Chapter 34. Business Planning & Management Review

0) Introduction

There are several closely-related applicable clauses in this chapter. At first glance, discussing business planning towards the end seems odd. There is a good reason-it is a natural pair with management review. Business planning is the front end of operations (planning), and review is the back end (results). It is therefore apt to discuss them as a pair, to see the cause and effect.

1) 6.2.2.1 Quality Objectives and planning to achieve them-supplemental (IATF16949)

(Clause Description-Paraphrase)
Top management shall ensure that quality objectives to meet customer requirements are defined, established, and maintained for relevant functions, processes, and levels throughout the organization. The results of the organization's review regarding interested parties and their relevant requirements shall be considered when the organization establishes its annual (at a minimum) quality objectives and related performance targets (internal and external).

(Highlights of the clause)

- (Ref to old Standards). There had been a similar clause, 6.2.2 of the same title, in the old version of ISO9001. Contents of both the new and old are rather similar.
- The requirement is to set Objectives for relevant functions, processes, and levels
- Notable change is bjectives setting is minimum annually
- Another notable the requirements of interested parties shall be considered as objectives

(Compliance best practice)

6.2.2.1 Quality objectives and planning to achieve them-supplemental

1. *The clause is discussed here for business planning*
2. *Set minimum one (1) KPI for a process. Some processes such as production, QAQC, and Sales should have more KPI due to the importance*
3. *If customers specified some KPI, they shall be included in your KPI list.*
4. *Evidence of approval by Top Management is required, either by signing on a list, or attached to the Business Planning report.*

2) 6.3. Planning of Changes (ISO9001)

This clause is already discussed in Chapter 12. Please refer.

3) 9.3, 9.3.1 Management Review (ISO9001)

(Clause Description-Paraphrase)

Top management shall review the organization's quality management system, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of the organization

(Highlights of the clause)

- (Ref to old Standards). There had been similar clauses, 5.6, 5.6.1 of the same titles, in the old version of ISO9001.
- The old clause reads: Top management shall review the organization's quality management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives."
- The new clause is a reworded version of the old one, with the second sentence removed, probably it is repeated at the input.

(Compliance best practice)

9.3, 9.3.1 Management Review

1. *This is only the ISO9001 portion of management review*
2. *See 9.3.1.1 for combined discussion*

4) 9.3.1.1 Management Review-supplemental (IATF16949)

(Clause Description-Paraphrase)

Management review shall be conducted at least annually. The frequency of management review(s) shall be increased based on risk to compliance with customer requirements resulting from internal or external changes impacting the quality management system and performance-related issues.

(Highlights of the clause)

(Ref to old Standards). This is a totally new requirement. The requirements are:

Frequency of Management Review (MRM) is subject to change, but minimum is once a year.

- Frequency depends on a) risk to compliance with customer requirements, b) changes in internal or external context, c) performance etc
- Frequency to increase when there are nonconformities raised (internal and external), customer complaints etc. (Ref 9.2.2.1)

(Compliance best practice)

9.3.1.1 Management Review-supplemental

1. *The entire management review has a lot areas to cover, therefore a documented process is recommended*
2. *This should be available from the ISO/TS16949 days, or provided by your consultant.*

5) 9.3.2 Management Review Inputs (ISO9001)

(Clause Description-Paraphrase)

The management review shall be planned and carried out taking into consideration:

a) the status of actions from previous management reviews;

b) changes in external and internal issues that are relevant to the quality management system;

c) information on the performance and effectiveness of the quality management system, including trends in:

1) customer satisfaction and feedback from relevant interested parties;
2) the extent to which quality objectives have been met;
3) process performance and conformity of products and services;
4) nonconformities and corrective actions;
5) monitoring and measurement results;
6) audit results;
7) the performance of external providers;

d) the adequacy of resources;

e) the effectiveness of actions taken to address risks and opportunities (see 6.1);

f) opportunities for improvement.

