

Feasibility Commitment for Supplier

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www.siemens.com/bt-supplier

ISO 9001:2015 → section 8.2.3

Feasibility review required based on ISO 9001

8.2.3 Überprüfung der Anforderungen für Produkte und Dienstleistungen

8.2.3.1 Die Organisation muss sicherstellen, dass sie die Fähigkeit besitzt, die Anforderungen an die Produkte und Dienstleistungen, die Kunden angeboten werden, zu erfüllen. Die Organisation muss, bevor sie eine Verpflichtung eingeht, ein Produkt an einen Kunden zu liefern oder eine Dienstleistung für einen Kunden zu erbringen, eine Überprüfung durchführen, die Folgendes einschließt:

a) die vom Kunden festgelegten Anforderungen,

8.2.3 Review of the requirements for products and services

8.2.3.1 The organization shall ensure that it has the ability to meet the requirements for products and services to be offered to customers. The organization shall conduct a review before committing to supply products and services to a customer, to include:

a) requirements specified by the customer

Feasibility Considerations for Suppliers:

Please perform the required feasibility evaluation for your quotation, including but not limited the following questions. Use your prior knowledge and experience as well as any drawings and / or specifications provided as a basis for analyzing the ability to meet all specified requirements.

All "NO" answers shall be supported with attached comments identifying concerns and / or proposed changes to meet the specified requirements.

If required, all ambiguous technical requirements, specifications etc. shall be clarified with the respective BT (Building Technologies) representative.

Siemens BT expects in this early stage of the project from potential suppliers pro-active proposals to produce/ manufacture the component/ product with higher quality, shorter lead time or reduced costs.

All the following requirements are based on **ISO9001:2015 (Chapter 8.2.3)** and need to be verified and sent to Siemens on each specification revision.

Siemens target is the avoidance of LoDS (List of declarable substances) substance even if not legally restricted

Feasibility Commitment

Feasibility Commitment is required by ISO 9001:2015 → 8.2.3

- The supplier has to do this for each quote and each new revision or new index
- Siemens only expect from Supplier to submit his evaluation

Pre-condition

- Specification needs serial conditions

Objectives

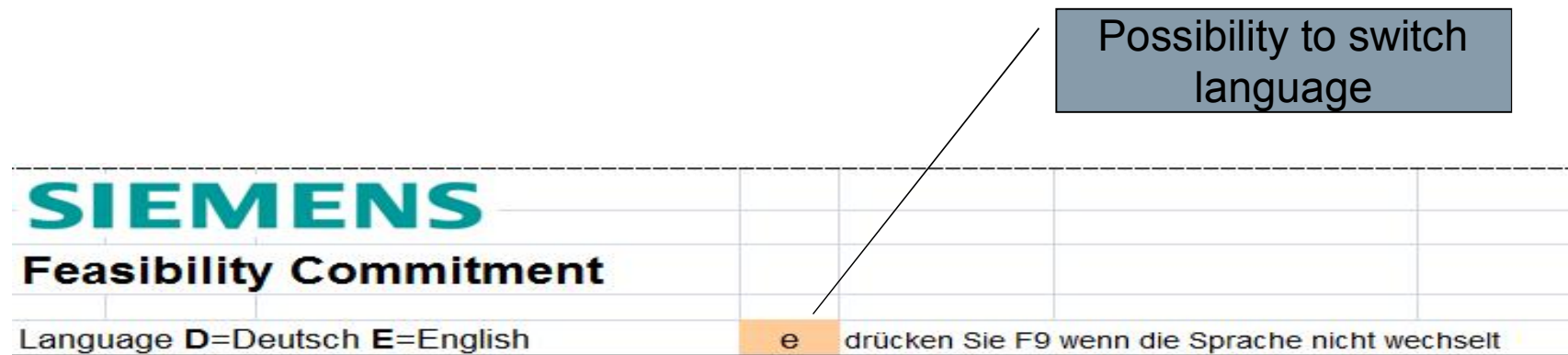
- To ensure that all requirements are understood
- Enhance pro-activeness from the supplier (also for discussions with Siemens R&D)
- Receive the basic milestones from the supplier
- Receive proposals from the supplier in the early stages to avoid costs and quality problems
- Receive qualified input for the supplier pre-selection for the Siemens sourcing committee

“NO” answers

- All “NO” answers shall be supported with attached comments identifying concerns and / or proposed changes to meet the specified requirements
- A “NO” answer **does not** mean that supplier can **not** be considered!

Content Feasibility Commitment

General



Content Feasibility Commitment

General (to be completed by supplier)

Supplier:		Suppliers Name	Date of drawing release:		Date of first release of specification Document
Part name:		see requested specification	Drawing Number:		Complete drawing number
Project:			Index / DS:		
			Revision:		
			Specification Document:		
		Project or part project name			Index, DS or Revision given
					Drawing, Tech Specs, Datasheet,...

