

PROCUREMENT GUIDANCE



HOW TO WRITE **TECHNICAL** **SPECIFICATIONS** FOR GOODS, WORKS, OR NONCONSULTING SERVICES

Abbreviations

Abbreviation	Definition
E&S	Environmental and social
IEC	International Electromechanical Commission
ISO	International Organization for Standardization
<bmdb< b=""></bmdb<>	Multilateral development bank
PPSD	Project Procurement Strategy for Development
RFB	Request for Bids
RFP	Request for Proposals

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Technical Specifications

Section 1: Overview

This Procurement Guidance offers Borrowers advice on how to write technical specifications for the procurement of goods, works, and nonconsulting services under World Bank–financed projects.

It explains the requirements of the World Bank's Procurement Regulations regarding technical specifications and how those requirements serve the World Bank's Core Procurement Principles.

The Procurement Guidance also examines the two main types of technical specifications—conformance and performance—and explains how the use of one or the other type affects related procurement decisions, such as the choice of selection method.

Finally, it explores how technical specifications may be used to advance economic, environmental, and social sustainability, and presents case studies of how this may be achieved.

Section 2: What is a Technical Specification?

A technical specification is a Purchaser's definition of the goods, works, or nonconsulting services that it intends to procure. It defines what a Bidder is required to offer in its Bid and, should its Bid be accepted, to supply to the Purchaser through the performance of the resulting contract.

It is also the yardstick against which the Supplier's performance under the contract will be measured, as the contract signed between the Purchaser and Supplier makes the technical specification legally binding on the Supplier.

Section 3: Why is a Technical Specification Important in Procurement?

A technical specification is an essential element of all bidding documents because it communicates to prospective Bidders what the Purchaser intends to procure.

Along with the Instructions to Bidders and the draft form of contract, the technical specification is one of the essential elements of the bidding documents that form the basis of fair and open competition among Bidders. It also provides potential Bidders with the information they need to make an informed decision about whether or not to bid, based on each Bidder's assessment of its own capacity to supply the goods, works, or nonconsulting services that the Purchaser intends to procure.

In addition, a well-written technical specification provides sufficient information for a Bidder to accurately determine how to prepare its Bid in such a way that it will be substantially responsive to the Purchaser's requirements and to calculate the cost and quality level of the goods, works, or nonconsulting services it will offer in order to meet those requirements.

Therefore, it is imperative that a technical specification should represent a clear, accurate, and complete definition of the Purchaser's requirements.

Section 4: Who Should Prepare the Technical Specification?

Preparing the technical specifications to be used as the basis for a procurement activity is a function of the Borrower as part of its responsibility "for carrying out procurement activities financed by the [World] Bank in accordance with these Procurement Regulations."¹

Within the Borrower's agency that is responsible for procurement, it is important that representatives of all the major stakeholders who will benefit from the contract should be involved in, or at least consulted on, the development of the specification.

Such stakeholders may include end users who will use or benefit from the goods, works, or nonconsulting services to be supplied under the contract, such as public officials who will occupy or work in a building constructed under a civil works contract, or clients who will benefit from services provided under a nonconsulting services contract. Stakeholder involvement is essential because, even if the procurement process is conducted in a timely and effective manner and in compliance with the Procurement Regulations, it will not be considered a success if the operational needs of those who are set to benefit most directly from the contract are not satisfactorily met.

The following are some examples of where end users should be involved in or consulted on the development of technical specifications:

- Education policy makers, curriculum development specialists, examination and testing experts, and classroom teachers should be involved in or consulted on the content and design of school textbooks.
- Fleet managers, environmental engineers, mechanical engineers, bus operators, and public transport users should be involved in or consulted on the development of specifications for public transport buses.
- Doctors, emergency medical technicians, and drivers should be consulted on the specification of ambulances and their associated medical equipment and devices.
- Information and communications technology specialists, hardware engineers, and equipment users should be consulted on the specifications for laptops, printers, photocopiers, and similar types of office equipment.