(Old version)

a) results of audits,
b) customer feedback,
c) process performance and product conformity,
d) status of preventive and corrective actions,
e) follow-up actions from previous management reviews,
f) changes that could affect the quality management system, and
g) recommendations for improvement.

(Highlights of the clause)

- (Ref to old Standards). There had been a similar clause, 5.6.2 of same title, in the old version of ISO9001. The agenda items have increased from the old to the new.
- Old requirement are given in a), b), c), c1, c3, c6. Item d) and f) have been removed
- The total requirement is now a) to g)
- Notable change is: i) feedback from interested parties, ii) the effectiveness of actions taken to address risks and opportunities

(Compliance best practice)

9.3.2 Management Review Inputs

1. *This is only the ISO9001 portion of management review*
2. *See 9.3.2.1 for combined discussion*

6) 9.3.2.1 Management Review Inputs-supplemental (IATF16949)

(Clause Description-Paraphrase)

Input to management review shall include:

a) cost of poor quality (cost of internal and external nonconformance);

b) measures of process effectiveness; <repeated in ISO9001?>
c) measures of process efficiency; ; <repeated in ISO9001?> for product realization processes, as applicable <not normal QMS efficiency>
d) product conformance; <repeated in ISO9001?>
e) assessments of manufacturing feasibility made for changes to existing operations and for new facilities or new product (see Section 7.1.3.1);
f) customer satisfaction (see ISO 9001, Section 9.1.2);
g) review of performance against maintenance objectives; Still need to add and comment
h) warranty performance (where applicable);
i) review of customer scorecards (where applicable);
j) identification of potential field failures identified through risk analysis (such as FMEA);
k) actual field failures and their impact on safety or the environment.

(Highlights of the clause)

- (Ref to old Standards). There had been a similar clause, 5.6.2.1 Review input-Supplemental, It was only 1 sentence: input to management review shall include an analysis of actual and potential field-failures and their impact on quality, safety or the environment.
- Total new requirement is very long from a) to k), with many new requirements
- Notable changes: i) field failure had become 2 discussion items, actual and potential, ii) for actual field failure, only safety and environmental impact required, quality has been removed, iii) there are some repeated items with 9.3.2.e.g b), c) d), f) and g).
- 2 SI added to this clause. SI-13: Process efficiency for product realization and
  SI-16 summary results of measurements at specified stages during the design and development of products and processes, as applicable.

(Compliance best practice)

9.3.2.1 Management Review Inputs-supplemental

1. *The agenda is quite confusing at certain parts, with repetition between ISO9001 and IATF16949.*
2. *A consolidated and streamlined agenda is proposed, to avoid hopping around and back tracking. See* ***Exhibit 34-1***
3. *Some items are poorly catered for and specimens given here as:*
   (i) COPQ. See ***Exhibit 34-2.***
   (ii) the 3 critical controls on customer satisfaction. See ***Exhibit 26-1.***
   (iii) Process Efficiencies ***(Exhibit 23-3)***
   (iv) Actual field failure and impact on safety and environment. See ***Exhibit 34-3.***

7) 9.3.3 Management Review Outputs (ISO9001)

(Clause Description-Paraphrase)

The outputs of the management review shall include decisions and actions related to:

a) opportunities for improvement;
b) any need for changes to the quality management system;
c) resource needs.

The organization shall retain documented information as evidence of the results of management reviews.

(Highlights of the clause)

- (Ref to old Standards). There had been a similar clause, 5.6.2 Review Input.
- Requirements of the new and old are similar, with the new one broader in scope.
- Total requirement see a) to c)

(Compliance best practice)

9.3.3 Management Review Outputs

1. *Input means presentations, discussions, proposals. arguments and suggestions.*
2. *Output in this clause technically means the conclusion. And they are resolutions, consensus, and decisions. Generally there will be many of them in a meeting.*
3. *To be practical, only take those with follow-up actions to be 'output', and list them in the Management Review output. Tabulate them in a table to show the actions needed, due dates, PIC etc. See* ***Exhibit 34-1***

8) 9.3.3.1 Management Review Outputs-supplemental (IATF16949)

(Clause Description-Paraphrase)

Top management shall document and implement an action plan when customer performance targets are not met.

