

DesignDenmark

April 2007

The Danish Government

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The Danish Government

Foreword

Denmark has a tradition for good design, which is internationally renowned. *Danish Design* was an international trendsetter in the 1950s and 1960s and helped pave the way for international commercial successes in furniture, fashion and hi-fi design, for example.

Good design is essential for the ability of Danish products and services to sell at a high price and hold their own in global competition. The Danish Government, therefore, aims for Denmark to be restored to the international design elite.

With this publication, "DesignDenmark," the Government presents a white paper on the direction for design policy in Denmark. The publication sets out the Government's vision for this policy and for the initiatives that will be implemented in the time ahead.

The objectives of the Government's design policy are expressly: to generate growth in the design industry, and for design to boost growth in the rest of the corporate sector.

With this white paper, the Government wishes to elicit a dialogue with the Danish design world and the rest of the Danish corporate sector concerning the lines of sight in the present white paper and what it will require from all the players involved to succeed.

Bendt Bendtsen Minister for Economic and Business Affairs

Denmark restored to the international design elite

Good design is an increasingly important means for businesses to hold their own in international competition. Design has the power to make products and services more attractive to customers and users, so they are able to sell at a higher price by being differentiated from the competition by virtue of new properties, values and characteristics.

Studies from Denmark and abroad¹ indicate that businesses that make use of design do better than those who do not – in terms of both earnings and exports. The more integrated design is in the development and innovation processes of the business, the greater its impact is on gross profit growth and export capability.

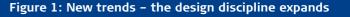
For an increasing number of companies, design is a key element in their development and innovation processes. Take for example the design of MP3 players, which stand out from the rest. Or the design of menus in computer games or on mobile phones that makes them more user-friendly. But more businesses need to tap into the potential of design. It is thus essential that the corporate sector is assured of access to the best design services.

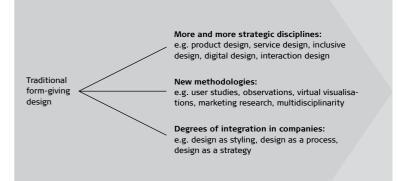
In the 1950s, Denmark was instrumental in setting the international design agenda. Danish Design was and still is internationally renowned for its first-rate design, born out of a form-giving tradition. Danish Design was and still is characterised by its focus on pure form-giving design and knowledge of materials, and a sense of detail and quality. But since then, design has undergone a profound transformation.

Today, the word design embraces many different disciplines such as communications design, digital design, product design, interior design, fashion and textile design, interaction design and service design. Design is thus no longer a closely delimited discipline, but rather an array of often interacting disciplines; see figure 1.

In addition, new methodologies have become integrated in the processes embodied by the design discipline, such as those from user-driven innovation, marketing research and the engineering skills.

At the same time, design has also evolved in the direction of a more strategic and conceptual level, where businesses increasingly use design throughout the development process or for defining and developing new business areas. Different companies and public institutions employ design in different ways. In some companies, design is used as a strategy, i.e. as a business method in which they take a strategic approach to the use of design and designers. In other companies, design is used primarily in the final styling of the product.²





In this way we have seen a dynamic development in the design discipline, which again makes new demands regarding the application of design if design is to provide leverage in international competition. And while Denmark is still renowned for its design in the 1950s and for its strong position in form-giving design generally, there is much to indicate that Denmark has found it difficult to retain its position as a trendsetting design nation. Danish design has not been sufficiently capable of assimilating the new trends, unlike countries such as the USA, Japan, Germany, Great Britain and the Netherlands, which set the design agenda. Instead, Denmark ranks among countries following in the wake of the leaders, such as Belgium, Italy, Sweden and South Korea.³

¹ "Designs Økonomiske Effekter" (Economic Impacts of Design), Danish Enterprise and Construction Authority (2003); "Næringslivets holdninger til design" (Business Sector Attitudes to Design), Norwegian Design Council (2006), "The Impact of Design on Stock Market Performance", British Design Council 2004; "Design in Britain 2005-2006", British Design Council (2006).

 ² Udvalget om styrkelse af dansk design (Commission on Danish Design Promotion) (2006): "Rapport fra udvalget om styrkelse af dansk design." (Report form the Commission on Danish Design Promotion).
 ³ Danish Enterprise and Construction Authority (2007): "Et billede af dansk design – udfordringer og perspektiver" (A picture of Danish design – challenges and perspectives), Red Associates (2006): "DanmarkTM – perceptionsanalyse og anbefalinger til en offensiv global markedsføring af Danmark" (Denmark TM – perception survey and recommendations for a global offensive to market Denmark).

The Government's vision for Danish design

The Government's vision is for *Denmark to be restored to the international design elite*. Danish design is founded on a strong tradition conveyed by the original native synonym for 'design': *'formgivning'*, as in form-giving: in its purest sense, creating artefacts – be they chairs, televisions or wind turbines – with regard for their functionality and aesthetic. A continued development of Danish design should be based on that foundation. Design should be instrumental in turning Denmark into a nation brimming with ideas, inventions and advances that can be realised as exports and jobs.

First, the ambition is to give impetus to development and growth in the design industry. The Danish design environment should be powerful enough to attract international design clients, the design departments of international companies, talented designers, students and researchers as well as international conferences. This in turn will attract investment and trade to Denmark, while securing demand for cutting-edge design services from the Danish design industry.

Second, design should be instrumental in boosting the growth of the Danish business sector generally. Denmark should be among the world's best nations at applying design in the development of products and services.

We also need to become better at using design in more industries, where design will serve to create added value. Design should not be used solely for the finishing touches, but instead be pivotal for innovation in companies.

In order to succeed in this, Denmark must sustain and build on its strong position in form-giving design, but also embrace new trends in design disciplines such as service design, interaction design and userdriven innovation.

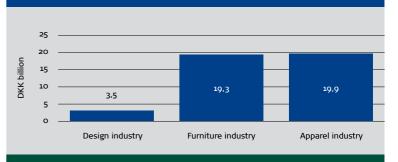
Positive trends in Danish design

The preconditions for the Government's vision for Danish design are in place. Over the last decade, Danish design has seen a positive trend, from which an independent design industry has emerged.

