

# **The European Design Competition "Lights of the Future" for Energy-Efficient Lamp Dedicated Fixtures: A Successful Example of Market Transformation**

*Flavio Conti, Flavio Conti Consulting*  
*Paolo Bertoldi, European Commission DG JRC*  
*Vincent Berrutto, European Commission DG JRC*

## **ABSTRACT**

Market research has indicated that to achieve durable market transformation and to substantially increase the use of Compact Fluorescent Lamps (CFLs) in the residential sector, it is essential to develop and market attractive and well-designed CFL dedicated lighting fixtures. To this end the first European Design Competition (EDC) for designers, students and fixture manufacturers was launched in 1999, and winners were selected on 12th April 2000. The main challenge for competition participants was to produce innovative and attractive design solutions aimed at the residential market for lighting fixtures dedicated to pin-based CFLs. The competition attracted a very large number of participants, including well-known designers and the largest European lighting fixtures manufacturers. Among them, 27 models were declared winners of the competition. A European-wide marketing and promotion campaign for the winning models, carried out between May 2000 and December 2001, followed the competition. The winning models were exhibited at the largest European fairs on residential lighting.

In May 2001 the second EDC was launched and winning models were selected on 16th April 2002. In the second competition, the range of eligible lighting technologies was extended to include other high efficiency lamps, such as metal halide lamps and LEDs. In the second competition a wide participation was achieved and the submissions are of the highest level. The paper presents: the full results of the first EDC and the following marketing campaign; the preliminary results of the second EDC; and a preliminary qualitative assessment of the impact resulting from the continuation of the action. In particular the response to the policy action by luminaires manufacturers, designers, and consumers, will be highlighted.

## **Introduction**

In the context of the Kyoto Agreement, the European Community and individual Member States are looking for cost-effective measures to reduce CO<sub>2</sub> emissions and combat climate change. To this end the European Commission recently carried out the European Climate Change Programme (ECCP) during which it identified, with stakeholders, cost-effective actions that contribute to CO<sub>2</sub> emission reductions. The ECCP identified residential lighting as an important area, which could result in cost-effective savings of 7 Mtonnes by 2010. Total residential lighting consumption in the 15 Member States of the European Union (EU) was about 90 TWh in 1996, i.e. about 15% of all residential electricity use (ECU 1998).

Moreover this consumption is predicted to rise to 105 TWh by 2020, largely because of the growth in household numbers. Moreover electric lighting represents a key component of peak electricity demand in many countries.

A major investigation on the lighting consumption in the EU, the DELight study (ECU 1998) reported that: "The average number of light bulbs is 24 per house across the EU. The majority (at least 70%) are incandescent, with the remainder being fluorescent (linear or CFLs) and halogen lamps. In Germany, Sweden and Italy, there are more halogens than CFLs in the installed stock." The study confirmed that there is a growing trend towards an increased use of halogens lamps both in ceiling fixtures (e.g. low voltage dichroic lamps in light spot) and in upright floor standing luminaires ("torchieres").

There is already a well-developed energy-efficient technology available on the market, in the form of compact fluorescent lamps (CFLs), which could deliver substantial savings. Such savings could be accessed quickly due to the rapid turnover of lamps in the stock - the challenge is to get the more efficient technology installed and guarantee the savings. CFLs use at least 60% less electricity than the traditional incandescent lamps while lasting ten to twelve times as long and can therefore deliver substantial savings in terms of both electricity and money. Their rated colour temperature ranges from 2700K to 6000K. Integral ballast CFLs, with a E27 (screw or bayonet) base, currently represent the best opportunity to achieve significant electricity savings in residential lighting since they are the most energy-efficient technology suitable for use in fixtures already in the home. Pin-based CFLs are also available. Their colour-rendering index can reach up to 98 (out of a 100). They have a separate ballast incorporated into the fixture (dedicated system). Therefore, the control gear outlasts several successive lamps, and when one lamp fails another can be fitted straight into the old gear.