(Highlights of the clause)

- (Ref to old Standards). This is a totally new clause
- The requirement is to document and implement an action pan when customer performance targets are not met

(Compliance best practice)

9.3.3.1 Management Review Outputs-supplemental

1. *This is about cases of customer performance targets not met. IATF wants this to be highlight and followed up.*
2. *List them in another sub-header under output. See* ***Exhibit 34-1***

Continuing

9) SIs & FAQs

SI Nbr	IATF Clause	Description
13	**9.3.2.1 Management review inputs – supplemental**	Input to management review shall include: a) cost of poor quality (cost of internal and external nonconformance); b) measures of process effectiveness; c) measures of process efficiency **for product realization processes, as applicable**; d) product conformance; e) assessments of manufacturing feasibility made for changes to existing operations and for new facilities or new product (see Section 7.1.3.1); f) customer satisfaction (see ISO 9001, Section 9.1.2); g) review of performance against maintenance objectives; h) warranty performance (where applicable); i) review of customer scorecards (where applicable); j) identification of potential field failures identified through risk analysis (such as FMEA); k) actual field failures and their impact on safety or the environment. ***Rationale for change:*** *Clarified that not every process requires an efficiency measure. The organization needs to determine which processes require efficiency measures within their quality management system.*
16	**9.3.2.1 Management review inputs – supplemental**	Input to management review shall include: a) cost of poor quality (cost of internal and external nonconformance); b) measures of process effectiveness; c) measures of process efficiency for product realization processes, as applicable; d) product conformance; e) assessments of manufacturing feasibility made for changes to existing operations and for new facilities or new product (see Section 7.1.3.1); f) customer satisfaction (see ISO 9001, Section 9.1.2); g) review of performance against maintenance objectives; h) warranty performance (where applicable); i) review of customer scorecards (where applicable); j) identification of potential field failures identified through risk analysis (such as FMEA); k) actual field failures and their impact on safety or the environment; **l) summary results of measurements at specified stages during the design and development of products and processes, as applicable.** ***Rationale for change:*** *In the section "8.3.4.1 Monitoring" the summary results of measurements at specified stages during the design and development of products and processes was required as an input to management review; however, it was not displayed in the section 9.3.2.1. Measurements may consider, for example: timing, costs, or feasibility.*

10) Supplementary Notes

Legend: HOC= Highlights of Clause, CBP= Compliance Best Practice, S&Q= SIs & FAQ, EXH= Exhibits

Clause	Section	Clarification Subjects
6.2.2.1	CBP	**SN34.1. Why is Clauses 4.1, 4.2, 6.1, part of Business Planning? Is so, should top management be handling this task?**
6.2.2.1	CBP	**SN34.2. Can you give some example of customer objectives?**
6.3	CBP	**SN34.3. Why is Management of Change included here?**
9.3.2 9.3.2.1	CBP	**SN34.4. Where can we get some explanations of the exact meaning of the various agenda items?**
9.3, 9.3.1	CBP	**SN34.5. What is the normal time taken for a good management review meeting?.**
9.3, 9.3.1	CBP	**SN34.6. How to run a management review meeting ?**
9.3, 9.3.1	CBP	**SN-34.7. How long should the Minutes take to prepare?**