There is intense entrepreneurial activity in the design industry. The number of businesses and the industry's total turnover has quadrupled since the mid-1990s. There are now more than 4,500 businesses with total turnover in excess of DKK 3.5 billion. Exports have increased sixfold over the same period, which means a quarter of Danish design industry turnover today derives from exports. Further, Denmark is in 8th place overall in terms of the number of design awards for Danish businesses for the use of design in their products.⁴

A number of adjacent industries, which traditionally use design as a powerful value-adding factor, are also enjoying a favourable trend. Denmark is currently on the rise as a leading fashion centre, with Copenhagen Fashion Week currently Northern Europe's largest fashion fair. Turnover for the apparel industry rose to DKK 20 billion in 2005, of which nearly 90% derives from exports. Danish furniture industry turnover amounts to DKK 19 billion, of which more than 80% derives from exports.⁵ Figure 2 below shows turnover for the design, furniture and fashion industries.

Figure 2: Turnover in the design, furniture and fashion industries 2005 in DKK billion



But Denmark has not quite succeeded yet. The Government's ambition is for Denmark, by 2015, to be the world's most competitive society, and for Danish companies and public institutions to be among the most innovative in the world. The same applies to the design industry, where recent years have seen rapid development. If Danish design businesses are to be the most competitive, they will need to do more than tag along after the best. It is therefore necessary to ensure conducive framework conditions for Danish design to reclaim its ranking among the international elite.

The Government's initiatives

Within recent years, the Government has taken a number of initiatives, the object of which is to ensure sustained positive growth in the design industry.

⁴ Danish Enterprise and Construction Authority (2007): "Et billede af dansk design – udfordringer og perspektiver" (A picture of Danish design – challenges and perspectives).

⁵ Federation of Danish Textile & Clothing, www.textile.dk; Danish Furniture, www.danishfurniture.dk.

In 2003, a radical reform of the design study programmes was introduced under the Ministry of Culture with the object of ensuring that Danish design students receive a training of the appropriate standard and with relevance for the needs of the corporate sector.

In 2005 the Government launched the BornCreative export promotion scheme to assist among others Danish design businesses in their internationalisation efforts. Finally, the Government was instrumental in mounting the world's largest design award show – INDEX: – in Copenhagen in 2005.

In autumn 2005, the Government appointed the "Commission for Danish Design Promotion", which in May 2006 submitted a catalogue of 16 recommendations and proposals for strengthening design as a growth parameter for the Danish corporate sector.

The Commission indicated a need to strengthen the framework conditions within five main action areas – the corporate sector's design use, the availability of design services, education and research in design, design rights and greater visibility for Danish design – in order to promote growth in the Danish design industry.

On the basis of the Commission's recommendations, the Government has allocated an additional DKK 10 million p.a. over the period 2006– 2009 for design promotion. The DKK 10 million will be used to follow up on the Commission's recommendations and thereby finance many of the initiatives currently being set in motion in the field of design. These are in addition to the DKK 13 million allocated annually to Danish Design Centre for design promotion activities in the corporate sector. Thus in total, DKK 23 million are allocated annually to corporate sector design promotion activities.

The recommendations from the Commission are currently being put into effect. One of these has been the intensified commercial orientation of activities comprised by the performance contracts between the Government and Danish Design Centre. At the same time, the INDEX: international design award will be repeated in 2007, and new advisory schemes on the protection of intellectual property rights and copyright have been launched for the design industry.

Furthermore, a study has been conducted into the challenges facing Danish design: *"Et billede af dansk design – udfordringer og perspektiver"* (A survey of Danish design – challenges and perspectives).

Challenges facing Danish design

Overall, Danish design is developing in a positive direction. But a number of challenges remain to be met if Denmark is to be restored to the international design elite:

- There is much to indicate that the market for design services is not altogether well-functioning. Rapid developments in the field of design make it difficult to obtain a complete overview of the new possibilities afforded by design. Consequently, many businesses are not making the most of the full potential of design. This means, for example, that only few design businesses achieve sustained growth.
- There is a need to ensure that design graduates are more geared to corporate-sector needs, and more internationally oriented than they are at present.
- Danish design's potential must be better exploited internationally.

In this publication, the Government presents a number of specific lines of sight for Danish design. In order to succeed 9 initiatives will be implemented, representing new measures since the Commission on Design Promotion's report of 2006, and which should be seen in the context of the initiatives already being implemented.

It is vital that the Government contributes to ensuring internationally competitive framework conditions. But it is equally vital that the design industry and design users themselves take action. If Denmark is to be restored to the design elite, it is not to be taken for granted that the initiatives that have already been taken, and the new ones set out in this paper, on their own can push Denmark to the top. There is a need for action from all parties involved.

The Government will therefore be setting up a reference group, consisting of representatives from the design industry, the rest of the corporate sector, trade organisations, knowledge institutions and ministries. The reference group will be evaluating and monitoring developments in the field of design.

A better functioning market for design services

The Government aims for Danish companies to be among the best at making the most of and working with design. In order to increase corporate sector use of design it is crucial to have a well-functioning market for design services.

In recent years, the design industry has enjoyed positive growth with rising demand, an increasing number of businesses and rising turnover. There is much to indicate that the market for design services is in many ways quite well-functioning.

But the market for design services is not transparent because design capabilities are evolving rapidly, along with many new design disciplines and methodologies. Consequently, the potential afforded by design is not being put to best use in the Danish corporate sector, and there is thus a need for greater awareness of the potentials offered by design among those businesses that purchase and use design.

Among other things, this means that no design businesses are created with multidisciplinary competencies. It also means that a strong growth layer is lacking in the design industry, where very few design businesses are achieving sustained growth.

Greater awareness of the potentials of design

It is important for Danish companies to have access to information about the many potentials afforded by using design. Especially because design is evolving rapidly, with the design of products such as furniture and apparel supplemented by new design disciplines.

Design is now expanding to embrace new types of products and services such as interaction design, which comes from communications and information technology, and is used for instance in the design of user menus for mobile phones. And service design, where design is used in enhancing the user-friendliness of services.

At the same time, design has begun to embrace new methodologies. There is a growing focus on systematic and methodical incorporation of user experience in design, which entails the involvement of competencies in marketing research, consumer behaviour, technology, anthropology and psychology in the design processes.

The many new potentials of design mean that it can be used more extensively by businesses as a strategic tool in commercial development. An example is retaining the services of designers in defining new business areas, and involving designers in the entire process of developing new products or services. Another example being where design creates a visible link between the businesses' products and services, brand, websites, marketing and retail outlets.