Three large multi-national companies (Philips, Osram and GE), common to both the residential and commercial sectors, dominate the EU lamp manufacturing industry whereas luminaires are manufactured by over 1000 companies in the EU, specific to the residential sector often-(also called the "decorative" sector). Moreover this sector is characterised mainly by national manufacturers. Successful collaboration between these two industries has been demonstrated by the rapid development of the market for low voltage halogen lamps, which require specific fixtures.

## **Market Barriers**

Although CFLs offer major benefits, their acceptance in domestic luminaire design is limited by a number of factors. In the past, one of the main reasons for not owning CFLs was that they were too expensive, now CFL prices have been dramatically reduced. Today the main reason is that most lighting fixtures for the domestic sector are designed for incandescent or halogen lamps. In most of these fixtures the CFL would not fit nor give an appropriate light output. They protrude into the shade, result in a poor light distribution or produce an unacceptable colour rendering. Even current owners of CFLs need assistance in recognising the opportunities for installing CFLs in their fixtures. As indicated in the DELight study "One of the main reasons for not owning CFLs is the lack of well-designed fixtures suitable for CFL use in the residential sector. So the purchase of a new fixture is likely to add to the stock of inappropriate fixtures. Moreover consumers, after having tried a

CFL, often switch back to incandescent bulbs" (switchback effect, as described in the DELight study).

The wider aesthetic lighting potential achievable with pin-based CFL design has so far been largely untapped. Moreover consumers lack confidence in the durability and continuity of CFL technology. The range of CFLs on the market is confusing and consumers do not know how to choose the appropriate one for their fixtures. There is little collaboration between the bulb and fixture manufacturers in developing a range of well-designed fixtures suitable for CFL use in the residential sector. In several cases the beneficiaries of CFL promotional rebate schemes often switch back to the incandescent lamp when the CFL fails, because they either have a spare incandescent lamp at home or they are not ready to pay the full price of the CFL.

## **The Way Forward**

After a considerable number of promotion and rebate schemes, organised mainly by utilities and European manufacturers, about 135 million CFLs are used today in European homes. However only 30% of household in the EU have at least one CFL, with those households that own them having an average of three or four. Increasing ownership further will need a continuing level of policy support. However, if the full savings available in this sector are to be realised, a coherent strategy is required to transform the lighting market. One of the most important developments to ensure a sustainable growth and use of CFL is to develop the market for dedicated CFL fixtures, which basically is non-existent in the residential sector. To this end collaboration between the lamp and fixture manufacturers has to be promoted to ensure the availability of a sufficient range of suitable fixtures within the next five years. In parallel with this, the promotion of integral ballast CFLs needs to continue in the short term because of the current lack of dedicated fixtures. The underlying aim of any approach must be to build a positive image of CFLs to lay the foundation for the successful transfer to dedicated fixtures.

A twofold strategy has been developed by the European Commission to promote efficient lighting in the domestic sector. The first is to continue promoting the integral CFL through a European wide campaign, sponsored by the European Commission and the European Association of the Electricity Industry (Eurelectric). However, to achieve the long term goal of transforming the domestic lighting market and having a large penetration of CFL in each household, the best approach is to develop CFL dedicated fixtures and to help with the initial market penetration of these fixtures. Many of the problems associated with the use of CFL in the existing fixtures could be avoided through the use of fixtures designed for pin-based CFLs. Dedicated fixtures optimise the light distribution and performance of CFLs and improve the cost-effectiveness of installation (pin-based CFLs are cheaper than the integral ballast versions), as well as guaranteeing the energy savings.

After discussion with experts and careful analysis it was agreed that in order to stimulate the introduction of energy efficient luminaires in the residential market, the best action was to launch a European design competition. With this action new models were to be designed, produced, and marketed. The purpose was also to match interesting design (something high on the private purchasers' list) with energy efficiency, which does have a very low profile with lighting customers in the residential sector. Moreover, if successful, the

competition would break a vicious loop since there are a very limited number of luminaires for the domestic sector using pin-based CFL, this lamp type is not usually available in retail outlets. By creating a demand for pin-based CFLs, it is hoped that this type of lamp would become commonly available in the EU shops and supermarket chains. Moreover there is a lack of suitably designed fixtures for the residential sector, representing an energy-saving opportunity that has not yet been fully exploited. On the contrary, dedicated fixtures are rather common in the professional/service sector (e.g. offices, hotels, etc.), where a price premium is demanded for this type of luminaires.

