

Edition	Date	Description of the Change	Initials
1	09/Oct/2013	1 st Edition.- Initial Release	RL
2	29/May/2017	2 nd Edition.- Included Code of Conduct & Corporate Social Responsibility Addition of the Ficosa Purchasing System Software (FPSS) Included details about Supplier Performance Index (SPI)	RL
2.1	13/07/2017	Corrected weight on SPI item OEM & Customer QCR	RL
3	1-11-2019	Include Electronics components. Risk assessment and general revision	JMz

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1. Introduction

The purpose of this manual is to communicate to our suppliers the main procedures and systems that are used from the selection of suppliers, development, manufacture and maintenance of the products supplied to FICOSA.

This manual applies to all suppliers that are supplying parts to any of the FICOSA plants worldwide.

2. Requirements to enter the Panel

The general requirements in order to be included in the Ficoso Supplier Panel are the following:

- 2.1 A Ficoso new supplier, has to show evidence that have an established effective automotive Quality Management System in place, IATF 16949, certified by an IATF recognized certification body, unless otherwise authorized by Ficoso.
- 2.2 A Specific Company Self-Assessment will be provided by the Buyer and must be filled out and returned.

This Company Self-Assessment consists of the following:

- General Company data
 - Financial Data
 - Manufacturing Resources Data
 - Self – Evaluation
- 2.3 Comply with the environmental regulations and requests of the country where the product is going to be produced and/or used, including but not limited to the Directive of ELV (2000/53/EC and its updated Annex II), REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) CLP/GHS (Classification, labeling and packaging of substances and mixtures) and the Dodd-Frank-Act in respect to Conflict Minerals (gold, tin, tantalum and tungsten sourced from conflict regions as the Democratic Republic of Congo and adjacent countries), as well as labor laws in general, working hours and employment conditions, workers rights, employment benefits, subcontractor selection, safety of vehicles and installations, etc.

Code of conduct & Corporate Social Responsibility

Our ethical requirements and code of conduct for all suppliers are primarily based on the United Nations ten principals (Global Compact) in the areas of human rights, labor, environment and anticorruption.

Principle 1: Suppliers should support and respect the protection of internationally proclaimed human's rights

Principle 2: Suppliers must make sure that they are not complicit in human right abuses.

Principle 3: Suppliers should uphold the freedom of association and the effective recognition of the right to collective bargaining

Principle 4: The elimination of all forms of forced and compulsory labour

Principle 5: The effective abolition of child labour

- Principle 6: The elimination of discrimination in respect of employment and occupation
- Principle 7: Suppliers should support a precautionary approach to environmental challenges
- Principle 8: Undertake initiatives to promote greater environmental responsibility
- Principle 9: Encourage the development and diffusion of environmentally friendly technologies
- Principle 10: Suppliers should work against corruption in all its forms, including extortion and bribery

2.4 In the case that Ficosa requires the assistance of a Supplier to design a component, a Partner for Development and Design will be required (PDD). These Suppliers will be assigned in order to achieve the design freeze of the components, taking into account the timing, quality and cost of the components.

2.5 To be registered at Ficosa Purchasing System Software B2B (FPSS). For specific instructions on how to register in the portal go to www.ficosa.com and follow the links to the supplier access.

2.6 The Ficosa Supplier Panel is distributed into four main branches

Chemical Commodity	Electric Commodity	Metalic Commodity	Electronic Commodity
PA (Raw Material)	Solenoids	Wire Rope Galvanized	Resistors
PP (Raw Material)	PCA	Wire Rope Stainless Steel	Capacitors
ABS (Raw Material)	Wire Harness	Wire Stainless Steel	Inductors
POM (Raw Material)	Mirror Glass actuators	Wire Phosphated/Galvan.	Displays
PVC (Raw Material)	Power Folding Actuators	Metal Sheet Stampings - Embossing	Transistors
PC (Raw Material)	Cameras	Fine Blanking	Diodes
PBT (Raw Material)	Glass Heater Pads	Screws, Nut - washer - Fasteners	IC: Integrated Circuits
TPE (Raw Material)	Lighting Systems	Mechanized Parts - Shifter Levers	Microcontrollers
PE (Raw Material)	DC Motors	Cold Stampings	Connectors
PMMA (Raw Material)	Pumps	Sintered Parts	Miscellaneous (Fuse, Time, Varistor, Switches, filters, ...)
ASA (Raw Material)	Miscellaneous Electrics	Forged Parts - Hot Forging	Audio (Speaker, Microphone)
Colour Masterbatches	Level Sensors	Springs	Batteries
Oils & Greases	Wire Harnesses Components (cable, sensors,...)	Tubes (Metallic)	Sensor (accelerometer, magnetic, temperature, ...)
Paint raw materials	Exterior glass mirrors	Zamak Raw Material	Connectivity Modules (GSM, GPS, BT/WIFI ...)
Rubber Mouldings	Interior glass mirrors	Zamak Parts	eSIMs
Knobs & Boots	Electrochromic glass mirrors	Aluminium Raw Material	GPS antennas
Foam parts	Plastic glass mirrors	Aluminium Parts	PCB (Rigid and Flexible Printed Circuit)
Packaging	Glass adhesives	Aluminium Style Parts	Ficosa Cameras
Blinjection		Magnesium Parts	Lenses
Overmouldings and subassy		Conduit	Image sensors
Structural parts (Common PI parts)		Cables - Final product	Cloud Services
Style Pieces (IMD and other specific technologies)		Miscellaneous Metallics	
Painted Parts			
Chromed Parts			
Catalogue parts			
Blow Moulding			
Thermic protection tubes			
Rubber tubes			
PTFE tubes			
Thermoplastic Tubes			
Tubes Assembly			
Corrugated Tubes			
Miscellaneous Chemicals			