9.3, 9.3.1	CBP	**SN34.8. Must Top Management be present in Management Review meeting?**
9.3, 9.3.1	CBP	**SN34.9. Can QMR chair the management review meeting?**
9.3.2, 9.3.2.1	CBP	**SN34.10. Should data pertaining to the report be attached, or directly printed on the report?**
9.3, 9.3.1	CBP	**SN34.11. Can IATF management review be combined with ISO14001 or ISO45001**?
9.3, 9.3.1	CBP	**SN34.12. For far-away plants that cannot attend Group Management Reviews in person, what can be done?**
9.3, 9.3.1	CBP	**SN34.13. Can the minutes be in Powerpoints, or must be in full text?**
9.3, 9.3.1	CBP	**SN34.14. What are some of the usual problems of management review meetings?**
9.3, 9.3.1	CBP	**SN34.15. Your example for management review minutes is very complicated and difficult to write. Can we reduce the content?**
9.3.3,	CBP	**SN34.16. If we put some comments to everything we discussed, can that be considered as output?**

SN34.1. Why are Clauses 4.1, 4.2, 6.1, consider as part of Business Planning? If so, should top management be handling this task?

Top Management is definitely involved in business planning, because it is a high level activity. The QMS team will also be actively involved to assist to provide data and information.

SN34.2. Can you give some example of customer objectives?

Example 1. A Malaysian OEM car plant requires its suppliers to score min AB in manufacturing process audit, and achieve an internal reject <30ppm. Suppliers are required to take them up as KPIs, monitored and reported. Example 2. A plant in China is required by its Israeli customer to achieved <2000ppm of internal reject rate, and include this as a KPI in the organization's QMS.

SN34.3. Why include Management of Change here (Management Process)?

This is where the responsibility belongs. By nature, this type of change is a bigger and needs funding and resources. One good time to do this is during business planning where budget can be requested.

SN34.4. Where can we get some explanation of the exact meaning of the various agenda items?

Exhibit 34-1 is a full management review report. From the content, you should be able to understand the meaning of each item of management review input and output. Please refer.

SN34.5. What is the normal time taken for a good management review meeting?

4 hours should be good enough. However, the participants should come prepared, otherwise the 4 hours cannot achieve much.

SN34.6. How to run a management review meeting ?

Process owners should come prepared and make presentations of graphs and Powerpoints, relating to their process/dept. They should later request input on certain issues such as pending problems and resources required. The other participants should be given time to ask questions, share opinions and give suggestions. Decision can be made through consensus, show of hands, or on management directive.

SN34.7. How long should Minutes take to prepare?

1 week is a fair time frame to write a management review. Action items, however, can be sent out immediately as a prelim report, so participants can start to work on them.

SN34.8. Must Top Management be present in Management Review meeting?

Yes, to show commitment. But if he/she really cannot, then QMR to run briefings for him/her later. with minutes draft. Input form management is then incorporated into the minutes. The final minutes shall be signed by top management. Continuous absence of top management will not be acceptable.

SN34.9. Can QMR chair the management review meeting?

It is common due to QMR being more familiar with the QMS. However, it is conducted under delegation from top management. Top Management is usually present at the meeting. Besides the QMR, any other senior member may also be appointed to perform this task under delegation.

SN34.10. Should data pertaining to the report be attached, or directly printed on the report?

Either way is acceptable. In the case of attachment, the copies of attachments should be physically tagged here, for easy retrieval.

SN34.11. Is combine meeting with ISO14001 or ISO45001 acceptable?

Yes, management reviews can be combined. But you have to think of effectiveness. Would the participants get confused? Also time availability is important. Do you have time to run, say, for 6 hours at a stretch, for example?

SN34.12. For far-away sites that cannot attend Group Management Review in person, what can be done?

Video onference is acceptable. Take a photo of the attendees with the monitor screen as the background for evidence.

SN34.13. Can the minutes be in Powerpoints, or must be in full text?

Powerpoints are good for presentation. But Management Review is an official document not only used for IATF, but often read by Board of Directors. It is official and should be written in full length.

SN34.14. What are some of the usual problems of management review meetings?

a) incomplete discussion items, against requirements given in the standards, b) wrong answers to agenda items due to misunderstanding , c) KPI achievement claims not supported by raw data, c) output not available, or vaguely stated.