¹ See "The World Bank Procurement Regulations for IPF Borrowers: Procurement in Investment Project Financing – Goods, Works and Non-Consulting Services and Consulting Services" (Sixth Edition, February 2025), Section III, paragraphs 3.1 and 3.2.

Furthermore, where sustainability is an important consideration in the procurement activity, environmental and social (E&S) specialists should be involved early in the process of developing the specification in order to identify any potential E&S risks associated with the goods, works, or nonconsulting services and to ensure such risks are mitigated through the specification—for example, by the inclusion of appropriate key performance indicators in the resulting contract.² See appendix A for practical tips on how to write a technical specification.

Section 5: When Should the Technical Specification be Prepared?

As drafting, finalizing, and obtaining approval for a technical specification is often time consuming and labor intensive, the process should start early in the project cycle.

It is a common misconception that, when a procurement activity is delayed, the time taken to develop and obtain approval of the specification is part of the cause of the delay. In reality, the procurement activity per se cannot start until the specification has been developed and approved by the Borrower, as it comprises a mandatory section of the bidding documents. In terms of the critical path of the project, specification development and approval occur immediately before the launch of the procurement activity, which is usually marked by the issuance of the Specific Procurement Notice. Therefore, timely completion of the technical specification is essential to avoid delays in the procurement process.

In most cases, the definition of the Purchaser's requirement, procurement planning, and the preparation of technical specifications will follow directly after the preparation of the Project Procurement Strategy for Development (PPSD).³ However, in exceptional cases, the development of the technical specification may form part of the writing of the PPSD itself (see case study 1). This may be an appropriate approach for high-value or highly complex contracts that are likely to have a significant effect on the successful implementation of the project. In such cases, the development of the specification should form an integral part of writing the PPSD. The success of some projects, such as a project that will finance the construction of a geothermal power plant, may rely almost entirely on the procurement of a single contract. In such a project, getting the technical specification of the requirement right forms an integral part of the project's procurement strategy and should, therefore, be folded into the development of the PPSD.

Case Study 1: Construction of Passenger Ferries on a Landlocked Sea

A multilateral development bank (MDB) financed a maritime transport project under a loan in the amount of US\$95 million to a Borrower country whose territory includes one of the world's largest landlocked bodies of water. This landlocked sea is renowned for its dangerous operating conditions—caused by severe seasonal storms—which led to the loss of several ships and hundreds of lives in previous decades. Procurement under the project would include the construction of two passenger ferries, estimated to cost US\$87.5 million, for use on the landlocked

² See “World Bank Procurement Guidance: Sustainable Procurement” (June 2023).

³ See “Project Procurement Strategy for Development: Short Form Guidance” (February 2017) and PPSD Long Form Detailed User Guidance (March 2025).

sea. The only other contract to be financed under the project would be a consulting services contract for the design of the ferries, estimated to cost US\$7.5 million.

Because of the intended location for the ferries' use, the successful Bidder would be required to construct them not in its own shipyard in its home country but in the shipyard of a government-owned shipbuilding enterprise located on the shore of the inland sea. The winning Bidder would also be required to implement a major technology transfer program to the government-owned shipbuilding enterprise during the construction of the vessels and to train its staff in modern shipbuilding techniques.

As part of its development of the PPSD, the Purchaser undertook a comprehensive analysis of the global supply market for passenger ferries. It found that, while there were many shipbuilding companies around the world with a successful track record of building ferries of the type it intended to procure, none of them were located in the Borrower's country, and none had constructed such ferries anywhere other than in their own shipyards in their home countries.

The PPSD proposed that the contract be awarded through a Request for Proposals (RFP) selection method, subject to open international competition. RFP was chosen as the most suitable selection method, as opposed to Request for Bids (RFB), because of the unusual requirement that the ferries be built in a government-owned shipyard and because of the complex technology transfer program to be delivered by the successful Bidder under the contract.