2.8 Packaging, raw materials, catalogue parts and customer imposed suppliers do not require all of the above requirements, only a third party certificate, registering in the FPSS is required and approval of the Purchasing Committee . If just trader needs list of accepted manufacturers and correspondent third parties certifications. In the particular case of electronic components traders it is mandatory to get signed Anti-counterfeit Components Agreement for Electronic Traders.

3. Request for Quotation

A formal RFQ will be submitted to the Supplier via the Ficosa Purchasing System Software (FPSS). The type of information will consist of:

- 2D / 3D data
- Feasibility Check List (P-CP-XX/XX-02-F)

- Logistic & packaging form (P-LL-XX/XX-01-A)
- The Supplier is expected to review all the documentation delivered, request more information if needed, sign and upload the documents in FPSS within the required deadlines.

4. Feasibility Check.

The purpose of this document is to help the Supplier assure that they can manufacture the part reviewing in a general way the means, technology and capacity to do it.

The tear down of the checklist is as follows:

- Delivery of the samples on required date*
- Compliance with this Quality Manual*
- Availability of specification, standards, drawings from FICOSA
- Confirmation that all specs marked in drawing and OEM specific PPAP requirements can be met (focus on Special Characteristic)
- Compatibility of the product with the suppliers current standards of production
- Technological Capacity confirmation (Additional Process Requirements defined at FPSS)
- Control means available to assure the product (focus on Special Characteristics)
- For Special Characteristics 100% control in case that capacity is Nok.
- Material regulation (ELV, IMDS, REACH, Conflict Minerals, etc) *
- Assure the product and manufacturing process is free from Intellectual Property (if applies)
- Production capacity confirmation *
- Tooling life problems for any carry over part

This document should be signed only after reviewing the data received. It is important to review all of the information mentioned on the drawing, assuring that the standards, specifications, materials and measurements can be accomplished in mass production.

Any item that is not clear or that is deemed that needs to be changed in order to obtain an Ok feasibility, must be clearly pointed out on the feasibility checklist, and should be explained in full detail.

5. Special Characteristic Agreement on drawing

Within the drawing you will find the characteristics identified by the FICOSA Engineering department or by our Final Customer that affect directly either the function or appearance of the finished product, as well as any governmental laws that the final product must fulfil.

It is the supplier's responsibility to assure that the characteristics mentioned are achievable, and that they can be controlled during the serial life of the component.

Any item that is found not feasible must be clearly written in the feasibility checklist and explained in full detail along with any potential suggested changes to make it feasible.

Ficosa identifies the following types of special characteristics:

- The Critical Characteristics (CC) are those for which the "Potential Effect of the Failure" is related to the vehicle Security for the people (also, called "Safety") or to the Legal requirements. These Critical Characteristics can affect one or the other (Safety or Regulation) or both (Safety and Regulation) and any variation of the product (dimensional, material, performance, software or process), could affect in their fulfilment.
- The Significant (SC) and Relevant (RC) Characteristics are those that can directly affect customer satisfaction, in aspects such as fit, function, product assembly and appearance and have a medium to high occurrence
- Special Characteristics must have a special control, typically a statistical process control, however it can also be controlled with a Poka-Yoke or a 100% in process control. Relevant characteristics are only

required to be controlled during the initial approval of the components, once in serial life, it will remain in the control plan but with a normal verification, without the need of statistical control.

