CIPS KNOWLEDGE

Planned Obsolescence

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Planned obsolescence

Introduction

The issue of obsolescence in the supply chain is not new. However, its profile has increased in line with the European Union's vision of creating and implementing a sustainable development strategy.

One aspect of this strategy is the effective management of natural resources, which, at an organisational level, makes sound business sense, and may be dovetailed with greater corporate social responsibility.

This CIPS guide aims to provide an awareness and level of understanding to the reader on the issues of obsolescence. In line with other CIPS guides, they are written for use by those with an interest in business issues in general, and purchasing and supply management (P&SM) in particular. This will include full and part time P&SM professionals as well as individuals interacting with P&SM activities. It will also include information on the contextual backgrounds to the issues, and will give a balanced opinion on issues the reader may wish to consider. There will also be references to other sources of information. Most CIPS practice guides will contain CIPS position statements, that is, CIPS' view(s) on the relevant subject matter. These views are arrived at via an extensive consultation process with P&SM practitioners and people with expertise relevant to the subject, including working knowledge groups and the CIPS Policy Advisory Network (PAN).

A working party of the CIPS Supply Chain Group defined 'Obsolescence' as a process whereby goods or services no longer meet the needs of the current user. There are four main types of obsolescence:

- Technical or functional obsolescence
- Planned obsolescence
- Style obsolescence
- Postponed Obsolescence.

All four types of obsolescence may be prevalent in an integrated organisation. The P&SM professional may therefore have an input in all these areas.

Technical or functional obsolescence

This would be characterised by a new, more functional product or technology superseding the old. In a manufacturing context, an example could be the change in production methods due to the unavailability of a component used in a type of machinery. The critical nature of that component will result in a specific strategy for managing the commodity that component is contained in. However, an excess stock of that component, resulting from inaccurate forecasting, may result in obsolete stock being held. These costs of obsolescence include the cost of the components themselves, the financial burden of holding the stock, and the inefficient use of capital assets.

A product targeted for technical obsolescence will typically cost more to repair than to replace. The product or service may even be withdrawn from service. An example of this was Microsoft withdrawing its service support for Windows 95 operating systems in 2002.

Planned obsolescence

Planned obsolescence is characterised by the deliberate introduction of obsolescence into the marketing strategy. This results in the consumer reducing the period between purchases, and thereby generating sales for the organisation. Planned obsolescence can be viewed as incongruent with good corporate social responsibility. There is an alternative argument however that planned obsolescence is a necessary enabler of innovation and economic growth. Examples include the change in technology from video cassettes to digital versatile disks (DVDs). Japanese electronics manufacturer Toshiba and Sony are in discussions over the format of the next change in technology from DVDs to Hi Definition (HD) DVDs. This could be similar in nature to the jostling of positions between VHS and Sony's Betamax.

Style obsolescence

This type of obsolescence is less relevant within the P&SM profession. It refers to a change in style that results in a product no longer being required as a result of market changes.

Examples can be drawn from the automotive and clothing industries, with styling on motor vehicles being implemented annually, and clothing fashions changing seasonally.

Postponed obsolescence

This fourth type of obsolescence is where technological improvements are not introduced even though they could be. Four different types of obsolescence have been detailed. The reader will be able to identify certain 'drivers' of obsolescence under each of the types. These will have included, but not been limited to:

- The product life cycle
- Changes in the market
- The effect of competition
- The business risks of inaccurate forecasting
- Changes in production methods.

The legislative and political environment has been one of the main 'drivers' of obsolescence. They are discussed in the following section.

Main European Union directives

Impacting issues around obsolescence

When an EU Directive comes into force, it is the responsibility of the Member State to transpose (implement) it into national law. The EU Directives can therefore be a living document, and subject to revision during the implementation phase. Once the provisions of the Directive are transposed into the national laws of the Member State, they afford certain rights and obligations to citizens.

