

- ▶ The requirements of the contract may be misinterpreted or interpreted differently by the suppliers.
- ▶ The tenders submitted may not be satisfactory (in terms of quality, etc.).
- ▶ There may be difficulties in the evaluation of tenders.
- ▶ The tenders submitted may contain wrong or unsuitable materials or services.
- ▶ The best value for money may not be achieved.
- ▶ Significant costs and/or losses may be incurred.
- ▶ Delays, non-implementation, or non-completion of the contract may be caused.
- ▶ There may be negative publicity, damaging the public image of the project owner.

To avoid the above and to ensure achievement of the aims of the contract, it is imperative (and, where not obligatory, it is strongly recommended) to determine the technical specifications by using relevant standardized texts (of European, international, or national technical specifications). Such texts ensure the following:

- ▶ Completeness in the description of the requirements.
- ▶ Exact wording of the requirements.
- ▶ Compatibility of the relevant documents and, consequently, ease of integration of the wording of the requirements.
- ▶ Correct measurement of the work done, and full determination of the responsibility of the party to implement the contract.
- ▶ Savings in effort.

Buyers should first conduct a search for definitions of their requirements in relevant standards and definitions used by professional institutes (national, European, international), and only undertake to develop their own technical specification text if no such text is available.

## A.5 Developing Technical Specifications

The contents that follow are organized as follows:

- ▶ An introduction presents the technical specifications which follow in the text, also describing their purpose and structure.
- ▶ Mention is made of what to be included or not in the technical specifications.
- ▶ A list is given, in order of precedence, of the specifications/standards to be used in the case of activities, resources, or results of the contract which are not covered by the technical specifications presented next.
- ▶ Reference is made to constraints (mandatory collaborations/synergies, time constraints, etc.) and to the allocation of responsibility to the contractor in connection with the application of the technical specifications.
- ▶ Special issues – clarifications are presented, to facilitate the understanding of the technical specifications presented next.

To avoid complications or financial claims from the part of the contractor, the introduction of the technical specifications may also contain certain provisions, such as the following examples:

- ▶ “If a candidate economic operator finds out that a specific term of the technical specifications deviates from legislation, it must inform to this effect the contracting authority within the deadline expiring on the date specified for the submission of comments, questions or recommendations, by special letter, otherwise such candidate economic operator:
  - Shall be deprived of the right to any financial compensation.
  - If appointed Contractor, it shall additionally be obliged to join forces with the contracting authority in the harmonization of the deviating term with the national or community legislation, even if this entails the economic operator incurring a financial burden, as such financial burden (if any) is assumed to be part of the normal business risk.”
- ▶ “Regarding any material, activity, construction, quality control, etc., not covered by the mandatory national regulations/specifications/codes, and the present technical specifications, the following shall apply, in order of precedence:
  - National standards transposing European standards.
  - The European technical approvals.
  - The common technical specifications.
  - The international standards.
  - The national standards, technical approvals and technical specifications (not contrary to the community legislation and the present technical specifications).”
- ▶ “Every participant in the tender procedure and, consequently, the contractor, acknowledges, by the mere submission of its tender, that the technical specifications provided are suitable and adequate for the performance of the contract scope, and that it undertakes any obligation, risk or consequence deriving from their application.”
- ▶ “All expenses for the application of the technical specifications and of the associated and/or referenced regulations/codes/specifications shall be borne by the contractor, regardless of whether or not a relevant explicit statement to this effect is made. The contractor shall not bear the expenses for a particular activity only if an explicit and undisputable statement to the contrary is made in a relevant article of the technical specifications.”

## Checklist for the Approval of the Technical Specifications

The checklist given below is intended to guide the competent officials of contracting authorities in identifying the items to be checked before approving the technical specifications for a contract.