6. Logistic & Packaging

The logistics conditions as well as the packaging are elements that can alter the quality and the price of the product. Along with the RFQ, the supplier has to fill an initial proposal for the Logistic Condition Form and the Packaging Definition Form. These documents will be reviewed by the Buyer and the plant, if all is found Ok they will be signed off.

Logistic Condition Form (P-LL-XX/XX-01-A)

This document summarizes all of the costs for transportation and delivery, it contains the following items:

- Packaging cost
- Lead times
- Minimum Stocks
- Delivery conditions (FOB, EXW, DDP, etc)
- Delivery Frequency
- Costs of customs, duty %

Packaging Definition (P-LL-XX/XX-01-B)

The supplier must propose the way the part should be package, otherwise specified. This will include the quantity parts per box, boxes per pallet, type of box, size, weight, etc.

7. Kick Off Meeting

This meeting is held to assure an effective communication between the supplier and FICOSA, identifying potential problems throughout the development of a component.

The main contents of the Kick Off meeting are:

- Explain the function of the part and its interactions with the final product *
- Review of Contacts and project milestones *
- Review the feasibility checklists *
- Review delivery dates expected for each phase
- Assure that the eng. level of information the supplier has is updated
- Establish the APQP of the project *
- Assure how the special characteristics are going to be controlled
- Review any specific testing that the part needs to comply for validation and in serial production
- Confirm annual lay out requirements
- Highlight any Customer specific requirements *
- Plan STA visits to verify 1st off tools, and subsequent productions
- Check all legal and regulation requirements *

During these meetings the supplier can highlight:

- Design optimization of the part:
 - Dimensional
 - Appearance
 - Performance

e.g. weak sections, sharp edges, missing ribs, extra thick sections, material selection, etc.

- Features of the design that can improve manufacture
- Items that can optimize packaging
- Any cost reduction opportunities
- Any lesson learned from other products that can be applied to this design
- Any concern over the special characteristics defined for the component
- Reconfirm of production capacity

It is the supplier's responsibility to recheck and confirm feasibility.

Items * are the only one applicable for standard electronic components.

8. Advance Product Quality Planning (APQP)

In order to be able to fully approve a component a series of deliveries of samples and documentation must be submitted. Each one of the steps are described below:

8.1 Prototypes

Prototypes are used for design validation and should be delivered together with information on basic dimensions and material reports, as well other items agreed on Technical Reviews (Kick of Meetings for prototypes).

8.2 HS1 (Test Tool Parts)

This step is used to verify that the tooling (if applies) is working properly, it will also help identify major changes that need to be done in order to continue with the approval process. There is no requirement to deliver parts from this step.

8.3 HS2 (1st Off Tool Parts)

Provide FICOSA with the necessary parts to do initial checks on the design, and provide the supplier of feedback on the process to implement possible corrections.

The main characteristics and information required of these parts:

- Must be Off Tool parts
- Reworks are allowed on the parts
- List of reworks (if any was done) must be included
- Special Characteristics must be inside of tolerances
- Material used must be the one indicated on the drawing
- Parts can be used for Design Validation (in the case where no prototypes were available)
- Usually injected at the toolmakers house

As established at the KOM and subsequent reviews, before producing these parts, the supplier must inform the STA, to schedule a visit for the trial.

The output for the supplier will be:

- List of modifications to the tool as necessary
- Detect countermeasures to correct non conformities
- Verify parts with checking fixtures
- Feedback from FICOSA on possible tool modifications or corrections

If reworks were performed on the parts, they need to be reported to the STA.

8.4 HS3 (2nd Off Tool Parts)

These parts will be used to review the modifications performed based on the first delivery. The corrections should be based on the feedback from FICOSA plus the ones identified by the supplier.

The main characteristics and information required of this second set of parts are:

- Dimensional must be 100% Ok
- Appearance must be Ok
- Reworks are NOT allowed
- Can be injected at the toolmakers house
- Parameters to produce the parts should be documented

As established at the KOM and subsequent reviews, before producing these parts, the supplier must inform their STA, to schedule a visit for the trial.

The output for the supplier will be:

- Take quick countermeasures to correct non conformities
- Request any drawing change on non-critical measurements
- Verification of the stability of the tool and process
- Receive the Ok to grain from FICOSA if it applies

8.5 HS4 (Parts for Validation; Off tool off Process)

Its purpose is the final verification of the tool, its production capability and appearance approval.

With the internal corrections identified by the supplier, along with the feedback or modifications provided by FICOSA, the final optimization of the parts should be performed. Parts that will come out of this optimization loop must be presented for component validation.