But while 4 out of 5 medium-sized Danish businesses are using design, only 1 in 5 is using design strategically. Among small businesses, there are even fewer. We also know that companies which have received a great deal of information about the use of design are more inclined to use design at a strategic level.⁶

There is thus every indication that the market for design services is nontransparent. Many companies may find it difficult to get a clear picture of the potentials offered by the new design disciplines, and which services are supplied by which design businesses. It may also be difficult to know what to demand in the way of services, and how to put a value on those services.

There may therefore be a need to strengthen information efforts concerning strategic use of design, for example, by ensuring that information and knowledge about design is targeted at all industries and sectors, and that companies in all parts of the country receive full information about the potentials of using design.

This also applies to the public sector, where design is still used primarily in producing brochures, websites, signage etc. There is much to indicate that the public sector is to a greater extent capable of exploiting the potential of design in extending and enhancing its services.

In the UK, there are examples of the use of service design in public sector services, such as in fitting out classrooms in such a way as to ensure optimal involvement of pupils in teaching. Or the design of an operating theatre where all the instruments are adapted and inter-matched in such a way as to minimise the risk of surgical error. Specific international experiences thus indicate that incorporating design in the development of public sector services will often result in improved quality and enhanced usability. But there is still a need for an information drive to ensure this also reaches Denmark.

A line of sight for corporate use of design

The Government wishes to boost the conditions for the dissemination and use of strategic design for more businesses in the Danish corporate sector. In 2005, 21% of Danish businesses were using design as an ele-

⁶ Explora (2006): "Motiver og barrierer for virksomheders brug af design" (Motives and barriers for corporate use of design"; Explora (2005): "Dansk Design Centers designfremmeindsats." (Danish Design Centre's Design Promotion Drive).

ment in their strategy. No surveys have been conducted, either at home or abroad, of how many businesses would benefit from strategic use of design. Neither in Denmark nor in other countries are there any experiences of measuring the macroeconomic impacts of design.

However, there is much to indicate that intensifying global competition from low-wage countries makes it essential for Danish businesses to give higher priority to non-cost-related competitive parameters – not least design. When Danish export businesses achieve high prices for their products this is due, among other things, to the fact that they often produce niche or up-market products of high quality, with attractive design, etc. A specific line of sight for the Government's design policy is therefore:

Line of sight: A larger proportion of Danish businesses is to use design strategically.

Stronger growth layers in the design industry

It is important to achieve growth in the design industry itself. This creates jobs in the design industry, and it is vital for the Danish corporate sector to have access to design services from a well-functioning design industry.

In recent years, the design industry has enjoyed positive growth, with rising demand, an increasing number of businesses and rising turnover. But the potential could be exploited even better if more design businesses were to achieve sustained growth.

The design industry currently consists primarily of one-man businesses; see Figure 3.

Figure 3: Distribution of businesses in the design industry according to size?

⁷ Danish Enterprise and Construction Authority (2007): "Et billede af dansk design – udfordringer og perspektiver" (A picture of Danish design – challenges and perspectives), Red Associates (2006). Even among businesses with as much as a decade in business behind them, only one in twenty ends up with more than five employees.⁸

This means that many small design businesses are not incorporating e.g. social science competencies and engineering and business skills. Many design businesses are unable to perform design assignments incorporating different design disciplines. And only a few work systematically with their customers and suppliers to develop products and services.

Finally, Danish design businesses are to a great extent concentrated geographically around the large towns and cities. This means that it can be difficult for businesses outside these urban centres to engage in permanent partnerships with design businesses and to come to appreciate the full potential of design. It is therefore even more important to ensure targeted design information activities in all the Danish regions.

Lines of sight for the growth of design businesses

Businesses that use design systematically and strategically do better than other businesses. Businesses at home and abroad that use design systematically and strategically rate design more highly than other businesses do.⁹ And those design businesses that are capable of supplying services that meet demand will therefore be able to charge more for their services than other design businesses.

The greater the demand for design services, the easier it will be to charge more for design services and thereby generate value in the design industry. The trend in value added per design industry employee may therefore be taken as an indicator of the scale of corporate sector demand for design services and of how highly design services are rated.¹⁰

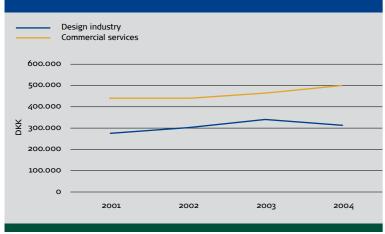
There is much to indicate that the design industry faces a challenge on that point. Studies show that value added per design industry employee in 2004 was 38% lower for businesses in the design industry than in commercial services generally; see Figure 4.

 ⁸ Vækstfonden (2006): "Dansk design – en god forretning?" (Danish Design – a Good Business?).
 ⁹ Danish Enterprise and Construction Authority (2003): "Designs økonomiske effecter" (The economic impacts of design); British Design Council (2006): "Design in Britain 2005–2006"; Explora (2006): "Motiver og barrierer for virksomheders brug af design" (Motives and barriers in corporate use of design);

Norwegian Design Council (2006): "Næringslivets holdninger til design." (Corporate attitudes to design).

¹⁰ Value added equates to the turnover of a business plus other operating income less its consumption of products and services.

Figure 4: The trend in value added per employee, 2001–2004¹¹



The Government's ambition is for the design industry's value generation to be strengthened over a number of years in order for the design industry to approximate other businesses in commercial services. The line of sight is therefore:

Line of sight: Value added per design industry employee is to approximate the average for commercial services.

In order for this to be achieved, it is important that businesses express demand for and use design as an important element in their value generation. And that more design businesses are capable of supplying high-quality design services.

For the Government, this will mean ensuring that businesses in all industries and in all parts of Denmark gain access to better information about the potentials afforded by design. The Government will therefore be ensuring that businesses in all industries and in all regions of the country gain access to better information about the potentials afforded by design.

At the same time, the Government will be launching an initiative for design in public-sector services with the aim of raising awareness of the possibilities of using design in new ways, including within the service sector. While growth in the design industry must ultimately be driven by the design businesses themselves, the Government will ensure that they have the most conducive frameworks for building and enhancing their business to ensure continual professionalisation of the industry in terms of specific access to advice on capital, information about technology and design rights protection.

¹¹ Statistics Denmark, StatBank Denmark.

