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**THE PUBLIC POLICY INTEREST IN THE U.K.  
IN STANDARDISATION**

## SUMMARY

1. Standardisation is a key factor in support of government policies, including competitiveness, innovation, reduction of trade barriers, fair trading and protection of consumer interests, environmental protection and public procurement. Used in conjunction with health and safety and environmental legislation, standardisation can also help government promote better regulation.
2. On the other hand, standards can be used to create trade barriers as well as to remove them. It is important for government to work against the danger of standards being used to create trade barriers, but rather to promote the very beneficial effects of standardisation.
3. Public policy is applied in order to compensate for market imperfections. Public policy must also seek to realise some of the potential socio-economic benefits of standardisation, including the promotion of the small and medium sized business sector and of worker, consumer and environmental interests.
4. The UK is expected to maintain a standards infrastructure consistent with European standards policy (as set out, inter alia, in EC Council resolution of October 1999) and a failure to do so would be interpreted negatively by European partners. Certain standards obligations are now enshrined in EC law, e.g. Directive 98/34.
5. Standards are increasingly important in the international trade arena, where influence is most effective if the efforts of this country's government and standards body reinforce each other. It is therefore, beneficial to promote the strength and influence of British Standards as the national standards body.
6. Product standards enable competition to focus on efficiency in providing the standardised aspects, as well as other additional features of products. This promotes a rise in the general level of product quality, performance and safety. Similarly, management and systems standards help to spread best practice and to raise general levels of performance. UK industry, helped by the National Standards Body, has been at the forefront of such developments.
7. Globalisation of trade and convergence of technologies require products to be considered less as stand-alone items and more as components in 'product networks', making interoperability standards an essential feature of a widening range of products.
8. By identifying standardised criteria by which service providers may be assessed, and identifying best practice, consumers and regulators are enabled to encourage and ensure acceptable levels of service provision. The public interest in many areas of such provision is thereby facilitated and focussable.
9. The inter-relationship between factors which protect the rights of innovators (such as patents) and those which propagate the innovations (such as standards) in a given product life cycle is therefore complex, but both types of factor are necessary for a successful innovation policy.
10. Reducing barriers involves removing mandatory specifications which are not justified by public policy (which is generally, the protection of health and safety); and by harmonising those which are so justified; and moving from national towards regional and international standards where practicable.

11. European policy on technical barriers (and the protection of health, safety and the environment which is the other side of the same coin) is inextricably bound up with standardisation. In keeping with the overall government policy of constructive participation in Europe, it is expected by our partners that we will maintain a UK infrastructure consistent with the policy we are helping to mould. An effective NSB, and a constructive relationship between it and U.K. government, are key parts of that infrastructure.
12. Pursuit of UK policy requires close co-operation between Government and British Standards so that negotiating positions in the standards and intergovernmental fora reinforce rather than conflict with each other.
13. Individual participants in a market do not necessarily have a strong incentive to invest in standards in their field, which would be beneficial for the market as a whole, unless they are satisfied that other players will do likewise. Public policy seeks to address this market imperfection.
14. A strong and effective standards body can help increase the relative attraction of the public standards route. Public policy seeks to achieve this by means of the Charter, the Memorandum of Understanding, and by directing DTI's financial contribution to BSI's funding towards helping BS achieve fully representative consensus standards.

DTI and BS share an understanding of these public policy interests, and how the constitutional structure provides a framework for pursuing them.

## PHILOSOPHY

### Introduction

1. Standardisation is a key factor in support of a number of government policies, including competitiveness, innovation, reduction of trade barriers, fair trading and protection of consumer interests, environmental protection and public procurement. Its importance is growing with the globalisation of commerce and the convergence of technologies. Used in conjunction with health and safety and environmental legislation, standardisation can also promote better regulation.
2. For these reasons there is a strong government interest in promoting effective standardisation in the UK. There are also potential problems to be avoided. Slow, rigid, out of date or inappropriate standards can be a hindrance to innovation rather than helping it. Standards can be used to create trade barriers as well as to remove them. It is as important for government to work against these dangers as to promote the very beneficial effects of standardisation.
3. Market forces are necessary for the development of efficient standards. But standards have some of the characteristics of 'public goods' and market forces alone will not enable the benefits of standardisation to be realised. In particular, there is an incentive for standards users to 'free-ride', leaving the development effort and costs to others. Conversely, left to their own devices innovative companies have an incentive to avoid standardisation, to promote their own specifications and exclude competition, perhaps by forming cartels. Public policy is required in order to compensate for these market imperfections. Public policy must also apply if some of the potential socio-economic benefits of standardisation, including the promotion of the small and medium sized business sector and of worker, consumer and environmental interests, are to be realised.
4. Standards are now an integral part of European Community policies, especially the completion of the Single Market using Articles 94 and 95 of the EC Treaty. If the government is to continue pursuing a policy of constructive participation in Europe it cannot avoid involvement in European standards policy as set out, inter alia, in EC Council Resolution of October 1999. The UK is expected to maintain a standards infrastructure consistent with European standards policy and a failure to do so would be interpreted negatively by European partners. Certain obligations are now enshrined in EC law, e.g., Directive 98/34.
5. Standards are also increasingly important in the international trade arena, where influence is most effective if the efforts of a country's government and standards body reinforce each other. It is therefore, beneficial to promote the strength and influence of the national standards body.