These parts will be taken into account to calculate the supplier performance indicator ISI –Initial Samples Index.

The main characteristics and information required of these parts are:

- Special characteristics must be ok and capable
- Parameters should be final parameters and documented
- The parts should be produced in the final serial conditions
- PPAP documentation should be delivered along with the parts

As a general rule; unless otherwise agreed with the STA; these are the documents that have to be delivered at each one of the steps.

8.6 HS5 (Parts for Approval; Off tool off Process Serial Run)

Its main purpose is to allow the supplier to test out the production method, capacity and capability, by manufacturing parts fully off production tools and process, at mass production speed and quality.

All of the APQP information must be uploaded in the FPSS, and will be validated by the corresponding Ficosa STA

Item	Description	HS2	HS3	HS4	HS5
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Dimensional	Complete dimensional report versus drawing (ballooned drawing to help compare drawing vs. report) 5 parts per cavity must be measured	X*	X		
Material report	Raw material report, should match the material request on the drawing, report cannot be older than 3 months	X	X		
Safety Data Sheet	Raw Material Data Sheet		X		
IMDS	IMDS report should be submitted to the corresponding Ficosa ID. Copy of the submission should be presented		X		
Appearance.- Report	Only to attach if the part needs an appearance approval		X		
Appearance.- Boundary samples	For appearance parts, boundary samples should be presented and agreed (1 set for supplier, 1 set for Ficosa)		X		
Capabilities	Cpk value > 1.33 (CO parts), Ppk value > 1.67 30 values per cavity			X	
Test Results	Test reports according to the specifications mentioned on drawing			X	
Packaging definition	Packaging sheet showing the type of container, arrangement of the parts in the box, type of box, etc.		X		
Identification / Traceability	Identification of the component should be according to the drawing. For electronic catalogue components mandatory check label appearance according manufacturer known standard. There should also be a way to track the production date of the component			X	
Process FMEA	PFMEA should reflect the special characteristics that were given by Ficosa			X	
Control plan	Control plan must reflect the special characteristics mentioned on the drawing It must also mentioned the controls that are to be done during the set up approval of the line			X	
Process flow chart	Flow chart should be aligned with the operations of the PFMEA.			X	
Work instructions	Initial work instructions should include the operations and controls performed during production			X	
Gage description	Gage instructions			X	
R&R studies	study can be either by variables or by attributes			X	
Sub supplier APQP	Only need PSW of subcomponents that are purchased			X	
Maintenance plan	Preventive maintenance plan for the machines/tools involved on the project, showing frequencies and characteristics to be checked.			X	
Use instructions	If any type of special care need to be done when handling the part (assembly, taking out of the box, storage, etc) it must be clearly specified			X	
Process Audit	Must be coordinated with STA, either to make a self audit or audited by the STA				X
Run@Rate	Must be coordinated with STA, either to make a self trial or performed by the STA				X
PSW	Part Submission Warrant			X	
Customer Specific requirements	Ficosa+Customer specific requirements			X	

* With exception of HS2 dimensional reports need to be of minimum 5 parts per cavity, otherwise agreed differently with the STA during the KOM

All of the APQP information must be uploaded in the FPSS, and will be validated by the corresponding Ficosa STA.

Exceptions:

Standard Electronic Components, Catalog Parts and Raw Materials

For these items, validation can be done with a PPAP level 2 (PSW+tec. Specs): PSW + Data sheet (tec. Specs.)+ IMDS + Packing & label definition

For Electronic Components only, part marking information is required. In case of AECQ100x certified components it is required the Certification of design, construction and qualification.

9. Boundary Samples

Their purpose is to establish limits especially on appearance items, when it is difficult to quantify using only the written specifications.

Boundary samples are used to help identify the acceptance limits of a characteristic that is hard to define. This boundary samples can be permanent or can be used temporarily.

- Should be obtained from the production trials performed for parts validation

- These parts should be representative of the process capability
- A minimum of two sets must be identified for each characteristic; one will remain with the supplier and the other with the production plant.
- If boundary samples with sub suppliers are needed, they should follow the same procedure
- Boundary samples must be kept and maintained thru out all of their validation time or until the end of production
- Boundary samples must be clearly identified; part and identification tag must be signed off.

Boundary samples must be identified, tagged and presented to the STA for revision with the production plant and project team.

If they are accepted, they will be signed off. If they are deemed not acceptable, FICOSA will negotiate the boundary sample upon reviewing the process capability

All esthetical parts must have boundary samples.

In case that the part delivered has a grain/colour specification; this must be clearly defined between parties, assuring that a master sample is available during the validation phase of the component for approval and future reference.

