Quality Assurance Agreement with Software Suppliers

between

Schaeffler supplier no.:

UPIK/DUNS no.:

(hereinafter referred to as the supplier)

and Schaeffler Technologies AG & Co. KG

Industriestraße 1 - 3

91074 Herzogenaurach

Germany

(hereinafter referred to as Schaeffler)

**Preambel**

The competitiveness and position of the Schaeffler Group in the world market is decisively influenced by the quality of its products. The faultless functionality and reliability of purchased software and associated development activities have a direct influence on the quality of the Schaeffler Group's products.

This *Quality Assurance Agreement with Software Suppliers (QSV)* is a binding statement of the fundamental technical and organisational conditions governing all deliveries and services to the Schaeffler Group (i.e. Schaeffler AG and all companies in which Schaeffler AG directly or indirectly holds a majority interest) that are required in order to achieve the joint intended quality objective of "zero defects“. It describes the minimum requirements that are placed on the supplier's quality management system.

The conclusion of this *Quality Assurance Agreement* represents an indispensable step for a future business relationship with the Schaeffler Group.

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# Supplier's responsibility for the quality of his products and services

The supplier is responsible for the faultless functionality and reliability of the software provided by him, in accordance with the technical documents agreed in writing. The supplier must be aware of the requirements placed on the software and their areas of application at Schaeffler. He must check that the documents are complete and correct and, where necessary, request further information from Schaeffler.

The quality strategy of the supplier must be oriented towards continuous improvement of his processes and services, in order to achieve the objective of "zero defects".

If the supplier places orders with subcontractors, he is under obligation to implement the requirements of this *Quality Assurance Agreement with Software Suppliers (QSV)* in relation to his subcontractors.

The supplier also undertakes to meet promised deadlines, e.g. for delivery of intermediate results, test evidence, status reports, patches.

# Quality management system

## General

The supplier must ensure the faultless functionality and reliability of his software in relation to Schaeffler through the use of a suitable quality management system which incorporates the requirements of Automotive SPICE and ISO/IEC 15504 – Part 5. The effectiveness of his quality management system must be verified by means of regular inspections.

## Checking the quality management system and adherence to development processes

Schaeffler has the right to check compliance with Schaeffler requirements at the supplier's premises and, where necessary, with a person appointed by the end customer, during the handling of the project or if quality deficiencies or system weaknesses are identified. Depending on the situation, this check can be carried out in the form of a technical discussion or process assessment (e.g. in accordance with Automotive SPICE or CMMI) and is agreed with the supplier in good time before its planned implementation.

The supplier shall grant Schaeffler access to the relevant areas and permit viewing of the corresponding documents, in accordance with the necessary non-disclosure agreements.

# Evidence of process quality

The supplier should use process assessments as a central tool in the continuous improvement of processes. The purpose of regular process assessments is to verify the quality capability of software development activities. Any subcontractors must also be included in the overall analysis of the process chain.

In order that potential risks can be identified at an early stage and counteracted with appropriate corrective actions, Schaeffler also rates the suppliers with the aid of a process assessment, which the supplier must allow for in the planning of the project. The assessment is subject to a completed development cycle (release).

In order to permit a systematic and reproducible analysis, the process reference model from Automotive SPICETM is used for Automotive suppliers and the process reference model from ISO/IEC 15504 Part 5 is used for suppliers from all other sectors. During a process assessment conducted by Schaeffler at the supplier's premises, or a self-assessment conducted by the supplier, the processes listed in the following table must be rated:

|  |  |
| --- | --- |
| Automotive (in accordance with Automotive SPICE PAM[[1]](#footnote-1)) | Other sectors (in accordance with ISO/IEC 15504-5[[2]](#footnote-2)) |
| MAN.3 Projektmanagement | MAN.3 Project Management |
| ACQ.4 Lieferanten-Monitoring[[3]](#footnote-3) | ACQ.4 Supplier Monitoring3 |
| ENG.2 Systemanforderungsanalyse\* | ENG.2 System Requirements Analysis\* |
| ENG.3 Entwurf der Systemarchitektur\* | ENG.3 System Architectural Design\* |
| ENG.4 Softwareanforderungsanalyse | ENG.4 Software Requirements Analysis |
| ENG.5 Entwurf des Softwaredesigns | ENG.5 Software Design |
| ENG.6 Softwareerstellung | ENG.6 Software Construction |
| ENG.7 Softwareintegrationstest | ENG.7 Software Integration |
| ENG.8 Softwaretest | ENG.8 Software Testing |
| ENG.9 Systemintegrationstest\* | ENG.9 System Integration\* |
| ENG.10 Systemtest\* | ENG.10 System Testing\* |
| SUP.1 Qualitätssicherung | SUP.1 Quality Assurance |
| SUP.8 Konfigurationsmanagement | SUP.2 Configuration Management |
| SUP.9 Problemlösungsmanagement | SUP.9 Problem Resolution Management |
| SUP.10 Änderungsmanagement | SUP.10 Change Request Management |

The supplier classification is conducted on the basis of these processes for assessment in accordance with Appendix 1.   
The results of the process assessments are to be presented in accordance with Appendix 2.

In the event of an A classification, the identified discrepancies must be remedied autonomously.

In the event of a B or C classification, the supplier must submit a program for improvement to the Project responsible person from Schaeffler for approval, complete with measures, responsible persons and dates. The supplier must also conduct a self-assessment, to verify the effectiveness of the measures taken, and communicate the results of the self-assessment to Schaeffler.

# Software in the context of Functional Safety

Depending on the application and corresponding contractual statement with Schaeffler, internationally valid standards must be taken into account for software development activities conducted in the context of functional safety. In particular, these standards include ISO 26262 "Road Vehicles" and ISO 13849 "Safety of machinery – Safety-related parts of control systems", as well as IEC 61508 "Functional safety of electrical/ electronic/ programmable electronic safety-related systems", which does not relate to a specific sector.

# Term

This *Quality Assurance Agreement*is effective once it has been signed by both contract parties and is valid for an indefinite period. It applies to the full extent of the business relationship between the contract parties involved.

# Termination

The *Quality Assurance Agreement* may be terminated in writing with twelve months notice if notice is submitted by the end of the month.

The termination of this agreement has no effect on the continued validity of any agreements made between the contract parties under the scope of this *Quality Assurance Agreement*. The conditions of this agreement will continue to apply to such agreements.

# General

* Any changes and additions to the agreement must be given in writing.
* The contractual relationship is governed by German law, excluding its conflict of law rules. The competent court of jurisdiction is Nuremberg, Germany. However, the customer is also entitled to file an action against the supplier at another competent court.
* If a contractual provision is or becomes ineffective, the validity of other provisions will remain unaffected.

The contract parties commit themselves, in good faith and within the scope of what is reasonable, to replace ineffective provisions with effective regulations which have an economic result equivalent to the original provisions.

# Appendices

The following appendices to the current version are an integral part of the *Quality Assurance Agreement with Software Suppliers*:

Appendix 1 Conducting and rating the process assessment

Appendix 2 Process assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Supplier** | | |  | **Customer** | | |
|  | | |  | Schaeffler Technologies AG & Co. KG. | | |
| Supplier name | | |  |  | | |
|  | | |  |  | | |
| Schaeffler supplier no. | | |  |  | | |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Place |  | Date |  | Place |  | Date |
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|  |  |  |  |  |  |  |
| Name |  | Signature |  | Name |  | Signature, Purchasing |
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|  |  |  |  |  |  |  |
| Name |  | Signature |  | Name |  | Signature, Quality |

1. Version V2.5 dated 2010-05-10 [↑](#footnote-ref-1)
2. First edition, 2006-03-01 [↑](#footnote-ref-2)
3. only relevant if subcontractors are used

   \* only relevant if the software is being developed as a constituent part of a system / a component [↑](#footnote-ref-3)