Box 1: Overview DesignDenmar	w of initiatives in the Government's k policy
Challenge:	A better functioning market for design services
Lines of sight	A greater proportion of Danish businesses encouraged to use design strategically
	Value added per design industry employee to approxi- mate the average for commercial services.
Initiative	Content
 Danish Design Centre activities to be made in- dustry-specific and regionalised 	From 2007, Danish Design Centre will be implementing an information drive on the use of design geared to selected industries and in each region. This will ensure that businesses nationwide gain local access to professional information about the use of design. At the same time, Danish Design Centre will be presenting new propositions to Danish design businesses concerning business development advice.
2. Design of public sector services	Service design is a new design discipline where the fo- cus is on developing user-friendly services. The Govern- ment will be instituting consolidated measures to pro- mote the development of a market for service design in Denmark. This will be achieved through the launch of a number of demonstration projects on design of public sector services and through a strategic partnership with foreign authorities and knowledge institutions – in the first instance in the UK – on the use of service design.
3. Development of Danish fashion zones	The Danish fashion industry is on the rise, but is made up of very small businesses. This means that large parts of the industry are very vulnerable. The Government will be looking into the option of inviting tenders for the develop- ment of one or more fashion zones. The fashion zones will provide access to advice on business development, inter- nationalisation and growth.
4. Rights protec- tion, including design, patent and trademark rights	Protection of rights to design is all-important in ensuring that Danish businesses profit from using design. The Gov- ernment will be offering Danish businesses a number of new options for protecting their designs. Among other ini- tiatives, the Design:VAGT scheme offering Danish design businesses comprehensive advice on rights protection will be continued. As of 2007, tuition will also be offered on rights issues on Danish design degree programmes, as well as thorough instruction in protecting rights to design, patents and trademarks via the regional Business Links.

More commercially oriented and internationalised design competencies

The competencies of Danish designers must be able to meet corporate sector competency requirements and be internationally competitive. These competencies are a crucial 'raw material' for both design firms and other businesses using design, but are also crucial in attracting international firms, designers, students and conferences to Denmark.

The two Danish schools of design, Danmarks Designskole and Designskolen Kolding, both offer five-year further education programmes, while design is also an integral component of the programmes at Aarhus School of Architecture and at the School of Architecture at the Royal Danish Academy of Fine Arts. In addition, institutions such as the Graphic Arts Institute of Denmark and TEKO, the institute of education within fashion and lifestyle, offer a range of short and medium cycle study programmes in the field of design. Finally, there are a number of commercial programmes qualifying students as technical designers and skilled textile and clothing assistants for example.

The Danish workforce numbers a total of 15,000 individuals with different design qualifications. However, the rate of unemployment is approximately twice as high for persons with design qualifications as it is for the Danish workforce generally. Further, designers on the labour market are often not using their design qualifications in their positions; see Table 1. This may indicate that not all designer competencies are sufficiently up to meeting corporate-sector demand.

This trend is confirmed by the fact that job opportunities for newly qualified designers have been weaker than for newly qualified professionals in the workforce as a whole. In 2004, approximately 20% of designers who qualified in 1997–2002 were unemployed.¹² By comparison, the average rate of unemployment one year after qualifying was 9.4% of the total workforce, while 10% of university graduates qualified for 1–4 years were unemployed.¹³

¹² Rectors under the Danish Ministry of Culture (2006): "Employment Report 2005".

¹³ Uni-C Statistik & Analyse: "Befolkning, Uddannelse og Arbejdsmarked 1997–2004" (Population, Education and Labour Market 1997–2004), Danish Confederation of Professional Associations (2006): "Ledighedsstatistik" (Unemployment Statistics).

Table 1: All persons with design qualifications and commercial relevance, November 2005 ¹⁴				
	Commercial qualifi- cations related to design	Short and medium cycle design-related qualifications	Long-cycle further education design qualifications	
Number in the workforce	5.621	7.413	2.320	
Rate of unemployment (Nationally: 5.3 %)	8,1%	10,4%	12,8%	
Percentage in non- design-related jobs	43,6%	43,5%	27%	

A survey of 200 international designers and design experts identified the 60 design study programmes worldwide that are best at linking design, engineering science, commerce and social sciences. The list contains design study programmes in the Netherlands, Switzerland, Finland, Sweden and Austria, but no Danish programmes.¹⁵ This indicates that while Danish design strengths lie in form-giving design, Danish design study programmes have found it difficult to make their mark internationally when it comes to new multidisciplinary trends in design.

At the same time, the number of Danish design students studying abroad as part of their education in Denmark is relatively low. A total of 29 students from the Danish schools of design – Danmarks Designskole and Designskolen i Kolding – went on a student exchange abroad in 2005, which equates to some 17% out of a single year. By comparison, 31% of university undergraduates go on international exchanges.¹⁶

Line of sight for the employability of design graduates

There is much to indicate that many design graduates do not fully possess the competencies demanded by the corporate sector, including international competencies. It is important that the Danish design study programmes enable designers to take up employment in their field, while the corporate sector should have access to recruiting labour with the competencies it requires. The rate of unemployment can be seen as an indicator of the relevance of study programmes to the corporate sector. The aim is to ensure that design study programmes give graduates the same chances of gaining employment in their discipline as graduates of other disciplines. The Government will therefore be monitoring employment trends in the coming years:

Line of sight: The rate of employment among newly qualified designers must approximate the rate of employment among other newly qualified persons.

The Government has implemented a number of initiatives with a view to strengthening long-cycle further education in design. In 2003, a reform was carried out to introduce new academic content, whereby the study programmes are now organised into the Danish *candidatus* (equivalent to a master's degree) and international bachelor programmes. The first master's equivalents receive their degrees in 2008. At the same time, the study programmes reduced their intake to match the supply of graduates to demand.

As next steps, the Government will be following up with a number of initiatives to ensure that the design programmes are more closely targeted to demand in the corporate sector and the international market. This will be done by orienting the programmes more closely to their area of application, and through collaboration with prospective employers. At the same time, the international profile of Danish design programmes will be strengthened to enable Danish designers to operate in a corporate sector with international customers and competitors.

Finally, measures will be instituted to establish better course and educational options for designers. Design graduates will have the opportunity to be employed as "Regional Knowledge Pilots" in businesses with only limited experience of employing highly qualified staff.