10. Product Identification and Traceability

The supplier shall meet with the product identification requirements that are called out on the drawing and with the international standard for identification.

This identification typically covers:

- Part number
- RH / LH identification
- Cavity number
- Date of manufacture (year, month, day, shift, operator, which ever applies)
- Regulation marks that apply

The supplier should have a system that allows to accurately determine the lot size, the material in process stock, in transit and at the customers manufactured on the same date, allowing the supplier to segregate material effectively.

The supplier should also be able to track a component in all of their production stages up to the raw material used. Including parameters, people, production equipment and inspection results.

11. Run @ Rate and Process Audit

Its main purpose is to allow the supplier to test out the production method, capacity and capability, by manufacturing parts fully off production tools and process, at mass production speed and quality.

11.1 Run @ Rate

Besides proving that the production system is capable of producing with the required capacity and quality, this trial should enable the supplier to identify problems or potential problems that could exist before the Start of Production.

This trial should not be only focused on producing parts, it should be used to test the complete manufacturing system, for example, parts per hour, machine downtime and problems, scrap levels, parts flow, material feed, in process quality checks, etc. The trial must take place in the final manufacturing location using final resources and means.

In order to be able to perform a Run @ Rate the following must occur:

- Equipment must be in final location and layout

- Machine Process Parameters should be defined and used
- Production flow must be followed
- Operators must produce the parts (can be under training)
- Team leaders (or equivalent) should supervise the production build
- Checking fixtures available and used
- Material handling and parts feed system being used
- Work instructions defined and in place
- Rejected parts flow defined in the working instructions
- Control Plan implemented

The amount of time the production trial should last is determined between the STA and the supplier, being 2hrs the minimum time allowed.

The STA will evaluate the outcome of the Run @ Rate.

11.2 Process Audit

In addition during the Run @ Rate a process audit will be performed, this can be done at the same time of the Run @ Rate, as a majority of the process audit can be observed during the trial.

The Objective of this Process Audit is to identify weak points that the supplier can have, in order to plan corrective actions before the Start of Production.

The parts produced during this Run @ Rate are used to deliver to Ficosa to make the final test and provide the final approval to the supplier.

On site T2 audit will be mandatory according risk assessment based on #Special Characteristics and supplier SPI.

12. Start Of Production

The supplier shall develop a reinforced control plan prior to the SOP. This control plan should cover the initial 3 months of production, and it should include additional samplings, checks, tests or frequencies to assure that quality issues are contained within the Suppliers facility.

13. Annual Lay-Out

Unless otherwise specified, a complete layout inspection is required. All suppliers must revalidate their respective components and submit the documentation to the production plant and their SQI. The minimum requirements to revalidate are the following:

- Full dimensional report
- Capacity studies on all special characteristics
- Material certificate
- Laboratory Test Reports

Annual lay outs must be presented using the PSW (P-CP-XX/XX-03-N) or supplier equivalent.

Exceptions for Annual Lay Out: Catalogue parts

Annual lay outs must be uploaded in the Ficosa Purchasing System Software.

14. Non Conformity Management

The supplier as well as FICOSA is committed towards a zero-defect goal. FICOSA will set annual targets as interim goals that will be orientated to achieve the zero-defect goal. If the defect rate of a supplier is

below the interim goal, this does not release the Supplier from his responsibilities to correct all non conformities and implement continuous improvement activities.

All of the Non Conformities are managed thru the FPSS.

QCRs are used for quality incidents

DMRs are used for delivery incidents

14.1 Communication

The formal method of communicating a problem from Ficoso to Supplier with the components supplied is through an incident report (QCR/DMR), this communication will come via an email from the FPSS.

Suppliers might receive a non-official QCR/DMR, which is considered as an alert, suppliers are expected to investigate and correct the problem, before it becomes an official QCR/DMR.

In the event that a non conformity with the product being delivered by the supplier is found; regardless of the location (warranty, final customer, production line, product audits, etc) a non conformity will be issued to the correspondent supplier.

14.2 Containment

After notification of the non conformity, the supplier must react with all the necessary actions to protect FICOSA against recurrence of the defect, preventing interruption to the FICOSA production lines.

This actions can be, but are not limited to, replacement of the defective material, sorting of the defective material, reworking the defective material or destroying the material. This can be performed by the supplier itself or a hired third party, and must be agreed with FICOSA within 24hrs of the notification of the non conformity.

These actions should be agreed and documented in the corresponding step in the FPSS

It is important to identify the material in such way that a cut off point can be determined.