SN34.15. Your example for management review minutes is very detail and difficult to prepare. Can we reduce the content?

You should take the specimen as a maximum target. You can start off by providing less fact and data, so long it meets the requirement. You may to gradually build up to a level of your choice, over the years.

SN34.16. If we put some comments to everything we discussed, can it be considered output?

Yes it can. However, that method would generally end up with a lot of action items, that you can't possibly cope with. It is to your advantage you to trim down the list, and repeat them at the end of the report. See **Exhibit 34-1.**

11) Exhibits

Exhibit 34-1. Management Review Minutes

Management Review

Meeting Description	Date/Time	Venue
Management Review. ISO9001:2015 & IATF16949:2016.	12 Nov 2019. 2-5 pm	Company Conference Room
Participants: Chair: Wilson Tan (MD) Participants: XXX, XXXX,		

1. Status of actions from previous Management Reviews

There were 3 follow-up items from last year's management review, they are all acted upon successfully as follows:

No	Improvement items	Due Date	PIC	Status as at Management Review
1	Refresher Training on Internal Audit	Sep 2019	QMR	Training conducted on 1-2 Jun 2019. Skills used for this year's internal audit effectively
2	Roof of material warehouse to repair-now leaking	June 2019	Maintenance	Roof leaking was repaired in Jun 2019, as plan. Now OK
3	Need new operators for CNC section and one crane operator	June 2019	HR/ Production	New operators required have been recruited in July, trained and now working

2. Changes in external and internal issues that are relevant to the QMS

No	Doc Info	Reviewed on	Conclusion
a)	Internal Analysis	16 Aug 2019	No major changes, and no mitigation or corrective actions needed
b)	External Analysis	18 Aug 2019	No major changes, and no mitigation or corrective actions needed
c)	Interested Parties	20 Aug 2019	No major changes, and no mitigation or corrective actions needed
d)	Scope of QMS	21 Aug 2019	No major changes, and no mitigation or corrective actions needed
e)	Contingency Plan	21 Aug 2019	No major changes, and no mitigation or corrective actions needed
f)	Organization Knowledge	25 Aug 2019	No major changes, and no mitigation or corrective actions needed
e) and f) are included due to their strategic nature and importance in QMS			

3. Information on the performance and effectiveness of the QMS, including trends

A) MP1. Management Planning, M2 Management Review

S/N	Discussion Item	Target/Expected	Actual	Actions Needed
a	KPI-1	Management Review 3 weeks before external audit	Review 12 Nov 2019 External Audit scheduled 15 Dec 2019. OK	NA
b	KPI-2	Business Planning/ budget submit before end of Jan of year	Submit to BOD on 25 Dec last year and approved. OK	NA
c	Safety & Environment	No incident, no near miss. No env breaches	No incident, no near miss. No env breaches. OK	NA
d	Resources	Sufficient resources to support the operations	Sufficient resources. OK	NA

Exhibit 34-1. Page 2

e	Changes that can affect process, or even the organization	Report the changes	New product lines next year on CJX Line.	Later during project launch
f	Risks and Opportunities changes in this area	Report the changes	Some changes, see SP-4 for details	See SP-4 for details
g	Opportunity for Improvement	Suggest any improvement that can improve the operations	None	NA
h	Other remarks	NA		

B) MP2. Internal Audits

S/N	Discussion Item	Target/Expected	Actual	Actions Needed
a	KPI-1	5 days to reply NC raised in internal audits	Average 4.6 days. OK	NA
b	Safety & Environment	No incident, no near miss. No env breaches	No incident, no near miss. No env breaches. OK	NA
c	Changes that can affect process, or even the organization	Report the changes	No changes	NA
d	Risks and Opportunities changes in this area	Report the changes	No changes	NA
e	Resources	Sufficient resources to support the operations	A little short on internal auditors	NA
f	Opportunity for Improvement	Any improvement that can improve the operations	We have lost some internal auditors due to resignation. Need to train up some more.	HR to apply for budget to run an inhouse training by external trainer
g	Other remarks	NA		