¹⁴ Statistics Denmark, see Danish Enterprise and Construction Authority (2007): "Dansk design – perspektiver og udfordringer." (Danish Design – Perspectives and Challenges). The categories are made up of different qualifications, and may comprise qualifications resulting in both high and low rates of unemployment.

¹⁵ Business Week, October 2006: http://bwnt.businessweek.com/dschools/2006/.

¹⁶ CIRIUS: "Mobilitetsstatistik – videregående uddannelser 2004/2005" (Mobility Statistics – Further Education Programmes 2004/2005).

Box 2: Overvie "DesignDenma	w of initiatives in the Government's rk" policy
Challenge:	More commercially oriented and internationalised design competencies
Line of sight:	The rate of employment among newly qualified designers must approximate the rate of employment among other newly qualified persons.
Initiative	Content
5. Commercial and international orientation of further education design study programmes	Study programmes at Danmarks Designskole and Design- skolen Kolding will be made more commercial and interna- tional in their orientation in order to strengthen the qual- ity of the programmes. The programmes will be accredited as bachelor and master equivalents by 2010 at the latest. Among other things, strategic partnership and exchange agreements will be concluded with leading international design study programmes. More formalised collaboration with the corporate sector will be introduced in the form of employer panels and partnerships.
6. The commercially oriented further education design study program- mes must be able to match the best counterparts abroad and meet corporate sector demand	The competitiveness of short and medium cycle further education programmes (the Danish 2-year academy pro- fession diplomas and professional bachelor degrees) will be improved. This will be achieved by introducing ac- creditation and work experience, by strengthening the international profile of the programmes and promoting interaction with the corporate sector.
7. Boost compe- tencies of quali- fied designers in the workforce	Danish designers are to have access to updating their academic/technical and commercial competencies and offered education schemes. Courses will therefore be offered in interaction design under the Copenhagen In- stitute of Interaction Design and in business manage- ment under Danish Design Centre. At the same time, the Knowledge Pilot Scheme will admit designers to enable them to acquire commercial competencies through a pro- bationary position with a business that has only limited experience of employing highly qualified staff.

Better international use of Danish design

We want to see Danish design become world class, and the nation capable of reaping the rewards in the form of exports, jobs and investments in Denmark. This calls for us to be internationally oriented. To do that, we need to attract customers to Danish design businesses, the design departments of international companies, highly qualified labour, foreign students and conferences.

Exports are often an important precondition for business growth,¹⁷ and it is vital that Danish design businesses also hold their own on the international market. It is therefore encouraging that the design industry is already undergoing an internationalisation process.

Between 1995 and 2005, the Danish design industry's exports increased sixfold and currently amount to just under DKK 800 million, while the individual businesses are becoming increasingly internationalised. While the export share of turnover generated by design businesses rose from 15% in 1995 to 24% in 2005, this share is still lower than the private sector average. At the same time, increasing numbers of Danish design businesses are setting up business abroad, with subsidiaries in Northern Europe, East Asia and North America.

This trend demonstrates Danish design's great potential on the international scene. However, the design industry is made up of many small businesses that lack experience of the international aspect – of exporting abroad or trading with international customers or of establishing activities abroad. This makes it essential to support the internationalisation of such design businesses.

It is also important to promote international awareness of Danish design and Denmark as a design nation in order both to preserve and develop Danish design as a brand and to attract international investments, designers and students to Denmark. It is therefore important to ensure that Denmark is known not only for its 1950s furniture classics, but also for state-of-the-art and innovative design.¹⁸

Although Danish design has a good reputation abroad, Denmark is facing keen competition from other countries and centres for design.

¹⁷ Danish Enterprise and Construction Authority (2006): "*Iværksættere og nye virksomheder, nøgletal 2006*" (Entrepreneurs and new businesses, key performance indicators 2006).

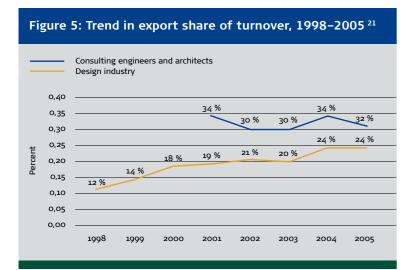
¹⁸ Red Associates (2006): "DanmarkTM – perceptionsanalyse og anbefalinger til en offensiv global markedsføring af Danmark." (Denmark TM – perception survey and recommendations for a global offensive to market Denmark).

And even if individual businesses have established design departments in Denmark, there is even greater potential in attracting international businesses' design departments, students or a workforce of highly qualified designers.¹⁹

Line of sight for design industry exports

From an overall perspective there is thus a need for measures to ensure that Danish design is exploited for export purposes and to ensure that Denmark becomes a leading design centre capable of attracting foreign investments and customers to the design industry. Because in their first year, companies that achieve growth average more exports than other businesses.²⁰

In 2005, exports by Danish businesses amounted to an average 24% of their turnover. This then puts the design industry above several other commercial service industries, which generally find internationalisation difficult. However, the design industry is still well behind those commercial service sectors that achieve the highest exports such as consulting engineers and architects for whom 32% of turnover derived from exports in 2005; see Figure 5.



A direct line of sight for this trend is:

Line of sight: The design industry's export share should approximate the level for consulting engineers and architects, which is approx. 30%.

The Government will ensure the most conducive framework conditions for supporting this developemt, but whether the design industry can export a higher share of turnover is up to the industry itself.

In support of export promotion, the Government implemented the BornCreative programme in 2005, aimed at creative Danish businesses. So far, design businesses are the most frequent clients on the programme. In addition, in early 2006, a global team of employees was set up under the Danish Trade Council to work primarily on export promotion activities for Danish design businesses. In supplement to this, the Government is implementing a number of initiatives designed to assist Danish design businesses in their internationalisation efforts and in attracting international businesses, students and labour to Denmark. This is being done specifically in the form of export promotion initiatives and initiatives to market Denmark as a design nation.

¹⁹ Danish Enterprise and Construction Authority (2007): "Et billede af dansk design – udfordringer og perspektiver" (A picture of Danish design – challenges and perspectives), Red Associates (2006).

²⁰ Danish Enterprise and Construction Authority (2007): "Iværksættere og nye virksomheder, nøgletal 2006" (Entrepreneurs and new businesses, key performance indicators 2006).

²¹ Statistics Denmark, StatBank Denmark.