It is also important to note that the current price of pin-based CFL is about half that of the integral CFL. Moreover this type of lamp will last at least twice as long as integral CFLs, and therefore will generate much less waste and therefore less environmental impact.

## **The First Design Competition**

The aim of the first EDC "Lights of the Future" was to foster and to promote the design, production and marketing of attractive, well-designed dedicated fixtures, i.e. fixtures that could accept only pin-based CFLs. The competition entry designs were required to give the most innovative and attractive solutions to the presentation of this technology, in particular the selected designs had to look good decoratively, give an aesthetic lighting impact, and exploit new design, materials, and technology.

The EDC entries could range from modern to classical luminaires. The products had to be suitable for the retail decorative market. Emphasis was on well-designed products suitable for mass production, rather than 'one-off' architectural schemes.

The technical requirements were: 1) to incorporate the ballast in the luminaire; 2) and not use retrofit lamps<sup>1</sup>. Products already in production, which were converted to take only pin-based bulbs, were eligible for the competition.

The competition was open to all manufacturers, designers and students. It was important that large and well know manufacturers participate in the competition, as they could guarantee the production and marketing of the competition entry models. It was experienced in previous design competition for lighting fixtures that students and professional designers were also likely to come up with new and innovative ideas. However it was not always possible to guarantee that their original design would at the end of the competition be put in production.

The EU competition covered five luminaires categories for the domestic sector using only pin-based fluorescent lamps: ceiling, walls, floors, tables and outside luminaires. In addition each luminaire category was further divided in two (retail-) price intervals in such a way to cater to both ends of the market. In particular the floor category was intended to stimulate design, which would replace the halogen torchieres.

The competition consisted of two phases. In the first phase the design flatwork together with an estimate of production costs and the potential market was submitted to the jury for selection. The selected finalists participated in the second phase, where they were requested to submit prototypes. These prototypes underwent a second selection, which

---

<sup>1</sup> Screw based or bayonet type CFL.

included more detailed estimates of production costs, market analysis and preliminary production plan.

The competition awards were given to those prototypes (“winning products”), which complied with the requirements of the competition and were deemed worthy of introduction into the market (according to price, production and aesthetic criteria).

To judge the submitted designs, an independent jury was established, composed of 10 representatives of professional designers and retailers. The retailers had a feel for products which could be sold and would be accepted by customers (especially taking into account the price). With such a jury, chances were high to get the right balance between attractive designs and marketable products.

The competition was officially launched at the Hanover fair (the largest European lighting fair at the time) in April 1999. More than 10,000 brochures were distributed to manufacturers, students and professional designers; several announcements were made in the specialised press. About 650 participants registered for the competition by July 31<sup>st</sup> 1999, and 140 participants submitted the required flatwork by the deadline of December 31<sup>st</sup> 1999 for about 200 different models of luminaires.

The competition award included the use of the European Design Excellency Logo on the winning products and on consumer awareness campaigns at the European and national levels (figure 1). The winning products were exhibited for the first time at the EuroLuce Fair, held in Milan (Italy) in April 2000. EuroLuce was the largest and most important European fair for decorative (i.e. residential) lighting in year 2000, being visited by about 200,000 people (mainly involved in the lighting business).

The quality of the submitted models was very high and after the first selection 62 models were exhibited at the EuroLuce fair. The final models belonged to 50 different participants so divided: 18 manufacturers, 20 professional designers and 12 students). The participants represented 12 European countries. The 18 manufacturers included some of the most well-known and largest in Europe. Twenty-seven models (9 by professional designers, 11 by manufacturers and 7 by students) were declared winners during the public award ceremony on April 12<sup>th</sup> 2000. A large number of visitors visited the competition stand and about 5,000 competition folders were distributed at the EuroLuce fair. Winning products were selected because their high aesthetic qualities and not because they belonged to a specific category. However all five luminaires categories were represented among the winners, as indicated in the below table.