During the project preparation phase, the Purchaser proposed and the MDB agreed that Advance Contracting⁴ would be used to hire a specialist consulting firm to prepare the ferry design as soon as possible and that the firm's Terms of Reference would include developing an outline methodology for the construction of the ferries and the technology transfer program, given the following factors: (a) the fact that the contract for construction of the two passenger ferries comprised 82 percent of the loan amount and would, therefore, be critical to the successful implementation of the entire project; (b) the dangerous operating conditions of the ferries; (c) the unusual requirement that the successful Bidder would be required to construct the vessels in a government-owned shipyard in the Borrower's country, a requirement that would likely impact the construction techniques the winning Bidder would be able to employ; and (d) the requirement for technology transfer. This outline methodology would then form the basis for the Purchaser's evaluation of the Bidder's technical proposals under the RFP selection method, using Rated Criteria.⁵

This case provides a salient example of when it is good practice to advance the definition of the technical specification to the PPSD stage of the project because the success of the overall project relies substantially on the successful award and implementation of the contract for the two ferries.

⁴ See Procurement Regulations, Section V, paragraphs 5.1– and 5.2.

⁵ See Procurement Regulations, Section V, paragraph 5.50 and Annex X: Evaluation Criteria. Also see "Procurement Guidance: Evaluating Bids and Proposals: Including Use of Rated Criteria for Procurement of Goods, Works and Non-Consulting Services" (February 2025).

Section 6: What are the World Bank's Requirements for Technical Specifications?

The World Bank's requirements for technical specifications are contained in its Procurement Regulations for IPF Borrowers, Section V, paragraph 5.25, which states:

Standards and Technical Specifications

5.26 Standards and technical specifications in applicable Procurement Documents shall promote the broadest possible competition, while ensuring performance or other requirements for the procurement. To the extent possible, in international competitive procurement, the Borrower shall specify internationally accepted standards...with which the equipment, materials or workmanship shall comply. When such international standards do not exist or are inappropriate, national standards may be specified. In all cases, the Procurement Documents shall state that equipment, material, workmanship, and/or methodology meeting other standards that are at least substantially equivalent to the specified standards will also be accepted.

The Regulations clearly establish the essential relationship between open, neutral technical specifications and competitive bidding. Given this link, the specification plays an essential role in advancing the World Bank's Core Procurement Principles, particularly transparency, fairness, and value for money.

Therefore, it is imperative that technical specifications should not restrict competition by including requirements that favor goods manufactured by a particular Bidder over those produced by other manufacturers, nor by limiting supply to a single manufacturer. For the Purchaser to enjoy the full economic benefits of competition, the technical specification should facilitate participation in the procurement process by the broadest possible cross-section of Bidders.

Also of direct relevance in this regard is Section V, paragraph 5.26 of the Regulations, which states:

Use of Brand Names

5.27 Specifications shall be based on relevant technical characteristics and/or performance requirements. References to brand names, catalogue numbers, or similar classifications shall be avoided. If it is justified to specify a brand name or catalogue number of a particular manufacturer to clarify an otherwise incomplete specification, the words 'or equivalent' shall be added after such a reference to permit the acceptance of offers for Goods that have similar characteristics and performance at least substantially equivalent to those specified.

Therefore, while the use of brand names should be avoided where possible, the Procurement Regulations recognize that there are certain circumstances where it cannot be avoided. In those cases, an "or equivalent" rider must be applied.

It is a reality of competitive markets that, in certain product markets, a single company or a single branded product may come to occupy such a dominant position in its given market that it becomes

a challenge for the Borrower to think of a way of describing a product that does not use the company's name or the brand name of the product it supplies. Indeed, in certain extreme but not uncommon cases, the name of the dominant company or its brand usurps the generic name of the goods. For example, the name of a manufacturer of a popular brand of vacuum cleaner has evolved into a verb meaning to clean an object by vacuuming it. To use a more contemporary example, the name of a global software company that produces a free application allowing users to search online for information has developed into a ubiquitous verb meaning to search for information online.