### Competitiveness and Innovation:

6. Product standards improve competitiveness by reducing costs both of manufacturing and of market transactions. They function by reducing uncertainty: a manufacturer does not need to reinvent the specifications or performance criteria incorporated in the standard, and can concentrate resources elsewhere. Both buyers and sellers in market transactions benefit from the shared information conveyed by a standard. Competition focuses on efficiency in providing the standardised aspects, as well as other additional features of products, with the aspects incorporated in the standard taken as read. This promotes a rise in the general level of product quality, performance and safety, and encourages competitive suppliers to differentiate their

products by additional desirable features.

Similarly, management and systems standards help to spread best practice and to raise general levels of performance as the requirements laid down in the standard become the expected norm. UK industry, helped by the National Standards Body, has been at the forefront.

7. One class of standards which is growing in importance is concerned with interoperability. Such standards have long been vital in the defence sector. Globalisation of trade and convergence of technologies require products to be considered less as stand alone items and more as components in 'product networks', making interoperability an essential feature of a widening range of products in, amongst others, the communication and information industries.
8. A further class of Standards, which is also growing, is concerned with the provision of services. By identifying criteria by which service providers may be assessed, and identifying best practice, consumers and regulators are enabled to encourage and ensure acceptable levels of service provision. The public interest in many areas of such provision is thereby facilitated and focussable.
9. Standards can help to propagate innovations, and hence to enable economic benefit to be derived from them. They do so by spreading acceptability of an innovation in the market, and by enabling other suppliers to incorporate the innovation in their own products. The former effect benefits innovators directly whereas the latter can only do so indirectly (purchasers benefit from both effects). The inter-relationship between factors which protect the rights of innovators (such as patents) and those which propagate the innovations (such as standards) in a given product life cycle is therefore complex, but both types of factor must be recognised in a successful innovation policy.

### **Reduction of Trade Barriers**

10. Tariffs have been largely eliminated from world trade (and totally from trade within the European Economic Area), exposing the harmful effects of non-tariff barriers. These include technical barriers caused by differing specifications for products in different markets. The barriers may be non-regulatory (where voluntary standards differ from one country or region to another); regulatory (where technical rules specified in law for the protection of health, safety or the environment or for reasons of national policy impose differing requirements); or a mixture between the two (where national or regional standards confer a presumption of conformity with technical regulations). Reducing barriers involves removing mandatory specifications which are not justified by public policy; harmonising those which are so justified (generally, the protection of health and safety); and moving from national towards regional and international standards.
11. In the European Single Market the interrelationship between the standardisation and regulatory aspects of work on technical barriers is extremely close. "New Approach" Directives made under Article 95 specify health and safety requirements (and sometimes other requirements) in broad terms. Standards prepared by the European Standards Bodies against mandates from the European Commission (and partly funded by the Commission) fill in the technical detail. Products complying with the mandated standards are 'presumed to comply' with the mandatory requirements of the Directive. Thus, although the application of the standards remains voluntary, European policy on technical barriers (and the protection of health, safety and the environment which is the other side of the same coin) is inextricably bound up with

standardisation. The UK makes a major contribution to EU work in this area, in keeping with the overall government policy of constructive participation in Europe. It is expected by our partners that we will continue to do so, and that we will maintain a UK infrastructure consistent with the policy we are helping to mould. The effectiveness of the NSB, and a constructive relationship between it and U.K government, are vital components of that infrastructure.

12. At the international level, barriers are tackled by standards bodies through the International Organization for Standardization (ISO) and the Electrotechnical equivalent (IEC) and by governments through the Technical Barriers to Trade Committee of the World Trade Organisation. The Trade Committee of the OECD also has a developing interest in standardisation. There is also a number of other organs involved, which may be intergovernmental (for example OIML), non-governmental (the Transatlantic Business Dialogue, for example), or other standard bodies (including regional groupings). Pursuit of UK policy requires close co-operation between government and BSI so that negotiating positions in the standards and intergovernmental fora reinforce rather than conflict with each other.