**Table1. Winning Models by Category and Participant Group**

	Ceiling	Wall	Table	Floor	Outdoor	Total
Manufacturers	5	3	2	1		11
Designers	2		5	1	1	9
Students	2	1	2	1	1	7
Total	9	4	9	3	2	27

**Figure.1. The EDC  
Logo Awarded to  
Winning Models**



## **The Promotion and Marketing Campaign**

During the lighting commercial season 2000/2001, starting in September 2000, both European and national promotion activities took place in five EU Member States. The national energy agencies in collaboration with the national lighting associations were responsible for these co-ordinated campaigns. It was recognised that for the EDC to be successful, an effective marketing strategy was required. The project partners (national energy agencies of United Kingdom, Italy, Sweden, Germany, the Netherlands) recognised that it was key to highlight the role and positive effects CFL-dedicated luminaires have on residential energy consumption and to involve the whole supply chain in activities related to the EDC.

Initially, the main goal of the promotion campaign was to raise awareness of the lighting supply chain, to encourage attendance, and to provide marketing support at the Design Award Ceremony at Euro luce in Milan, in April 2000. Since then, a range of activities have been undertaken in Italy, the Netherlands, Sweden, Germany, and the UK to promote the dedicated luminaires in general and the winning designs of the EDC in particular. The winning designs were presented at various national and international conferences and exhibitions, were the subject of a number of workshops, and were featured in articles and awareness raising marketing materials. The project has been successful in engaging key organisations and individuals in the promotional activities for the winning designs. In fact, many activities, notably exhibitions and workshops, would not have been possible without the financial support, professional backing, and contributions in kind from various organisations and individuals.

The marketing project developed a web site: [www.etsu.com/eulightdesign](http://www.etsu.com/eulightdesign), where the full documentation, pictures of the finalists, and winning models are available for viewing on the Internet. The marketing project developed a database to capture the various contacts that were collected during the project. The database was used for the distribution of the Winning Design Catalogue. It contains the following information: participants in the EDC's second phase, (i.e. student, designer, manufacturer); Euro luce exhibition contacts (the project collected more than 800 business cards of visitors at the EDC stand, who were interested in receiving a Catalogue of winning designs); manufacturers and retailers via the trade

organisations; press contacts; and lighting sector multipliers (lighting trade and research associations, consumer associations, energy agencies, group housing and hotel associations).

At national levels the following activities were carried out: distribution of the catalogue of the winning models; articles and press coverage in lighting and design magazine and in DIY/home furnishing television programmes; promotion at national lighting and home furniture exhibitions; market launch events by lamp and luminaire manufacturers; intensive discussion with retailers to persuade them to showcase the winning models in an energy-efficiency dedicated area, and to present them as the lights of the future; and finally consumer awareness promotional campaigns.

Promotion and marketing activities consisted in further exhibitions of the winning models at the following lighting Fairs:

- Furniture Show, Cologne, January 2001;
- Lightstyle in Frankfurt (Germany) between 22-25 April 2001;
- World Light Show at INTEL Fair in Milan (Italy) between 23-28 May;
- the Birmingham Light Show between 21-24 January 2001 (figure 2).

These exhibitions are main trade shows for lighting products and offered a prime opportunity for the promotion of the EDC's winning designs.

In the Netherlands, a very comprehensive marketing campaign was undertaken. All activities in the Netherlands were focussed on a travelling exhibition named Gallery of Excellent European Lighting (figure 3). Based on interviews with eleven Dutch stakeholders (including lamp and ballast manufacturers, luminaire manufacturers, and retailers), it was developed into a national marketing strategy. The starting points were:

- Manufacturers of domestic luminaires are in a weak competitive position related to the retail channels. Therefore they are forced to follow a survival-strategy and will not develop efficient luminaires themselves.
- Energy Efficiency does not play any role in selling luminaires in the domestic market at this moment.
- The most relevant action for governmental agencies at this moment is to raise awareness among consumers that energy efficiency is an important aspect of lighting and to prove that selling efficient luminaires to consumers is possible.
- The best market-segment to start these activities is in the high-end market. Specialised lighting shops and interior decorators are in a position to really advise consumers when selling a luminaire.
- It is very important that these activities are communicated to the other market segments and to luminaire manufacturers.

