
SupplyOn offers the option to copy the relevant and verified actions from D5 to D6.

Type of action is only visible by clicking on it. Supplier has to state title, description, root cause, effect,…
Overview shows now planned, actual implementation and validation date. For every action supplier shall upload an evidence as attachment.

Evaluation result 0, 7 or 10

D6 (2/3): IMPLEMENTED CORRECTIVE ACTIONS

- The report contains detailed information about the implementation of the action(s) for non-detection?
- The report includes the validation results (method of validation, date, effectivity) of the non-detection action(s)?



An individual implementation and validation tracking is possible in each D6 action.

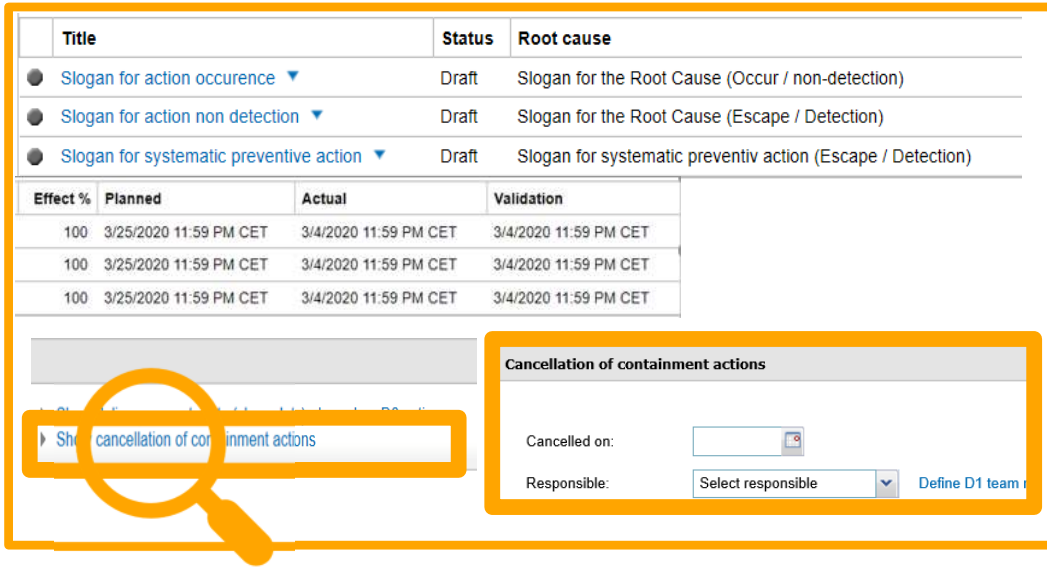
Date of first delivery of corrected parts (clean date) fill in the date for the first delivery after corrective actions were implemented as **mandatory.**
For the implementation of long term actions, an alignment with respective Continental responsible is necessary.
SupplyOn does not support an overview list for first shipments with lot/batch no. and number of parts, please use the attachment function.

Note: The clean date has a major impact on the recurrence measurement. Components which are detected with the same root cause after this clean date, are counted and considered as recurrence.

Evaluation result 0, 7 or 10

D6 (3/3): IMPLEMENTED CORRECTIVE ACTIONS

- **Do the action(s) avoid the recurrence at Continental or final customer?***
- **The report contains information about containment action(s) removement after introduction and verification of the corrective action(s)?***

