The Economic Contribution of Copyright-Based Industries in Bulgaria

Based on the Year 2005
Sofia, May 2007

Table of Contents

Executive Summary

This survey is the first comprehensive study of the contribution of copyright and neighboring rights-based industries to the Bulgarian economy. It was conducted between August 2006 and February 2007 at the request of the Bulgarian Government and with the financial support of the World Intellectual Property Organization (WIPO). The adoption of the NACE international classification of economic activities by the National Statistical Institute (NSI) in 2003 (Bulgarian National Classification of Economic Activities NKID-2003) was an important precondition for the study, allowing for the application of the WIPO methodology. The data on the years 2003 and 2005 allowed for an evaluation of the real situation at the end of 2005 and the development of these industries over a three-year period.

Carrying out this study was an expression of Bulgaria's adherence to the principle that knowledge protected by intellectual property rights is of key importance for the wealth of nations. This principle, widely accepted among developed countries, has put the copyright-based industries at the forefront of public policy. The OECD countries have developed a relevant infrastructure and boosted the implementation of intellectual property legislation, which has transformed copyright-based industries into one of the most rapidly-developing economic sectors. Since 1998 several Bulgarian governments have made significant efforts to limit the piracy of protected goods and services and to impose intellectual property rights legislation. In 2006 the present government launched a national campaign for the protection of copyright aimed at raising public awareness and further strengthening the implementation of copyright law. The present research forms part of these efforts since it provides objective economic data for designing better policies in the field and can contribute to the general positive change in public attitudes towards copyright-based industries.

The methodology of the study is based on a secondary analysis of main economic indicators such as value added, gross output, share of imports and exports and employment, which have been analyzed for each of the copyright-related activities. These activities are classified into four groups – core, interdependent, partial, and non-dedicated support industries. The economic contribution of core and interdependent industries is considered as 100 percent copyright related, while for the other two groups a specific copyright factor is applied, following WIPO's methodology and the experience of researchers in Hungary, the US, Singapore, Latvia, and others.

Core industries - those with the highest copyright contribution to the created value added: press and literature; visual and graphic arts; music, theater and opera; photography; motion picture and video; radio and television; advertising; software and databases.
Interdependent industries - manufacturing and trade of equipment, instruments and products used entirely or mainly in core copyright industries: computers, photographic and cinematographic equipment, radio and television devices, paper, blank recording materials.
Partial industries - those in which only a part of their activities are related to copyright and neighboring rights: apparel, textiles and footwear, furniture, jewelry, artistic arts, toys and games, domestic and home appliances and goods, architecture, activities of museums.
Non-dedicated support industries - facilitate distribution and sales of copyright-protected goods and services: telecommunications including the Internet, transportation, general wholesale and retail.

Typology of Copyright-Based Industries according to WIPO's Methodology

In its analysis of the manner of collection and calculation of the macroeconomic data applied by the Bulgarian NSI, the survey team concluded that, at present a more appropriate idea of the economic contribution of copyright-based industries can be provided by their share of the gross value added (GVA) at basic prices rather than the gross domestic product (GDP) at market prices. In addition to GVA as its basis, GDP includes indirect taxation, excise and customs duties (all having a greater impact on goods for mass consumption unrelated to creative industries), which changes the basis for comparison by artificially reducing the share of copyright-based industries. In addition the NSI methodology does not take into account the income of such large cultural institutions as the national television, national radio, state and municipal theatres, opera, dance troupes, museums and galleries, etc. (which, according to the experts, exceeds 20 percent of their subsidies).

The WIPO methodology has been applied to the most detailed level in the Bulgarian survey – to the primary data by each of the codes of economic activities in the classification of the Bulgarian version of NACE (NKID-2003). This has made it possible to process information about the intangible fixed assets of the companies (including rights on products of intellectual property, software, R&D), net sales, profit from main activities, intermediate consumption and others. The collected copyright-based industries' economic data for 2003 and 2005 allows for additional specialized analyses of different segments of the copyright-based industries, including in-depth analyses of the most successful and rapidly-developing sectors of software, publishing and printing, and film. These data also form a good basis for future comparison on a national and international level.

The Overall Contribution of the Copyright-Based Industries to GDP in 2005

In 2005, gross output of BGN4.155 billion and value added of BGN1.204 billion came from economic activities related to copyright and neighboring rights. The core copyright industries made the greatest economic contribution to the sector with a gross output of BGN2.498 billion and value added of BGN672 million.

Core CI (Gross output)	Total BG Gross out-put	Core Share of BG Gross Output
2 498 559	92 132 091	2.71%
Total Copyright (Gross output)	**Total BG Gross out-put**	**Total Share of BG Gross Output**
4 155 101	92 132 091	4.51%

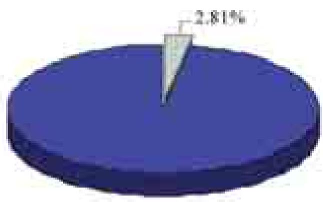
Core CI (value added)	Total BG Gross Value Added	Core Share of BG Gross Value Added
672 270	35 220 410	1.91%
Total Copyright (value added)	**Total BG Gross Value Added**	**Total Share of BG Gross Value Added**
1 204 229	35 220 410	3.42%

When calculated in comparison to the GDP, the total contribution of the copyright-based industries is 2.81 percent and that of the core industries is 1.57 percent.

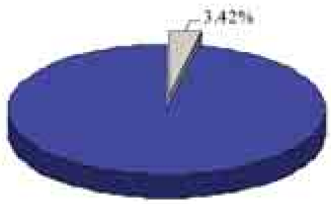
Core Copyright (value added)	Total BG GDP	Core share of BG GDP
672 270	42 797 407	1.57%
Total Copyright (value added)	**Total BG GDP**	**Total share of BG GDP**
1 204 229	42 797 407	2.81%

The economic contribution of the copyright-based industries in 2005 can be represented as follows:

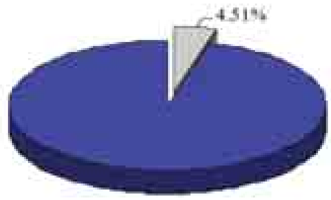
Share of GDP



Share of GVA



Share of gross product



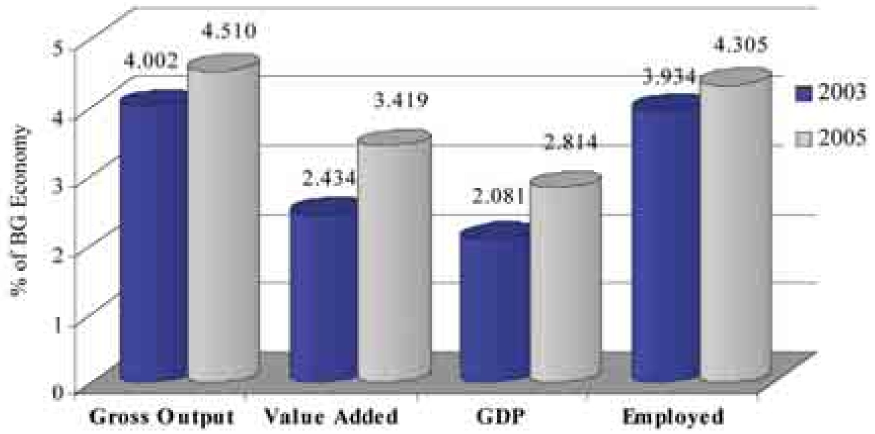
The 'static' outline of the share of the copyright-based industries' economic contribution reveals a significant though small sector of the Bulgarian economy. This outline, however, does not give a clear idea of the copyright-based industries growth rates, which put them among the most rapidly-developing sectors of the economy. For the period 2003-2005 the survey identified the gross value added derived from the current price index as growing by 50 percent over three years, which exceeded the growth rates of the economy as a whole (11.5 percent). If favorable conditions continued and if the sector received adequate public support, it could become one of the engines for Bulgarian economic development in the near future.

Rates of Change in Value Added for 2003-2005

Growth Core Copy-right (value added)	Growth Total Copy-right (value added)	Growth BG Gross Value Added	Growth BG GDP
52.8%	49.9%	10.8%	11.5%

Information on the copyright-based industries is obtained as a ratio of the values for 2005 and 2003 adjusted for inflation. The data on the national economy are taken from Table 1.2.22 in 2005 Main Economic Indicators, National Accounts Section *(www.nsi.bg).*

Growth of Copyright-Based Industries for 2003-2005



Employment in the Sector of Copyright-Based Industries

In 2005, 104,814 people in Bulgaria were employed in economic activities related to copyright and neighboring rights, almost one in every 20 of the working population: 55,861 people worked in the core copyright sector only, i.e., more than half of those employed in the entire sector.

Core Copyright (number employed)	Total BG employed	Core Share of BG employed
55 861	2 434 726	2.29%
Total Copyright (number employed)	**Total BG employed**	**Total Share of BG employed**
104 814	2 434 726	4.31%

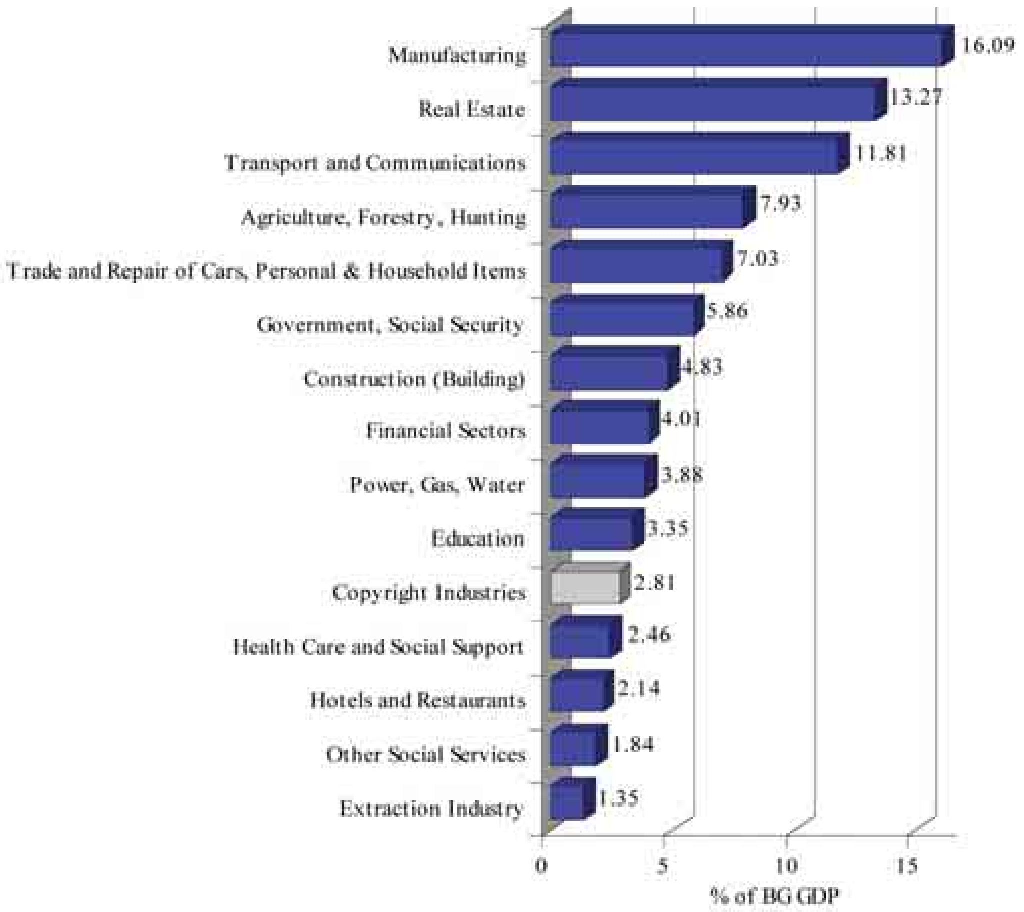
A rapid increase in the number of people employed in the copyright-based industries was registered for the period 2003-2005; the growth rate more than three times higher than the growth rate of employment in the economy as a whole.

Core Copyright (growth of employed 2003-2005)	Total Copyright (growth of employed 2003-2005)	Total BG Employment Growth
12.3%	13.3%	3.5%

Comparison with Other Sectors of the Economy

The copyright-based industries are not monitored separately in the Bulgarian National Statistics. That is why they are somewhat undervalued in this comparison since their activities have already been included in some of the monitored sectors. In view of their share in the gross value added in 2005, they rank eleventh, above health care, hotels and restaurants, and extraction industries. The value added generated by the copyright-based industries (3.42 percent) is approximately three-quarters of the value added in such an important sector as generation and distribution of electric power, gas and water and was significantly higher than the hotels and restaurants sector. As for its contribution to GDP, the share of the copyright-based industries is 2.81 percent – a value that is more than twice the share of the extraction industries and higher than that of hotels and restaurants. Regarding employment, the copyright-based industries occupy tenth place, higher than hotels and restaurants and agriculture, forestry, hunting and fishing.

Copyright-Based Industries Share in GDP compared with Other Sectors in the Bulgarian Economy

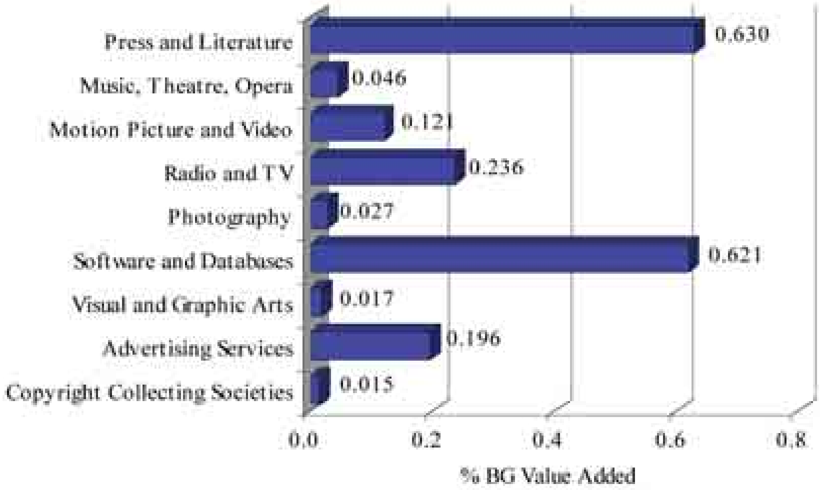


Leading Sectors in the Copyright-Based Industries

Book publishing and printing and software and databases are the two largest core copyright-based industries – they both contributed 0.51 percent to the gross value added in the country in 2005. The value added per person employed was the highest in the radio and television industry – BGN25 287. It was followed by production and distribution of motion picture and video with BGN19 503 and software and databases – BGN18 522 per employee.

In 2005 the value added adjusted for inflation generated by the core industries grew by 52.8 percent in comparison to 2003. The highest growth was registered in production and distribution of motion picture and video – 166 percent, i.e., almost triple. The main activity in this industry shows the highest growth among all copyright-based economic activities of 225 percent. In 2003, this sector was comparable with other sectors such as theater and music, visual and graphic arts, and photography. It became an industry in the true sense of the word over a three-year period.

Relative Contributions of Core Copyright Industries to the Bulgarian GVA in 2005



The second fastest developing sector is software and databases, registering a growth rate of 93 percent: its key activity, development of original software for customer needs and design of websites, grew by 108 percent. Interviews carried out with experts in the field confirmed the positive effects of current efforts to increase the share of legal software used by companies – it improves their efficiency, the quality of the end product and their competitiveness.

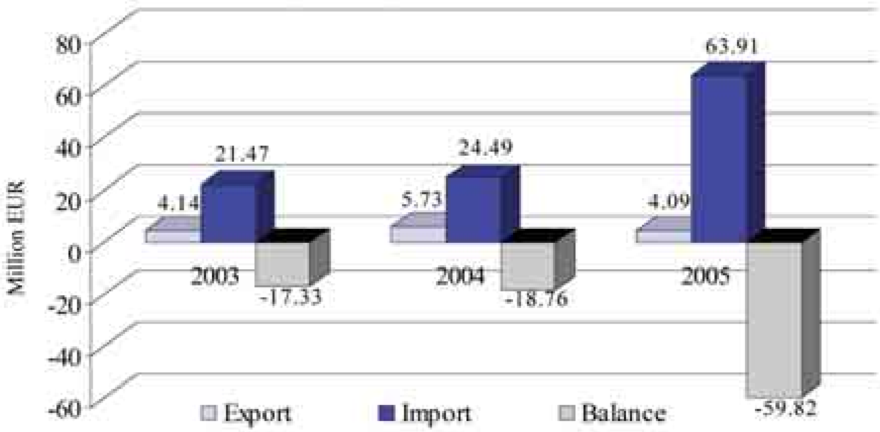
The third fastest developing sector is architecture which falls under the category of partial copyright-based industries. During the period surveyed it showed a growth in value added of 81 percent taking inflation into account, a growth in gross product by 23 percent and 16 percent growth in employment. Using real numbers, the contribution of this sector to the GVA is BGN15.3 million and this is the figure calculated after a 90 percent reduction (10 percent copyright-based factor). The importance of the sector must not be underestimated because there is hidden potential here, which is not accounted for by NSI due to the peculiarities of the construction sector.