However, even in such extreme cases of domination of a product market by a single manufacturer, there is invariably an alternative to using the brand name. It is incumbent on the Borrower to find and use such an alternative when seeking to define such a product in a technical specification so as to engender competition.

As mentioned previously, technical specifications that are neutral and impartial facilitate the participation of the maximum possible number of Bidders, enabling the Purchaser to benefit fully from competition between Bidders and between a wide range of goods, works, and nonconsulting services that meet the Purchaser's requirements.

Section 7: General Principles of Specification Writing for Goods

There are a number of general principles that should be observed when defining technical specifications for goods. These include:

- Physical measurements should not be defined in terms of finite numbers, as these tend to limit responsiveness to a single product (see "Vehicle dimensions" in the specification for a commuter bus-type ambulance in table 1). Rather, physical measurements should be stated as a range of values that are acceptable to the Purchaser, as this will allow a greater number of Bidders to offer products that comply with the specification.
- Physical limitations should be stated as minimum or maximum values, not as finite values, and should be consistent with the operational requirements of the Purchaser. For example, where a vehicle's operating location requires that it have a tight turning radius (the amount of space needed for the vehicle to make a full 360-degree turn), this value should be stated as a maximum so that vehicles with a smaller turning radius may also comply with the specification. Or, where bridges in the Purchaser's country have a legally binding gross vehicle weight of, say, 8,670 pounds (3,932 kilos), this value should also be stated as a maximum in the Purchaser's specification, so that lighter vehicles may comply. By the same token, a Bid offering vehicles that exceed the stated maximum gross weight would be evaluated as substantially nonresponsive. Operational requirements for office equipment such as printers or photocopiers may be stated as a minimum values or ranges: for example, minimum 60 pages per minute or a range of 50–60 pages per minute.

Case Study 2: Addressing a Tailored Technical Specification for an Ambulance

A small island developing state received a loan from an MDB in the amount of US\$6.8 million to finance the cost of improving the resilience of the country's health sector in responding to health emergencies. The procurement plan for the project included financing for the procurement of eight fully equipped commuter van-type ambulances, estimated to cost US\$450,000. The procurement process was conducted through open, international competitive bidding and was subject to prior review by the MDB.

In reviewing the draft bidding documents, the procurement and engineering staff of the MDB determined that the vehicle specification closely matched that of a commuter van-type ambulance manufactured by a globally renowned manufacturer of commuter vans. As a result, the MDB required the Purchaser to change several elements of the vehicle specifications to include ranges instead of finite measurements, including those for the vehicles' length, width, and height, and to remove the model number of the engine, which was proprietary to the identified manufacturer. The MDB also requested the Purchaser to change the fuel type of the vehicle from "gasoline" to "gasoline or diesel," as both were freely available in the Purchaser's country at similar cost, so there was no operational reason to limit Bidders to offering only vehicles with gasoline-powered engines. The Purchaser was also asked to replace several other finite measurements with ranges. By requesting these changes, the MDB opened up the specification to allow vehicles produced by several manufacturers to comply, while still fully meeting the Purchaser's operating requirements, thus resulting in a more competitive procurement process.

Table 7.1 lists the main vehicle specifications that the MDB required the Purchaser to change before issuing its clearance of the bidding documents.

TABLE 7.1. MDB-Requested Changes to a Tailored Specification for Commuter Bus-Type Ambulances

Ambulance specification	Purchaser's original specification	Amended specification after MDB's prior review
Transmission	6 forward manual transmission and reverse	5 or 6 forward manual transmission and reverse
Vehicle dimensions Length x width x height (millimeters):	5,400L 1800W 2280H	5,400–5,915L 1800–1880W 2280–2300H
Gross vehicle weight	8,670 lbs	8,670 lbs maximum
Engine model	1GD-FYV	Deleted
Engine type	4 Cyl DOHC 16 Valve VN Turbo Intercooler	4 Cyl DOHC 16 Valve VN Turbo Intercooler or equivalent
Turning radius (meters)	6.5	6.5 maximum
Fuel	Gasoline	Gasoline or diesel
Fuel capacity (liters):	70	70 minimum

Source: Caribbean Development Bank 2023.