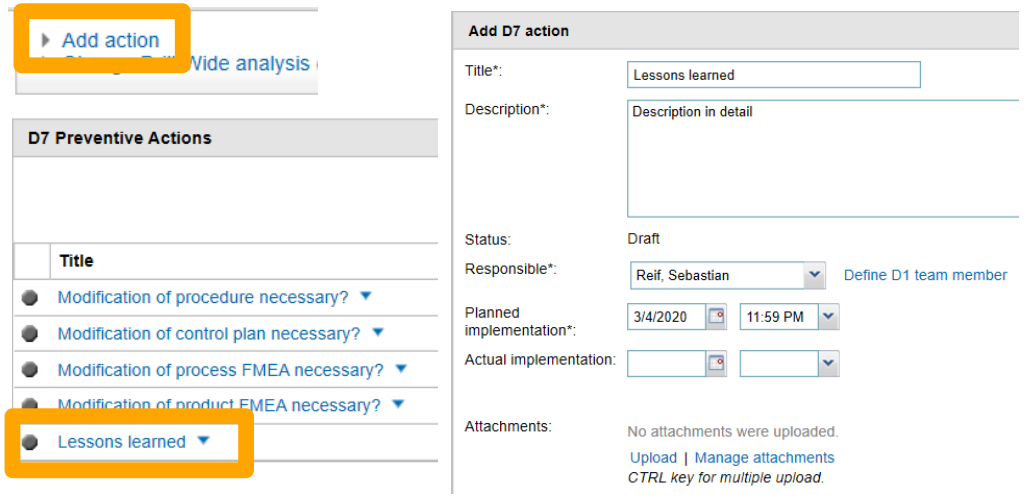


Combination of all actions shall ensure avoidance of recurrence.

Evaluation result 0, 7 or 10

D7 (1/3): PREVENTIVE ACTIONS

- The report includes information about the update of the lesson learned database?
- The update from process/ product FMEA, control plan and procedures are included in the report? If not, an explanation for the missing information is included?



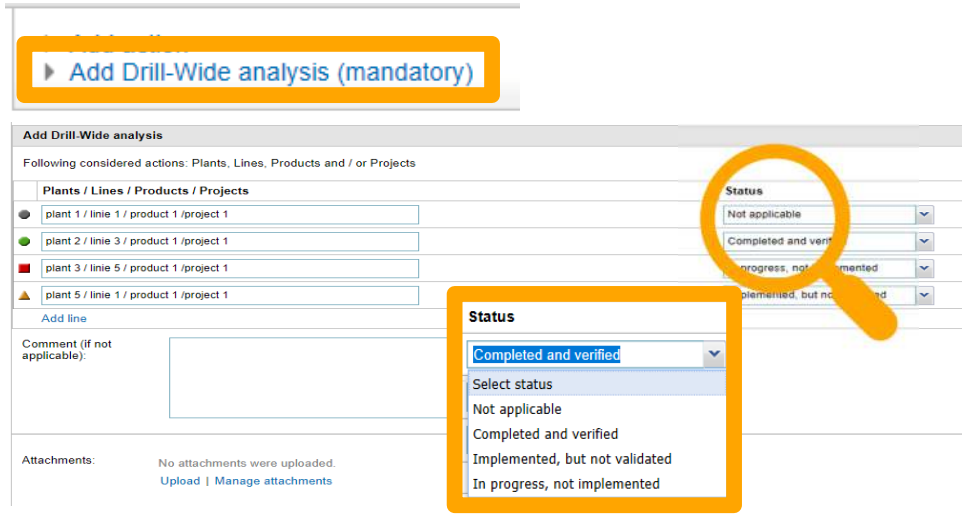
Action for update of lessons learned database is not yet visible in SupplyOn per default. Supplier has to “add D7 action” to communicate lesson learned information.
Supplier has to upload the evidence for its internal lesson learned and Read Across under Drill-Wide Analysis. Evidence shall be shown with attachments (e.g. Read Across Letter).

Information for product-FMEA only necessary, if supplier is design responsible…
Otherwise cancel or use n/a .
For FMEA update, also reverse FMEA shall be considered in this section.