C) MP3. Continual Improvement

S/N	Discussion Item	Target/Expected	Actual	Actions Needed
a	KPI-1	Min 5 projects a year	Last year 8 projects. OK	NA
b	Safety & Environment	No incident, no near miss. No env breaches	No incident, no near miss. No env breaches. OK	NA
c	Resources	Sufficient resources to support the operations	Sufficient resources. OK	NA
	Changes that can affect process, or even the organization	Report the changes	No changes	NA
	Risks and Opportunities changes in this area	Report the changes	No changes	NA
d	Opportunity for Improvement	Any improvement that can improve the operations	Have been improving on quality of the projects.	Consider some incentives for good projects
e	Other remarks	NA		

D) COP-1. RFQ Handling

S/N	Discussion Item	Target/Expected	Actual	Actions Needed
a	KPI-1	Submission of Quotation on time	2 submissions, all on time. OK	NA
b	Safety & Environment	No incident, no near miss. No env breaches	No incident, no near miss. No env breaches. OK	NA
c	Resources	Sufficient resources to support the operations	Resources sufficient. OK	NA

Exhibit 34-1. Page 3

8. Audit Results

(internal Audit)
Internal audits were carried out between 13 Sep to 5 Oct 2019. 16 NC and 20 OFI had been raised. NCs were all closed out at time of Management Review.

(Customer Audit)
No customer audit last year

(3rd Party Audit)
IATF::2016 had been audited by XXX on 3 June 2019, with 2 minor NC.

9. Monitoring and measurement results

- KPI measurement and performance see 3A- 3K above
- Measurement and monitoring on products and processes are conducted daily mainly on site. No major issues noticed throughout the year

10. Performance of external providers

Please refer 3O above

11. Adequacy of resources

Please refer 3A- 3K above

12. The effectiveness of actions taken to address risk and opportunities

Please refer 3R above

13. Opportunities for improvement

Please refer 3A- 3K above

(IATF)

14. Cost of Poor Quality
Please refer 3R above

15. Measures of Effectiveness.
Effectiveness is monitored by the various KPI of all the processes.
Please refer 3A- 3K above

16. Measures of Process Efficiency Process efficiency, for product realization processes, as applicable <SI-13>
Conducted a process study of the blow moulding machine LX80. The output is achieved. OK. See Special Report attached.

17. Product conformance
Please refer 3P above. Generally no major issues

18. Assessment of manufacturing feasibility made for changes to existing operation and for new facilities or new product

No new facilities or new product last year. Also no changes to existing operations.

19. Review of performance against maintenance objectives
Objectives set as KPI, which are reviewed every month. If objectives not met, actions will be taken. More details, please refer 3Q.

20. Warranty performance
NA. No warranty in contractual agreement

21. Review of customer scorecards
Only XXX and YYY have scorecards. They are sent in every month. For last 12 months, the feedback has been good, scoring A for both customers

Exhibit 34-1. Page 4

22. Identification of potential field failures identified through risk analysis (such as FMEA)
This year some risks have been identified from operations, they are later included into the FMEA, after resolution

22. Actual potential field failures and their impact on safety and environment
There are other warranty, and 3 complaints. They were analysed and found no impact to safety and environment.
See attachment XXX

23. Summary results of measurement at specified stages during the design and development of products and processes, as applicable <FAQ-16>
Available at project files. Last year only 1 project. All verification, validation and review carried out and all OK.
Project already approved for mass-production during May 2019