All these factors led to the development of a highly visible marketing strategy, whereby the winning models of the Design Competition were not only exhibited, but also sold. The Gallery of Excellent European Lighting was installed in home-furnishing and lighting shops and at a home-furnishing fair in the Netherlands. Home-furnishing and lighting shops staff members were provided with background information on energy-efficient lighting through a workshop lasting approximately two hours. During the presence of the

Gallery at each shop, local and regional publicity was generated. Customers were personally invited to attend a lecture on energy-efficient lighting. During this lecture, the well-known interior designer, Steven van Manen, advised people on energy-efficient lighting. Together with the staff members, Steven van Manen gave individual lighting advice to consumers participating in the workshop. Consumers were able to purchase luminaires from the Gallery, while the retailer was expected to keep some of the luminaires from the Gallery in stock even after the Gallery display was over. During the months of April to November 2001 the Gallery was installed in six home-furnishing/ lighting retailers. In addition the Gallery was installed at the consumer fair 'Metamorfose Live'. At each location the Gallery was well attended, and Steven van Manen presented a workshop for consumers. Prior to and during the installation of the Gallery, publicity was made through press notices. The retailers sold several luminaires from the Gallery, however it was not possible to quantify the number of sales.

**Figure 2. The EDC Stand at the Birmingham Light Show 21-24 January 2001**

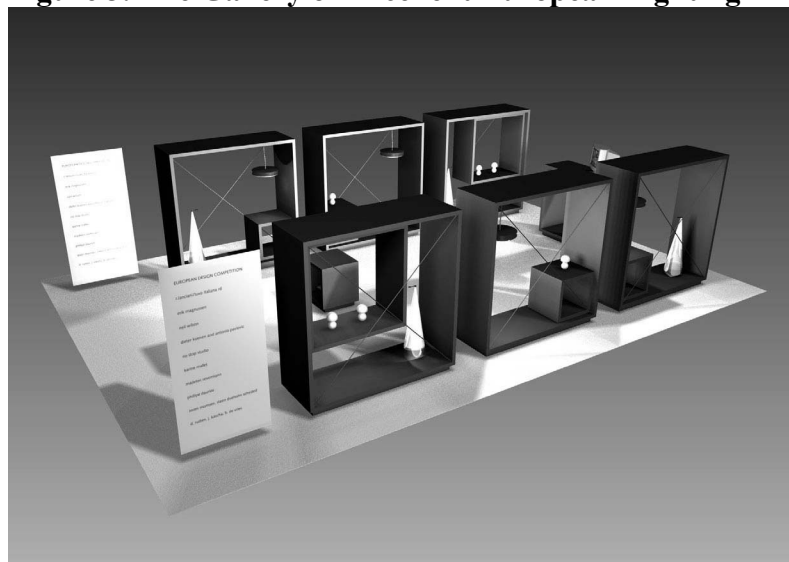


## **The First EDC's Results and Lesson Learned**

As of September 2001 there were 14 winning products on sale while 3 products are in the stage of production preparation. Twelve out of a total of 27 products have advanced at least one step since April 2000, either from the "prototype" stage to "production preparation" stage or from "production preparation" to "on sale" stage. Four out of the ten Dutch and Belgian products have advanced one step after the EDC: three of them to the selling stage and one to that of product preparation. Four products are still prototypes while two had already been on sale before the award. The situation in the UK, one year after the competition results were announced was unchanged. The change described above was the result of both the exhibitions (especially Euroluce, where all the major manufacturers were present) and the national promotion campaigns. This explains why in the Netherlands more progresses were made in bringing some of the winning models to the market. In Italy, where

all the winners were manufacturers, all designs are now on sale. While professional designers were in most cases able to advance their product to the production stage or even sales stage, students struggled to capitalise on winning the competition. This is because to move the prototype to the production and market stage, requires a lot of contacts with manufacturers, i.e. it to visit them and to try to sell the model design to them. While designers are generally already doing this action for their products, students are rather new in this activity. Therefore for students despite their good designs it has been difficult to find a manufacturer willing to produce their model. However some of them have managed to find a manufacturer willing to produce the model, this could be considered a positive result of the competition and the major award for the students.