Evaluation result 0, 7 or 10

D7 (2/3): PREVENTIVE ACTIONS

- Information about read across for other processes, other products and other locations is included in the report?
If not, an explanation for the missing information is included?*

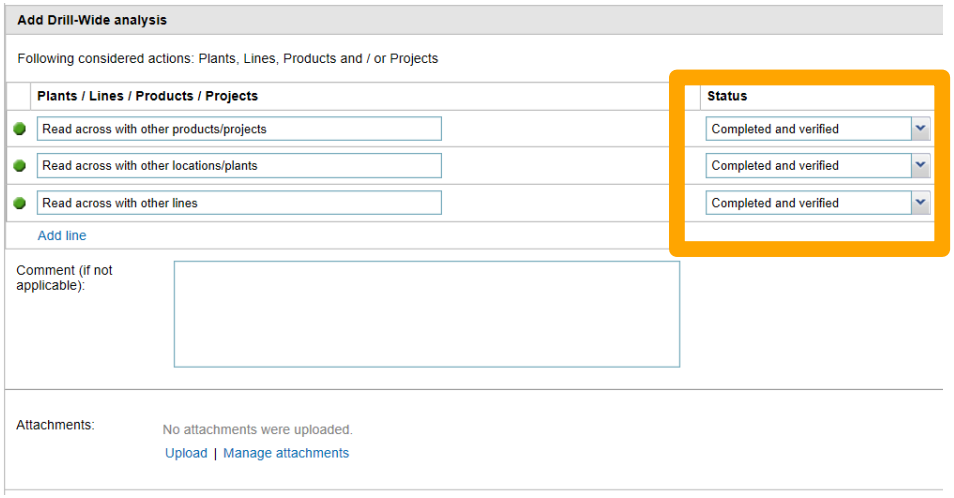


The “Drill-Wide analysis” offers a transparent solution to show the effected areas and also to allow a transparent follow up, via the “status”.

Evaluation result 0, 7 or 10

D7 (3/3): PREVENTIVE ACTIONS

- **The actions are validated in other processes, products and locations and are included in the report?**
  If not, an explanation for the missing information is included?*
- **Are there attachments (affected sections of 8D) to provide evidences of the activities?***



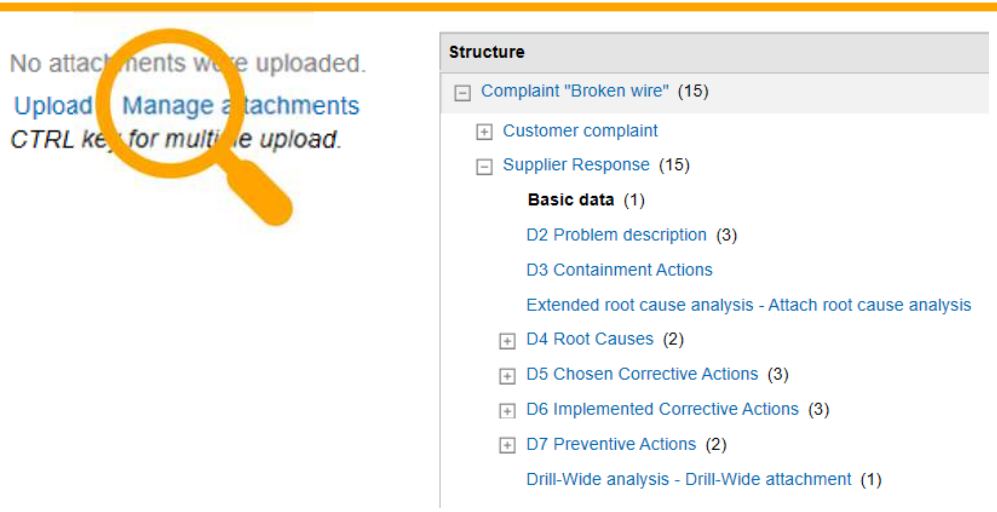
The drill-wide-analysis and validation may be documented as shown in the example. Attachments are useful for further details.

In D7 a special focus for attachments is placed, as these documents cannot be verified in written form only. A good practice is to place at least extracts of the relevant area of e.g. Control plan / FMEA; re-PPAP activity shall be aligned with the respective Continental responsible.