24. Output of Management Review

No	Improvement items	Due Date	PIC
1	HR to apply for budget to run an inhouse course for internal auditors, by external trainer	Mar 2020	HR
2	Consider some incentives for good improvement projects	Dec 2019	HR, Management
3	Work out standard costing to speed up submission of quotations.	Dec 2019	Financial Controller
4	Consider to recruit one more staff for process engineering	Mar 2020	HR, HOD, Management
5	Prevent repeat of customer disruption	Jan 2020	Marketing, QA, Production
6	Prevent the near-miss at Production (chemical drum rolled off from forklift)	Ongoing	Production, Maintenance
7	Look into using outsourced transporter to supplement to assist in delivery	Jan 2020	Planner, Purchasing
8	Monitor for 2-3 months and decide if needs to recruit more people at maintenance	Mar 2020	HR, HOD, Management

(Below only required if customer targets not achieved)

a. Customer Target not achieved

No	Corrective Actions	Status	Corrective action	PIC
1	OTD to XXX not achieve 100%	In progress	NCR-INT 23/18	Shipping
2	PPM at 6500 ppm, not OK to customer XXX	In progress	NCR-INT 24/18	Production/QA

Remarks given in this section explain on the Exhibit. Do not include them as part of your document

- This management review minutes is comprehensive and useful. But it is probably beyond most companies to go into this level of details
- Each organization can decide on the level of sophistication immediately. Gradual incremental may be a better way. However, the organization must ensure all the headings mentioned in the standard are discussed.

Exhibit 34-2. Cost of Poor Quality

A. Monthly

	J	F	M	A	M	J	J	A	S	O	N	D	Average
Target. % of sales	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
Actual	5	4	5	1	0.5	3	1	0.5	0.3	0.5	0.3	0.2	1.78%
Remark	New part	New part	New part										

Comments for non-achievement:

Dec: (Example)

- The new part XYZ is still not stable. Adjustment actions are still taking place since in Jan.
- Customer engineers have also been present to assist.
- The rejects were coming down steadily and by Jul, we are down to 1% which is the target
- The average for the year is still 1.78% due to earlier high rejects

Remarks given in this section explain on the Exhibit. Do not include them as part of your document

- This is a simple way to record COPQ. COPQ should be a KPI so as not to be overlooked.
- Whenever it is not on target, the cause shall be investigated for actions to be taken. But it does not mean every time is is not within the limits, actions must be taken. S
- Sometimes you need to observe the trend or problem a little longer. A slight delay up to 3 months is generally accepted.

Exhibit 34-3 Actual field analysis and Impact on Env & Safety

Actual field-failures and their impact on safety or the environment.

Date of Failure	Customer/Product Failure	Impact	Description	Significance Low, Mid, High	Action Needed Yes/No	Action Plan Ref No
Case 1. Missing component in part						
02 NOV 2016	Heat shrink casing missing in part	• Environment	No Impact	-	No	No Action needed
		• Safety	No Impact	-	No	No Action Needed
Case 2. Steering host bursts						
1 Dec 2017	Steering hose burst	• Environment	Hydraulic oil spillage onto road and drainage system	Mid	No	NA
		• Safety	Loss of car controls by driver.	High	Yes	AP 011/17. (To make it fail-proof)
Case 3. Chemical drums leak on delivery						
6 Sep 2018	Chemical drum leaks when delivered to customers	1. Envi	Chemical leaks into waterways and drainage system	High	Yes	AP013/17 (Train transporters on care and response)
		2. Safety	Chemical spills on the fore court of the customers- can cause industrial accidents	Low-Mod (clean up)	No	

Remarks given in this section explain on the Exhibit. Do not include them as part of your document

- This is the working document to analyse each failure. A wild claim that there is no failure, or no impact will not be acceptable without evidence.
- The above 3 cases are provided to illustrate how to comply with the IATF requirement. They are fictitious examples and not from the same organization.
- Some organizations say they have ISO14001 and ISO45001 so these are taken care off. This is incorrect, as the impact we are talking about is on customer and car owners. Your ISO14001 and ISO45001 are for your own plant and therefore irrelevant

>> End of Chapter 34 <<