### **Fair Trading and Protection of Consumer Interests:**

- 13 Standards convey information to consumers, and therefore help them to purchase effectively. Standards concerned with safety or environmental performance also provide a level of assurance to consumers which may otherwise be very difficult for them to obtain. By providing an independent and testable specification for key features of a product, standards offer objective, empirical evidence which provides fundamental assistance for settling disputes, and so help to reduce the costs of regulating the market.
14. **Small and medium sized enterprises:** Standards can be particularly helpful to SMEs, in two ways. First, the *existence* of a standard helps to lower entry barriers to a market. Second, the *process* of standardisation allows the interests of SMEs to be taken into consideration and reflected in the resulting standard.
15. **Better regulation:** The underlying principle of the European Community's New Approach is to make use of standards so that legislation can be more goal-based, thus contributing to better regulation policy. In effect, responsibility for implementing regulation is shared with industry, since industry through the standards bodies is entrusted with drawing up the standards which give presumption of conformity. Furthermore, there is no need to amend legislation in the light of technical progress, provided that the standard is maintained.

### **Potential Pitfalls**

16. Standards can reduce some aspects of "variety"; that is the unavoidable consequence of the certainty and consistency which are the basis for the beneficial effects of standardisation. Over-early standardisation in a rapidly developing technology or product sector can shut out alternative lines of development and discourage innovation. Similarly, government backing for a standard to the exclusion of non-standard approaches can inhibit technological progress.
17. Public policy can limit these problems to some extent, for example by avoiding the direct incorporation of standards into regulation, and by specifying essential requirements in terms of performance rather than design. But the main safeguard against them is to allow market forces to influence standardisation, and to keep to the minimum the role of government in the preparation of specific standards. In practice, BSI does not itself write

standards, but facilitates the preparation of standards by consortia of those interested in the outcome. Members of these consortia are drawn primarily from the – usually large – suppliers (manufacturers as well as ‘own branders’ and market leaders) interested in using the standard for their products and those who design and specify the products themselves and assembly of products. A key role of BSI is to facilitate genuine ‘consensus’ standards, by enabling representatives of other interests (users, SMEs, workers, lobby groups and enforcement authorities) to participate in their preparation.

### **Standards as “Public Good”**

18. The benefits of standards are not exclusive: their use by one supplier/producer does not preclude their use by others. Market participants cannot be excluded from using them; the minimum entry price for doing so is the cost of acquiring the standards, which is already low and being forced lower by new technologies. These ‘public good’ characteristics mean that individual participants in the market do not have a strong incentive to behave in the way which would be beneficial for the market as a whole. One rational behaviour for individual participants is to leave the development of standards to others, and to ‘free-ride’ on the results. Another is to use standards as a barrier, by excluding competitors from the standardisation process and favouring specific technologies. There is little incentive for suppliers / producers alone to ensure that standards reflect wider socio-economic interests by enabling representatives of consumers, SMEs, workers and others to participate.
19. If it believes it is in a position to do so, a company may seek to impose its own private ‘standards’ on the market, either by itself or with a cartel. If successful, this can lead to a damaging concentration of economic power and, ultimately, a need for competition authorities or the courts to intervene to prevent abuse of a dominant position. (The concern of the US anti-trust authorities with the activities of Microsoft might be thought of in this light).
20. A strong and effective standards body can help to make such an eventuality less likely, by increasing the relative attraction of the public standards route. BSI fulfils this role, by providing an efficient facilitation service to suppliers / producers. However, while it is necessary for BSI to be responsive to suppliers’ / producers’ requirements that is not sufficient, because there could still be a tendency towards under-provision of standards, and for interested parties other than suppliers / producers to be under-represented or excluded from the standardisation process. Public policy seeks to redress the balance by:
  - The objects and other terms of BSI’s Royal Charter, which sets the development of standards as BSI’s primary object;
  - A Memorandum of Understanding between BSI and DTI, which spells out more fully what BSI is expected to do in fulfilment of its Charter obligations in respect of the key public policy dimension to standardisation;
  - Directing DTI’s contribution to BSI’s funding towards programmes which help consumer and other interests to participate in standardisation and, more generally, which help BSI achieve fully representative consensus standards.

DTI and BS share an understanding of these public policy interests, and how the constitutional structure provides a framework for pursuing them.