In the event that the supplier fails to implement an effective containment, the Supplier might be placed on a Control Shipping status, where an external company (at the Suppliers expenses and approved by FICOSA) will verify 100% of the product for the defective characteristic, until the Supplier has implemented the necessary actions.

14.3 Root Cause and corrective actions

The supplier should use problem solving techniques (brainstorming, 5 Why's, Fish Bone diagrams, DOE, etc) in order to determine the root cause of the problem and the respective corrective actions.

The general timing expected to receive a complete 8D report, with the corrective actions identified, with their respective responsible and due dates is 10 days, unless otherwise is agreed with the production plant.

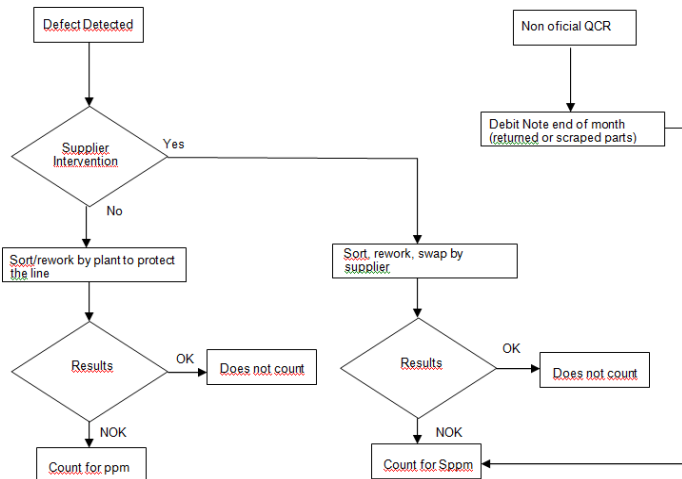
As a guide for the 8D methodology, checklist I-QA-XX/XX-33 can be followed.

The root cause and corrective actions must be documented in the corresponding step in the FPSS, Supplier is encouraged to upload additional files to provide more detailed information.

14.4 Parts per million (ppm)

There will be two types of defective parts that are taken into consideration, ppms and sppms (sorting ppms).

- Ppms affecting the supplier rating.- These are calculated using the actual defective parts that have impacted the production line, our customer, the final user, or found during the incoming inspection. Basically parts that impact before supplier intervention.
- Sppms (Sorting ppms) NOT affecting supplier rating.- These are calculated using the amount of parts that are found after supplier intervention (sorting, rework) and line rejects that do not cause an official QCR (Alerts).



The main difference between ppms & spPpm is the supplier intervention.

15. Change Request

15.1 Process/Product Change Request

If during serial production, the supplier is in need of performing a change to the process or to the product, it must be communicated in written to FICOSA (P-CP-XX/XX-03-E)

The Process Change Request should be filled out for any of the following changes:

- Sub-supplier change
- Manufacturing Location change
- Manufacturing Process (machinery or layout) change
- Material change
- New tool
- Tooling modification
- Design Change of component
- Packaging change

The Process Change Request should be sent at least 60 days before the planned modification date of the change. The reason for the change must be explained in detail in the Change Request format, along with a detail planning of the change.

Changes shall not be implemented prior to receiving written approval from FICOSA.

In the case that the change is approved, it is the supplier's responsibility to continue with the scheduled plan.

Ficosa reserves the right to visit the supplier's facility to verify the status of the change.

15.2 Process/Product Deviation Request

In the event that the supplier finds production problems that force to produce the product in an alternative manner or in cases where a specific characteristic of the component is not being met (material, dimensions, appearance, machinery, rework is needed, etc), a request for deviation must be issued to FICOSA.

This deviation must be addressed to the production plant, prior of sending material that does not comply with the approved parts conditions. The causes of the deviation should be clearly stated.

No material can be shipped prior to receiving written approval from FICOSA I-QA-XX/XX-02-A.

15.3 End Of Life

Supplier must notify FICOSA if a part used into production will no longer be available in the market. Notification must be sent 6 months before End Of Life.

Supplier shall offer a suitable replacement in terms of availability and specification, bearing for the correspondent validation costs. If that point is not possible, supplier shall support a LTB (Last Time Buy) plan to meet project needs.

16. Debit Notes (Chargeback)

Suppliers are liable for all costs incurred by FICOSA, when they are proven to be responsible of the problem that originated the costs.

Listed are some examples of the origin of the costs:

- Production line stoppage
- Customer Charges
- Material sent back from the customer
- Travels of displacing personnel to the customer because of a claim
- Transportation costs of goods
- Retrofits of subassemblies or vehicles

Initially a pre-charge with potential charges that the incident can produce will be sent out via the FPSS.