The core copyright-based industries value added share was 2.12 percent of Bulgarian GDP for 2005, higher than the extraction industries and closer to the share of hotels and restaurants. The share of the seven 'culture-related' core copyright-based industries (without software and advertising) in GDP for 2005 was equal to 1.27 percent, while total government subsidies to culture-related activities for 2005 was 0.72 percent of GDP – about one third of the core copyright-based industries economic contribution and slightly more than half of the seven 'cultural' copyright-based industries economic contributions. These results call for a revision of public policy towards structure and management of subsidized cultural activities.

Import and Exports of Products of Copyright-Based Industries for the Period 2003-2005

Bulgaria is a net importer of products protected by copyright and intellectual property rights in general – in the past, the compensation paid abroad for using products of intellectual property increased from €21.5 million to €64 million, while the income received from the sale of domestic intellectual property abroad reached a level of €4.5 million a year. One might extrapolate that the early successes in the fight against piracy and the strengthening of copyright legislation have resulted in a triple increase in payments made abroad while the income from rights and licenses in Bulgarian products of intellectual property remained constant.

Royalties and Taxes for Copyrights and Neighboring Rights received and paid by the Bulgarian National Economy in 2003-2005



The exported goods and services of the publishing and printing industry amounted to between €5.45 million and €6.84 million a year for the period 2003-2005 while imports grew steadily and the increase for 2005 only was 68 percent. The negative trade balance in this group of goods increased and amounted to €21.27 million in 2005. Exports of software were higher, reaching almost €10 million in 2005, an increase of 45 percent in comparison to the previous year. In the opinion of the experts, a significant part of these exports is unaccounted for in the national statistics.

Information received on the imports and exports of radio and television sets, tape recorders, CDs, DVDs and other equipment for reproduction and recording of audio and visual carriers shows that the main part of the value added in this interdependent copyright-based industry was realized in imports. During the period surveyed, the ratio between imports and exports was 1:4 in favor of imports; the negative trade balance exceeding €400 million in 2005.

The leading partial copyright-based industry is apparel, textiles and footwear with a positive balance of 1.13 billion. The survey shows that there has been a trend in this sector for enterprises to appoint professional designers or to purchase the services of such while the companies more often protect their original products and register trademarks.

The furniture industry also shows growing volumes of imports and exports given a stable positive balance between €70 million and €80 million. With a higher copyright weight, the industry outperforms apparel, textiles and footwear for gross value added. With respect to games and toys, imports and exports were about €20 million annually during the period surveyed with a slight rise in imports. There is a significant informal sector leading to serious infringements of copyright in this industry (computer games), which forces Bulgarian game producers to turn their attention primarily to the external market and which explains the relatively high levels of exports.

The export-import data on products and services provided by Bulgarian interdependent copyright-based industries reveal a clear picture of deindustrialization of the sector. Fifteen years ago most of these industries were among the country’s leading, export-oriented industries. Aside from paper production there are few items of copyright-based industries-related equipment and apparatus that are produced and exported. Only a limited number of entrepreneurs have managed to preserve and develop small-scale production in specific niches such as blank recording material (CDs, DVDs), optical and electronic components, etc. Public policies need to stimulate foreign direct investment, to identify the country-specific competitive advantages (research and manufacturing traditions, access to specific markets, production facilities, etc.) and to support local entrepreneurs.

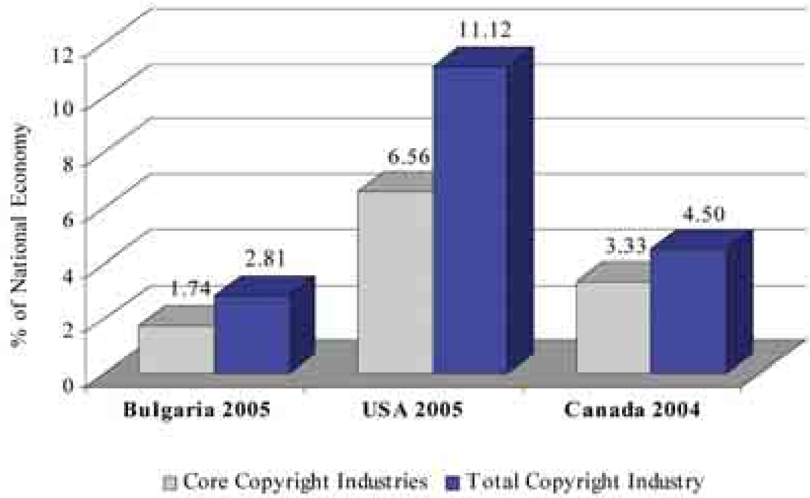
International Comparisons

According to the employment figures, the core copyright industries represent a 2.5 percent share of total employment. This means that Bulgaria is above the average of 2 percent for the 15 EU Member States (according to the data from the *2003 Study of Copyright-Based Industries in the EU*).

With the share of value added of the core copyright-based industries in 2003 equal to 1.3 percent of GDP, Bulgaria does not feature as one of the leading European countries in the field. However the comparison does not take into account the enormous growth in copyright-based industries in Bulgaria over the past three years – 13.3 percent, which is four times higher than the average growth of the economy. The relatively low share can partially be explained by the inability of the national statistical system to register the exact contribution of all copyright-based activities.

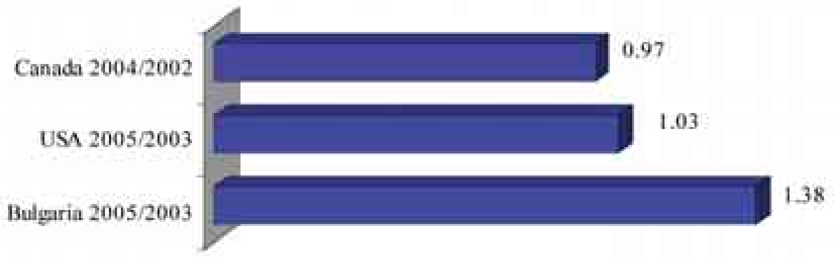
The available US data for 2005 and Canadian data for 2004 allowed for comparison with Bulgarian data for 2005. It shows that the contribution of the core copyright-based industries to Bulgaria's GDP is three times lower than that in the US and more than twice as low as that in Canada.

CI share GDP – Bulgaria, the US and Canada, 2004 - 2005



Employment in the core copyright-based industries in Bulgaria is about twice as low as that in the US and is comparable to Canada. For the period 2003-2005, the growth rate of the core copyright-based industries in Bulgaria, calculated as a ratio between the shares of value added in GDP, was 38 percent – significantly higher than that in the US and Canada.

Growth Rates of Core CI Share in GDP



Policy Issues

The following conclusions and recommendations could be outlined, on the basis of the study:

1) Develop public policy on copyright-based industries – from 'public good' management to correcting market failure in the field and providing seed capital for new copyright-based industries. The much higher share in value added of the core copyright-based industries in GDP for 2005 compared with the share of government subsidies to culture-related activities for 2005 claims for revising the public policy on management of subsidized cultural activities. These subsidies should be considered not just as 'public good' distributed according to a society's long-term social and cultural needs, but rather as partial compensation to the economic agents in the copyright-based industries for their efforts in response to these needs, as a correction of 'market failures' in private response to the cultural needs of society, and as 'seed capital' for developing new businesses in the cultural sphere. This, however, presupposes developing the public-private partnership in the management of public subsidies for culture.

2) The relative homogeneity of the main part of core and partial copyright industries in Bulgaria favors development of common policy measures to support them, in addition to sector-specific policies aimed at fast-growing 'champions' (book publishing and printing, software, architecture, furniture). The positive trade balance in most of these industries is an additional argument in this respect. Possible strategies include improving the general conditions for protection of copyrights, whose importance is already widely recognized among the entrepreneurs in these sectors. In more specific terms, it is necessary

   - To strengthen the implementation of IP law, especially in the distribution of protected goods and services via the Internet. This should include tightening controls on LANs and cable TV networks.

   - To improve competence in and knowledge of copyright among the representatives of the legal system in Bulgaria, especially the judges and prosecutors. Special training programs are needed to encourage best practices and facilitate the exchange of information and experience.

   - To continue the public campaign against piracy and rising public awareness of the economic losses and moral damages related to it.

3) Support the export of locally-produced copyright-based industries products and services. Introduce measures to improve qualifications of employees and entrepreneurs in copyright-based industries. The interviews carried out revealed that the transition from small entrepreneurial firms towards larger, corporate businesses leads to a number of problems, the most acute being the lack of managerial skills for running larger enterprises.

4) Improving the national system of classification of economic activities and statistical data collection is an urgent necessity. At present a number of important copyright-based industries-related economic activities are classified under mixed codes together with other, irrelevant activities. This requires much additional effort and resources. We recommend the establishment of a special task force comprising representatives of the National Statistical Institute, the Ministry of Culture, the UWE Intellectual Property Department and members of the Bulgarian WIPO research team to revise the Bulgarian version of NACE and to propose the necessary changes. Such changes would correspond to the rapid development of copyright-based industries in the country and offer relevant information for the practitioners and policy makers in the field. We especially recommend changes in the 12 codes, described in Annex 4 of the present report, as well as a number of copyright-based industry-related codes in the Bulgarian Customs Tariff. Changes to the existing rules for classifying export-import data are also needed. In general, the proposed improvements in Bulgarian economic statistics would help public policy in the field of copyright-based industries and would make a valuable contribution to current efforts against piracy, allowing for adequate measurement of the effects of anti-piracy campaigns.

5) The rudimentary status of certain creative occupations such as the design profession had a bearing on the development of a number of copyright-based industry sectors. This title does not yet exist in Bulgaria as an autonomous business field. At present it covers a number of different professional activities attached to other copyright-based industries businesses, each indicated with a corresponding title – i.e., fashion design, media design, graphic design, interior design, etc. The spread of these activities among the sectors, lack of a common profile, as well as of an autonomous institutional and organizational status of design activities limits the possibility of imposing their copyrights on the market and defending them against misuse. The present situation creates obstacles in building long-term strategies for development of the sector and improving the artistic level of the design profession. Public policy in the field is urgently needed to support the efforts of the practitioners and to create a better legal, educational and organizational environment for the autonomous development of the sector.

The results obtained in this survey revealed a new, rapidly-growing sector of the economy. They provide solid ground for future studies to serve the needs of policy makers and the various stakeholders in the field.

Introduction

This is the first overall study of the contribution of the copyright and neighboring rights-based industries (hereinafter referred to as copyright-based industries) to the Bulgarian economy. It was conducted in the period August 2006 – May 2007 and was funded by the World Intellectual Property Organization (WIPO). The study used the WIPO methodology which has now been applied in more than 20 countries all over the world. The methodology is based on the main economic indicators monitored by the National Statistical Institute, the Bulgarian National Bank and other national institutions, and measures the value added, gross output, share of imports and exports and employment generated in these industries on the basis of which other related economic indicators can be computed. The methodology allows for comparison of the results of the study with those in other developed countries.

Why is a study on the copyright-based industries necessary? – It is an expression of the growing understanding over the past two decades that knowledge is of key importance for the wealth of a nation. While intellectual property, and copyright in particular, has been traditionally viewed primarily from a legal point of view, attention is now turning to the economic characteristics of copyright. The first studies have shown that the economic activities based on the use of creativity and related copyright make up a significant sector of the economy. The transformation of the creative (or copyright-based) industries as the result of a specific economic policy, together with the creation of the appropriate infrastructure and strengthening law enforcement in the field of intellectual property, have yielded impressive results – today, in most OECD countries, the copyright-based industries are one of the most rapidly-developing economic sectors, often several times ahead of the average rates of economic growth. There are other factors for this, one of the most powerful of which is the development of digital technologies and the Internet which have rapidly expanded the possibilities for consumption of the products and services provided by the copyright-based industries, changing some traditional economic activities and creating new ones.

Very often events in the economy and their study go in sequence. Novelties often occur by stealth, in the shadow of other forms,[1] and exist unnoticed by journalists, researchers, politicians, tax authorities, etc., for some time. This is what has happened in the UK – after the economic awakening in sectors such as advertising, software, plastic and fine arts, architecture, etc., researchers found there was an economic boom and that "in fact," the activities which are seemingly unconnected and scattered by sectors of the old economic statistics reveal the unified phenomenon of creative industries – "… those industries which have their origin in individual creativity, skill and talent and which have a potential of wealth and job creation through the generation and exploitation of intellectual property."[2] This definition places economic wealth in direct relation with individual talent and mind, innovation and its related reputation and popularity in setting market forces in motion.

Deeper research has found that the basis for the realization of the economic value of these industries is intellectual property rights and the importance of protecting these rights. In Bulgaria, intellectual property rights and their observance are yet to be learned, after the years when the real owner of the creative product was the state and inventors owned the so-called "authorship certificates." In the fifteen years of transition Bulgaria was sanctioned several times for violations of intellectual property rights. Over the past years, Bulgarian governments have made significant efforts to fight piracy yet problems still exist. Research into the creative industries in the city of Plovdiv conducted in 2005 at the initiative of the British Council in Sofia showed that this is one of the main reasons why the various sectors of the creative industries remain

[1] Theoretically, the opportunities for businesses and profit are the greatest in such a case – because the risks are the highest.
[2] See *Creative Industries Mapping Document,* Department for Culture, Media and Sport, UK, 1998, p.1.

separated in everyday economic practice; the common elements are not seen, the problems of an essentially similar nature the various professions have to resolve remain hidden.

This study was the first to give a detailed picture of the economic contribution of the copyright-based industries in Bulgaria for the period 2003-2005. It is of key importance to be acquainted with and to promote these industries with a view to establishing adequate policies in the field. The study also provides a good foundation for future research – comparative research, research applying the same methodology with a view to tracing the future development of the copyright-based industries, research using other methodologies or specialized studies of individual problems or of individual sectors of these industries.

This study has been made possible at the initiative of the Bulgarian Government with the financial support of WIPO.

It was conducted by a team of experts led by Associate Professor Dr. Ivan Tchalakov (Plovdiv University and BAS Institute of Sociology) and included Senior Assistant Professor Dr. Vladia Borisova with the Intellectual Property Department of the University of National and World Economy, Senior Assistant Professor Donka Keskinova from Plovdiv University, Associate Professor Yordan Kalchev from the National Statistical Institute (NSI) and the following experts from the Ministry of Culture – Georgi Damyanov, Head of Copyright and Neighboring Rights Directorate, Dr. Rossitsa Arkova, Chief Expert with Strategies and Programs Directorate, and Tsveta Andreeva, Chief Expert with EU Integration and International Cooperation Directorate. The team worked under the close supervision of the Deputy Minister of Culture, Mrs. Ina Kileva. The WIPO consultant was Professor Robert Picard from the Jönköping International Business School, Sweden. Dr. Dimiter Gantchev, Acting Director, Creative Industries Division of WIPO, monitored the execution of the project at all stages. Of great importance was the close cooperation with the experts of the NSI, Mr. Todor Todorov, Director of the National Accounts Directorate, and Ms. Ljuba Yaneva, Head of the Business Statistics Department.

The report that follows consists of four parts. The first part is a legal and economic study of the content of copyright and neighboring rights, the need for and the types of protection, as well as existing legislation. It also looks at the main institutions in the country tasked with the application of this legislation and their activities for the past fifteen years. The second part presents the methodology of the study and its application in Bulgaria. The third main part analyzes the joint contribution of the copyright-based industries to the Bulgarian economy in view of the value added, GDP and employment in the sector for the period 2003-2005. It is compared to the contribution of the other basic branches of the economy, followed by a description of the internal structure of the copyright-based industries – relative shares of the core, interdependent, partial and non-dedicated support industries by the given indicators – and identifies the leading sectors in each group. It also shows the structure and dynamics of the imports and exports of the economic sectors monitored in each group. It then compares the results computed with those of other countries and draws conclusions about the place and specific characteristics of the Bulgarian copyright-based industries. The final section outlines the development and current situation in each of the eight core copyright industries.