In addition, much of the medical equipment to be supplied and fitted with the ambulance, including oxygen flow meters, ventilators, and pulse oximeters, was defined using brand names of goods manufactured by well-known US, European, and Japanese manufacturers. The MDB requested that the Purchaser delete all such brand names and define the required equipment using neutral specifications. After the Purchaser made the required changes to the bidding documents and resubmitted them for prior review, the MDB cleared the bidding documents to be issued to the Bidders.

By requiring the Purchaser to make these changes to the technical specification for the ambulances, the MDB succeeded in broadening the specification from one limited to a single manufacturer to one that would facilitate competition between multiple manufacturers. By doing so, the MDB ensured that the procurement activity met its core procurement principles of equality, fairness, transparency, and value for money.

Section 8: What are the Main Types of Technical Specifications?

Specifications are usually one of two types: conformance specifications or performance specifications.

A **conformance specification** is prescriptive in nature in that it defines the key technical and physical characteristics of the goods, works, or nonconsulting services to be procured in terms of such properties as their physical dimensions, power input and output, locations, and functions of various controls, or the materials to be used in the manufacturing process. It typically includes detailed drawings, materials, and engineering standards that must be met. This is also referred to as an **input** specification.

By contrast, a **performance specification** is one that states the Purchaser's requirements in terms of the results the goods, works, or nonconsulting services are required to achieve, without stating the methods by which those results will be achieved—that is for the Bidder to propose. From the Purchaser's perspective, having a clear definition of what it wants to achieve by the end of the implementation of the contract is the key to writing a good performance specification. This is also referred to as an **output** specification. See table 8.1 for an example of both specifications from the construction sector.

TABLE 8.1. Examples of the Use of Performance and Conformance Specifications for Health and Safety Signage for a Construction Site

Performance-based	Conformance-based
Example: health and safety signage on site for workers and community	
Require that signs are prominently placed, provide simple clear information, are available to users in their language, are readable from a reasonable distance and made from a reasonable distance and made from durable materials	Specify precise features and dimensions: where the signs should be placed, what the content should address, sign dimensions, languages, type of paint, background color, font type, materials, etc.

Source: World Bank 2025.

A summary of the pros and cons of conformance and performance specifications is provided in table 8.2.

TABLE 8.2. Pros and Cons of Conformance and Performance Specifications

		Conformance specification	Performance specification
Pros	<ul style="list-style-type: none"> ■ Maximizes the Purchaser's control to design and specify the goods, works, or nonconsulting services to be procured. ■ Where a high degree of compatibility with the Purchaser's existing equipment is essential, requiring Bidders to offer equipment that complies substantially with a conformance specification of that equipment may be the most effective way of achieving the required compatibility. ■ Supports standardization across a range of goods and thereby may reduce costs associated with holding spare parts and consumables and retraining staff in using different kinds of equipment. ■ Contract management by the Purchaser is relatively simple with respect to the goods, as the responsiveness of the goods supplied with the contract specification can be empirically verified. However, it remains more complex in the case of works and nonconsulting services. 	<ul style="list-style-type: none"> ■ From the Purchaser's perspective, it transfers the responsibility for the correctness of the chosen solution to the Supplier, including decisions affecting the production of the most suitable goods, works, or nonconsulting services to ensure the solution works once in operation. ■ Encourages Bidders to offer innovative options and solutions that improve the Purchaser's ability to conduct its core operational functions cost-effectively. ■ Provides an opportunity for the Purchaser to create equitable competition among various prospective Bidders. 	
Cons	<ul style="list-style-type: none"> ■ Contractual responsibility for the correctness of the specification and for its appropriateness to fulfill the identified operational requirement remains with the Purchaser and, with it, the risk to the Purchaser if the specification is wrong. ■ As writing a conformance specification is often time-consuming and labor-intensive, it may delay the start of the procurement process. ■ To write the specification, the Purchaser has to have access to staff with specialist technical expertise relevant to the goods, works, and nonconsulting services it intends to procure. ■ The Purchaser has to have deep knowledge of the supply market, the main suppliers, and their products to write a specification that facilitates the participation of most or all of them. ■ An overly detailed specification may unintentionally limit competition to goods, works, or nonconsulting services offered by only a few Bidders. ■ It may also act as a barrier to innovation. 	<ul style="list-style-type: none"> ■ Evaluation of widely differing solutions can be highly complex and requires specialist technical judgment of the goods, works, or nonconsulting services offered by participating Bidders. ■ It requires a high degree of skill on the Purchaser's part to set appropriate performance metrics and ensure effective measurement of the Supplier's performance. ■ Increases the role of the Purchaser in conducting effective contract management to ensure the Supplier delivers fully on its offered methodology and solution. 	