The text of the technical specifications should be free from the following:

- Overestimates of the requirements or use of terms such as the highest possible quality, except if necessary, because this raises costs excessively.
- “Casual” terminology, which could lead to vagueness and, later on, to potential areas of future disputes (e.g., the use of words like usually, regularly, or day, week, or month without defining whether these are working days, weeks, or months, or elapsed time, and whose time zones and working hours apply – the customer’s or the supplier’s).
- Over-specification of characteristics that do not serve user needs and are not necessary to fulfill user requirements leading to cost increases and stifling innovation.
- Elements that diminish competition or lead to discriminations, or that favor (or, conversely, restrict) certain economic operators.
- Inconsistencies between the technical specifications and the other tender documents, including the general conditions of contract.
- References to names of suppliers/materials, etc., except if necessary, and then always accompanied by the words “or equivalent.”
- The requirement for candidate economic operators to be certified or be registered with specific environmental management schemes (e.g., ISO 14000, EMAS) or be registered with a specific eco-label management scheme, except if provision has been made for some other equivalent or for the use of other means as evidence.

### A.5.1 Technical Requirements (Technical Specifications)

This part – which is the main body of the technical ITT – contains only the detailed technical specifications, which the supplier must apply. Any other references, referrals, etc., should be listed in another chapter (usually in the introduction).

The technical specifications are structured in subchapters that distinguish the technical specifications of the expected results, the required activities, and the necessary resources (when the latter are not included in the specifications of activities). Within each subchapter, the requirement modules that correspond to the individual components of the contract scope are presented separately, so that they may be easily located and taken into account during the preparation of the tenders as well as during the implementation of the contract. In every such section, the technical specifications that satisfy the respective requirements are mentioned.

The quality of the technical specifications is a very important element which must be checked by the contracting authority before the contract is put out to tender. Remember that a complex ITT could take several months in gestation, in which time technology that was initially current may become obsolescent or obsolete.

## A.5.2 Instructions for Developing a Technical Specification

The text of a technical specification should comprise the following:

### Introduction

The Introduction presents the purpose of the technical specification and the way in which it was composed, as well as any conditions that restrict its application.

### Main Body (text)

The structure of the technical specification must be as close as possible to the structure of the other specifications in use in the country.

The contents of a technical specification usually include the following:

- ▶ Description of its scope.
- ▶ Inputs used (raw materials, methods, labor, etc.) and the criteria for their acceptance.
- ▶ Characteristics of outputs, which may be either qualitative characteristics or performance/functional characteristics. (This is the main section of the technical specification – e.g., printing speed and quality of a printer, strength of a bridge to loads, or number of copies per unit of time of a photocopier.)
- ▶ Quality control requirements (criteria and ways of implementation) for acceptance of the outputs.
- ▶ Health and safety conditions/requirements during implementation, and the requirements regarding the protection of the environment.
- ▶ Method used to measure the outputs.

### Remarks and Application Guidelines

These application guidelines contain data/information concerning the application of the technical specification, reference to other technical specifications with which it may be combined or with which it interacts, and description of the relation/interconnection with them, and other clarifications as needed.

## A.5.3 Procedure for Developing a New Technical Specification

To develop a new (ad hoc) technical specification, it is recommended to adopt an approach consisting of the following steps:

- ▶ Specification of the requirements (functional, output, quality, etc.) of the intended outputs (work, material, service, construction, etc.).
- ▶ Analysis of output requirements and establishment of requirements in inputs (materials, activities, methodologies, etc.) for implementation of the outputs.
- ▶ Market research to identify existing alternative solutions and the possibilities offered by innovative solutions for achievement of the outputs. This includes:
  - Identification of information sources (people, organizations, and documents).
  - Communication/research on the requested data from these sources.
- ▶ Specification of input and output requirements (technical specifications) at a level of detail which allows economic operators to understand what is requested and specify solutions for their achievement.

Not all of these clauses may be necessary in every contract: apply discretion. Equally, additional clauses may be necessary for some specific contracts and additional clauses for specific services will also be necessary. Example detail content, comment, or explanation is in italics, clauses are in normal font. Square boxes indicate areas to be completed. Where you see comments like “[insert number of third sub-clause above]” this refers to the clauses immediately above within the same clause (e.g., Variations) unless a different clause is specified.