The fourth part provides summaries and conclusions on the practical activities and policies of government institutions, private entrepreneurs and associations in the field of copyright-based industries.

PART ONE – Artistic Property as a Subsystem of Intellectual Property in Bulgaria

This chapter deals with an interesting and current topic on the contribution of the copyright-based industries to the economy of Bulgaria. The observance of the terms and conditions and the procedure for the use of intellectual property are directly related to the rules established by copyright.

Copyright is an exclusive right, which enables the author to use the work and to authorize its use by others. "Use" is understood as a realization of the economic rights of the author specified under the law. It is a main principle that copyright arises automatically on the creation of the work. In order to be protected a work must be original. Protection lies in the expression of an idea, and not in ideas themselves. The work must be disseminated in a place before an unlimited number of persons[1] and at a moment chosen by the author.

There are limitations to copyright protection in certain cases. They are imposed with a view to protecting the economic interests of society and of the author separately and at the same time and in response to the process of harmonization of the national legislation with the *acquis communautaire* in the field.

Artistic property includes neighboring rights. According to national legislation, neighboring rights cannot contradict copyright, especially as regards the use of the work and the allocation of the remuneration received (see *Appendix No.1*, item 2, item 3, item 4, item 5 and item 6).

Rights management is essential for deriving any income from economic use. This management may be conducted individually or collectively.

Copyright protection is not provided on the basis of registration. There is no statutory requirement for the author to use his/her work.[2] As regards copyright licensing, an agreement in which the author agrees to transfer all his/her rights to future works is considered void. Copyrights are licensed by contract for use of a work with the author. The principle is that the type of works in the three main groups coincide with the types of an author's economic rights which themselves represent separate contracts with authors (the right to import and export copies of the work in commercial quantities is an exception irrespective of whether such copies are made legally or not).

According to Bulgarian legislation, Collective Management Societies for Copyright and Neighboring Rights (CMS) are voluntary associations of authors or neighboring rights holders organized as non-profit organizations registered in accordance with the Commercial Act and subsequently with the Ministry of Culture.[3]

The main objective of CMS is: to represent authors; to negotiate the use of their works; to collect and allocate authors' remuneration and to represent their members in similar foreign organizations with which they have contractual relations.[4]

[1] National legislation does not provide for a definition of the notion of "unlimited number of persons" – whether the unlimited number refers to the number of persons itself or to the free access to the place where the work is disseminated. So far, there has been no case law on this issue.
[2] The Copyright and Neighboring Rights Act protects unpublished works upon expiry of the copyright for a further period of 25 years in favor of the person who disseminated the work.
[3] The non-monopolization of collective management of copyright and neighboring rights is a major principle in the legislation concerning artistic property. The legislation allows for the establishment of multiple collective management organizations. In Bulgaria, this principle is not applied in practice; therefore there is one collective management organization for each cultural sector.
[4] CMS are competent to authorize the: *transmission of the work by cable simultaneously with the broadcasting or its transmission entirely or in an unchanged manner by an organization different from the broadcasting one.* In this case, the organization also acts for non-members in the same way as for its own members.

CMS for Copyright Management in Bulgaria

- MUSICAUTOR is a voluntary association of authors of musical works. It is the first organization for collective management of copyright and was established in 1993 with the help of the Swiss society SUISA. Its members are Bulgarian authors and publishers, representatives of large worldwide publishing and record companies. MUSICAUTOR authorizes the use of the rights of reproduction and distribution.

- FILMAUTOR is a voluntary association of authors of audiovisual works and films. It authorizes the use of the right of reproduction and distribution of the original film and any materials derived therefrom.

- THEATERAUTOR is a voluntary association of authors of staged works, playwrights, composers, choreographers, producers and translators. The organization allows for the transmission by cable or by wireless of staged performances by television or radio.

- IZA-ART is an association of authors of works of art and photography.

- FMFC *(Fellowship of the Masters of Folkloric Crafts)* is a voluntary association which issues licenses for this activity and awards the titles Journeyman and Master.

CMS for Management of Neighboring Rights

- PROFON: This is a voluntary association of producers of audio recordings, producers of videos of musical works and of artists performing musical works. The association was created in 1998 to handle neighboring rights and is a so-called "chain collecting society."
  It acts in its own name and is paid by its members to: authorize the transmission by wireless and by cable of musical works; authorize the retransmission or rebroadcasting of the same by cable or by wireless; authorize internal streaming. The remaining rights of the producers and artists performing musical works are managed separately by their owners.
  The organization represents producers and performing artists thus acquiring the rights of performers for secondary use[1] of their performances. PROFON works on the basis of bilateral agreements when representing foreign performers. The International Federation of the Phonographic Industry (IFPI) determined that PROFON was to be the association with the smallest allowance for its activity with only 10 percent of its income deriving from remuneration for use compared to other European countries.

- BAMP (Bulgarian Association of Musical Producers): BAMP is a national structure of IFPI. It has been recognized as such since 1999 although it was officially created in 1996. The main objectives of the organization are: to fight piracy (physical and digital); to support the activity of the rights-protecting institutions and authorities in fighting infringements of intellectual property rights. Until 2002-2003, the organization was financed by IFPI and fees were collected from its members. Today, its budget is provided by PROFON under the heading of the Anti-Piracy Fund. Members of PROFON may also be members of BAMP.

- ARTISTAUTOR is a voluntary association of performing artists. It manages their rights in cases where they are not transferred to record or film producers (PROFON). It authorizes the use of mechanical rights for reproduction and distribution of live or recorded performances.

[1] Pursuant to the CRRA, secondary use of live performances or records of performing artists constitutes broadcast by wireless, cable or other technical means or public performance through audio or other equipment.

Organizations operating in the field of copyright and neighboring rights without the status of collective management societies

- ARSIS CONSULTING – established in 1991, the company aims at providing consultancy and legal services in this field at the local, national and international levels. ARSIS is the first and still the only firm in Bulgaria specializing in copyright protection, in which capacity it actively contributes to the enforcement of national and international legislation for the prevention of intellectual property crime. ARSIS works in close cooperation with the executive and the judiciary (Ministry of the Interior, Ministry of Culture) to increase the awareness and qualifications of the law enforcement institutions in the field of intellectual property protection. ARSIS represents BSA – the Business Software Alliance in Bulgaria.

- ABBRO (Association of Bulgarian Broadcasters) – a voluntary, independent non-profit organization established in 1997 which represents the interests of the radio and television industry. In December 2003, it had 60 member companies representing approximately 160 licensed radio and television operators from the entire country.

The comparative analysis of the factors of economic reality and the forms of management of copyright and neighboring rights in the free market shows that the form of copyright management is influenced by changes in the economic environment. This can be seen in real growth terms in the activities of collective management organizations for copyright and neighboring rights, acting as an economic intermediary between the holders of the rights and the users if their use generates income.

The scope of copyright is indicated by the grouping of large rights, small rights and mechanical rights.[1]

Bulgarian legislation sets down a requirement that, in certain cases, the management of small rights should be made on a collective basis through collective management organizations for both copyright and neighboring rights. The Bulgarian experience shows that, in addition to the authors' small rights, their mechanical rights are also often managed on a collective basis as are certain independent rights such as the right to modify a musical work – i.e., its arrangement. All other rights are managed individually.

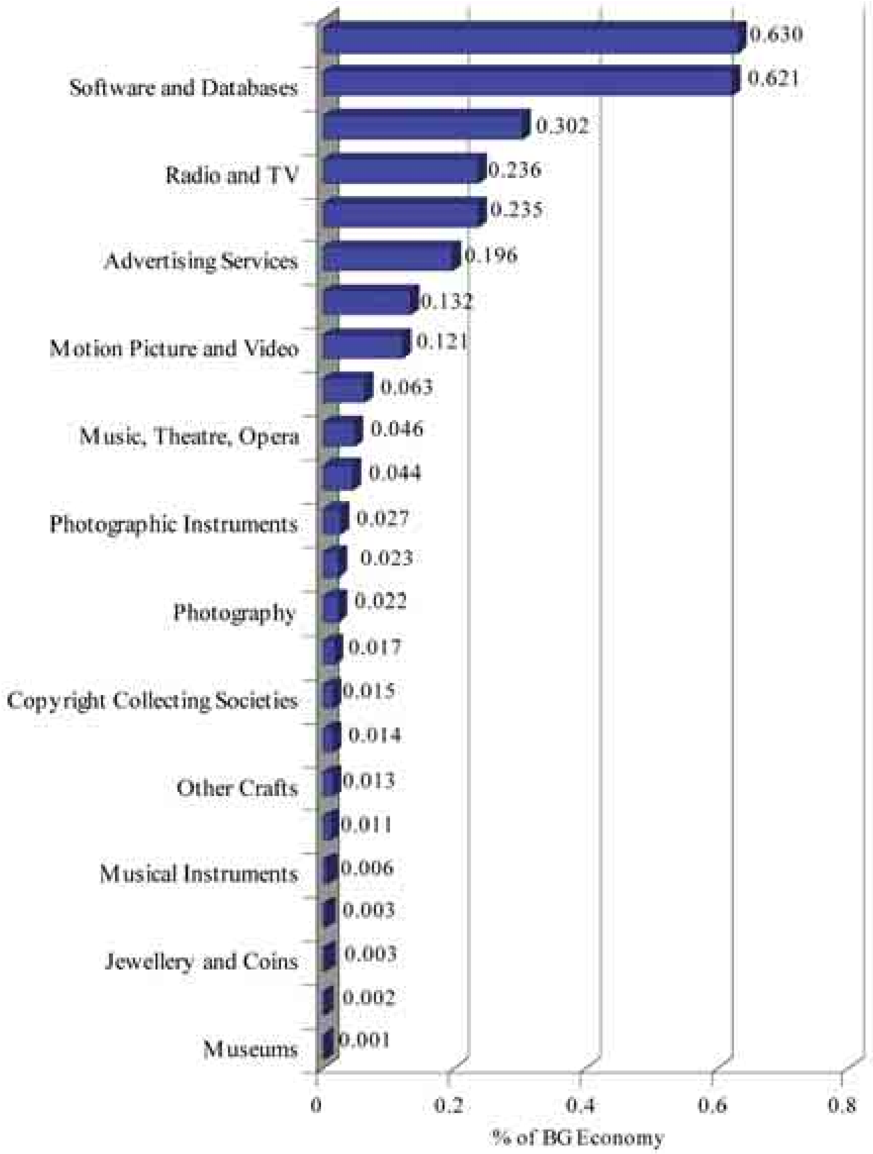
An interesting element of the Bulgarian experience is that the type of rights management exerts influence on the economic activity of the respective groups of industries and, hence, on their contribution to the economy measured with indicators such as value added, gross ouput, employment, etc. The results of the study show that industries with an individual principle of rights management make a greater economic contribution compared with those managed on a collective basis. As a preliminary step, we have provided a ranking of the 24 copyright-based industries from the first three groups applying the WIPO methodology (see below) in accordance with their contribution to the gross value added (GVA).

The graph below shows that the first ten include six core and four interdependent industries, with the latter directly related to some of the six core industries. The leading industries (ranking first and second) with similar values in their contributions to the GVA are book publishing and printing and software and databases, while advertising services occupies the sixth place. In all three industries, copyright is managed on an individual basis. The third and fifth places are held by the respective interdependent industries in the

[1] Each group encompasses a certain number of the property rights of the author from the content of his/her copyright. The *large rights* are related to the use of stage works, works of art, photography, etc. The *mechanical rights* include the right to reproduce the works in the form of video recordings and audio recordings. The *small rights* are related to the right to transmit by cable or by wireless means, to allow access to the work to an unlimited number of people at a time and place of their choice, Internet rights and the right of public performance of the work.

manufacture of and trading in paper and computers and related equipment. If we add the interdependent industry of manufacture of and trading in blank recording materials ranking ninth in the group, we will be able to outline an interdependent set which makes up the core of the sector of copyright-based industries. The total share of this core is 1.98 percent given a total share of the sector in the gross value added of 3.403 percent, i.e., more than two-thirds of the total contribution

Graph 1. Ranking of the Copyright-Based Industries by their Contribution to the Gross Value Added in 2005 (relative shares in %)



Of the industries where copyright management is on a collective basis, the greatest contribution (but at a much lower level than the first group) is from radio and television (fourth place), motion picture and video production and distribution (eighth place), and music, theater, and opera (tenth place).[1] What is of interest in the radio and television industry is that management of their own programs is done on an individual basis. The acquisition of the right to retransmit simultaneously with the transmission and broadcast of works of various organizations is done through a collective management organization. It is common practice for

[1] See the section on the total economic contribution of the copyright-based industries below.

producers to obtain the right to video or audio recordings and their subsequent distribution from the authors of the recorded works on a collective basis. These collective rights management organizations are: FILMAUTOR for the film industry and MUSICAUTOR for the music industry. Management in the field of stage arts is mostly individual even though THEATERAUTOR is a collective rights management organization operating in Bulgaria.

A possible explanation for the important differences in the economic contribution of management is its relatively limited experience in the free market. Collective rights management has been in existence in Bulgaria since the 1970s but the differences in modern collective management methods is due to the changes that have come about in economic and market conditions (*Appendix No. 1*) which are also reflected in the legislative amendments in the field of artistic property in the 1990s. This inevitably impacts directly on the development of the collective management of copyright and neighboring rights. For the past five years, the collective rights management organizations have established themselves institutionally and administratively and have started to be more visible participants in the copyright-based industries. Thus, for the period 2003-2005, the remuneration collected by them increased by 58 percent and amounted to BGN5.155 million in 2005.

Bulgarian Legislation in the Area of Artistic Property in the European Context: Law Enforcement

National legislation has been harmonized with the *acquis communautaire* in the area of artistic property through international regulations, conventions and directives that have been or are in the process of being ratified which are or will become part of the national law of the Republic of Bulgaria *(See Appendix No. 1, item 1).*

Competent Bodies in the Area of Law Enforcement in the Event of Unauthorized Use of Objects of Copyright or Neighboring Rights at the National Level:

- The Ministry of Culture keeps special registers of the existing organizations for collective management of copyright and neighboring rights; of the names of artistic groups; of the licensed producers of optical disks in the country.

- The Ministry of the Interior participates in the interdepartmental commission for the issue of licenses for manufacture of and trading in optical disks or matrixes for their manufacture.

- The Ministry of Justice: there is still no special judicial division or panel dealing with intellectual property issues. A positive tendency in this regard started with the establishment of a specialized division with the Prosecutor's Office dealing with crimes against intellectual property.

- The Customs Agency acts either upon information received or on its own initiative. It has the authority to detain temporarily objects of intellectual property subject to import or export to or from the country;

- The Patent Office of the Republic of Bulgaria, whose activities are mostly in the field of industrial property.

- The Ministry of Economics and Energy participates in the interdepartmental commission for the issue of licenses for the manufacture of and trading in optical disks or matrixes for their manufacture. It keeps a public register of the licenses issued, including their number and date of issue, name/title, head office, address of the management of the licensed producer/trader and type of optical disks or matrixes produced. Twenty licenses in total had been recorded at the beginning of 2007. Since 2006, a database has been created for imported and exported raw materials for the manufacture of optical disks and equipment for their manufacture, including matrixes and other carriers. The Ministry monitors the terms and procedures for the authorization of the source identification code (SID-code).

The competent institutions interact through a national system for exchange of information related to intellectual property rights, administered, maintained and developed by an inter-agency council. The Council operates to support intellectual property protection. It is an inter-institutional consultative body assigned to achieve a high level of political and institutional representation in order to guarantee the speed and efficacy of intellectual property protection and to fight piracy.

The legal protection of the economic interests of the holders of copyright or neighboring rights pursuant to existing legislation may be realized through an administrative, civil or criminal legal procedure. We set out below some of the most important Bulgarian Government activities in copyright law enforcement during the period 2005-2006:

- The Ministry of Culture: 44 inspections of the observance of the Copyright and Neighboring Rights Act were conducted, 10,745 optical carriers and 686 computer systems were confiscated, 123 expert opinions were provided, 39 administrative acts to establish violations were issued, 10,320 certificates of transactions of transfer of copyright or neighboring rights and certificates of production were issued, 54 penal orders were drawn up.

- The Customs Agency: border measures were applied and goods were detained in accordance with 619 reports for violations of intellectual property rights or *ex officio* totaling BGN26,332,310

- The Ministry of the Interior: 2,478 specialized police operations were carried out; 7,279 sites were checked, in 1,079 of which violations were found and 305 police files were opened for checks and preliminary investigations; 166,674 optical carriers, 1,170 computer configurations with entertainment and business software with nine terabytes of information were confiscated.