Source: World Bank 2025.

Section 9: How Does the Type of Specification Used Influence the Choice of Selection Method?

As a general rule, the simpler the Borrower's requirement, and therefore, the more readily the Purchaser can define the technical specification in detail, the more the requirement lends itself to the use of the Request for Bids (RFB) selection method.

The relevant provisions of the Procurement Regulations are contained in Section VI, paragraphs 6.5 and 6.6.

Request for Bids

6.5 An RFB is a competitive method for the solicitation of Bids. It should be used when, because of the nature of the Goods, Works, or Nonconsulting Services to be provided, the Borrower is able to specify detailed requirements to which Bidders respond in offering Bids.

6.6 Procurement under this method is conducted in a single-stage process. Qualification criteria may be expressed as minimum requirements which are evaluated as pass/fail; and, where Rated Criteria are also used, the Rated Criteria shall be weighted and scored. Rated Criteria shall be used with RFB in accordance with paragraph 5.50. For details see Annex XII, Selection Methods.

Conversely, the more complex the Borrower's requirement and the more infeasible it is for the Purchaser to define the technical specification in detail before commencing the procurement process, the more the requirement lends itself to the use of the Request for Proposals (RFP) selection method.

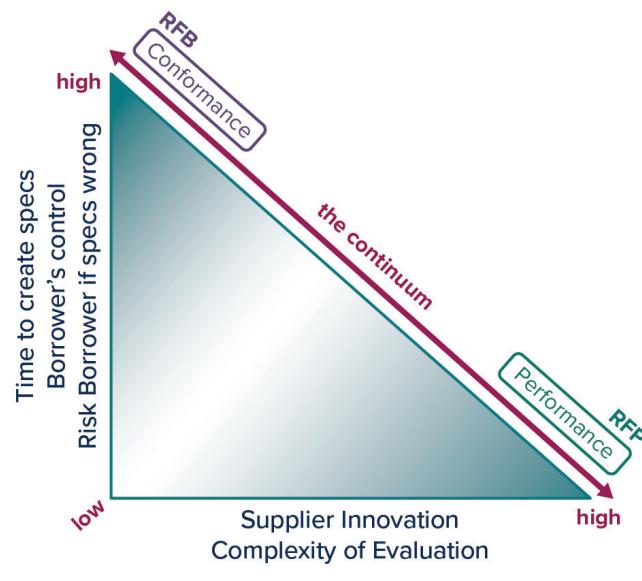
The relevant provisions of the Procurement Regulations are contained in Section VI, paragraphs 6.3 and 6.4.

Request for Proposals

6.3 An RFP is a competitive method for the solicitation of Proposals. It should be used when, because of the nature and complexity of the Goods, Works, or Nonconsulting Services to be procured, the Borrower's business needs are better met by allowing Proposers to offer customized solutions or Proposals that may vary in the manner in which they meet or exceed the requirement of the Request for Proposals document.

6.4 An RFP is normally conducted in a multistage process. To allow an evaluation of the degree to which Proposals meet the requirements of the Request for Proposals document, the evaluation normally includes the application of Rated Criteria to the evaluation of proposals.