**Figure 3. The Gallery of Excellent European Lighting**



In order to assess the impact of the EDC and the subsequent marketing activities, winners of the EDC were interviewed during the month of April 2001.

**Table 2. Replies to Question 1: “Overall, Do You Feel that It Was Beneficial to Your Company to Participate in the European Lighting Design Competition?”**

No, not at all	Yes, but not a lot	Yes, it was beneficial	Yes, it was very beneficial
4	6	9	2

While the winners of the EDC have not benefited from concrete orders or sales of their product, both students and designers have stated that it was a good experience. In summary: “good intentions, ample subsidies, but little results”. However, one manufacturer mentioned that within the business itself the EDC had actually influenced a better consideration of materials and design for luminaires.

**Table 3. Replies to Question 2: “Overall Do You Feel that your Design Benefited from the Marketing Project?”**

No, not at all	Yes, but not a lot	Yes, it was beneficial	Yes, it was very beneficial
6	12	1	1

With the second question the winners had to tell if, in their opinion, the EDC marketing activities had generated interest in their model(s) and/or led to additional sales. Similar to question 1, the answers were disappointing. The overall majority of participants were of the opinion that their products had benefited little or not at all from the EDC. On the other hand, one UK manufacturer pointed out that the marketing activities had benefited their company, particularly in terms of exposure to the public and appearance at exhibitions, although they did not result in sales increase. However, it was felt that it might still be too early to give a definite answer as the activities might produce sales in 2001-2002, as the market often requires a long "digestion period".

**Table 4. Replies to Question 3: “Which Activities of the Marketing Project Provided the Greatest Benefits for your Design?”**

Launch in Milan April 2000	Catalogue	EDC - Website	(Inter)national exhibitions	Press coverage	Others
15	8	3	4	1	-

The launch in Milan was seen by a large majority of participants as the marketing activity yielding the best results for their product. There was a very positive response to the catalogue, seen as an important output of the project. The catalogue is seen as a real asset that can be presented to potential customers and, in the case of student, future employers.

**Table 5. Replies to Question 4: “Did the EDC or the Marketing Project Stimulate any Further Activities on your Side Relating to the Marketing, Production, Sale of the Design?”**

Yes	No
6	16

In general, in the winners' view, the impact of the first EDC appears to be limited. Most designers stated that after the EDC they continue to work in much the same way as before. Those participants who answer 'Yes' refer chiefly to changes in their own attitude towards product development and collaboration rather than to changes in their way of thinking and acting with respect to energy-efficient lighting. In the case of the Danish manufacturers, the fact that a product won the European Design Competition was highlighted in the manufacturers' catalogue.

## **Lessons Learned and the Second Design Competition**

The first EDC helped to raise awareness of purpose, benefits, and scope of dedicated energy-efficient luminaires among professionals in the lighting sector. The following

marketing project established contacts and working relationships with a number of key players in the lighting market, including exhibition organisers, lighting associations, housing associations, and energy agencies etc.

Valuable lessons have been learned, and future marketing projects of this kind should review the experience of this project. There is a huge demand for more communication within the industry. Exhibitions and workshops that bring together designers, retailers, consumers, and the press should form a key element of future marketing strategies. The catalogue of winning designs was recognised as a good vehicle to present the competition and the winning models in a very professional way to those interested in dedicated luminaires. Working with the press will need to be emphasised in the future, not only to inform lighting professionals but also consumers.

The issue of pin-based lamps needs to be addressed further. While the number of winning luminaires available to consumers increased from 6 to 14 over the last 14 months, it will be important to involve lamp manufacturers more in the marketing activities, as the (un)availability of pin-based lamps at retail hinders the uptake of these luminaires. It has become clear that in order to make the most of the competition winners' results and enthusiasm, structures have to be put in place to allow marketing activities at the local level. More efforts will therefore have to be made to identify contacts in countries where there are winners but no marketing project partners.