Feasibility Commitment - Questions

No.	Items	YES	NO
1	Is it feasible to supply the product/component considering the required volumes with regard to...		
1.1	... all dimensions on the drawing?		
1.2	... all given tolerances (incl. form, orientation and location tolerance)?		
1.3	... all critical and important characteristics?		
1.4	... all other requirements according to the specifications (delivery specifications, product requirements, product characteristics, packaging, labelling, additional text on drawings, ...)?		
1.5	... is the material declaration according the Siemens LoDS (LoDS - List of declarable substances – all SVHC need to be declared in BOMcheck https://www.BOMcheck.net)		

Core questions!

Technology (specifications) / Time - Quantity / Material declaration

2	Feasibility according all required process capabilities (Cpk-values) ensured? (marked characteristics with <S> or <C>) SPC, Cmk, Ppk ≥ 1.67 short term / Cpk ≥ 1.33 long term (detailed analysis in FAIR Special Characteristics List requested) If there are DPM or PPM targets given by GQA or QRS: Are the DPM or PPM rates achievable?		
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Consideration of

- Serial production capability and available experience of the supplier
- For production lot sizes < 5000 long term capabilities may be not possible/ required
- In case a process capability cannot be ensured or is not practicable, the supplier should describe how the product conformity will be ensured (e.g. 100% inspection, SPC with more severe control limits, ...).

Feasibility Commitment - Questions

3	FAIR requirements recieved, understood, confirmed and included into quotation to Siemens.		
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FAIR requirement

- Received
- Understood
- Confirmed
- Included into quotation

FAIR - Requirement form		
Template for FAIR planning and reporting		
Choose submission level:	Submission	Remarks
	1	Full documentation
Cover sheet / IPSW	YES	needs to be ALWAYS submitted
Samples (Quantity as agreed upon)		
Machined components: ___ samples of which ___ samples parts individually measured	TBD	
Tool related components: ___ samples of which ___ part per tool and mould cavity individually measured	TBD	
50 consecutively produced/ assembled products (per mould and cavity)	TBD	
Test results		
Dimensional Results (Result sheet)	YES	
Validation and qualification results per the technical specification (as applicable)	TBD	
Functional test results (as required based on the product specification)	TBD	
Short term Capability studies/ results (Cmk/ Ppk >= 1.67) for special characteristics	YES	
Measurements system studies (MSA)	YES	
Engineering Documents		
Technical drawing with individual numbered characteristics (using original Customer drawing)	YES	
Technical specifications with individual numbered verified characteristics	YES	
Supplier Specifications/ Drawings (for design responsible supplier only)	TBD	
Engineering changes/ Change Log	YES	
Process FMEA	YES	
Packaging instruction	YES	
Process Flow Chart	YES	
Supplier Component Quality Plan (SCQP)	YES	
Certificate of (legal) requirements met		
LoDS "List of declarable substances" for Environmentally-friendly products, prohibitions & avoidance lists (www.siemens.com/lods)	YES	
Material properties/ certificates (if not otherwise agreed, EN 10204 3.1)	TBD	
Supplier declaration of conformity (based on ISO/IEC 17050-2)	TBD	A "YES" indication means the supplier is obliged to submit a declaration per serial delivery
Legal Requirements fulfilled (i.e. UL, CE, VDE etc.)	TBD	
Surface Treatments	TBD	

First article inspection report and respective initial sample parts for the attestation of:

Confirmation of the Project Team:

Engineering Representative/ Department/ Date	Quality Representative/ Department/ Date
Manufacturing Representative/ Department/ Date	PM (PL) / Date (as required)

Feasibility Commitment - Questions

4	Are there or have there been similar products / components in production? Is the production of the requested specification an established process?		
5	Is there a quality concept (prevention oriented quality planning) to realize the requirements based on the specifications also under consideration of the zero-defect approach (see also GQA or QAA)?		

Quality planning to prevent problems from occurring

- i.e. Risk evaluations and measures
- i.e transparent project planning
- Inspection concepts (Poka Yoke/ 100% functional tests etc.)

Message: Supplier need to consider a concept for Quality in his planning/ quotation!

6	Is the traceability for the product / component given? (date code, data matrix, serial number, ...)		
7	Does the planned packaging design ensure that the products / components can be packed and transported, so that no damages occur during shipping, stacking or handling?		

Logistics aspects need to be considered by the supplier

- Traceability/ Delivery/ Packaging
- Supplier is responsible to consider logistics aspects in his planning and quotation/ price

Feasibility Commitment - Questions

8	Can the product / component be manufactured without additional costs for equipment, tooling or measurement equipment? (If "NO" all the additional needed equipment needs to be offered separately)		
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Additional Equipment needed

- If some special equipment is needed to produce the product / component , supplier needs to offer this separately including the lead time!