The key consideration for the procurement professional are which EU Directives affect their organisations. The following are four examples of Directives that impact purchasing and supply management:

- The Directive on Waste, Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC as amended by Directive 2003/108/EC).[4]
- The Directive on the Restriction of the Use of Hazardous Substances (RoHS) (Directive 2002/95/EC).[5]
- The Directive on Packaging and Packaging Waste (Directive 94/62/EC).[6]
- The End of Life Vehicle Directive (2000/53/EC)[7]

The Waste Electrical and Electronic Equipment (WEEE) Directive

Both the Waste Electrical and Electronic Equipment Directive (WEEE) and the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) entered into force on 13 February 2003. In this section we consider the WEEE Directive.

The purpose of the WEEE Directive is, as a first priority, the prevention of WEEE, and in addition, to promote the re-use, recycling and other forms of recovery of such wastes so as to reduce disposal. It also seeks to improve the environmental performance of all operators involved in the life cycle of electrical and electronic equipment, eg producers, distributors and consumers, and in particular those operators directly involved in the treatment of waste electrical and electronic equipment.[8] The reader is encouraged to consult the website of the European Commission relating to the environment, or the UK's Department of Trade and Industry website for criteria determining whether a product falls under the WEEE Directive.[9]

The final date for implementation in Member States was 13 August 2004. Future deadlines had also been set. For example, by 31 December 2006 at the latest, WEEE of at least 4 kg on average, per inhabitant, per year in a private household must be collected separately from other household refuse. The legislation also covers the minimum proportion of recyclable material that should be in products by 31 December 2006.

However, it was announced in August 2005 that the Department of Trade Industry (DTI) in the UK has delayed the implementation of the WEEE Directive's producer responsibility and retailer take-back obligations from January 2006 until June 2006. This decision reflected the Governments concern that an adequate UK network of facilities for separate collection of WEEE should be in place for householders to use.

This is a key practical requirement for the implementation of the Directive. Whilst much progress has been made towards this, it is clear that a UK-wide network of WEEE collection facilities will not be ready by the start of next year. A number of our members have made their concerns known to CIPS, so CIPS welcomes more complete infrastructure to be in place prior to implementation.

The professional purchaser may want to note that the European Council has granted Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia temporary exemption (referred to as a derogation) from Directive 2002/96/EC for 24 months (except in the case of Slovenia, where the exemption is only for 12 months).

The Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive

In this section we consider the RoHS Directive. This Directive is linked to the WEEE Directive, but focuses on hazardous substances relating to electrical and electronic equipment.

The purpose of this Directive is to approximate the laws of the Member States on restrictions of the use of hazardous substances in electrical and electronic equipment, and to contribute to the protection of human health and the environmentally sound recovery and disposal of waste electrical and electronic equipment".[10]

Since entering into force on 13 February 2003, there has been much debate as to what substances should be exempt from the obligations of the Directive. The European Commission pronounced a decision on the subject of exemptions on 18 August 2005.[11] The RoHS substance ban came into force on 1 July 2006, with collection and recycling targets to be achieved by 31 December 2006.

The reader is encouraged to consult the relevant website to assess how their organisation is affected by the RoHS Directive.

Directive on Packaging and Packaging Waste

This Directive aims to harmonise national measures in order to prevent or reduce the impact of packaging and packaging waste on the environment and to ensure the functioning of the internal market. It contains provisions on the prevention of packaging waste, on the re-use of packaging and on the recovery and recycling of packaging waste".[12] Directive 94/62/EC on packaging and packaging waste was amended by Directive 2004/12/EC on 11 February 2004.

The UK's Department for Environment, Food and Rural Affairs (Defra) has initiated a consultation paper (August 2005) to consider what business recovery and recycling targets for packaging waste are needed in 2006, 2007 and 2008 to ensure the UK meets the targets set out in EU Directive 2004/12/EC.