Box 3: Overvie	w of initiatives in the Government's Design Denmark policy
Challenge:	Better international use of Danish design
Line of sight:	The design industry's export share should approximate the level for consul- ting engineers and architects, which is approx. 30%.
Initiative	Content
8. International design week and travelling exhibitions	The Government is taking the initiative for the hosting of an international first rate design week every other year. The design week event will coincide with the presentation of the world's largest design award: INDEX: and will attract tourists, experts, students and international media to prominent design-related activities.
9. Strengthened internationali- sation of Danish design	A number of innovation centres will be established in leading international research, innovation and business environments capable of facilitating access to design environments in the countries concerned. The first innovation centre opened in Silicon Valley, USA, in 2006. In 2007, Invest in Denmark is launching a new action area entitled 'Creative Denmark', which will serve to promote foreign investment in Denmark in areas such as fashion, textiles and furniture. Finally, Danish commercial and creative competencies will be marketed on key markets based on an innovative and multidisciplinary umbrella concept.

Catalogue of initiatives

Object: Denmark restored to the international design elite

	Challenges	
A better functioning market for design services	Commercially oriented and international design competencies	Better international use of design
 Danish Design Centre activities to be made industry-specific and regionalised Design of public-sector services Development of Danish fashion zones Rights protection, in- cluding design, patent and trademark rights 	 Commercial orientation and internationalisation in long cycle further education design pro- grammes Short and medium cycle further education programmes related to design must be able to match the best abroad and meet corpo- rate sector demand Boost competencies of working designers 	 8. International design week 9. Strengthened inter- nationalisation of Danish design
Line of sight: A greater proportion of Danish pusinesses is to use design strategically. Line of sight: Value added per design industry employee to approximate the aver age for commercial services.		Line of sight: Design industre export share is to approxi- mate the level for consulting engineers and architects, which is approx. 30%.

A better functioning market for design services

 performance contract with Danish Design Centre, and 2006 saw the commence ment of a commercialisation of public-sector activities at the Centre. From 2007 the following new activities have been launched under the performance contract: Targeted design promotion drive aimed at selected industries Regionalised design promotion drive New professionalisation scheme for the design industry In future, Danish Design Centre will be carrying out a focused drive aimed at selected industries. The drive includes industry-specific knowledge dissemination surveys, workshops and seminars on applications for and impacts of design. I 2007, in the first instance, the Centre will be carrying out a drive aimed at th food industry and the medico industry with a focus on industry-specific needs i relation to use of design. This drive is intended to disseminate design in indust tries not traditionally strong on design. At the same time, design promotion activities will be regionalised based aroun the new regional Business Links as of 2007. Danish Design Centre will be providin tuition to at least one employee with expertise in design at each Business Link, an organising information and course activities in the form of seminars and workshop for businesses that are basic-level users of design. Finally, Danish Design Centre will be establishing regional networks among new design business is all the Danish region will gain better access to information about work involving design. The frameworks for sustained professionalisation of the design industry will con tinue to be supported. As of 2007, Danish Design Centre will be matching a numb of design businesses with ambition and growth potential with external investors either Vækstfonden (the Danish Investment Fund) or other venture capital funds Further, in 2008 Danish Design Centre will be piloting a scheme for Danish design businesses to the network's 22,000 experts within 850 specialist fields. The initiatives wil	Object	More Danish businesses in different industries and in all regions of Denmark to use design
 lected industries. The drive includes industry-specific knowledge dissemination surveys, workshops and seminars on applications for and impacts of design. I 2007, in the first instance, the Centre will be carrying out a drive aimed at th food industry and the medico industry with a focus on industry-specific needs i relation to use of design. This drive is intended to disseminate design in industries not traditionally strong on design. At the same time, design promotion activities will be regionalised based aroun the new regional Business Links as of 2007. Danish Design Centre will be providin tuition to at least one employee with expertise in design at each Business Link, an organising information and course activities in the form of seminars and workshop for businesses that are basic-level users of design. Finally, Danish Design Centre will be establishing regional networks among new design business start-ups an entrepreneurs in other industries. In this way, businesses in all the Danish region will gain better access to information about work involving design. The frameworks for sustained professionalisation of the design industry will continue to be supported. As of 2007, Danish Design Centre will be matching a numbe of design businesses with ambition and growth potential with external investors either Vækstfonden (the Danish Investment Fund) or other venture capital funds Further, in 2008 Danish Design Centre will be piloting a scheme for Danish design businesses to attract leading technological expertise via the 'Technological Part nerships' information network. Under this pilot scheme, Design businesses in the process of product development will be able to submit queries regarding specifit technological issues to the network's 22,000 experts within 850 specialist fields. 	Content	Regionalised design promotion drive
 the new regional Business Links as of 2007. Danish Design Centre will be providin tuition to at least one employee with expertise in design at each Business Link, an organising information and course activities in the form of seminars and workshop for businesses that are basic-level users of design. Finally, Danish Design Centre will be establishing regional networks among new design business start-ups an entrepreneurs in other industries. In this way, businesses in all the Danish region will gain better access to information about work involving design. The frameworks for sustained professionalisation of the design industry will continue to be supported. As of 2007, Danish Design Centre will be matching a number of design businesses with ambition and growth potential with external investors either Vækstfonden (the Danish Investment Fund) or other venture capital funds Further, in 2008 Danish Design Centre will be piloting a scheme for Danish design businesses to attract leading technological expertise via the 'Technological Part nerships' information network. Under this pilot scheme, Design businesses in th process of product development will be able to submit queries regarding specifit technological issues to the network's 22,000 experts within 850 specialist fields. 		In future, Danish Design Centre will be carrying out a focused drive aimed at se- lected industries. The drive includes industry-specific knowledge dissemination, surveys, workshops and seminars on applications for and impacts of design. In 2007, in the first instance, the Centre will be carrying out a drive aimed at the food industry and the medico industry with a focus on industry-specific needs in relation to use of design. This drive is intended to disseminate design in indus- tries not traditionally strong on design.
tinue to be supported. As of 2007, Danish Design Centre will be matching a number of design businesses with ambition and growth potential with external investors either Vækstfonden (the Danish Investment Fund) or other venture capital funds Further, in 2008 Danish Design Centre will be piloting a scheme for Danish design businesses to attract leading technological expertise via the 'Technological Part nerships' information network. Under this pilot scheme, Design businesses in th process of product development will be able to submit queries regarding specifi technological issues to the network's 22,000 experts within 850 specialist fields. The initiatives will be financed under Danish Design Centre's performance com		At the same time, design promotion activities will be regionalised based around the new regional Business Links as of 2007. Danish Design Centre will be providing tuition to at least one employee with expertise in design at each Business Link, and organising information and course activities in the form of seminars and workshops for businesses that are basic-level users of design. Finally, Danish Design Centre will be establishing regional networks among new design business start-ups and entrepreneurs in other industries. In this way, businesses in all the Danish regions will gain better access to information about work involving design.
		The frameworks for sustained professionalisation of the design industry will con- tinue to be supported. As of 2007, Danish Design Centre will be matching a number of design businesses with ambition and growth potential with external investors, either Vækstfonden (the Danish Investment Fund) or other venture capital funds. Further, in 2008 Danish Design Centre will be piloting a scheme for Danish design businesses to attract leading technological expertise via the 'Technological Part- nerships' information network. Under this pilot scheme, Design businesses in the process of product development will be able to submit queries regarding specific technological issues to the network's 22,000 experts within 850 specialist fields.
tract, which for 2007 amounts to a total of DKK 19.6 million.		The initiatives will be financed under Danish Design Centre's performance con- tract, which for 2007 amounts to a total of DKK 19.6 million.
Timeframe The initiatives are being implemented in early 2007 or commencing in 2008	Timeframe	The initiatives are being implemented in early 2007 or commencing in 2008