Evaluation result 0, 7 or 10

D8 (1/2): CLOSURE

- The report is structured and has all explanations, attachments in logical order?



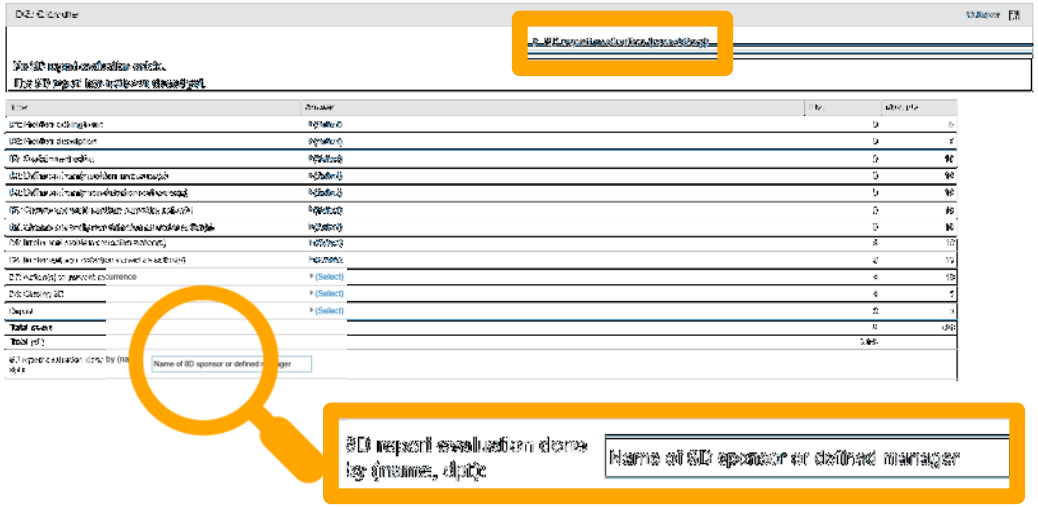
Important is a logical flow of information, qualified content with facts and figures and a reasonable “story-line” during the problem solving. The understanding for an independent person shall be ensured.

An indication for a structure can be, that relevant information and attachments are stored in the respective Discipline, as example here.

Evaluation result 0, 4 or 5

D8 (2/2): CLOSURE

- The report is approved by the 8D sponsor or defined manager (who is not part of the 8D team)?*



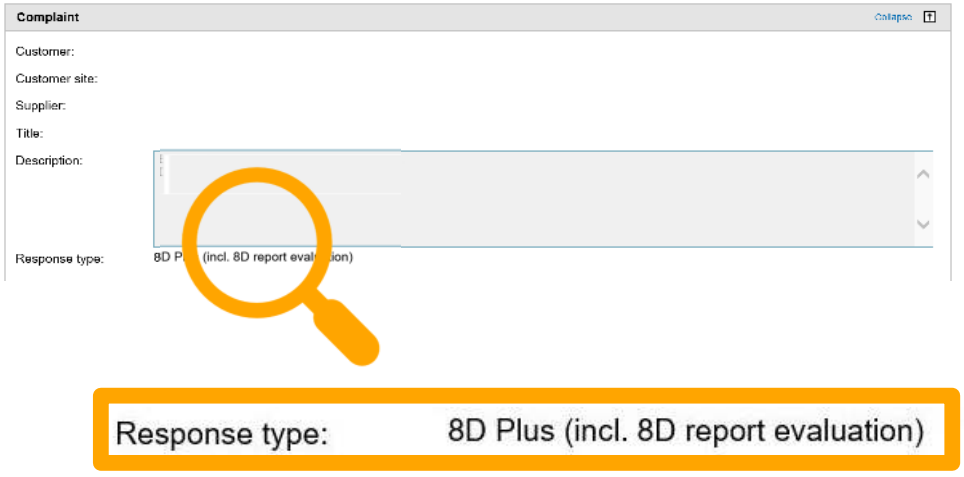
Sponsor or Manager approval can be considered in SupplyOn. Possibility also for supplier is to upload last page of excel 8D template to show Manager sign-off´s or supplier internal documents.
Important is an “independent view” of the management.