As soon as the internal costs are computed, a charge notification will be sent out via FPSS. In case that the non-conformity caused economic issues outside of FicosA, all of the corresponding charges will be forwarded on an additional Charge Notification.

Upon receipt the supplier has 10 days to respond to the charge notification either agreeing or rejecting the charge. In the case that the charge is rejected, clear evidence of non-liability must be presented along with the rejection. If no answer is received within that time period, the charge will be executed.

FICOSA must present to the supplier all of the supporting data for the chargeback costs.

17. Key Indicators

FICOSA regularly monitors the performance of its suppliers and evaluates them according to several criteria. The aim of this assessment is to confirm the performance of the suppliers versus the defined targets to determine potential support that the supplier can need from FICOSA and to track the improvement of its supplier panel.

17.1 During development phase

Initial Sample Index (ISI). During the delivery of the HS3 (2nd Off Tool Parts) & HS4 (Parts for validation) there are 3 parameters that will be considered to calculate the metrics.

$$ISI = (Q \times 0,8 + T \times 0,2) \times N$$

- “Q” score for Quality (dimensional, appearance,, assembly results, PPAP quality).
- “T” score for Time delay (in days) between planned date and real date
- “N” score for Number of times the parts have to be presented before being validated as ok

An ISI value is given for each component being developed. The average score of all of the submissions is used to calculate the final score of the metric for a supplier.

Grade A supplier if $ISI > 80$
 Grade B supplier if $80 > ISI > 60$
 Grade C supplier if $60 > IMI$

17.2 During serial production

17.2.1 SPI

Supplier Performance Index (SPI). During serial production, the quality of the components is evaluated. The parameters; and their individual weights; that are used for evaluation are:

Item evaluated	Description	Weight in SPI
ppms	Number of defective parts divided by the total of parts delivered	10%
OEM QCR	Number of complaints at Ficosa´s customer due to suppliers responsibility	30%
Customer QCR	Number of complaints at Ficosa due to suppliers responsibility	15%
Repetitive QCR	Complaints that are recurrent	20%
8D Nok	8D reports not answered, or not answered on time	15%
Warranty PPM;s	PPM,s for warranty Claims	10%

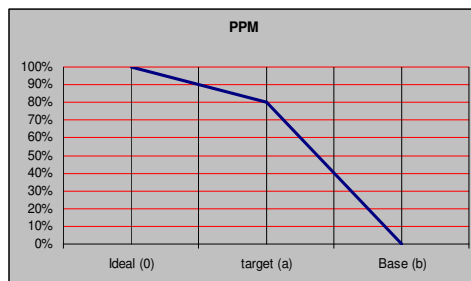
For each one of the items mentioned above, there is a target value(a), a base line value (b) and an ideal value

If you score the ideal value, you will achieve 100% of the total weight of the Item evaluated.

If you score the Target value (a), you will achieve 80% of the total weight of the Item evaluated.

If you score the Base value (b), you will achieve 0% of the total weight of the item evaluated.

Rates are computed according to example for ppm´s below:



Cotation	Value	
100%	0	Ideal (0)
80%	a	target (a)
0%	b	Base (b)

Ideal is 0 ppm

If the Target is 100ppm → a= 100

If the Base is 200ppm → b= 200

Example 1: ppm's equal to Ideal

If the supplier result is 0ppm → Rate = 100%

Example 2: between Ideal and Target
 If the supplier result is 90ppm → **Rate = 82%**

Example 3: between Target and Base
 If the supplier result is 150 ppm → **Rate = 40%**

Example 4: worse than Base
 If the supplier result is 300 ppm → **Rate = 0%**

Rate is given by adding the individual rates, taking into account their relative weight.

- SPI= Rate ppm x 10%**
 + **Rate Ficosa QCR's x 15%**
 + **Rate OEM QCR's x 30%**
 + **Rate Repetitive QCR's x 20%**
 + **Rate 8DNOK x 15%**
 + **Rate Warranty PPM,s x 10%**

The evaluation will provide a final score for the metric of a supplier

- Supplier A : SPI > 80%
- Supplier B : 60% < SPI < 80%
- Supplier C : SPI < 60%

If your monthly score is a “C”, you must submit within 5 business days your action plan, with responsible and deadlines, to reduce/eliminate the causes that deteriorated your performance.

If your monthly score is a “B”, you need to work internally on the causes that deteriorated your performance.