- The Ministry of Economy and Energy: 15 inspections were conducted of producers and traders in optical disks, equipment for their manufacture and matrixes. No violations were found. The inspectors found that the obligatory quarterly reports provided by licensed producers and traders contained reliable data about the resources purchased and invested in the production process *(Appendix No. 2, item 7).*

PART TWO – Methodology of the Research

We have pointed out that copyright-based industries have been the subject of research and interests of practical application for less than two decades. A series of studies was carried out at first in the English-speaking countries followed by other developed countries, which show that these industries form one of the most dynamic sectors of the economy, and their pace of development is often in sectors traditionally regarded as the basis for economic development. Krisztina Penyigey and Péter Munkácsi, authors of the Hungarian study, offer a synthesised overview of the situation at the beginning of 2005. Having mentioned the pioneer surveys of Arnold Plant on the economic aspects of copyright from the mid-1930s and the later mostly theoretic studies in the field, they point out:

"…The first studies were published in Canada and Sweden in the seventies to be followed by further research works from the USA, New Zealand, the United Kingdom, Holland, Germany and Austria in the eighties. These analyses allowed for plenty of methodological considerations due to the lack of standard applicable methodology. Ever since the nineties new countries (Finland, Japan, the MERCOSUR countries – Argentina, Brazil, Paraguay, Uruguay – and Chile) have been entering the scene preparing comprehensive studies and are using an increasingly integrated standardised methodology to study the economic roles of copyright-based industries. The analysis on the 15 EU countries was prepared with the coordination and under the guidance of Robert Picard, Timo Toivonen, and Mikko Grönlund in 2003." *(The Economic Contributions of Copyright-Based Industries in Hungary: The 2005 Report,* WIPO Creative Industries Series No1, 2005, p.287).

The authors set out the WIPO role in summarizing the existing approaches and developing a unified and standardized methodology comprising the economic contribution of copyright-based industries. This methodology was published in 2003 as *Guide on Surveying the Economic Contribution of Copyright-Based Industries* and was applied for the first time in the Singapore, Canadian and US surveys in 2004 and 2005 in the Latvian and Hungarian surveys. The present Bulgarian study is based on similar surveys in other Eastern European countries such as Romania and Croatia.

The WIPO methodology sums up existing experiences, and offers an efficient practical instrument for future studies, laying down a body of basic statistical methodologies allowing for the comparison of results from previous searches with future surveys in various countries. The authors of the WIPO methodology, amongst whom an important role was played by Dr. Dimiter Gantchev, indicate the meaning of the empirically-established fact for the larger economic contribution of the copyright-based industries in countries where the importance of these industries is understood and efforts made to improve the legislative base and law enforcement in the field of copyright and neighboring rights. The surveys following the WIPO methodology therefore have an important political and cultural impact as they not only provide economic information but contribute to a change in public and government attitudes to these industries.[1]

The application of the WIPO methodology is not just a process of simple copying – it requires considerable effort by the national teams on the transfer of the internationally-applied standards and practices to the specific context of the different countries. These efforts are directly proportionate to the specifics of the

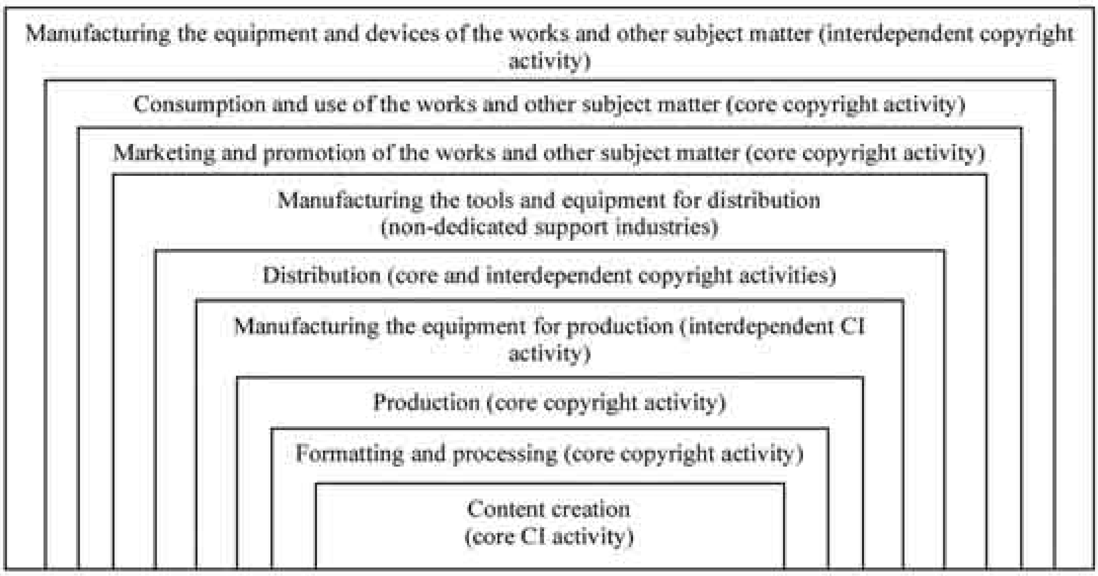
[1] Justin O'Connor draws an interesting analysis of the connection between the changes in the economic policies of the Labour Party in the UK introduced by Tony Blair and the reconsideration of the traditional cultural policy based mostly on state subsidies. This new approach connects the democratic element in cultural policy with the problems of economic development with emphasis at local level. It is based on the facts established empirically at the end of the 1980s that a large part of the cultural goods are produced outside the system of state subsidies and their creation and distribution have their own economic 'logic' (see Justin O'Connor - Public Hearing on 'Cultural Industries' at the European Parliament, Brussels, 22 April 2003).

systems for statistical information and economies reflected by those systems. Eastern Europe is a region where economies and statistics were governed by different principles for decades and their influence can still be felt today even though the principles of operation and indicators of the European Statistics (Eurostat) and other international standards referred to in the WIPO methodology have been introduced. Therefore, each national survey of the economic contribution of the copyright-based industries is unique in its own way – it should accord with international methodologies, the specific features of the economic environment and traditions, and with the need faced by the political elite of their readiness to accept these results and apply them to their activities.

What is the substance of the WIPO methodology? Mostly that it attempts to reflect the entire economic contribution of the copyright-based industries. Many of the initial studies are limited to the core industries, in which copyright and neighboring rights have greatest importance – press and literature, visual and graphic arts, music and theater, press, architecture, photography and motion pictures, but also radio and television, advertising, software. These are industries built upon the so-called actions for creation of the contents and apply to the creation of art (books, paintings, sculptures, theater, motion pictures, musical works, art photography, etc.), computer programs, radio and television programs, advertising, etc. These activities make the greatest contribution to the added value generated by the respective industry.

It is clear that the results of creation are not "consumed" in the same way as products in other economic sectors (nutrition, materials, machines, etc.). Music, theater and dance creations need performers, which before the invention of modern technologies for reproduction of sound and film (the gramophone, cinema and the subsequent digital technologies and the Internet) were the only way their works could reach the customers. The technical means however allowed the separation of created contents from live performance and made possible widespread reproduction and distribution. Thus, at the start these processes came between the interests of artists, performers and distributors and the establishment of systems for regulation of the relations between them was needed.

Therefore, to evaluate the economic contribution of these industries, the chain of activities related to the creation, formation, distribution and consumption of the artistic creation and service should be studied. The major activities are set out below in the graph, although in the real economy there is constant interaction between them:



This feature of artistic products leads researchers to try to encompass not only the activities related to the creation of the work but also the entire chain of economic activities by means of which the artistic works reach their consumers. The authors of the study of copyright-based industries in the 15 EU Member States examined two additional groups:[1]

- Industries dependent on copyright including the sectors engaged in production which is strongly dependent on the core copyright-based industries. A typical example would be the production of technical means and equipment for the creation, production and use of copyright-protected products and services;

- Copyright-related industries determined as sectors engaged in production or services partly related to the products of the copyright protected creation, e.g., production of apparel, which is based on the work of fashion designers, production of jewelry, architecture – the creative activities of the architect are supplemented by the work of construction engineers, craftsmen, etc. more than in the case of a sculptor.

The WIPO methodology adopts this approach and develops it with one further group – non-dedicated support industries. These are defined as industries, in which "…a portion of the activities is related to facilitating broadcast, communication, distribution or sales of works and other protected subject matter, and whose activities have not been included in the core copyright industries."[2] Preserving the name of the group of the core copyright-based industries, the methodology uses the term 'interdependent copyright industries', defined as "industries that are engaged in production, manufacture and sale of equipment whose function is wholly or primarily to facilitate the creation, production or use of works and other protected subject matter." (WIPO Guide, page 88.) The methodology defines respectively the partial copyright industries (instead of "related" industries as used in the European study) as "industries in which a portion of the activities is related to works and other protected subject matter and may involve creation, production and manufacturing, performance, broadcast, communication and exhibition or distribution and sales. "*(ibid.)*

Thus the methodology identifies four groups – core, interdependent, and partial copyright industries, and a group of non-dedicated support industries. Each of these groups consists of clearly determined industries whereas small variations are possible in the different national economies.

[1] See Robert G. Picard, Timo E. Toivonen and Mikko Grönlund (2003) - *The Contribution of Copyright and Related Rights to the European Economy,* Final Report for the European Commission Directorate General – Internal Market, Media Group Business Research and Development Centre, Turku School of Economics and Business Administration, Turku, pages 16-17. They also designed the above graph.
[2] *Guide on Surveying the Economic Contribution of the Copyright-Based Industries,* WIPO, Geneva, 2003, page 35.

Table 1 **List of the Main Groups of Copyright-Based Industries as given in the WIPO Methodology and in the Bulgarian Study**

Category	Group of Industries	
	WIPO	Bulgaria
CORE COPYRIGHT INDUSTRIES	Press and Literature	Press and Literature
	Music, Theater, Opera	Music, Theater, Opera
	Motion Picture and Video	Motion Picture and Video
	Radio and TV	Radio and TV
	Photography	Photography
	Software and Databases	Software and Databases
	Visual and Graphic Arts	Visual and Graphic Arts
	Advertising Services	Advertising Services
	Copyright Collecting Societies	Copyright Collecting Societies
INTERDEPENDENT COPYRIGHT INDUSTRIES	TV sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment	TV sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment
	Computers and Equipment	Computers and Equipment (including photocopiers)
	Musical Instruments	Musical Instruments
	Photographic and Cinematographic Instruments	Photographic and Cinematographic Instruments
	Photocopiers	
	Blank Recording Material	Blank Recording Material
	Paper	Paper
PARTIAL COPYRIGHT INDUSTRIES	Apparel, textiles and footwear	Apparel, textiles and footwear
	Jewelry and coins	Jewelry and coins
	Other crafts	Other crafts
	Furniture	Furniture
	Household goods, china and glass	Household goods, china and glass
	Wall coverings and carpets	Wall coverings and carpets
	Toys and games	Toys and games
	Architecture, engineering, surveying	Architecture, engineering, surveying
	Interior design	
	Museums	Museums
NON-DEDICATED SUPPORT INDUSTRIES	General wholesale and retail	General wholesale and retail
	General transportation	General transportation
	Telephony and Internet	Telephony and Internet
NON-ATTRIBUTABLE GROUP		Wholesale and retail of other household goods; Rentals of personal and home items

The economic activities under these industries are subject to empiric identification in the system of the national statistics followed by collection of data for them. The overall success of the study depends on the successful completion of these tasks. We describe below how they have been dealt with by the Bulgarian team.

Identification of Codes in the National Classification of the Economic Activities (NKID-2003) and Related Sources of Data

The national statistics classify the economic data for the non-financial enterprises by codes reflecting their main scope of activity. It is possible that the same company 'migrates' between different codes if it changes its activities, which occurs more often in the commerce and services sectors.

Codes for economic activities: The study was facilitated by the fact that at the beginning of 2003 Bulgarian statistics adopted the standard European Classification of Economic Activities NACE[1] (NCEA-2003) and the European Classification of the Products and Activities CPA[2] (NCPEA-2003). WIPO uses NACE for the identification of economic activities related to copyright and neighboring rights, which would allow the direct application of the WIPO methodology to determine the main groups of industries and their codes.[3] After discussion with our international consultants it was decided that data for 2003 and 2005 should be collected so that the dynamics in these industries over a three-year period can be reflected.

Codes for import and export: The national statistics classify the data on import and export of products and services within the copyright-based industries based on the Customs Tariff of the Republic of Bulgaria. Unfortunately, the Tariff only includes trade goods, thus omitting import and export of services, which is very important for copyright-based industries. The main chapters of the Customs Tariff show that it includes goods in four of the core copyright industries (polygraphy, photography, cinematography, visual and graphic arts), with the other codes referring mainly to partial copyright industries. Some codes were attributed to indirectly related activities, e.g., import and export of staff and materials for the production of goods and services by these industries (see *Appendix 2*).

In the work on the classification of the Bulgarian codes corresponding to those of WIPO we encountered many problems. It appeared that the same problems were faced by other researchers. One of the best and most concise explanations of these problems is made in the survey for the contribution of the copyright-based industries in the 15 EU Member States (one of whom is an international consultant on the project):

> "NACE data often reports within broad categories that often comingle activities and despite its efforts to harmonise statistics not all European nations use the NACE categories. Even when data are available, it is often not very rigorous because many copyright industries have traditionally been considered cultural rather than economic activities and only limited economic statistics have been gathered. Or they have been gathered in broad categories that also include a variety of activities that make the data inappropriate for assessing the impact of the copyright industries. This study has endeavoured to overcome these problems by widening the sources of data used to gather data." (Picard, Toivonen and Grönlund 2003, p.14.)

As explained below, the problems we encountered and the solutions we attempted to find were identical or similar to those of our colleagues in other countries.

[1] General Industrial Classification of Economic Activities.
[2] Classification of Products by Activity.
[3] See WIPO Guide, page 81 – Annex III European Classification Codes, Corresponding to Some of the Copyright-Based Industries.

In applying the WIPO methodology in the same way as other European studies (Hungary, Latvia), we have established differences in some of the codes used. The main problem was that the National Statistics Institute registers economic activities at level 4-digit codes whereas separate activities related to copyright and neighboring rights fall within the mixed codes together with other activities not related to copyright. In such cases WIPO offers the use of the 6-digit CPA codes, in which activities are classified at a lower level.

Following this methodology, the relevant economic activities under each of the four groups were easily identified – core copyright industries, interdependent industries, partial copyright industries and non-dedicated support industries. It appeared also that for some industries it is sufficient to use the more general 3-digit code, e.g., code 72.2. (software development), and in some places even the 2-digit codes. The classification was changed for two reasons. First, in collecting data the National Statistics Institute uses only the NCEA-2003 at level 4-digit codes. Therefore, the survey should have used only these codes, which required breaking down the 2- and 3-digit codes. This was done relatively easily, but the more serious problem was the impossibility of using 6-digit codes under NCPEA-2003 (the Bulgarian CPA equivalent), which led to substantial difficulties in the calculation of the contribution of copyright-based industries under the "mixed" or "non-differentiated" 4-digit codes (see the relevant section below). The second reason for changing the initial system of codes was that it was impossible to collect important data for the economic contribution of copyright-based industries from national statistics. Among these are royalties paid on licensing of products or services in the copyright-based industries, the economic contribution of self-employed persons in the copyright-based industries, income of companies for collective management of rights, etc. Additional sources were also searched.[1] The final list of codes used in the study is provided at *Appendix 3*.

As regards the codes for import and export of products of these industries, we encountered an unexpected problem – confidentiality. From 136 codes applied by us, 27, i.e., almost 20 percent gave no or only partial data due to confidentiality. This included data for the import and export not only of the products in the jewelry sector and the raw materials for it – which was expected, but also for such goods as: broken glass and waste, musical wind and percussion instruments, cameras, postage stamps, radio receivers, tape-recorders, etc. The lack of information on these codes left serious gaps in the generalization of the data for import and export in some of the sectors (jewelry, musical instruments, artistic works and, partially, in glass products).

The Problem with Mixed Codes in NCEA-2003 (the Bulgarian Version of NACE)

The problem with mixed or non-differentiated codes under NKID-2003, i.e., codes containing data for several economic activities relevant to the study, or codes in which such data are presented with data for other activities non-related to copyright was the most serious problem for the Bulgarian study. In total the team encountered 12 such codes, six of them with high values of gross product, number of employees and value added. The non-weighted share of value added in the six main codes in this group[2] in 2005 is equal to 1.29 percent of the gross value added (1.1 percent of GDP) and is comparable to the share of the core copyright industries (1.46 percent of the GVA and 1.25 percent of the GDP for 2005).