It is important that the purchasing professional is aware of the targets set out by the Directive[13.] Selected paragraphs from the Directive are as follows:

- No later than 31 December 2008 60% as a minimum by weight of packaging waste will be recovered or incinerated at waste incineration plants with energy recovery.
- No later than 31 December 2008 between 55% as a minimum and 80% as a maximum by weight of packaging waste will be recycled.
- No later than 31 December 2008 the following recycling targets for materials contained in packaging waste will be attained:
  60% by weight for glass
  60% by weight for paper and board
  50% by weight for metals
  22.5% by weight for plastics, counting exclusively material that is recycled back into plastics
  15% by weight for wood.

There are temporary derogations for the acceding States with respect to the targets of the Directive. The Directive states that the European Parliament and Council shall fix targets for the five-year phase from 2009 to 2014 by 31 December 2007. The Directive states that recycling targets for each specific waste material should take into account life-cycle assessments and cost benefit analysis of the products under consideration.

Of crucial importance to the buyer is the requirement for the Member State to set up return, collection and recovery systems. This will also apply to imported products which in turn raises important logistical and financial considerations for the purchasing community, when sourcing in the global environment.

Questions might include whether potential liability issues reside with the manufacturer, the importer or the retailer? In essence, how sophisticated are the reverse supply chains that may be required to enable fulfilment of EU legislation?

The End of Life Vehicle Directive

EU Directive 2000/53/EC aims at making vehicle dismantling and recycling more environmentally friendly, and set clear quantified targets for reuse, recycling and recovery of vehicles and their components. This Directive also pushes producers to manufacture new vehicles with a view to their recyclability.

This Directive is complex, with substantial secondary legislation proposals. Further details are available on the European Commission website.[14]

Conclusions and Further Guidance.

This CIPS guide stated at the outset that obsolescence in the supply chain is not new. However, an environmental and political agenda, being driven by the European Union, is addressing the whole issue of reducing consumption of resources, increasing recovery of material and recycling what is recovered.

The potential for obsolescence will always exist, especially if it is part of a marketing strategy. Others, however, will see the commercial benefits of recycling what would otherwise be obsolete material. European Union legislation affecting the procurement professional has been detailed. This proposed legislation is dynamic in nature and will evolve over time. The reader is encouraged to follow developments through the following governmental websites:

- The UK's Department for Environment Food and Rural Affairs (DEFRA):www.defra.gov.uk
- The UK's Department of Trade and Industry (DTI): www.dti.gov.uk
- The European Commission's Environment website: http://europa.eu.int/comm/environment/waste/index.htm

The UK's Environment Agency: www.environment-agency.gov.uk

The reader may also wish to consider the following organisations:

The Chartered Institute of Purchasing & Supply: (CIPS): www.cips.org/ knowledge

- The Component Obsolescence Group (COG): www.cog.org.uk
- The Waste and Resources Action Programme (WRAP):www.wrap.org.uk
- The European Environmental Bureau: http://www.eeb.org/
- Environmental Services Association: http://www.esauk.org/
- Disposal Services Agency (An Executive Agency of the MOD): http://www2.edisposals.com
- Waste & Resource Action Programme (WRAP): http://www.wrap.org.uk/ ...an environmental and political agenda, being driven by the European Union, is addressing the whole issue of reducing consumption of resources, increasing recovery of material and recycling what is recovered.

Main References

1 http://europa.eu.int/eurlex/en/com/cnc/2001/com2001_0264en01.pdf
2 http://europa.eu.int/comm/environment/waste/elv_index.htm
3 http://en.wikipedia.org/wiki/Obsolescence
4 http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_345/l_34520031231en01060107.pdf
5http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=32002L0095&model=guichett
6http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31994L0062&model=guichett
7http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=32000L0053&model=guichett

8 http://europa.eu.int/comm/environment/waste/pdf/faq_weee.pdf
9 www.dti.gov.uk
10 http://europa.eu.int/comm/environment/waste/pdf/faq_weee.pdf
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13 http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_047/l_04720040218en00260031.pdf
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