With this competition being the first of its kind at the European level, important foundations have been laid. It was important to build upon these foundations and establish the EDC "Lights of the Future" as a regular feature in the calendar of lighting professionals including the press. Following the recommendation of the marketing group and the feedback from participants, the European Commission decided to make the EDC "Light of the Future" a regular event to build on the result of the first competition and to create a permanent education/training and market transformation effect. To this end the second European Design Competition "Light of the Future" was launched in May 2001 at the World Light Show (Milan, Italy). The second EDC has slightly changed its focus, no longer being reserved only to pin-based luminaires, but also to luminaires dedicated to other energy-efficiency lamps. Since the EDC aims at promoting white light lamps, not coloured lamps, the following requirements were introduced: a colour rendering index (Ra) greater than 80 (in accordance with existing practice/standards); and a Colour Temperature  $T_k$  in the 2700-3500K range (because the competition aims at incandescent replacement solutions). Typical lamps that can be used are: pin based CFL (including circular shaped); linear fluorescent (T8, T5, T2, etc.); induction lamp (i.e. electrodeless fluorescent lamp); cold cathode fluorescent; and metal halide.

The competition aims to encourage design with new technologies such as LED. As of today there are no LED's commercially available that allow for a 50 lm/W white lamp. Although this will change in the next few years this specification practically excludes LED's for white light. To this end a special LED category was established.

The second EDC attracted the same initial interest as the first EDC with about 500 applicants. At the end of January 2002 a total of 272 pieces of flatwork were submitted for the first round of judging (87 from manufacturers; 108 from professional designers; and 77 from students). From these entries the jury selected 70 finalist models: 26 by manufacturers (about 32% of submitted material); 28 by professional designers (about 26% of submitted

material); and 16 by students (about 21% of submitted material). The Commission was very pleased with the large number of participants this year, and with the high quality of the submitted models. As a result of the width and quality of the competition, the jury had to choose only a few finalists from a pool of many excellent models. The winners of the second European Competition were announced on 16<sup>th</sup> April at the Light+Building fair in Frankfurt (14-18 April 2002), where all the 70 finalist models were be exhibited. The 26 winning models received the award certificate and they carry the competition logo. Plans for an improved marketing campaign are underway. In May 2002 the catalogues of the second design competition was in production in 5000 copies. The catalogue is seen by the winning participants as the key vehicle for the promotion of their models. It was proven during the first EDC that the post-competition marketing campaign is crucial to achieve any result on the market. The new marketing campaign will: increase the contacts with the concerned press; prepare a good communication message to be transmitted during all the national lighting fairs, where the new winning models will be exhibited; and last but not least, increase the contact between the winners and the lighting market actors.

**Table 6. Comparison Between 1<sup>st</sup> and 2<sup>nd</sup> EDC**

	Models (Flatwork) Submitted	Models selected at the first round (finalists)	Winning Models
First EDC	198	62	27
Second EDC	272	70	26

## Conclusions

Although it is not possible to have sale figures or other indicators of the market transformation for the winning models of the first competition, from feedback from participants, winners, and market operators, it emerged that the EDC had some impact on designers and manufacturers. At least for the first time during major European fairs dedicated to decorative lighting, there was a well-visited stand dedicated to energy efficiency. Several visitors and the press showed great interest for the competition.. Winning manufacturers are now mentioning energy efficiency as a sale element for their models. Therefore it is possible to conclude that a new attitude and awareness for energy efficiency has been introduced in the market, which previously was only concerned with design issues. The second EDC has reinforced this feeling and change in attitude. The Commission has decided to organise the EDC every two years, and it has established itself as a key event in the calendar of designers and manufactures.

## References

- Environmental Change Unit - Oxford University. 1998, "*Delight*". Study for the European Commission, Final report. Brussels, Belgium.
- ETSU. 2001. "*Co-ordinated Action for Marketing of the EU Competition for CFL-Dedicated Luminaires*". Report for the European Commission,. Brussels, Belgium.