Chartered Institute of Purchasing & Supply

Level 5 Advanced Diploma in Procurement and Supply

AD5 - Sustainability in supply chains

EXAM EXEMPLAR QUESTIONS

QUESTIONS AND INDICATIVE ANSWER CONTENT

QUALIFICATIONS 2013

QUESTIONS AND MARKING SCHEME

Q1 Learning outcome: 1.0

Critically examine **FIVE** drivers of globalisation in supply chains using an environmental analysis tool of your choice.

(25 marks)

Marking scheme

Globalisation is a term that has been used to explain how organisations can view the world as a single market. This has caused the global business market place to be considerably more complex. Organisations that sell into a single global market place are generally selling the same product but designed to fit the local markets worldwide. This practice has meant more fierce competition that means products are frequently redesigned with more functionally and as result product life cycles are decreasing. This has led to shortages of raw materials as products are replaced without disposing of the old products in an environmentally friendly and sustainable manner.

Candidates should identify a tool that will enable them to analyse the main drivers of globalisation The ideal environmental analysis tool here is STEEPLE or PESTLE and candidates should use this as a framework for describing how globalisation has influenced supply chain management and practice.

Consideration of five of the following global drivers:

- Demographic trends – population growth (mainly in developing countries), ageing population in developed countries, the widening gap between rich and poor and the growth of urbanisation
- Global skills base – skills migration, the role of women in the workforce, global skills development, migration of labour within Free Trade Zones
- Globalisation of business – impact on developed and developing countries in terms of shorter product life cycles, lower labour costs, environmental pollution at the expense of minimising supply costs
- Depletion of fossil fuels and rising energy costs – need for renewable energy
- Availability of natural resources – water, land, soil, forests
- Corporate Social Responsibility (CSR) and Extended Producer Responsibility (EPR)
- Innovation – sustainable technologies, products and materials
- Other relevant global trends influencing the implementation of sustainable procurement.

For each driver outlined, answers should include appropriate analysis of their influence on sustainable supply chains, for example:

- How does this driver influence the introduction of sustainable procurement? For example organisations need to consider the whole life cost of goods and services from cradle to grave.
- How is the role of the supply chain management affected? For example there needs to be a greater emphasis on ensuring outsourcing takes CSR standards into account when selecting suppliers
- What might the risks or benefits be? For example a risk would be how the use of child labour could have a negative impact on the reputation of an organisation.

Up to 5 marks should be awarded for each driver outlined and analysis of the driver's influence on the implementation of sustainable supply chain management. Other appropriate drivers will be considered.

Answers which are bullet pointed/purely descriptive and fail to include sufficient depth of detail/ demonstrate application to the question context will be awarded no more than a bare pass grade.

(25 marks)

CIPS study guide reference: Chapter 2 page 27 to 40

Q2 Learning outcome: 2.0

(a) Explain the relevance to organisations of leading standards relating to sustainable sourcing in each of the following areas:

- Environmental
- Social
- Economic

(15 marks)

(b) Analyse the potential advantages and disadvantages of the use of sustainability standards within the sourcing process.

(10 marks)

Marking scheme

(a) Answers might include the following standards as examples and explain their relevance to organisations:

- Environmental - Kyoto Protocol (emissions), ISO 14001 (environmental management), ISO 14023/25 (Eco-labelling), The Eco- Management and Audit System Scheme (EMAS), PAS2050:2011
- Social – International Labour Organisation (ILO), Fair Trade, SA8000 (Social accountability)
- Economic – ISO15686 (whole life costing), Sarbanes Oxley (financial accountability)
- Reference to the Turnbull Report should also be awarded appropriate marks.

In each case there is a requirement to describe the standards and how they relate to and assist with sustainable sourcing. It is not enough to just state the standard. Up to half a page of explanation is required for each standard, in order to be awarded the full marks.

Up to 5 marks are available in each category. Higher scoring answers will include a comprehensive explanation and more examples. Other relevant standards will also be accepted.

(15 marks)

(b) Potential advantages of using sustainability standards are as follows:

- Product or service meets expectations as per your organisation's sustainability criteria
- Consistency of product quality – ensures superior product quality along with sustainability
- Interchange ability and comparability of suppliers - helps with supplier prequalification
- Encourage fair trade and sustainable long term pricing
- Promote 'best practice' across all sectors
- More competition within global markets.

Potential disadvantages:

- Overuse might exclude otherwise suitable suppliers - if used specifically for supplier appraisal then many suppliers may be eliminated or excluded which will limit competition and cause increased prices
- Can lead to design and process compromises in order to achieve standard – this in turn

can mean products are designed with less regard for recycling and disposal
- Loss of differentiation can affect product desirability - products can become bland and monotonous which leads to reduced turnover and profit
- Achieving standards can be costly for suppliers - this may exclude SME's and smaller businesses that cannot afford the accreditation costs.