A communication for approval of 8D sponsor / defined manager is possible even without a self-evaluation.

Evaluation result 0, 4 or 5

REPORT

- All content is understandable?
- The report is written in English?
- **The report includes the definition of abbreviations used?***
- Is the 8D evaluation going to be sent to Continental?



Questions 1-3 are soft questions. The supplier shall use explanations/pictures for also no technology experts. English language is mandatory, as 8D report is normally also read by global stakeholders.
It is also requested in the QPR Complaint Management of Purchased Components.

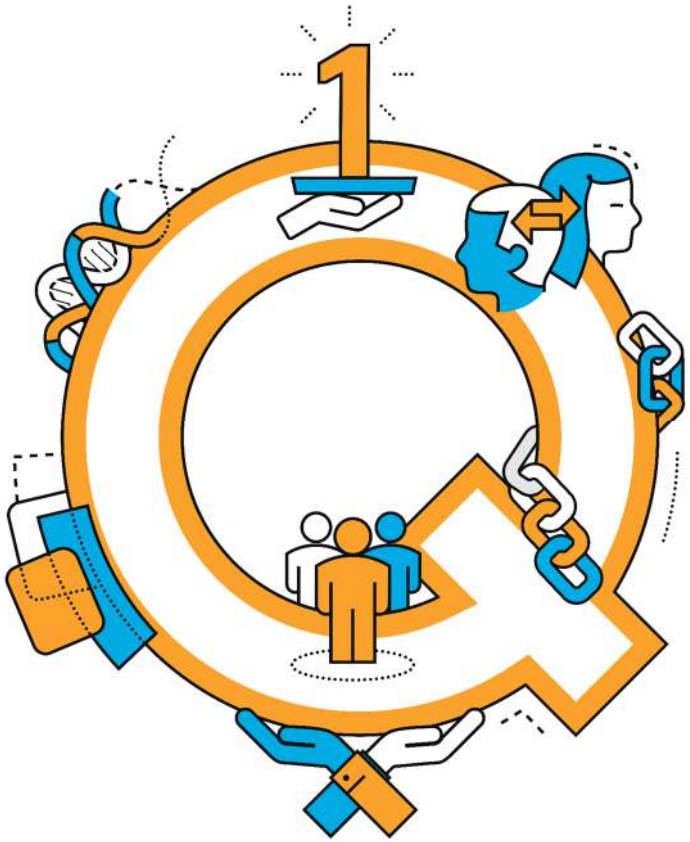
8D evaluation is only sent to customer (Continental) as mandatory, if tick is set correctly in SAP at complaint opening.
Pre-defined as mandatory for C0 & CW.
Supplier self-evaluation on voluntary base is welcome for other incident types.

Evaluation result 0, 1 or 3

DOCUMENT HISTORY

Version,	Release	Reason
1.0	June 2020	Initial version
2.0	June 2021	Update document identification, minor changes in wording, pictures from SupplyOn exchanged

Thank You



BACKUP

Summary and Referencing Documents

Summary:

- Continuous improvement of 8D content, reporting and evaluation (Yokoten SPS Project at SQM)
- Target of better quality and higher consensus of evaluation results between all stakeholders
- Evaluation based on 8D-pdf (printed version out of SupplyOn)
- Harmonized information available for plants and suppliers, where to place requested data in SupplyOn.

Referencing Documents:

- QPR Complaint Management A2C00052917AAA
- CA0709229 Supplier Quality Incident Standard (internal use only, not supplier relevant)
- (Supplier) 8D Checklist