2. Design of public-sector services

Object	Danish design businesses to be among the international leaders in service design
Content	 The Government has decided to implement an initiative for the design of public-sector services whereby the services are adapted to user requirements. The initiative comprises: The launch of demonstration projects in the public sector Methodology development and dissemination of information about service design Strategic international partnerships on service design
	7-11 specific demonstration projects will be launched in the public sector. The aim of these will be to provide examples of design solutions to specific problems entailed by public welfare services. The demonstration projects will illustrate how service design can be used to fundamentally improve public sector services. At the same time, the projects will build competencies in the design industry within service design. All design businesses will be able to apply to participate in the demonstration projects. Further to the demonstration projects on the use of service design in public sector services, methodology development and dissemination of information about service design will be implemented. This component will include a training programme on service design methodology with a view to professional competency building for Danish designers in the field of service design. At the same time, a strategic collaboration will be initiated with authorities and
	knowledge institutions in the UK, which for a number of years have worked sys- tematically on methodology development and on growing the market for service design. This collaboration might consist of a forum in which Danish and British educational and knowledge institutions can exchange experience, conclude ex- change and training agreements, form research and development partnerships and, make arrangements for continuing education programmes so that compe- tencies in service design are boosted significantly by drawing on expertise in the UK. Danish Design Centre, Danmarks Designskole and Designskolen Kolding will also, together with UK enterprise promotion organisations and other design study programmes, have access to participate in the collaboration.
	This initiative will draw attention to the use of design in the service sector, while at the same time exposing the design industry to the demand for service design, while building their competencies in the field.
	The initiative will be financed by design promotion allocations under the National Budget. A total of DKK 8 million will be allocated to demonstration projects in 2007–2009.
Timeframe	Due to be implemented mid-2007
Responsibility	Ministry of Economic and Business Affairs

3. Develop	ment of Danish fashion zones
bject	For more Danish fashion businesses to achieve sustained growth
Content	 Danish fashion is undergoing rapid development. The industry is however characterised by a proliferation of small businesses that are very fragile in their early stage and many of the businesses do not have the requisite commercial competencies. The Government is currently looking into the options for establishing one or more fashion zones in Denmark, the object of which will be to support development of the fashion industry. One zone will consist of a number of schemes for businesses within a geographically delimited area in order to develop a strong and visible environment where the businesses can collaborate and loam from each other.
	businesses can collaborate and learn from each other. Inspiration can be drawn from environments such as New York Fashion Center, where a network organisa- tion offers member firms in a district of New York City access to joint marketing, networking and business advisory services.
	A fashion zone would give entrepreneurs and other businesses in the fashion in- dustry access to sparring and advice on business development, internationalisation and growth as well as facilities, networks and more.
Fimeframe	In order to build up the fashion industry, help more businesses to grow and acquire greater insights into international trends in fashion design, a study will be launched of trends and tendencies in the fashion industry, nationally and internationally. The body of know-how collected will be distributed to fashion businesses in Denmark. This measure will contribute to professionalisation of the fashion industry so that more businesses achieve sustained growth. The Government launched the project of looking into the options of development one or more fashion zones in 2007
Responsibility	Ministry of Economic and Business Affairs

be submitting its report in the 2nd half of 2007.

tablishment of the enterprise incubators in 2007. The working group on piracy will

Commercially oriented and international design competencies

5. Commercial orientation and internationalisation in long cycle further education design programmes	
Object	The corporate sector is to have access to commercial design competencies at the highest level
Content	A number of initiatives will be implemented at Danmarks Designskole, Design- skolen Kolding, Aarhus School of Architecture and at the School of Architecture at the Royal Danish Academy of Fine Arts in order to create Danish design study programmes to match the highest international level. As a suprastructure for all the initiatives, the programmes will be accredited as bachelor and master equiva- lents by 2010 at the latest. Firstly, the schools will be introducing internationally recognised quality-assurance systems to provide them with continuously updated information about the quality of the education provided. The internal systems will be tied in with independent external evaluations to document the quality of the programmes. Secondly, the study programmes will to a greater extent be geared to the corporate
	sector through careers counselling for the students, marketing of the students' competencies, partnerships with the corporate sector and employer panels at the institutions, made up of working designers and the rest of the corporate sector. Thirdly, the study programmes will take the initiative for establishing credit transfer agreements with relevant institutions of higher education in Denmark, including business colleges, universities and engineering courses in order thereby to facilitate greater multidisciplinarity in the design programmes.
	Fourthly, the institutions of education will be signing agreements on exchanging students, tutors and researchers with a number of the leading foreign design pro- grammes. The object is to increase the number of design students on academic and work experience exchanges abroad and the number of foreign students attending Danish design programmes, including those from countries outside of the EU/EEA.
	Finally, the assignment of the Centre for Design Research will be geared to achiev- ing a sufficiently high standard of research at the schools of design to ensure the accreditation of bachelor and master programmes in 2010. The Centre will ensure the development of well-functioning research environments aimed at and developed through interaction with the corporate sector, and the application of research findings in the study programmes. These initiatives form part of the multiyear agreements for Ministry of Culture
	study programmes 2003–2006 and 2007–2010 and will be implemented under the performance contracts with the institutions.
Timeframe	2007-2010