Feasibility Commitment - Questions

9	Can the product / component be measured and evaluated (usage of correct measurement equipment with the required accuracy)?		
9.1	Will a verification of the measuring tool ability be generated (measurement system analysis)?		

Measurement System

- All specifications are important as they are part of the specification
- Supplier need to be able and is responsible to evaluate **ALL** specification requirements
- Accuracy and capability need to be ensured
- Restriction (i.e. Siemens will evaluate and measure) need to be documented and form part of the specification/ contract

Feasibility Commitment - Questions

10	Is the required capacity for production of the specified product / component available (required space for manufacturing, equipment, personal and capital)?		
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Capacity

- Unusual manufacturing methods – technology, equipment, tooling which are currently not in the scope of the supplier – where he has no or little experience

11	Can all necessary sub-components / raw materials be purchased from existing, approved suppliers?		
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- Sub – Supplier Management
 - Supplier has the full responsibility for his supply chain

Feasibility Commitment - Questions

12	Will a risk assessment be made for the product/component (dFMEA)?		
13	Will a risk assessment be made for the production process (pFMEA)?		

- Risk management → i.e. FMEA (Failure Mode Effect Analysis)
 - Supplier has the responsibility to evaluate the risk which is related to the service he may supply
 - **Product Risk** (for design responsible supplier) Question 12
 - **Process Risk** Question 13
 - NO answer (for 12) possible as no tool is involved and / or Siemens is responsible for the design

Feasibility Commitment - Questions

14	Will the project planning be met as stated and will a conclusive planning process for product / component realization, including necessary quality planning be applied? (fill out / see page 2)		
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Project Planning

- Project Plan required covering the complete realization process
- Timing/ Resources/ Capital/ Investment Responsibilities/ Milestones/ Quality Review points

15	Will a product / design verification / validation be carried out?		
16	Will a process verification / validation be carried out?		

▪ Validation

- Q15 → For supplier with design responsibility and / or “system supplier”
 - i.e. Life time test
- Q15 → **NO** answer possible → for supplier without any design responsibility
 - (e.g. ASIC designed by Siemens)

Feasibility Commitment - Questions

17	Have all customer specific requirements / specifications been considered? i.e. GQA - Global Quality Agreement; Logistic - labelling requirements;		
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Emphasize on all customer requirements

- Project, safety and general information need to be considered
- Supplier need to document all requirements considered

Feasibility Commitment - Conclusion

Conclusion: (please select one of the following options)		
	feasible	Product / component can be manufactured in time as specified
	feasible under conditions	Changes / actions required (see attachements)
	not feasible	Product / component cannot be manufactured

Supplier need to document conclusion

- If conclusion is “feasible” and the result meets BT expectations, supplier is **released** for sourcing decision
- If conclusion is “feasible under conditions” BT has to adjust specification / technology or supplier is **not released** for sourcing decision
- If conclusion is “not feasible” supplier is **not released** for sourcing decision

Feasibility Commitment – Basic Timeline

Emphasize on lead time for serial production!

- The lead time need to fit our BT project needs!

Basic Timeline – Key Milestones with Lead time if not already mentioned in the offer				
Total Project Lead-time			Lead-time in weeks:	
(Availability of serial production material in serial quantity and quality)				
Key Milestones				
1.	Product Design and Development (if required)			
	◆	Design Release	Lead-time in weeks:	
2.	Process Design and Development			
	◆	Release of production / process concept	Lead-time in weeks:	
	◆	Order and release of new tooling / equipment	Lead-time in weeks:	
	◆	Availability of series parts	Lead-time in weeks:	
3.	Logistics			
	◆	Definition and release of logistics/ packaging concept	Lead-time in weeks:	
4.	Production/ Component/ Process Release			
	◆	Process Sign-Off / Capacity and capabilities	Lead-time in weeks:	
	◆	Initial sample submission / Initial sample approval	Lead-time in weeks:	

Feasibility Commitment - Confirmation

Interdisciplinary confirmation of the Supplier's Project Team:

Supplier Representative Sales / Date

Supplier Representative Quality / Date

Not only Sales!

Supplier Representative R&D / Date

Supplier Representative Production / Date

Interdisciplinary confirmation of the Siemens Project Team:

Siemens BT Approval SQE / Date

Siemens BT Approval R&D / Date

(Siemens BT Approval LOG / Date)

(Siemens BT Approval APE or Proc / Date)

Feasibility Commitment - Feedback

- Supplier shall provide feedback regarding critical and significant characteristics
 - Based on specification requirements
 - Based on the supplier proposal
 - SPC/ Capability requirements
 - Inputs into FAIR Document Special Characteristics List

Detailed feasibility analysis for critical and significant characteristic according proposal
of the supplier and/ or based on specification

--> **Please fill out our FAIR Special Characteristics List**

<http://www.siemens.com/bt-supplier>

Questions



**Go directly to your
Procurement or Quality
responsible people**



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