The clauses are simply examples and are not intended to form part of a coherent contract. They should be amended to reflect the specific goods or service(s) that are the subject of the contract and other relevant clauses should be included. Clauses should be identified by numbers or letters for reference.

### **A.9.2 Common Ambiguities**

The general rule for definitions is this: If a phrase can be misinterpreted, it will be. The lesson, therefore, is to define, unambiguously and completely, every word or phrase capable of being misinterpreted. You can discover these words and phrases by asking yourself, “If I were from Mars, what would that mean to me?” At A.9.3 below we list some words and phrases that have caused disputes between our clients and their other party.

If the contract identifies a charge for every service provided by the supplier (whether apparently included in the service specification or not) then there should be no hidden surprises in the event that additional services are required. The contract term (which should rarely be more than five years) should reflect the stability and anticipated life span of the customer’s activities and frequent review of contract and service levels should be built in. It is most unusual for a contract or SLA to remain valid for the entire duration of a contract, so change should be anticipated.

### **A.9.3 Important Considerations for Contracts**

**At the outset, consideration should be given to what can go wrong.**

- ▶ Unambiguously and clearly define every word or term that could be misunderstood: Words like hour, day, or week. Working hours or elapsed hours? Whose – yours or theirs? Which time zone? What is meant by words like the system or the equipment? What do they include and exclude? One dispute we helped to resolve was caused by the customer thinking “a piece of equipment” meant something like a PC or printer while the supplier thought it meant a motherboard or power supply unit.
- ▶ Outsourcing contracts may say parties can recover only “direct damages,” and not “consequential” ones. But the definition of each of those terms is unclear in law. To avoid misunderstandings, customers should give specific examples of what they mean by direct damages (e.g., the cost of having defective or incomplete work performed by another supplier), and examples of consequential damages, such as lost profits.
- ▶ Similarly, the term *material breach of contract* is ill-defined. So provide examples of material breach in the contract – such as failure to meet a defined service level, breach of confidentiality, or late delivery.
- ▶ To avoid “your fault, not your fault” attack/defense spirals, require the supplier to provide timely written notice to the customer of failure of the customer to meet the customer’s obligations.
- ▶ Ensure all breaches of contract terms or service level requirements are promptly documented – it will provide evidence in the event of later dispute.

Word/Phrase	Comment/Example
Computer	Define explicitly
Equipment	Define explicitly
Configuration	Define explicitly
System	Define explicitly
Software	Define explicitly
Hardware	Define explicitly
Network	Define explicitly
Infrastructure	Define explicitly
Timely	Define explicitly – “within four hours” or “by 14th of each month”
Promptly	Define explicitly – “within five minutes”
Usually	Define explicitly – “four times out of five”
Normally	Define explicitly – “four times out of five”
Regularly	Define explicitly – “every Tuesday”
Hours	Working hours or consecutive hours?
Day	Define explicitly – 24 hours? Standard working hours?
Week	Define explicitly – working days or 7 days per week?
Month	Calendar or lunar month?
Reasonably	Could this be clarified by reference to standards or authorities?
Continuously	Do you really mean “an activity that never stops for a second?”
‘N’ Percent within...	Where % is used (e.g., 95% by...) try to close down the remaining % (e.g., 95% within 3 seconds and 100% within 10 seconds).

- We have seen too many important contracts where a termination clause provides one month’s notice to the supplier – although it has taken up to six months to negotiate the initial deal and could take much longer than a month effectively to find a replacement supplier. A Deloitte survey<sup>3</sup> found that the average length of the outsourcing transaction from strategy to contract signature ranges from 23 to 46 weeks in duration. Equally the termination clause should require the outgoing supplier to maintain service quality and facilitate an orderly handover to their successor.

**In contracts, insist that the supplier:**

- Takes daily backups and that these are checked for content and readability.
- Has tested and maintained effective contingency and recovery plans (you might wish to audit their plans and be present at tests).