

Specification of work: the basis for binding purchase and supply contracts

The specification of work (Leistungsbeschreibung) defines in binding terms which services, deliveries or construction works a supplier must render, and in what quality, quantity and within what deadline. It is the central steering document between the purchase requisition, the offer and the contract, and forms the basis for bid comparison, award and acceptance. The more precisely it is worded, the lower the risks of change orders, disputes and additional costs in the procurement process.

Key facts

- The specification of work describes the nature, scope, quality and conditions of the performance to be procured and forms part of the contract.
- The basic forms are the descriptive (functional) and the determining (detailed) specification of work.
- In the construction and plant engineering sector, the bill of quantities (LV) is the typical practical implementation.
- Clear specifications of work typically reduce change-order and change risks considerably and improve the comparability of offers.
- In cross-border procurement, the limits of the specification of work, Incoterms and topics such as customs clearance and certificates of origin must also be considered.
- Unclear or contradictory specifications of work are one of the most common causes of supply conflicts and additional costs in procurement.

Definition: specification of work

The specification of work is a document that bindingly defines the scope of a performance to be rendered – i.e. a delivery, service or construction/manufacturing work. It generally comprises requirements regarding technology, quality, quantity, deadlines, interfaces, documentation and acceptance.

Distinction from specification and solution proposal (Pflichtenheft)

The term is often used synonymously with 'specification', but it has a broader focus: the specification typically describes the technical properties of a product, whereas the specification of work additionally maps organisational, logistical and contractual requirements. A solution proposal document (Pflichtenheft), by contrast, documents how a supplier intends to solve a particular task and is usually only produced after the enquiry. In practice, the specification of work can combine both levels: it references valid specifications and standards and supplements them with process and contractual requirements.

Legal classification

In contractual terms, the specification of work is regarded as the basis of the obligation: it defines what

constitutes performance of the contract and serves as the interpretive benchmark in disputes. Errors in the specification of work can lead to warranty issues, change orders or even the invalidity of individual agreements. Public sector customers must also observe procurement law requirements, for example on transparent and non-discriminatory wording. As the legal assessment depends heavily on the individual case, the binding version should always be reviewed contractually.

Types of specification of work: descriptive, determining and functional

The choice of description type determines who bears the technical risk and the design latitude. Buyers should choose the form deliberately and make it transparent to suppliers in competitive participation.

Determining specification of work

The determining specification of work stipulates exactly, item by item: material, dimensions, processes, tolerances, scope of inspection. The customer bears the planning and technical risk; the contractor must implement the specifications within the scope of construction and works performance. This form is suitable for standard parts, series components and situations where interchangeability with existing plants or manufacturing processes must be ensured. Disadvantages are the high drafting effort and limited supplier innovation.

Descriptive and functional specification of work

The descriptive specification of work prescribes properties and processes without anticipating the solution; the functional variant describes only the objective, such as an availability, throughput or service life. With this form, the planning risk passes partly or entirely to the contractor, who renders the essential planning services. This form encourages supplier solutions and fits well with innovation management in procurement. A prerequisite is a clear requirements-specification logic with measurable acceptance criteria, otherwise interpretation conflicts loom.

Structure and methods: creating the specification of work in practice

A robust specification of work follows a systematic structure and is ideally drawn up on an interdisciplinary basis – involving engineering, quality, logistics and procurement. It usually evolves from a requirements specification (Lastenheft) and is sent to suppliers as part of the request for quotation.

Typical structure

A structure with the following building blocks has proven its worth: subject matter and scope of the performance, technical requirements and standards, quality and inspection requirements, quantities and delivery date, packaging and transport, documentation, acceptance and settlement terms, and warranty. For international procurement, rules on Incoterms, customs clearance, origin preference and supplier ESG requirements are added. Every requirement should be worded verifiably – 'good quality' is not a requirement, but 'restraint limit according to the in-house materials catalogue' is.

Descriptive vs. normative wording

Experienced buyers use a hybrid form: core requirements are formulated as mandatory services (must), optional elements as optional services (may), and suggestions are clearly marked as such.

Contradictions between text, drawings and standard references must be ruled out; it is common to establish an order of precedence stating which document applies if conflicts arise. Changes are processed formally via change orders with price and schedule impact – this keeps contract compliance between the contract and the actual performance measurable.

Key KPIs and inspection methods relating to the specification of work

The quality of a specification of work only becomes apparent in its implementation. Metrics and systematic reviews help identify gaps early and evaluate supplier performance objectively.

Metrics for change-order and quality risks

Key metrics are the change-order rate (proportion of orders with changes compared with the base contract), the proportion of changes attributable to an unclear specification of work, and the first-time acceptance rate without complaints. In supplier evaluation, the supplier scorecard reflects whether agreed requirements regarding deadline, quantity and quality are permanently met. A high three-way-match rate shows that purchase order, goods receipt and invoice match the described performance.

Inspection and acceptance processes

Before award, the bid review takes place: does the offer fully match the specification of work, or do scope, alternatives and assumptions deviate? During ongoing supply, goods receipt relies on defined inspection characteristics and documentation requirements; with partial deliveries and residual quantities, the contract scope is tracked via open items. For complex performances, a protocol of acceptance with documented defects and deadlines is standard – it is typically only acceptance that marks the transition to the warranty phase.

Risks, controls and contractual safeguards

The most common problems arise from incompleteness, contradictions and a lack of change discipline. Controls and safeguards reduce these risks systematically.