Continuous performance is monitored through Quality status for which following rules apply:

- 2 consecutive months C rated supplier is placed on Business Hold
- While Business Hold, if 4 C rates out of any 6 consecutive months drops to Fix or Leave

Upgrade criteria:

- Fix or Leave: 3 consecutive months with no C score upgrades status to Business Hold
- Business Hold: 3 consecutive months A rated exits Business Hold

Quality Status Examples:

Month	1	2	3	4	5	6	7	8	9	10	11	12
Rate	B	C	C	A	A	A						
Quality Status:	Normal	Normal	B.Hold	B.Hold	B.Hold	Normal						

Month	1	2	3	4	5	6	7	8	9	10	11	12
Rate	B	C	C	B	C	A	C	B	C	C		
Quality Status:	Normal	Normal	B.Hold	B.Hold	B.Hold	B.Hold	B.Hold	B.Hold	B.Hold	Fix or Leave		

Month	1	2	3	4	5	6	7	8	9	10	11	12
Rate	C	B	A	B	A	C	A	A	A			
Quality Status:	Fix or Leave	Fix or Leave	Fix or Leave	B.Hold	B.Hold	B.Hold	B.Hold	B.Hold	Normal			

The SPI Score is available in the FPSS and can be checked at any time. The system refreshes on the 6th day of the month.

17.2.2 SLI

The SLI (Supplier Logistics Index) is a Ficosa global indicator in order to measure the logistics incidences of the suppliers worldwide.

Every month this indicator is obtained through the data that each plant uploads to FPSS system. Each plant therefore gets its own SLI in a monthly basis.

The type of incident of a supplier could be the following:

- **Shipment incidence:** when the supplier does not realize the delivery according to the plant requirement: delivery on time, quantity, documentation and packaging. Also to be imputed when the shipment incidence cause delays for Ficosa, production line stops or other operative deficiencies.
- **Communication incidence:** when the supplier does not send the shipment information (ASN) on time, according to the plant requirement

Global indicator:

- This indicator is calculated considering last 6 months suppliers' score.
- All suppliers have 100 points at the beginning of each month. According to the incidences this score will be somehow reduced.
- Each month result considers the score of the previous 5 months. This calculation is a weighted average where the current month weights 6, the previous one 5, the previous one 4 and so on.
- According to the previous calculation, this indicator will allow us to rate a Supplier as A, B o C at a logistic level.

Supplier C :	$SLI < 80$
Supplier B :	$80 \leq SLI \leq 91$
Supplier A :	$SLI > 91$

- Each supplier is responsible for checking its score in FPSS on a monthly basis.

18. Supplier Audits

A properly functioning quality management system in all areas of the organization is a basic for achieving quality targets. To fulfil with all of the requirements, the supplier must audit its quality management system at regular intervals (at least once per year)

The supplier will allow FICOSA and when necessary its customers, to audit systems, processes and products at previously and appointed times. The supplier will offer support during those audits and provide access to the information necessary to evaluate the quality and performance of the quality system in place.

The Audit questionnaire can be FICOSA's or a customer specific format.

The main reasons to conduct an audit to a supplier are as follows:

- New supplier approval
- Follow up on an incident
- Eliminate or minimize fluctuations on the quality of the products
- Evaluate modifications to the process that can impact the product
- Identify weak points and develop a supplier
- Fulfil customer specific requirements

18. Supplier Development

In the event that FICOSA identifies suppliers that are either jeopardizing the quality of the products delivered to their customers, or a supplier that is in need of development, a task team will be established to intervene in the supplier's facility.

The type of development can be in any areas that may require improvement.

An initial assessment of the situation will be performed using a Process Audit, were with the results an action plan will be agreed and carried out until the objectives that were set are achieved.

19. Fix or Leave Process

A Fix or Leave process is defined as the last step to take with a supplier. Prior to this intervention, normal process audits, face to face meetings, coaching, etc, should have been tried to solve the problematic situation with the supplier.

Once a supplier enters a Fix or Leave process, FICOSA will clearly explain the objective, process and timing that will be followed during this process. The Supplier has to commit to follow this process or will be placed on a phase out status.

20. Anti-counterfeit policy

FICOSA works to ensure that manufactured products present the highest level of quality and reliability. In that sense, FICOSA must avoid the use of counterfeit parts in its products.

The SUPPLIER must:

- Establish a process to detect and report parts that are or are suspected of being counterfeit which may appear in its supply chain
- Ensure that all parts and materials are original and produced by original contracted manufacturer
- Submit any required information/documentation concerning the source of a part or material

21. Risk assessment

Ficosa Purchasing System KPI's (Key performance indicators) evaluates different kind of risks for every process (quality, financial, technical feasibility, timing impact). All risk evaluations are retro-feeding the FPS (Ficosa Purchasing System) process, in all of their sub-processes.