Ideally candidates should be able to provide a more detailed explanation than that listed above. Up to 5 marks for advantages and disadvantages, or a mix of the above topics dependent on level of detail up to a maximum of 10 marks in total.
Other valid advantages and disadvantages should also be awarded appropriate marks.

(10 marks)

CIPS study guide reference: Chapter 3, pages 47 -66

Q3 Learning outcome: 3.0

Having a sustainable specification is an important part of the sustainable procurement process.

Propose and justify key sustainability criteria for inclusion in purchase specifications for products and services.

(25 marks)

Marking scheme

Although not a specific requirement, answers might include comments on the definition and/or purpose of purchase specifications and why they are an important part of the sustainable procurement (SP) process. Essentially there are two types of specification which are conformance and performance specifications. These are input and output specifications respectively.

The overarching requirement is for sustainable specifications to consider the following:

- Social
- Ethical
- Environmental and
- Economic.

Wherever possible, sustainable purchase specifications for products should be performance related to allow for sustainable innovation and alternative, sustainable materials and processes. However it is also important that a conformance specification is considered as there needs to be an element of ensuring that materials are recyclable and that depending on legislation this may not be optional. Hence organisations and purchasing departments should be aware of legislation related to sustainability and ensure that the right specification type is chosen when defining their requirements.

Content of a sustainable specification might include the following criteria/requirements of suppliers:

- Maximise reuse and recycling potential – e.g. as defined by the WEEE directive
- Responsible testing
- Maximise expected life of materials and end products – consider whole life costing
- Minimise the environmental impact of materials, processes, end products and packaging
- Maximise energy efficiency
- Minimal use of landfill for disposal at end of life – in many cases within the public sector organisations will not entertain suppliers who use landfill as a method of disposal at the end of the contract
- Other appropriate criteria.

For specification of services, a service level agreement (SLA) can be used to specify reporting requirements on sustainability criteria such as:

- Responsible recruitment
- Acceptable employment conditions
- Requirement for ethical trading throughout the supply chain
- Ensuring a comprehensive E&D policy
- Use of recyclable materials e.g. within a cleaning service
- Demonstrating a responsible attitude to environmental issues.

Any five of the above criteria can be discussed for 5 marks each and either goods, services or a mix is acceptable.

Typical answers should propose and justify a range of key sustainability criteria; though the number of points included in each answer is expected to vary (answers may suggest fewer in more depth of detail or more in less detail for equivalent marks).

Stronger answers will also consider sustainable purchase specifications in relation to the impact of end products and services for example: use of energy and natural resources, emissions, design for disassembly, and supporting local enterprise and communities.

(25 marks)

CIPS study guide reference: Chapter 5, pages 94 – 99

Q4 Learning outcome: 4.0

Analyse how supply chain mapping can be used as a tool for identifying compliance risks in the supply chain. Support your answer with relevant examples.

(25 marks)

Marking scheme

Environmental and sustainability risks are common, not in your immediate first tier suppliers but your suppliers. For this reason, mapping the supply chain can give an organisation an appreciation of how long and complex a supply chain is. The risks with sub-contracting and outsourcing are well documented but these practices will likely mean that there is further loss of control as you move down the supply chain.

The supply chain mapping tool is used to identify all the suppliers within your existing supply chain or network. Award up to 5 marks for the definition and explanation of the supply chain mapping tool. Other risk analysis tools will be acceptable e.g. Kraljic or variations on this model.

This tool will enable you to identify some of the following weaknesses/risks:

- Strong and weak linkages in the sustainability chain
- Potential areas of sustainability, compliance or reputational risk
- Potential areas of weakness and therefore areas for improvement
- Areas of inefficiency in the supply chain such as unnecessary transport, duplication of effort, small quantity purchase inefficiencies
- Potential areas in need of supply base or supply chain rationalisation
- Understanding of cost structures and inefficient use of resources or energy
- Issues around information exchange and possible lack of security/fraud/corruption
- Reverse logistics issues
- Issues around disposal and recycling and use of recycled materials
- Limited options within the supply chain and maybe a need for a larger more diverse network. performance or other such measure.

Up to 5 marks should be awarded for discussion of any **FOUR** of the above bullet points in reasonable detail and to include an example in each case. Alternatively there could be **FIVE** bullet points awarded up to 4 marks in less detail but each point must have associated examples.
Additional marks should be awarded for candidates who identify that in addition to risks some beneficial opportunities may well come to light. This might mean opportunities for supply chain rationalisation and the elimination of some suppliers, thus saving money and simplifying the logistics. Other benefits might include bundling of goods and services if suppliers are part of a larger organisation that can offer a diverse product range. It could therefore be possible to cut out the parts of the supply chain that give the highest risk factor.

Hence supply chain mapping is part of knowing your supply chain and ensuring that you know the risks and the opportunities associated with the environment and issues around sustainability.

Higher marks should be awarded for candidates that indicate that some sort of audit mechanism should be devised to ensure compliance with company policy and organisational procedures in the longer term.

(25 marks)

CIPS study guide reference: Chapter 8, pages 149 – 168