6. Short and medium cycle further education programmes related to

7. Boost competencies of working designers		
Object	To ensure that Danish designers have access to continual updating of their busi- ness and design competencies	
Content	 Through a number of new initiatives, the Government will facilitate the provision of courses for designers already on the labour market: Courses and instruction in interaction and service design Education of designers in business acumen Extension of the Knowledge Pilot scheme for design graduates 	
	As part of the competency building initiative, designers will be offered instruc- tion in new design disciplines such as interaction design and service design – which are new methods for designing products, services and systems. In 2007, a number of activities will be implemented with a view to offering de- signers training in these fields of design. One such activity, to be provided under the newly established Copenhagen Institute of Interaction Design, will be a workshop; another will be a symposium on interaction design and service design attended by leading international capacities. In addition, a study will be conducted of demand for a two-year master's programme in interaction and service design.	
	Danish Design Centre will be offering a number of module-based courses for designers with a focus on aspects such as strategy, management, finance, customer dialogue, marketing, sales generation and network formation on a course entitled TURBO (an acronym for the Danish words for talent, development, resources, bottom line, organisation).	
	Finally, graduates with the equivalent of a Master-level degree in design will have the opportunity to participate in the Knowledge Pilot scheme under the Ministry of Science, Technology and Innovation, from 2007. Businesses with 2 to 100 employees located outside of Denmark's urban centres can apply for a subsidy of DKK 10,000/month for up to 12 months for probationary employment of a designer from the schools of design – Designskolen Kolding or Danmarks Designskole – to be assigned to a development project. Businesses can also apply for a grant of up to DKK 50,000 to be spent on retaining the services of a knowledge institution. The aim is to give Danish designers competencies and experience from the corporate sector and to give the corporate sector experience of employing designers.	
	These initiatives will serve to ensure that designers increasingly update their competencies post-graduation so that they are fully equipped to service the corporate sector.	
	Extension of the Knowledge Pilot scheme to open it to graduates with the equivalent of a Master-level degree in design will be financed through the existing scheme. Interaction design and TURBO will be financed under the National Budget Design Promotion allocations and Danish Design Centre's performance contract.	

Timeframe	The extension of the Knowledge Pilot scheme has come into effect. The work- shop and international symposium will be held in 2007. Continuing education modules under the Danish Design Centre will be offered in 2007.	
Responsibility	The Knowledge Pilot scheme is administered by the Ministry of Science, Technol- ogy and Innovation. The Ministry of Economic and Business Affairs and Danish Design Centre are responsible for interaction design and TURBO.	

Better international use of Danish design

ati	onal design week in Copenhagen	Object	The object is to promote the internationalisation of Danish design and a
	The object of the design week is to preserve and strengthen Denmark's reputa-		international companies, students and labour to Denmark
	tion as a design nation by raising awareness of contemporary Danish designers	Content	In 2007, the Government will be launching several new initiatives for Denn
	and their competencies		competencies in design to be applied internationally:
			Establishment of bridgeheads for companies abroad
	As part of a proactive and global promotion stategy to market Denmark, the fol-		 New measures to promote foreign design investments
	lowing new initiatives will be implemented:		General concept for marketing Danish commercial and creative compete
	The hosting of an international first rate design week		
	Travelling exhibitions devoted to Danish design and architecture		A number of innovation centres will be established in leading intern
	······································		research, innovation and business environments. The centres will be a
	A Danish design week of first rate international standard will be held every other		facilitate access for the Danish design environment to international net
	year. The design week event will coincide with presentation of the world's larg-		knowledge, technology and investors and thereby support international c
	est design award: INDEX: and will attract tourists, experts, students and interna-		ation, knowledge sharing, etc. The first centre was established in Silicon
	tional media to prominent design-related activities. Activities might for example		
			USA, in June 2006. A decision has been made to establish the next inno
	include exhibitions, talks, conferences, workshops, etc.		centre in Shanghai in 2007.
	Further, in order to strengthen marketing of Denmark as a design and architec-		At the same time, a new action area, 'Creative Denmark', will be launc
	tural nation, travelling exhibitions will be mounted. The exhibitions will present		2007 through Invest in Denmark, which will be instrumental in promoting f
	classic and contemporary Danish design, architecture, arts $arepsilon$ crafts and the top		investment in Denmark in areas such as fashion, textiles and furniture. In
	design entries from INDEX:		Invest in Denmark will direct focus at Denmark as a leader in user-driven
			and innovation. Material will be compiled on Danish competitive advanta
	The design week and travelling exhibitions will be organised by Danish Design		the field, which will be used in sales efforts to attract foreign investments
	Centre in association with other relevant cultural institutions, including Danish		the focus areas of Creative Denmark, Renewable Energy, ICT and Life Scie
	Architecture Centre, Danish Crafts, public authorities and the corporate sector.		
			An innovative and multidisciplinary overall concept will be formulated for
	The projected effect of these initiatives is for Danish design competencies to		Danish commercial and creative competencies can be marketed on key m
	gain greater prominence as a brand internationally for the benefit of the Danish		The aim is for the concepts to form the basis for a number of Creative
	design industry, Danish businesses generally and for Denmark as a tourism and		drives on selected OECD markets. These campaigns will be based on the
	investment country.		concept that creates visibility and is relevant to the market in question.
			the frameworks of the overall concept, the businesses, cultural institu
ame	The design week and travelling exhibitions will be mounted for the first time in		etc. will present their specific competencies to relevant target audiences.
	2009 at the latest.		campaigns will be made in close collaboration between trade organis
			businesses, cultural institutions and relevant public authorities.
ibility	Ministry of Economic and Business Affairs/Danish Design Centre		The initiative will serve to boost the internationalisation level of Danish
			businesses and help to ensure that Denmark is more capable of attracting
			national design customers.
			A total of DKK 2.5 million will be allocated to Creative Nation, as part of a
			promotion to market Denmark in 2007.
		Timeframe	The initiatives will be implemented in 2007

9. Strengthened internationalisation of Danish design