Figure 9.1 presents a schematic overview of the relationship between the two specification types, complexity, innovation, and choice of selection method.

FIGURE 9.1. Types of Specification and Choice of Selection Method

Source: World Bank 2025.

Section 10: How Can Technical Specifications be Used to Promote Sustainability?

Technical specifications are powerful procurement tools that can be harnessed to advance many aspects of economic, environmental, and social sustainability.

Annex VII, paragraphs 2.4 and 2.5 of the Procurement Regulations include the following provisions on sustainability:

2.4 The sustainable procurement requirements should be based on evidence (that is, with supporting data), and on existing social-label criteria, eco-label criteria, or information collected from stakeholders in industry, civil society, and international development agencies.

2.5 The Borrower shall not request sustainable procurement requirements that are proprietary or otherwise available to only one Bidder/Proposer, unless such a requirement is justified to the satisfaction of the Bank.

Environmental sustainability may be promoted by the use of sustainable sourcing, such as green cement, organic cotton, or certified sustainable timber, such as that certified by the Forest Stewardship Council.⁶ Other common environmental sustainability considerations that the Borrower may advance through technical specifications include:

- Energy efficiency
- Air emissions, including greenhouse gas emissions, such as carbon dioxide

⁶ See <https://fsc.org/en/businesses/wood>.

- Pollution of land, waterways, or sea
- Impacts on biodiversity
- Resource use and circular economy
- Changes in land use
- Reduction and management of waste
- Packaging
- Disposal, reuse, or recycling.

With respect to eco-labeling and certification, Annex VII, paragraph 2.6 of the Procurement Regulations states:

The Borrower may adopt international sustainability standards covering a wide range of product and service groups, provided they are consistent with [World] Bank's Core Procurement Principles. Internationally recognized certification or accreditation schemes may be used to demonstrate a Bidder's/Proposer's ability to apply environmental management measures. Such schemes may include [International Organization for Standardization] ISO 14001 or other systems that conform to the relevant international standards on certification and environmental management. Bidders/Proposers may also be permitted to demonstrate that they apply equivalent sustainable management measures, even without certification.

Case Study 3: Green Specification for Information and Communications Technology Equipment

The following is an example of an EU (European Union) technical specification related to rechargeable battery endurance for laptop computers, tablets, and smartphones.⁷

- The tested state of health of the battery after 300 cycles shall be ≥80 percent.
- The battery test must be conducted in accordance with the standard International Electromechanical Commission (IEC) EN 61960-3:2017⁸ or equivalent.
- Verification: The Bidder shall provide test results obtained from an accredited ISO 17025⁹ test body, according to the IEC EN 61960-3:2017 standard or equivalent.
- A Bid offering to supply goods that have not been tested as having met the requirement of the technical specification shall be evaluated as nonresponsive.

Technical aspects can be used to promote many of the most pressing aspects of **social sustainability**, such as:

- Freedom of association and the right to organize

⁷ See https://green-business.ec.europa.eu/green-public-procurement/gpp-criteria-and-requirements_en.

⁸ See <https://webstore.iec.ch/publication/29603>.

⁹ See <https://www.iso.org/ISO-IEC-17025-testing-and-calibration-laboratories.html>.

- Minimum wage levels
- Prohibitions against forced labor, child labor, sexual harassment, gender-based violence, sexual exploitation, and abuse
- Gender balance, equal pay, equal opportunity, and work-life balance for parents and carers
- Adherence to national occupational health and safety laws.

Case Study 4: Promoting Inclusive Employment in the Roads Sector in Albania

In accordance with the Government of Albania's social policy and with support from the World Bank's Gender Equality in Access to Economic Opportunities Development Policy Credit, the World Bank agreed to include minimum gender requirements in the bidding documents for the rehabilitation of local roads financed under the Regional and Local Roads Connectivity Project (US\$50 million), which was approved by the World Bank's Board in April 2018. The bidding documents required Bidders to sign a self-declaration of adherence to nondiscrimination principles for collective employment and individual contracts, and to principles of equal pay for work of equal value.