Typical risks

Incomplete information leads to queries, delays and subsequent price pressure; contradictory requirements lead to disputes over interpretation; overly narrow market restrictions restrict competitive participation or are discriminatory. For services from third countries, customs and compliance risks are added, for example incorrect origin statements despite a valid origin preference. Trust protection must also be regulated: confidentiality agreements protect the documents submitted that form the basis of the specification of work.

Controls and safeguards

Proven measures include a four-eyes review of the specification of work before dispatch, an obligation on suppliers to state reservations and deviations, and a formalised change management process. Financial safeguards such as bank guarantees or suretyships (e.g. for advance payments or contract performance) and suitable transport insurance mitigate risks from payment and logistics processes. With payments based on progress, a regulated interim payment is linked to objectively verifiable progress of work. Legal details should always be reviewed on a case-by-case basis – ideally with legal experts.

Current developments: digitalisation, sustainability and global supply chains

Specifications of work are changing as a result of digitalised procurement processes, stricter sustainability requirements and increasingly global, complex supply chains.

Digitalised and data-based specifications of work

Digital procurement platforms enable structured, machine-readable specifications of work with reference templates, catalogues and standard modules. Catalogue-based procurement requires that item and performance data are maintained consistently – catalogue restrictions (catalogue compliance) on the supplier side ensure that only defined items can be ordered. Structured templates significantly reduce drafting effort and greatly increase the comparability of offers.

Sustainability and supply chain due diligence

Many companies are increasingly anchoring ESG requirements – for example on the origin of raw materials, working conditions, emissions data or take-back obligations – directly in the specification of work. Where violations are identified, they often demand a supplier ESG improvement plan with defined milestones. Regulatory pressure is increasing, among other things, due to the Corporate Sustainability Due Diligence Directive (CSDDD); the specific obligations depend on size classes, sectors and the implementation by the EU legislator and must be examined on a case-by-case basis. Procurement models such as toll manufacturing – in which the customer provides the material and specification – also shift requirements onto process and plant contracts and require particularly precise specifications of work.

Typical metrics

Change-order rate: < 5 %

Proportion of orders with changes compared with the base contract; typical benchmark for well-run projects

First-time acceptance rate: > 95 %

Proportion of acceptances without complaints at first inspection

Three-way-match rate: > 98 %

Agreement of purchase order, goods receipt and invoice with the described performance

Proportion of fully priced line items: > 90 %

Proportion of bill-of-quantities line items without queries regarding pricing

Practical example

A medium-sized mechanical engineering company awarded the manufacture of complex welded assemblies to a new supplier. The originally brief specification of work led to multiple queries, deviating angular and surface tolerances and ultimately to change orders worth several per cent of the order volume. The company fundamentally revised the specification of work and thereby permanently consolidated the collaboration.

- Introduction of a standardised bill-of-quantities template with mandatory information on tolerances, inspection stages and documentation before every requisition
- Establishment of a four-eyes review by design engineering and quality management before sending the requisition

- Inclusion of reservation obligations for suppliers and a formal change management process with price/schedule impact quantification
- Integration of the specification of work into the supplier scorecard and linking of interim payments to verified progress of work

Conclusion

The specification of work is more than a drafting document: it steers offers, contracts, acceptance and the entire transaction processing, and decides whether procurement projects remain plannable. Its quality depends on a clear structure, verifiable requirements and a deliberate choice between a determining and a functional description. Complementary controls such as bid review, change management and metrics on the change-order rate ensure implementation. Those who maintain and digitalise specifications of work systematically reduce dispute costs and sustainably improve their supplier base. The effort is almost always worthwhile in practice – especially for complex, multi-stage or international procurement.

Frequently asked questions

What belongs in a specification of work (Leistungsbeschreibung)?

Typically it includes the scope and nature of the performance, technical requirements and standards, quality and inspection characteristics, quantities and deadlines, packaging, transport and Incoterms, documentation obligations, and acceptance and payment terms. In international procurement, information on customs clearance, certificates of origin and compliance requirements is added. It is important that every requirement is formulated in a verifiable and consistent manner.

What is the difference between a specification of work and a bill of quantities?

The bill of quantities (Leistungsverzeichnis) is the practical, usually item-by-item implementation of the specification of work, especially in construction and plant projects. The specification of work is the overarching term for the entire binding description of the performance to be rendered. In practice, the two terms are often used synonymously, with the bill of quantities providing the calculable detailed structure.

When is a determining specification of work sensible, and when a descriptive one?

Determining descriptions are suitable where the customer wants to bear the planning and technical risk itself, for example with replacement parts or close interfaces to existing plants. Descriptive or functional descriptions fit when supplier solution expertise is desired and the technical risk is to pass to the contractor. The choice should be made deliberately and secured contractually as to who bears which risk.

Who bears the risk for errors in the specification of work?

As a rule, the party who caused the incorrect statement bears the risk – usually the customer if it specifies planning and specification services. With functional or descriptive specifications of work, parts of the planning risk pass to the contractor. The contractual allocation should be regulated explicitly; in the event of a dispute, a legal review is required on a case-by-case basis.

How should procurement handle changes to the specification of work?

Changes should be made exclusively through formalised change orders with documented price and schedule impact. The basis is a clear change management process that records and evaluates every

deviation from the original specification of work. This keeps contract compliance between the contract and the work performed measurable and allows the change-order rate to be controlled.

What role does the specification of work play in public tenders?

Under public procurement law, the specification of work must be transparent, complete and non-discriminatory so that genuine competitive participation can take place. Brand or manufacturer specifications are only permissible under narrow conditions, for example where an indispensable functional or compatibility reason exists. Drafting errors can trigger review proceedings and delays; in case of doubt, procedural legal advice is recommended here.