[1] We received data on the amount of the import and export royalties upon use of products and services of the copyright-based industries from the Bulgarian National Bank.
The collective management of copyright societies provided us with information on income.
To calculate the contribution of freelancers we have used a methodology applied by the NSI for calculation of such contributions by determining the gross value added and the gross public product of the country.
[2] The other six codes are allocated to different sectors in one group or are too small to calculate.

Table 2. Data for the Six Common Codes (51.43; 51.47; 51.85; 52.45; 52.48; 74.87)

	2003				2005			
	Number of enterprises	Number of employees	Gross output	Value added	Number of enterprises	Number of employees	Gross output	Value added
I. CORE COPYRIGHT INDUSTRIES	8857	43797	1469496	324831	9167	49204	2159196	524148
V. NON-ATTRIBUTABLE GROUP	12345	43730	776089	272833	14011	52694	1200639	463763

The existence of such large non-differentiated codes sometimes covering many different economic activities demonstrates the inadequacy of the national system for registration of economic activities and does not allow the precise determination of the economic contribution of new and rapidly developing sectors such as the industries based on copyrights and neighboring rights.[1]

Therefore the study team made considerable efforts to collect information on quantity, expert evaluations and other relevant data, which would allow for more precise estimation of the share of the copyright-related economic activities in these mixed codes. The main result was redistribution of the values under nine of the codes with the respective industries according to the WIPO classification. The values under the remaining three codes for which no justified procedure for reallotment was possible were separated into a new – fifth group. The values calculated for this group with the respective copyright factor were added to the generalized data for the economic contribution of the copyright-based industries.

Table 3. Non-Weighted Data for the Fifth Group following Re-Distribution

	2003				2005			
	Number of enterprises	Number of employees	Gross output	Value added	Number of enterprises	Number of employees	Gross output	Value added
I. CORE COPYRIGHT INDUSTRIES	8985	44420	1500874	335449	9559	50239	2210050	539158
V. NON-ATTRIBUTABLE GROUP	6273	20918	314332	114930	6999	24349	483254	193741

The methodology used for the weighting of each of the nine codes is presented in *Appendix 4*.

Identification of the Sources of Information for the Selected Codes

The WIPO methodology provides the data necessary for the activity of the non-financial entities of copyright-based industries – gross product, gross value added, number of employees, number of entities. These are calculated based on more specific data according to the standard form of the National Statistics Institute *Annual Report of the Non-financial Entities.* The data collected by the National Statistics Institute differ for small and medium-sized entities keeping simple accounts from the accounting of the larger companies keeping more detailed accounts. The data for the two groups are calculated according to a special methodology of the National Accounts Department which also takes into account the indications for self-employed persons (see *Appendix 5*).

[1] The changes in the classification codes in NKID-2003 made in the spring of 2007 partly reflect this problem and we hope the situation will be improved in the near future.

The Bulgarian study is specific with regard to the WIPO methodology for calculation of the gross product and gross value added – it was applied not only to the industries but also to the data under each of the 4-digit codes. This approach allowed the processing of other relevant primary data from the accounting balance of the non-financial entities from which important information was received for several aspects of their activity – fixed non-tangible assets (including the groups: rights over intellectual property products; software, products of development activity and other fixed non-tangible assets), net income from sales; profit from usual activity, intermediate consumption, number of employees (the number of individuals employed under contract and working owners) (see *Appendix 6*). The data for the dynamics of the fixed non-tangible assets (FNTA) for instance played an important role in determining the copyright factor of the partial copyright-based industries (see *Appendix 8*, item 2).

In addition, data for the sales and commercial outlets for certain groups of goods related to the copyright-based industries were processed (*see Appendix 7*) with the cost of scientific research and the number of persons engaged. The last two groups of data do not fall within the purpose of the study but allow for a detailed evaluation of the market situation and can be used for determining the share of the separate copyright-based industries under one of the mixed codes (see *Appendix 10*, items 3 and 4).

The Economic Contribution of the Cultural Institutions

The survey provides data for the economic contribution only of the non-financial entities. This means that it does not take into account income from large cultural institutions such as national TV and radio, state and municipal theaters, opera, dance groups, state and municipal museums and galleries, state publishers, community libraries. This is because Bulgaria does not collect separate data for these cultural institutions – they are included in cultural activities together with all other subsidized activities in the field of culture and art. The data for this group are provided by the respective state institutions and municipalities. According to NSI experts the income (including from advertising) of these cultural institutions does not exceed 20 percent of the budget subsidy received. NSI computes value added for the activities of these public institutions as the sum of primary input costs such as: salaries, net taxes on production and consumption of fixed capital where the operating surplus is assumed to be zero. In addition to GVA at basic prices, GDP measured at market prices includes indirect taxes and duties (which concern to a greater extent goods unrelated to the creative industries) thus changing the basis for comparison.

Based on these assessments, the survey team reached the conclusion that at present a better idea about the economic contribution of the copyright-based industries can be provided by their share compared to GVA at basic prices rather than GDP at market prices. Following the WIPO methodology, we have based our calculations on GDP. However, we have also provided the calculations for GVA.

The Copyright Factor

Measuring the economic contribution of the copyright-based industries in other countries, our colleagues concluded that this contribution is different for each of the above-defined four groups of industries. Furthermore, differences are also possible between the separate industries within one and the same group. The economic statistics however do not differentiate to what extent the value added created in one industry is due entirely to the creative copyright-protected activities and to what extent it includes other activities unrelated to these rights (although the latter directly or indirectly contribute to the realization of the former).

The solution offered by the WIPO methodology relates to the introduction of the copyright factor. Its purpose is to eliminate components, which are unrelated to copyright and neighboring rights in economic activities classified under the codes of the respective industry. The methodology defines it as "…The weighting of the portion of a specific industry that can be attributed to copyright or the level of dependence on copyright has been referred to in some of the surveys as the copyright factor. It has to be done in relation to all industries that are not core copyright-based industries where the contribution will be counted as 100%." (WIPO Guide, page 57). In addition to a percentage, the weighting can also be expressed by a number with a value between 0 and 1, where 1 (or 100 percent) is accepted for the core industries. The values of the main economic indicators – value added, number of employees, gross product, etc., are multiplied by this number (or percentage).

Different methods are used for the weighting of the copyright factor in the other three groups, such as surveys among entrepreneurs and managers of companies in the respective sectors, interviews with experts, secondary analysis of indirect economic data such as the competitiveness factor, investments in education, scientific and development activity, etc. The researchers emphasize that these weights almost always depend on the specific conditions in the respective economy.[1] All these methods, however, are related to substantial additional expense, and in some cases the relation between the expense incurred and the precision of the evaluation is highly unfavorable. As a solution, if the resources of the research team were limited, the WIPO methodology advises that international comparisons be taken into account as an important source of information, i.e., in spite of the national specifics, it is possible to use the approaches and solutions of the researchers in countries similar in legal frameworks, structure of the economy, production practices, working conditions, etc. The authors of the methodology give as an example the experience of Norway in which the data missing under certain categories were completed through respective re-calculation of the data from the Finnish study (see WIPO Guide, page 58).

Based on our own research and similar international comparisons, many important studies (such as those studies in the US, Hungary, etc.) also adopt value 1 for the interdependent industries. The reason is that these are closely integrated in the creation, distribution and use of the products of the core copyright industries and a large part of the value added they create is directly related to those industries.[2] A solution has also been found for the recalculation of the economic distribution of the fourth group – non-dedicated support industries. The contribution to copyright for this group is weighted as being equal to the share of the first three groups (core, interdependent and partial) in the national GDP or the GVA.[3]

Therefore the efforts of the researchers aim mostly to determine the copyright factor in the partial industries where substantial differences can be found – in the different studies it varies from 0.4 percent for the textile industry in Singapore to 50 percent for games and toys in Hungary. Here, all the methods for direct and indirect evaluation described in the WIPO Guide (pages 58-59) are used. The recommendation in the WIPO methodology that irrespective of national variations the contribution of the industries from the three groups except the core copyright industries should be around 30 percent of the total contribution of all copyright-based industries should be taken into account.[4]

[1] Globalization, efficacy of legal security and legal enforcement systems, share of the informal economy, traditions in the use and management of non-tangible assets, the power of the trade unions and organizations for collective management of rights, etc.
[2] Other research teams disposing of substantial resources are trying to differentiate in more detail the contribution of the interdependent industries. An example is the internal separation of this group between core and partly interdependent copyright industries, which for convenience we have presented in our list. A different copyright factor is introduced on this basis for the different industries in this group. In spite of the considerable efforts of the authors of this and other similar studies, the indirect data on which the copyright factor for the different industries is determined are still disputable.
[3] For example: if the industries in the first three groups generate in total 5 percent of GDP, the copyright factor of the non-dedicated support industries will be 0.05 percent – the total value added generated by them will be multiplied by this.
[4] In 2001 in the US, the core industries amounted to 67 percent of the total contribution and this share varies between 82 percent for Finland in 1997 and 51 percent for Australia in 2000 (WIPO Guide, page 101) : in the US in 2005 this share fell to 59 percent (Siwek, S. – *Copyright Industries in the US Economy. The 2006 Report*). Using this analysis in the Bulgarian study this share is 54.7 percent for 2003 and 55.8 percent for 2005 (see the next section for more details).

The Bulgarian study accepts this approach to determining the copyright factor of the main and interdependent industries (value 1 or 100 percent for both). The same approach was applied to the calculation of the contribution of the group of non-dedicated support industries (see *Appendix 8, item 3*). Our efforts also aimed mainly at determining the copyright factor of the partial copyright-based industries.

Table 4 presents the solutions we adopted for the weights of the copyright factor for each industry. The arguments for the solutions adopted for the group of the partial copyright-based industries compared to the Singapore and Hungarian studies are presented in *Appendix 9.*

Table 4 Copyright Factors adopted in the Bulgarian Study

I. CORE COPYRIGHT INDUSTRIES	Copyright factor
Press and Literature	1.000
Music, Theater, Opera	1.000
Motion Picture and Video	1.000
Radio and TV	1.000
Photography	1.000
Software and Databases	1.000
Visual and Graphic Arts	1.000
Advertising Services	1.000
Copyright Collecting Societies	1.000
II. INTERDEPENDENT INDUSTRIES	
TV sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Gaming Equipment	1.000
Computers and Equipment (including photocopiers)	1.000
Musical Instruments	1.000
Photographic and Cinematographic Instruments	1.000
Blank Recording Material	1.000
Paper	1.000
III. PARTIAL COPYRIGHT INDUSTRIES	
Apparel, Textiles and Footwear	0.006
Jewelry and Coins	0.200
Other Crafts	0.400
Furniture	0.050
Household Goods, China and Glass	0.005
Wall Coverings and Carpets	0.040

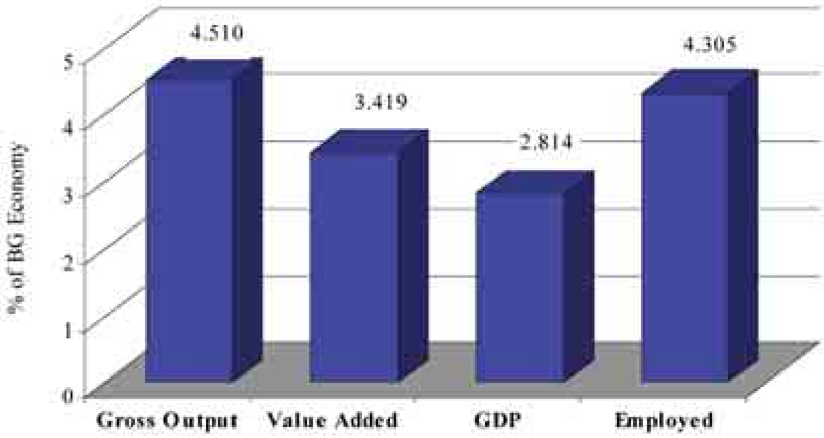
Toys and Games		0.400
Architecture, Engineering, Surveying		0.100
Museums		0.500
IV. NON-DEDICATED SUPPORT INDUSTRIES	2003	2005
General Wholesale and Retail	0.021	0.028
General Transportation	0.021	0.028
Telephony and Internet	0.021	0.028
V. NON-ATTRIBUTABLE GROUP		0.550

PART THREE - Contribution of the Copyright-Based Industries to the Bulgarian Economy

1. Evaluation of the Overall Economic Contribution of Copyright-Based Industries

In 2005, 104,814 people were engaged in economic activities related to copyright and neighboring rights in Bulgaria, i.e., almost one in 20 of the workforce. They produced a gross output of BGN4.155 billion and created a value added of BGN1.204 billion. The graph below shows their share in the economy as a whole – it is the highest compared to gross output and employment and the lowest when compared to GDP – 2.814 percent.[1]

Graph 2. Share of the Copyright-Based Industries in the Key Economic Indicators of Bulgaria in 2005

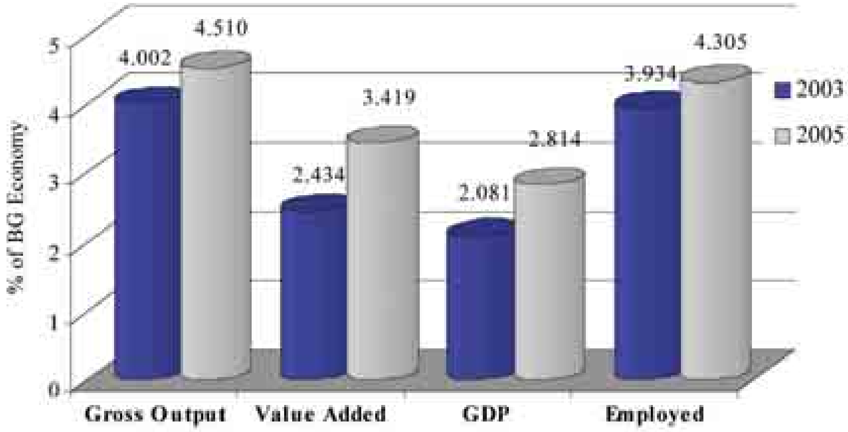


The study registers significant growth in this sector for the period 2003-2005. In two years the gross value added calculated in regard to the current price index grew by 50 percent; gross output increased by 33 percent and employment by 13 percent. The growth in value added far exceeded the growth rate of the economy as a whole (11.5 percent) and turned the sector into one of the fastest developing. We foresee a booming industry which, if given adequate public support, could become one of the driving forces of economic growth in Bulgaria in the future.

The graph below shows the increase measured with the relative shares of the respective indicators in the economy as a whole for the period in question.

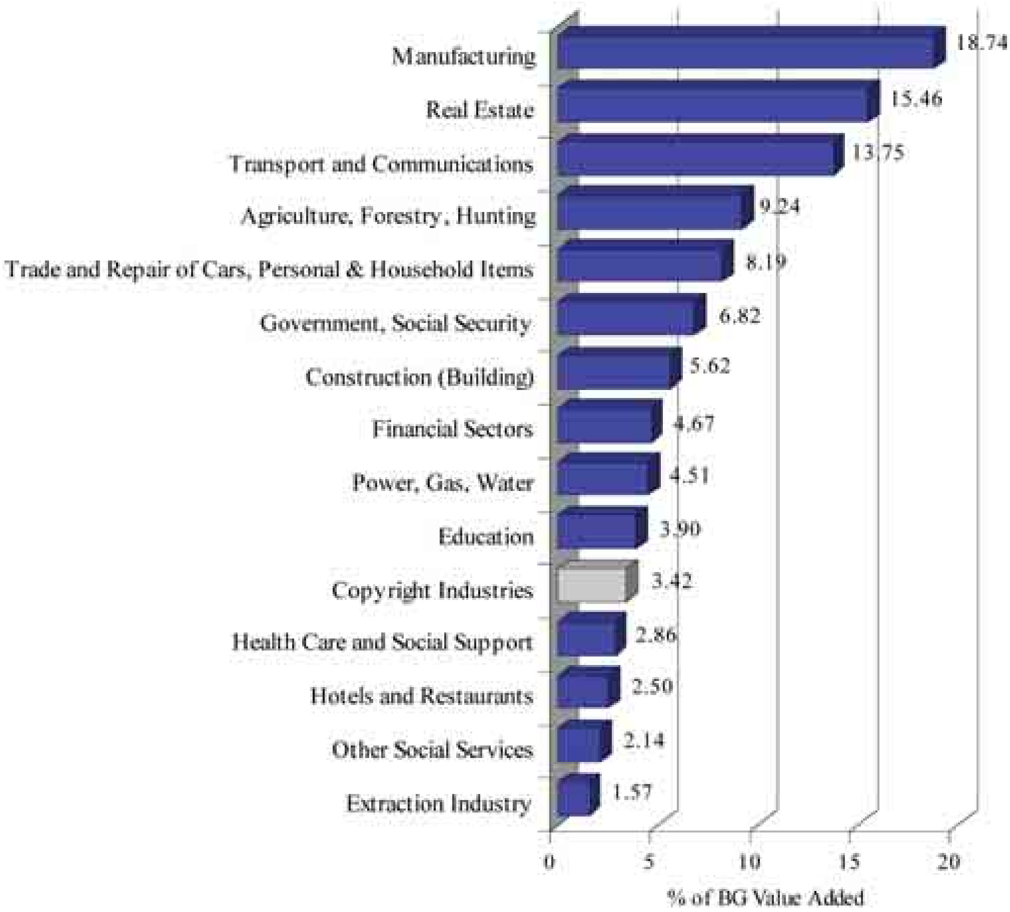
[1] As already mentioned, the best measurement is made in comparison to the gross value added to the extent to which the adjustments made in the calculation of GDP reflect to a lesser degree the contribution of the copyright-based industries (see Part 2).