The World Bank's Environmental, Social, Health and Safety requirements, which were incorporated in the bidding documents, included a requirement to, "incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning, development, and implementation of the Works," including by promoting greater gender diversity in the workforce by increasing the representation of women in construction works through:

- Adopting recruitment and selection processes that encourage women to apply;
- Seeking to employ women at all stages of construction and at all jobs levels;
- Seeking to provide part-time and full-time employment;
- Retaining women in employment for the duration of the contract; and
- Creating a more inclusive workplace culture that supports gender diversity.

Contractors who bid on the works contracts financed under this project responded positively to these new requirements, submitting work plans that demonstrated increases in women's participation in their labor forces by 30–40 percent compared to the same contractors' work plans under previous contracts signed with the government.

Economic sustainability can be advanced through the inclusion in technical specifications of requirements for:

- Participation of micro or small and medium enterprises in public procurement;
- Paid apprenticeships for youths in employment contracts; and
- Provision of technical skills training in employment contracts.

How to Write a Technical Specification—Practical Tips

Take time to get it right. A good specification is created through the planning and research undertaken before writing.

1. Defining timetables, roles, and responsibilities

- Work backwards from the date the specification is needed to identify the time available for writing it and then plan based on that timeframe.
- Identify who is going to write it. Ideally, the writing process should be led by someone with the relevant skills and experience, such as a procurement practitioner or technical or engineering specialist in the relevant discipline.
- Identify any technical support you may need.

2. Engagement with key stakeholders

- Engage as early as possible with key stakeholders (such as customers, end users, and internal and external technical experts) for input.
- Make sure that any market engagement carried out to develop the specification is transparent, open, and fair. This means asking all potential suppliers the same questions and giving each one similar information.
- Do not restrict competition by including biases that favor a particular Supplier.

3. Standards and certification

- Avoid referring to brands, trademarks, or any specific processes that are particular to suppliers in the marketplace.
- To the extent possible, specify internationally accepted standards. When such international standards do not exist or are inappropriate, consider if national standards may be appropriate. In all cases, standards substantially equivalent to the specified standards should be accepted.
- Consider what forms of verification you will require, such as certification or reports following testing, inspection, calibration, verification, or validation by a third-party assessment body.

4. Drafting

- Identify your objectives.
- Organize your specification into component parts with a clear, logical flow. Sections may include an introduction, background, scope of services and detailed requirements.
- Think carefully about what your requirements are, separating them into “must haves” and “nice to haves.”
- Decide whether you are going to write a conformance-based or a performance-based specification.
- Think about how the specification will match the outcome you are looking for. Do not assume that suppliers can read your mind.
- Make your specification as enforceable and measurable as possible.
- Be clear about what success and failure look like.
- If you want to specify parameters using exact numbers (such as time limits, productivity rates, and so on), be sure that what you are asking for makes sense, is realistic, attainable, and verifiable.
- Use positive and directive language such as “the Supplier shall ensure that the project delivers x, y, and z.”
- Write in plain language and avoid technical jargon unless you are sure a person reading it will understand what you are asking for.
- Avoid empty filler terms such as “world class” and “game changer.”

5. Legal framework, procurement principles, and policy considerations

- Check whether there are applicable legislative requirements that must be met.
- Consider the impacts of policy and legal issues, such as environmental and social issues, climate change, cyber security, prompt payment of suppliers, and social value. They may not all apply in every procurement, but it is important to check.
- Check that the specification complies with the World Bank’s Core Procurement Principles (transparency, fairness, integrity, value for money, economy, efficiency, and fit for purpose) and the requirements of the Procurement Regulations.

6. Finalizing the draft

- Conduct several sense checks before you publish the specification.

- If appropriate, engage the market to discuss the specification (ensuring any comments received from potential suppliers don't create any biases in the specification).
- Make sure you have all the necessary internal approvals and signoffs from technical experts and management.
- Be sure that the specification can secure for you what you are looking for.