Graph 3. Dynamics of the Share of the Copyright-Based Industries in the Main Economic Indicators in Bulgaria for the Period 2003 – 2005



When compared to the share of the value added in the monitored sectors in 2005, the copyright-based industries rank eleventh – above healthcare, hotels and restaurants, and the extraction industries.

Graph 4. Comparison of the Copyright-Based Industries with the Other Economic Sectors (share in GVA), 2005

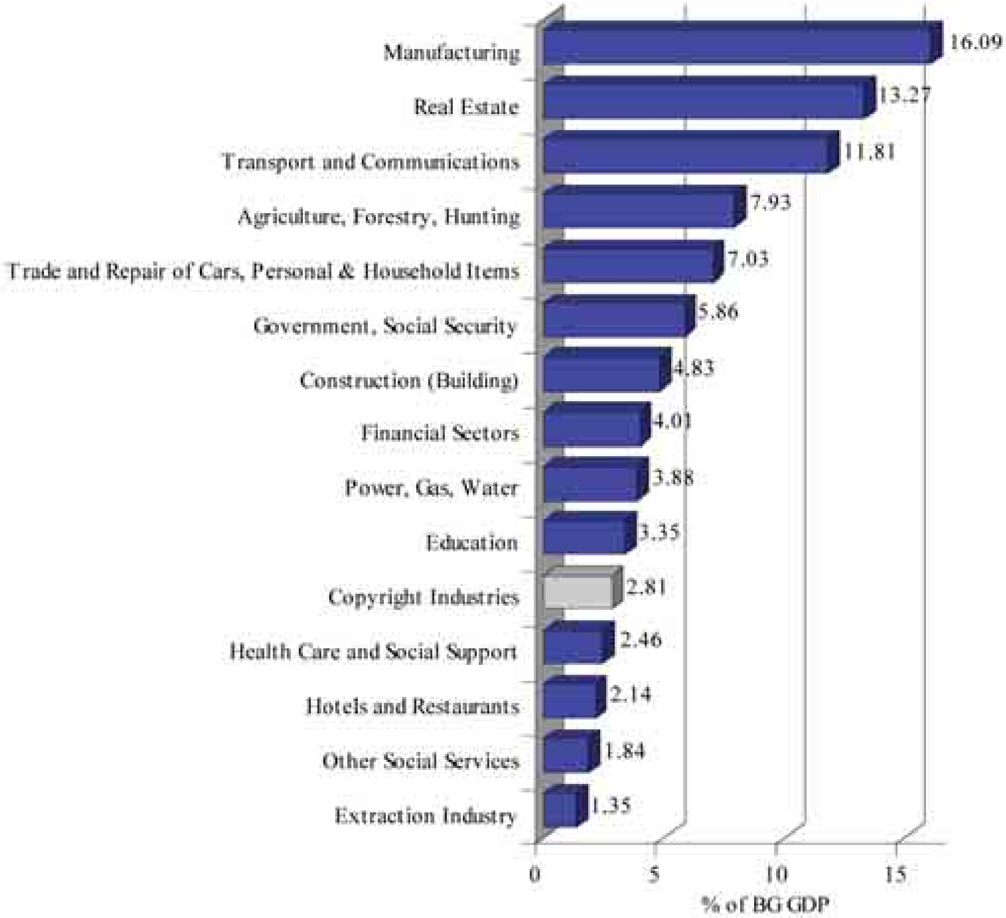


(Source: 2005 Main Macroeconomic Indicators, NSI, p. 74, Table 2.3.1).

The value added generated by copyright-based industries (3.42 percent) is around three-quarters of the value added in such a significant sector as generation and distribution of electric power, gas and water and makes a much greater contribution than hotels and restaurants.

As for the contribution to GDP, the share of the copyright-based industries is 2.81 percent – a value which is more than double the share of the extraction industries and higher than that of hotels and restaurants.

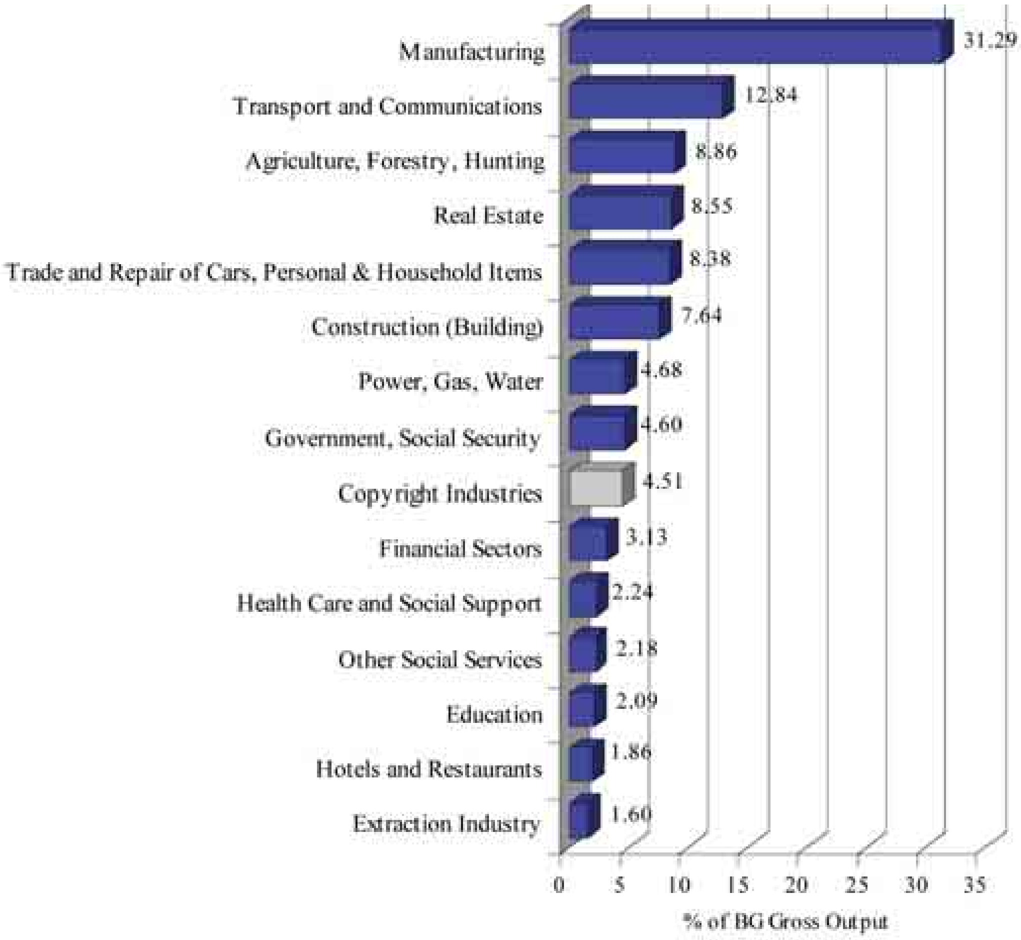
Graph 5. Comparison of the Share of the Copyright-Based Industries with the Economic Sectors (share in GDP), 2005



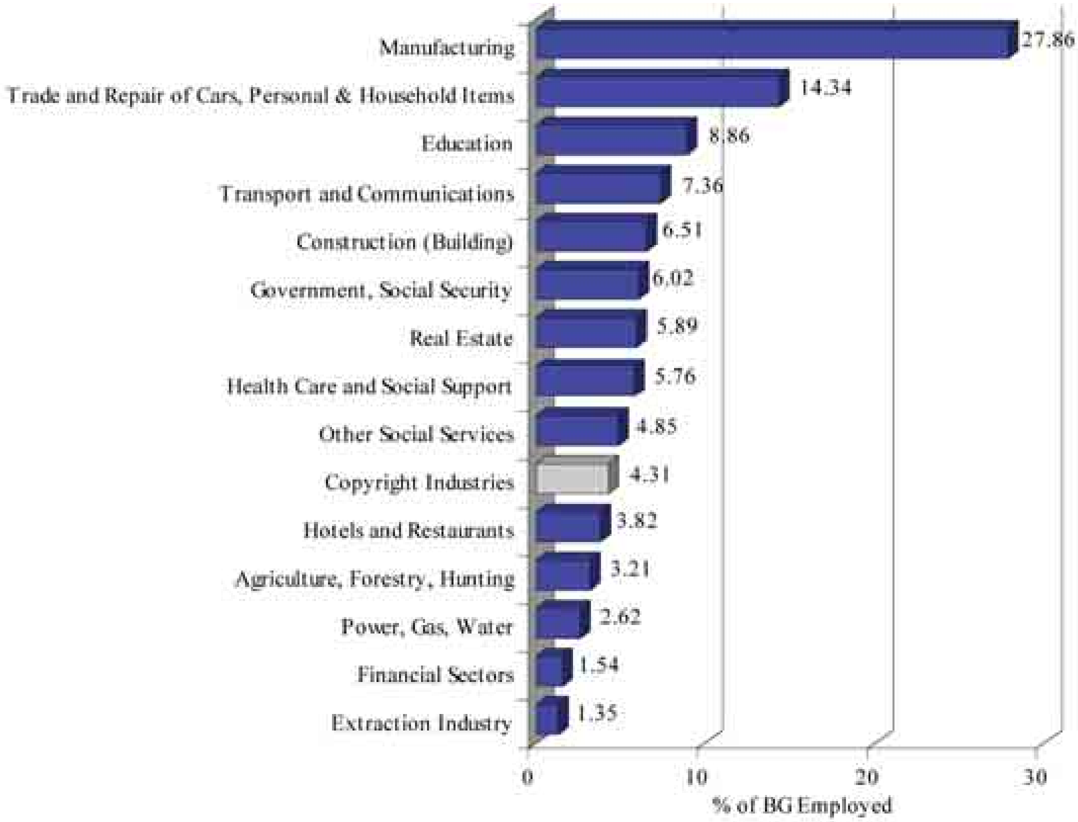
(Source: 2005 Main Macroeconomic Indicators, NSI, p. 74, Table 2.3.1).

In view of the gross output, the copyright-based industries rank above the sectors of education and finance which rank ninth. In terms of employment, they rank tenth ahead of hotels and restaurants and agriculture, forestry, hunting and fishing.

Graph 6. Comparison of the Copyright-Based Industries with the Economic Sectors (Share of Gross Output), 2005



Graph 7. **Comparison of the Copyright-Based Industries with Other Sectors in Terms of Employment, 2005**



Comparison of the copyright-based industries with the other sectors reveals a small but significant sector in the Bulgarian economy – with values greater than or close to those in sectors like generation of electric power, hotels and restaurants, healthcare and social work, and the extraction industries. This however, conceals the growth rates where the copyright-based industries are among the leaders. That is why we must bear in mind the pace of change in the relative shares of the individual industries over a given period.

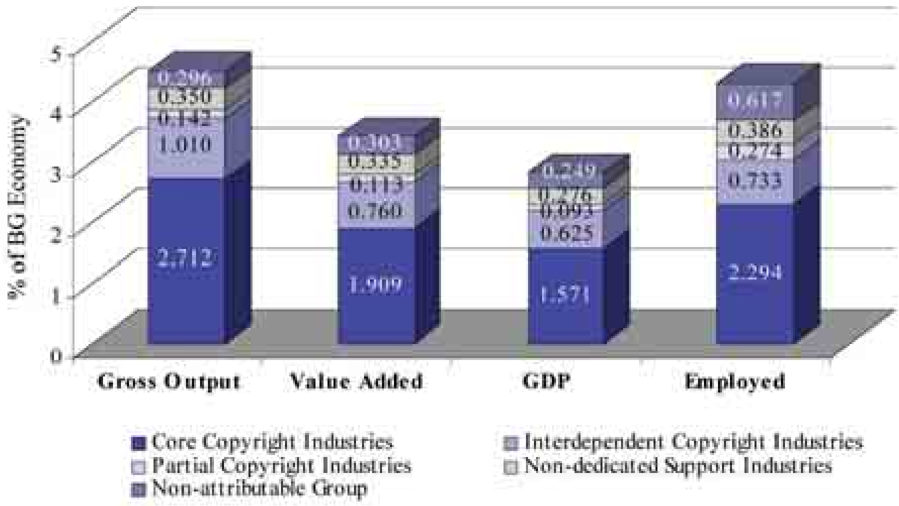
It must also be noted that the sector is slightly undervalued in these comparisons: this is because copyright-based industries are not monitored separately in the national statistics but their economic results are included in the data on other sectors. In this sense, the proposal for a change in the system of calculating national statistics made in the methodological section must also include a change in the methodology of calculation for the economic sectors.[1]

[1] An adequate procedure requires that the shares of the other sectors be reduced with the share of the copyright-based industries. This, however, cannot be done proportionally because the economic activities of the copyright-based industries are not included on a random basis in these sectors. For this purpose, there must be a change in the methodology of calculation of the sectors to include the copyright-based industries as a separate sector.

2. Distribution of the Total Economic Contribution of the Individual Groups of Copyright-Based Industries

As indicated above, it was impossible to attribute all the codes of economic activity in the four groups identified in the WIPO methodology, making it necessary to group some of them in a fifth, mixed group. We set out below the share of these five groups in terms of the main indicators. The choice of a fifth group was an expression of our conservative approach as we do not yet know the exact proportions in the distribution of the common codes and we expect deviations overall.[1] That is why we analyze the contributions of the separate industries in the four groups applying the WIPO methodology and then discuss separately the contribution of each of the three codes in the fifth group.

Graph 8. Share of the Five Groups of Copyright-Based Industries in the Key Economic Indicators in 2005

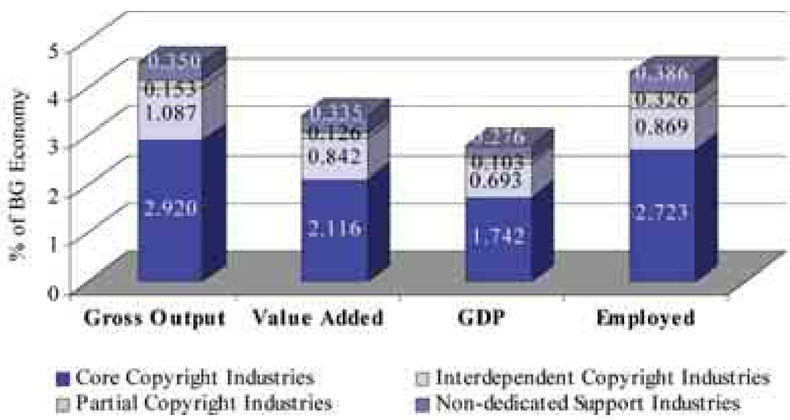


Analysis of the activities related to copyright-based industries under the mixed codes shows that they mostly fall within the group of the core and interdependent industries. That is why it can be claimed that their proportional distribution among the four groups of copyright-based industries reflects the real economic situation. The computation is logical because, as shown in *Appendix 4*, the three codes in the group include the weighted values of the economic results of retail and wholesale trading in and lease of products of copyright-based industries joined to the products of other activities unrelated to copyright-based industries. In this mix, the economic activities related to copyright-based industries are represented with a much greater share than the other, unrelated activities, taken into account in the additional weighting of the data on these codes.

Before the national statistics break down the mixed codes and start to collect independent data about the economic activities related to the copyright-based industries and for the purposes of practical policy in the sector, it is admissible to redistribute the fifth group among the first three groups proportionate to the contribution of each. This is also necessary with a view to ensuring international comparability of the data. The following graph represents the ratio between the four copyright-based industries after the recalculation of the fifth group:

[1] It is possible for the data to be distributed to the core and interdependent industries in an even better ratio.

Graph 9. Recalculated Share of the Four Main Groups of Copyright-Based Industries in the Main Economic Indicators in 2005



The graphs show that the core copyright industries make the greatest economic contribution to the sector as a whole – in 2005, they contributed 60.1 percent to the share of the copyright-based industries in the gross output, 55.6 percent of GDP and GVA and 53.3 percent of employment. When redistribution to the fifth group is taken into account, their contribution grows to 64.7 percent of the gross output, 61.9 percent of GDP and GVA and 63.3 percent of employment respectively. If we look at the first two groups only – core and interdependent copyright, with more than 2.96 percent of value added, they remain in eleventh place, exceeding the share of healthcare and hotels and restaurants.

Taken alone, the value added of the core copyright industries contributed 2.12 percent to GDP in 2005. Thus, it exceeded the share of the extraction industries and is close to the share of the value added generated by hotels and restaurants (see the previous section). Budget subsidies for culture in the same year amounted to 0.72 percent of the gross internal product, i.e., one-third of the value generated by the core copyright industries. If we exclude software and advertising, which do not have a direct relation to culture, from the contribution of the core copyright industries to the gross value added generated in the economy, we would again obtain a share of 1.27 percent of GVA, i.e., almost twice as high as public expenditure on culture in the form of budget subsidies. Moreover, the subsidies given to the sector making the greatest contribution to the value added generated in the group of the core copyright industries – book publishing and printing – amounted to a fraction of the total sub-sidies (0.12 percent).

These results have a direct bearing on public policy in structuring and management of subsidies for cultural activities. They must not be considered only a "public good", distributed by the authorities in view of the long-term cultural and social needs of society, but be thought of as partial compensation for the copyright-based industries in their efforts to meet the cultural and social needs of society – as a remedy for market failures when meeting these needs and as seed capital for the development of new business. This entails the expansion of public and private partnerships in the management of these subsidies.

In absolute numbers, the core copyright industries produce a gross output of BGN2.498 billion and value added of BGN672 million. There are 55,861 people employed in them which is three times more than the number employed in the next group of interdependent industries and eight times more than the weighted values for the partial industries. As for value added and gross output, the fifth undistributed group of activities occupies fourth place while in terms of employment it ranks third. This shows the group's potential in refining the national statistics which will give a more accurate recording of the contribution of such activities as retail and wholesale trading in and leasing of a number of products of copyright-based industries.

The tables below show the indicators for each of the industries and their respective relative shares in the national values.

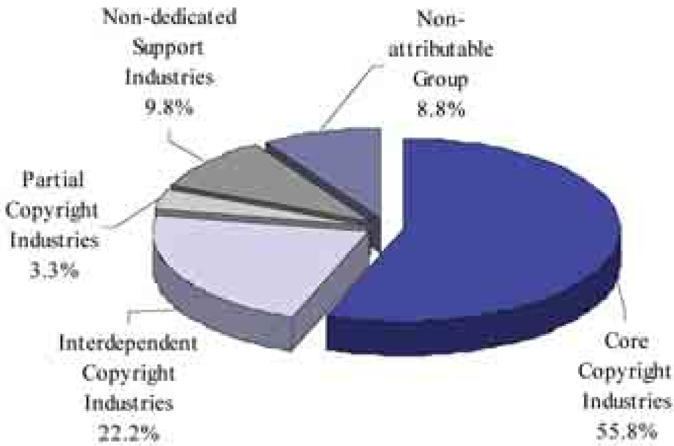
Table 5. Economic Contribution of the Main Copyright-Based Industries in 2005

CI	Gross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
Core Copyright Industries	2 498 559	2.712	672 270	1.909	1.571	55 861	2.294
Interdependent Industries	930 389	1.010	267 539	0.760	0.625	17 835	0.733
Partial Copyright Industries	131 247	0.142	39 888	0.113	0.093	6 682	0.274
Non-Dedicated Support Industries	322 137	0.350	117 973	0.335	0.276	9 409	0.386
Non-attributable Group	272 769	0.296	106 558	0.303	0.249	15 027	0.617
Copyright-Based Industries	**4 155 101**	**4.510**	**1 204 229**	**3.419**	**2.814**	**104 814**	**4.305**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82,296**	**2 434 726**	**100**

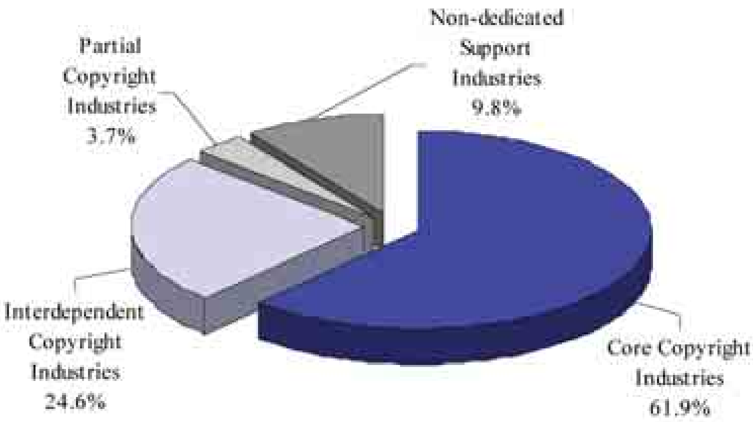
Table 6. Economic Contribution of the Main Copyright-Based Industries in 2005 after Recalculation of the Fifth Non-Distributable Group

CI	Gross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
Core Copyright Industries	2 689 989	2.920	745 390	2.116	1.742	66 304	2.723
Interdependent Industries	1 001 672	1.087	296 638	0.842	0.693	21 169	0.869
Partial Copyright Industries	141 303	0.153	44 227	0.126	0.103	7 931	0.326
Non-Dedicated Support Industries	322 137	0.350	117 973	0.335	0.276	9 409	0.386
Copyright-Based Industries	**4 155 101**	**4.510**	**1 204 229**	**3.419**	**2.814**	**104 814**	**4.305**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82,296**	**2 434 726**	**100**

Graph 10. **Relation of the Five Groups of Copyright-Based Industries in Terms of the Value Added**



Graph 10. **Relation of the Four Copyright-Based Industries in Terms of the Value Added after Re-Distribution of the Fifth Group**

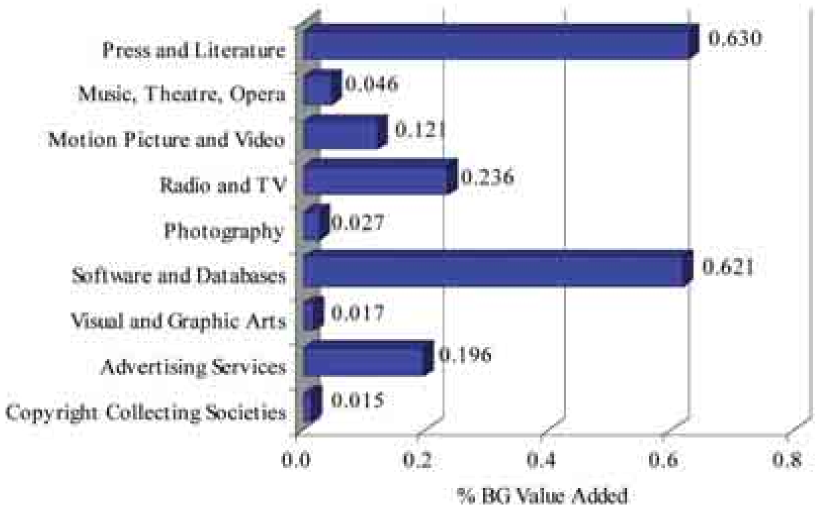


When the dynamics for the period 2003–2005 and inflation are taken into account, the fastest growth in value added can be seen in the non-dedicated support industries – 63 percent, which must be interpreted as a reflection of the overall growth in the field of trading, transport and communications – some of the most rapidly developing sectors. They are, however, closely followed by the largest sector of core copyright industries – 53 percent, followed by the partial (40 percent) and interdependent industries (39 percent). As is true for the copyright-based industries as a whole, the growth in the individual groups exceeds many times the national growth rates of GDP (11.5 percent) and GVA (10.8 percent) for the same period.

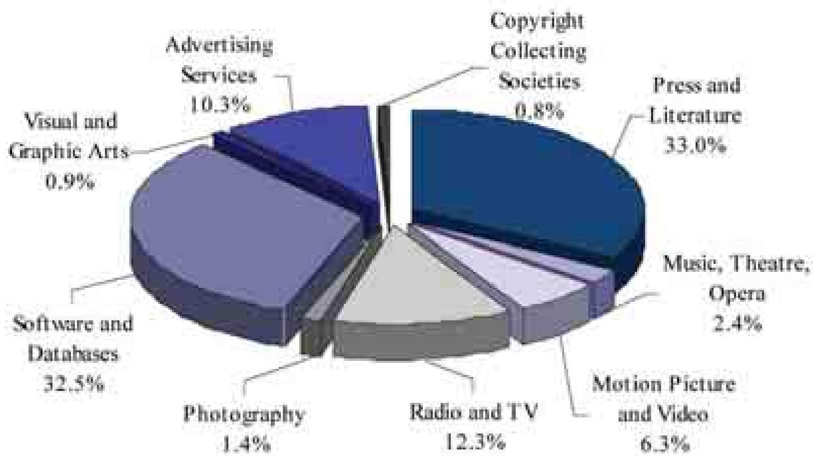
3. Economic Contribution of the Core Copyright Industries

The contribution of the individual industries from this group to the gross value added generated by the Bulgarian economy in 2005 can be seen below.

Graph 12. Share of the Core Copyright Industries as a Percentage of GVA in 2005[1]



Graph 13. Relative Shares of the Core Copyright Industries (in Terms of Value Added)



In terms of value added and employment, the two largest core copyright industries are book publishing and printing, and software and databases. Next in terms of value added are radio and television, advertising and motion picture and video whose values are much lower. The table with the figures for the three economic indicators studied reveals other interesting factors too.

Table 7. Economic Contribution of the Core Copyright Industries in 2005

CI group	Cross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
Press and Literature	**761 043**	0.826	**221 784**	0.630	0.518	**25 116**	1.032
Music, Theater, Opera	33 927	0.037	16 346	0.046	0.038	1 207	0.050
Motion Picture and Video	143 524	0.156	42 555	0.121	0.099	2 182	0.090
Radio and TV	211 211	0.229	83 018	0.236	0.194	3 283	0.135
Photography	22 320	0.024	9 623	0.027	0.022	2 034	0.084
Software and Databases	480 926	0.522	**218 731**	0.621	0.511	**11 809**	0.485
Visual and Graphic Arts	21 874	0.024	5 959	0.017	0.014	975	0.040
Advertising Services	**817 691**	0.888	69 100	0.196	0.161	9 226	0.379
Copyright Collecting Societies	6 043	0.007	5 155	0.015	0.012	30	0.001
Core Copyright Industries	**2 498 559**	**2.712**	**672 270**	**1.909**	**1.571**	**55 861**	**2.294**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82.296**	**2 434 726**	**100**

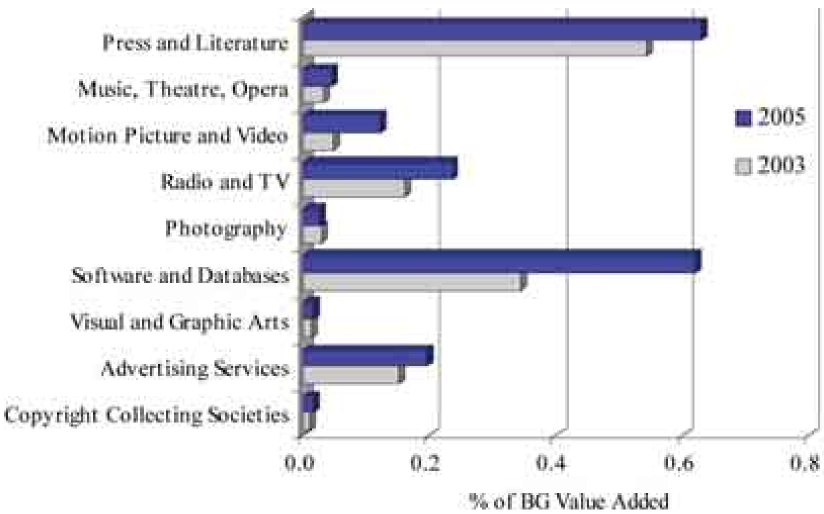
In view of the gross output, advertising services ranks first, while book publishing and printing and software and databases come second and third. Advertising also has one of the highest values of gross output per employee. Yet, to the extent to which the sector ranks fourth by value added, the productivity (value added per employee) is significantly lower.

The value added per employee is highest in radio and television – BGN25,287, followed by motion picture and video production and distribution with BGN19,503 and software and databases – BGN18,522. This compensates partly for the relatively low number of people employed in the first two industries (fourth and fifth in terms of this indicator). Radio and television also occupies third place in terms of the value added. It is appropriate here to cite the analysis of our Hungarian colleagues which, to some extent, explains the variations in the industries between the individual economic indicators which we also find relevant to the Bulgarian study:

> "…The difference in the rankings based on the contributions to gross output and gross added value can be explained by the different material demands, intellectual and outside labour intensity in the specific core copyright industries. The greatest contribution of press and literature to gross output is due to its relatively greater material intensity than that of software and databases. As for radio and television, productions are predominantly made with the engagement of outside production companies, which is also reflected in the higher contribution to gross output since the value of gross output – given that all conditions are unchanged – is directly proportional to the increase in the division of labour." (National Studies on Assessing the economic contributions of Copyright-Based Industries, WIPO, 2006, p. 320)

The Bulgarian study allows us to trace the development of the core copyright industries by the economic indicators measured, albeit for a relatively limited three-year period. In 2005, the value added generated by these industries and recalculated in view of the inflation index grew by 53 percent in comparison to 2003. The greatest growth is observed in motion picture and video production and distribution: +166 percent, i.e., more than triple. The main activity in this industry – motion picture and video production – shows the highest growth among all copyright-based economic activities: +225 percent. In 2003, this sector was in the same economic bracket as sectors like theater and music, visual and graphic arts and photography. It was assessed separately three years later and became an industry in its own right.

Graph 4. Dynamics of the Core Copyright Industries in Terms of the Changes in the Value Added for the Period 2003 – 2005

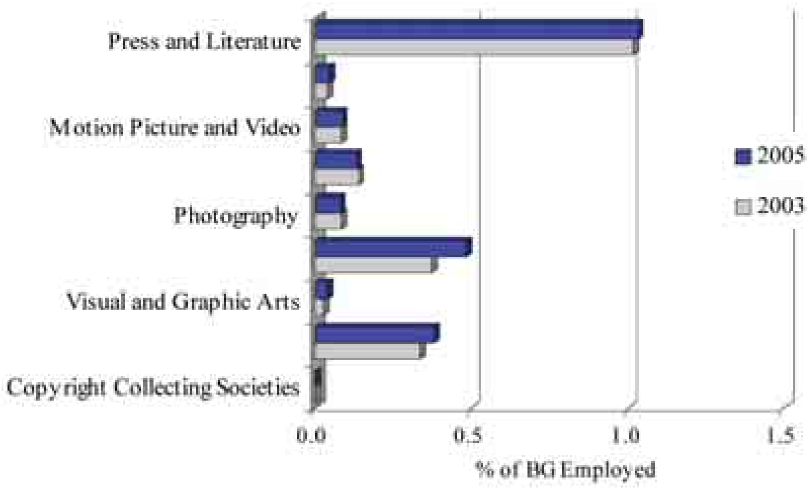


The second fastest developing sector is software and databases, registering growth of 93 percent; its key activity of development of original software for customer needs and design of websites grew by +108 percent. High rates, yet from a lower base, are shown by the sectors of radio and television (57 percent) and music, theater and opera (54 percent). The collective rights management companies also increased authors' remuneration collected by them by 58 percent.

This growth is also clearly visible in terms of employment. A little over 2 percent of the people employed in the Bulgarian economy worked in the core copyright industries (2.116 percent in 2003 and 2.294 percent in 2005); half of this figure is due to book publishing and printing – 1.032 percent of the total employed. During the three-year period, the number of people employed in the core copyright industries grew by 6,097 or 12 percent. For the sake of comparison, the increase in employment in the economy as a whole for the same period was 83,094 or 4 percent.

One can clearly see a group of three industries with a very low level of change in employment, and, in radio and television, it is even negative at –1 percent. The highest growth computed from a low base is in visual and graphic arts while the increase in software and databases, 34 percent, is the most significant given that the real increase in 2005 in comparison to 2003 is almost 3,000 people, i.e., half of the total increase in employment in the core copyright industries.

Graph 15. Dynamics of the Core Copyright Industries in Terms of the Changes in Employment for the Period 2003 – 2005

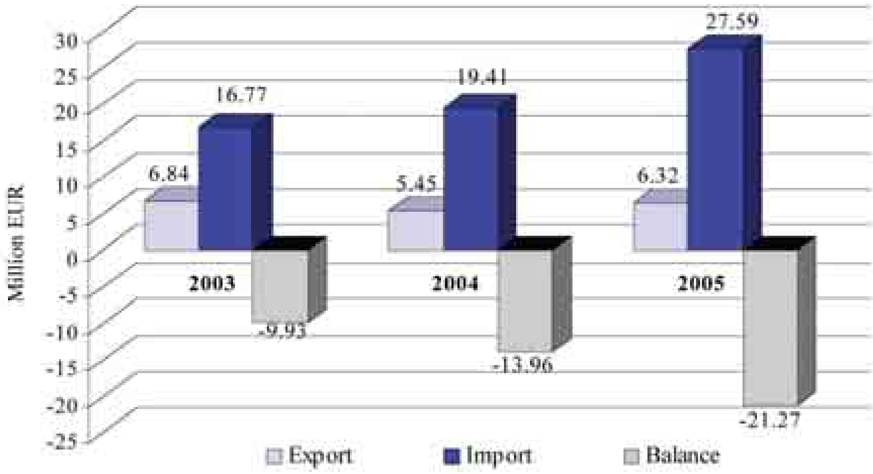


The indicators used in comparisons are interrelated and behind the numbers and rankings there are real problems in the development of each industry. Every company and organization constantly solves problems of increasing revenue by increasing the intensity of production, including quality and technical improvement, expansion of markets, etc. That is why the current needs and critical points in the development of every sector are different – for some this may be the shortage of experts (software, advertising services), for others – the promotion of products and services created abroad (motion picture and video, visual and staged arts), while for others – technological improvements (book printing, photography), etc. The final section of this Report presents the situation of these sectors relating them to the study data thus offering a wealth of possibilities to clarify public policies in order to develop adequate strategies for their development.

We have obtained information about imports and exports of the products in the core copyright industries – book publishing and printing and visual and graphic arts. The graph below shows that the share in exported goods and services in the first industry is between €5.45 million and €6.84 million for the period 2003-2005 while imports of goods and services grew constantly – in 2005 only it was 68 percent (without accounting for inflation). The negative balance in trading in this group of goods reached €21.27 million in 2005.[1]

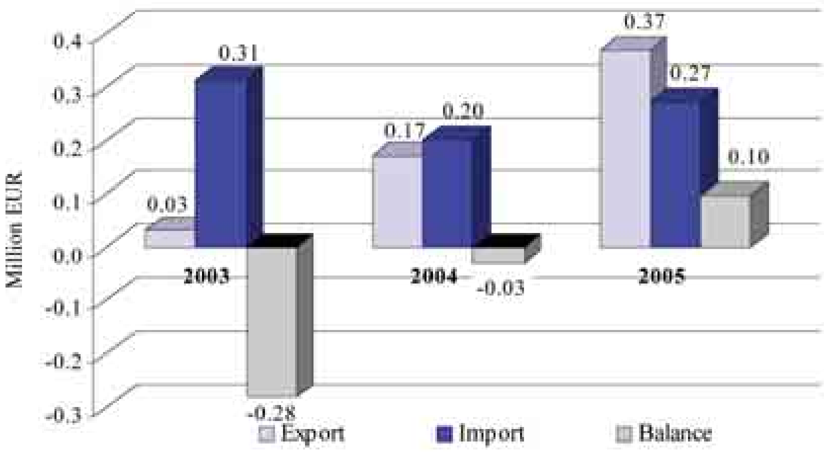
[1] The information on imports and exports is incomplete because it is confidential for 9 percent of the activities.

Graph 16. Imports, Exports and Trade Balance of the Economic Activities in the Sector of Book Publishing and Printing for the Period 2003 – 2005



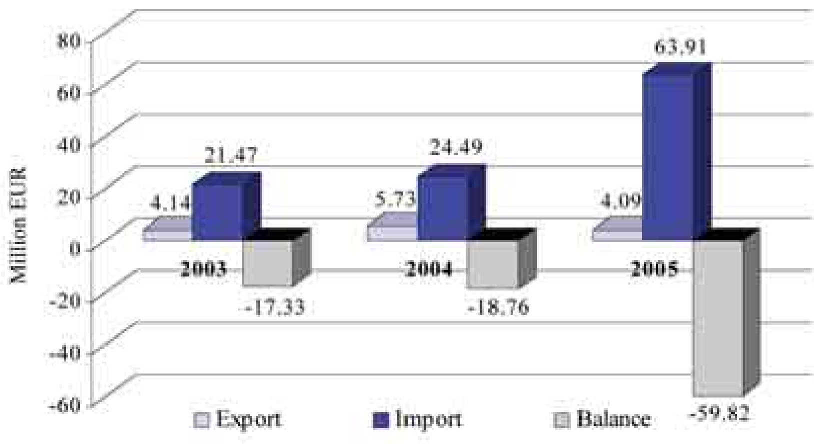
The import and export of goods in the visual and graphic arts sector registered a positive trade balance in the final year but the short period does not allow us to claim that the anticipated growth in exports is sustainable. Exports and imports here have low absolute values because the export of art objects in 2005 totaled only 369,000. The interviews conducted with representatives of this sector give us reason to claim that the real levels in this group are higher but it is difficult for the national statistics to include them.

Graph 17. Imports, Exports and Trade Balance of the Economic Activities in the Sector of Visual and Graphic Arts for the Period 2003 – 2005



Royalties are an economic feature of special importance to the copyright-based industries, covering rights to products of intellectual property purchased and sold abroad (copyright, licenses, patents, trade marks, etc.). The National Statistical Institute does not collect information about this and the data were obtained from the Bulgarian National Bank which summarizes the information about transfers made from and to places abroad for the reasons indicated.

Graph 18. Remuneration and Licenses Received and Paid Abroad for Copyright and Other Products of Intellectual and Industrial Property for the Period 2003 – 2005

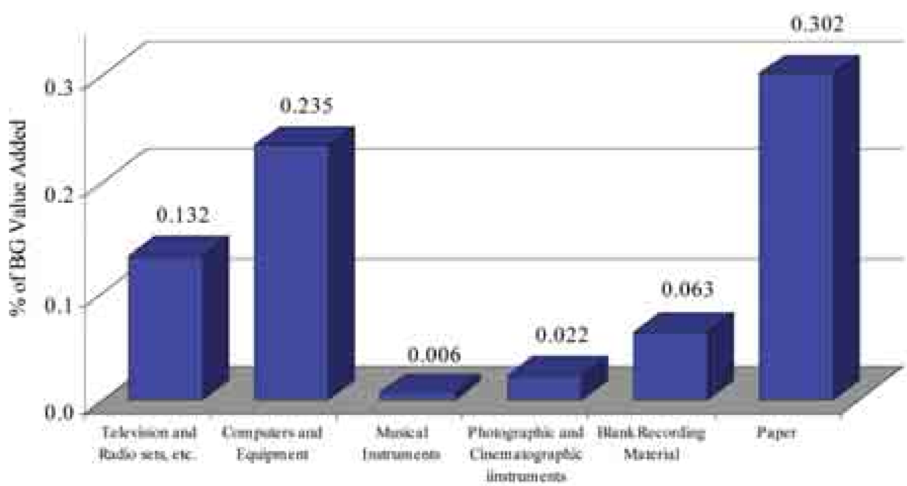


Payments on copyright and other licenses delineate Bulgaria's place in the international exchange of products of artistic property and neighboring rights. They show that the country is a net importer of products protected by copyright and intellectual property rights in general. The first success in the fight against piracy and the strengthening of legislation has brought about a significant increase in payments abroad – in 2003-2005 the increase was three-fold while the sale of rights and licenses in protected Bulgarian products remained at a constantly low level. The efforts of the authorities to protect intellectual property inside the country must be accompanied by support for the creation, promotion and enforcement of our intellectual property abroad.

4. Economic Contribution of the Interdependent Copyright Industries

In view of their share in the overall economic contribution of the copyright-based industries in 2005, the six interdependent industries rank second – 22.1 percent in value added, and in GDP the share increases to 24.6 percent after recalculation of the fifth undistributed group. In terms of employment, the group again ranks second with a share of 17 percent, (20.2 percent) after recalculation (see the section on the overall contribution of the copyright-based industries above).

Graph 19. Share of the Interdependent Copyright Industries as a Percentage of the GVA in 2005



Given the fact that we talk mainly about technologies, one of the explanations is that over the past 17 years, there has been a sharp drop in the production of technical devices related to the creation, dissemination and communication of the products of copyright-based industries. In 1994, for example, the export of computers and computer equipment fell 30 times in comparison to 1984 levels – from US$1.5 billion to US$50 million (*Wall Street Journal Central Europe* – Summer, 1994). As of 1989, 122,000 people worked in the Bulgarian electronics industry and it generated almost one-fourth of the value added.[1] The situation with the local production of radio and television equipment, telephones, radios, etc. was similar and the consumption of these is almost entirely covered by imports (see below). Hence, we must not be surprised by the fact that the aggregate share of the low-tech products such as paper and blank recording materials equals almost half of the value added in these groups.

Table 8. Economic Contribution of the Interdependent Copyright Industries

CI group	Gross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
TV sets, Radios, VCRs, CD Players, DVD Players, etc	125 397	0.136	46 625	0.132	0.109	4 536	0.186
Computers and Equipment (including Photocopiers)	**228 111**	0.248	**82 864**	0.235	0.194	**5 026**	0.206
Musical Instruments	4 557	0.005	2 067	0.006	0.005	312	0.013
Photographic and Cinematographic Instruments	28 140	0.031	7 585	0.022	0.018	1 215	0.050
Blank Recording Material	63 664	0.069	22 168	0.063	0.052	255	0.010
Paper	**480 520**	0.522	**106 231**	0.302	0.248	**6 491**	0.267
Interdependent Industries	**930 389**	**1.010**	**267 539**	**0.760**	**0.625**	**17 835**	**0.733**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82,296**	**2 434 726**	**100**

The above table shows that, unlike the core copyright industries where we have identified significant variations between the sectors in view of the different indicators, the leading industries are clear – by gross output, value added and employment the leader is the manufacture and sale of paper and print-related materials followed by computers and equipment (in 2005, the ratio of manufacture to sales was 1:7.35). The third most important is radio and television receivers and sound or video recording or reproducing apparatus and the ratio of manufacture to sales here is even greater – 1:11.16.

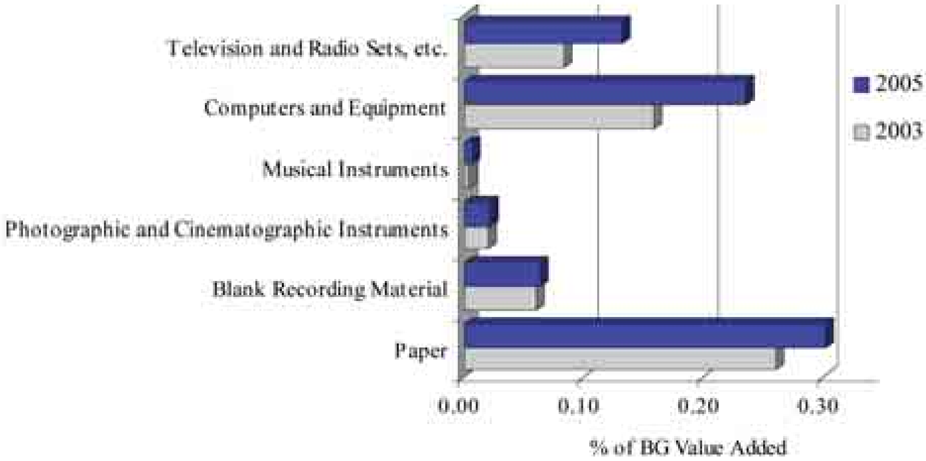
The study registers extremely low economic values for the manufacture of musical instruments.[2] This is partly due to a technical problem to the extent to which we are unable to include sales and leases of musical instruments at this stage – these activities are shown in the non-distributable fifth group. Hence, we can suppose that the real overall values for the industry are higher.

The dynamics of the interdependent copyright industries for the period 2003 – 2005 show greater growth rates in value added in the first three industries and these are higher for computer equipment, radio and television equipment and video and audio equipment. The growth in the other industries is minimal.

[1] For more information see: Run, R. and Utt, R. (1990), Bulgarian Economic Growth and Transition Project, National Chamber Foundation, Washington.

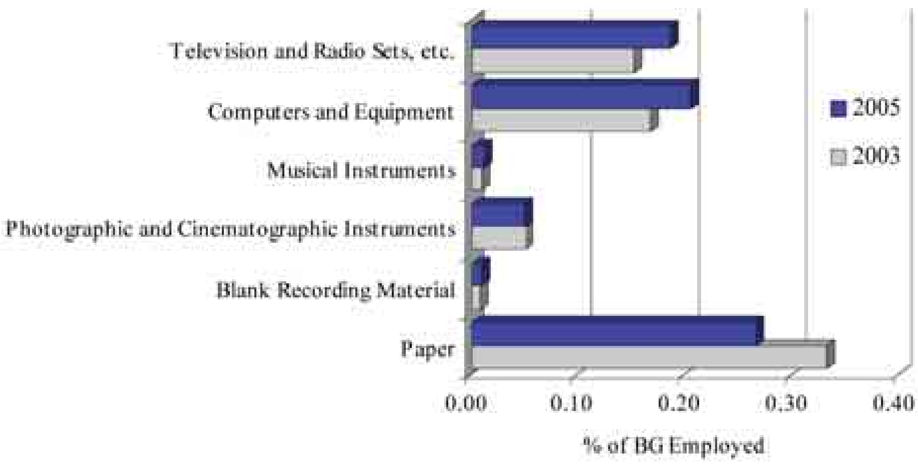
[2] The data are similar to those of the Latvian study – see *National Studies on Assessing the Economic Contribution of the Copyright-Based Industries,* WIPO, 2005, p. 280.

Graph 20. Dynamics of the Interdependent Copyright Industries in Terms of the Change in the Share of Employment for the Period 2003 – 2005



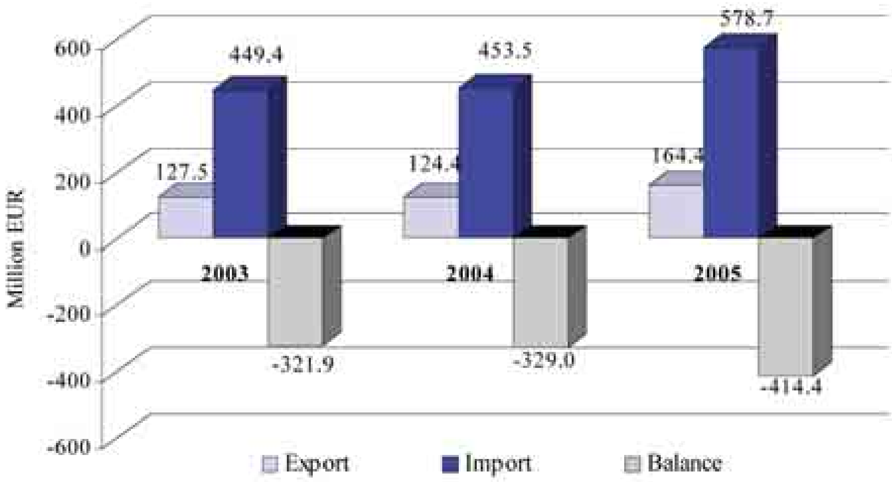
The study registers a reduction of 17 percent in employment in the paper industry for the period 2003 – 2005 which, given the 24 percent increase in the value added, can be explained through the investment in equipment and increased production. Employment grew the most (with shares between 26 and 33 percent) in the manufacture of blank recording materials, computer equipment and radio, television, sound and video equipment. The low volumes of manufacture and the low employment level in the manufacture of blank recording material (CDs and DVDs mostly) should be noted – in comparison to the recent past when the country used to be one of the major suppliers of these products within the former Council for Mutual Economic Assistance.

Graph 21. Dynamics of the Interdependent Copyright Industries in Terms of the Change in the Share of Employment for the Period 2003 – 2005

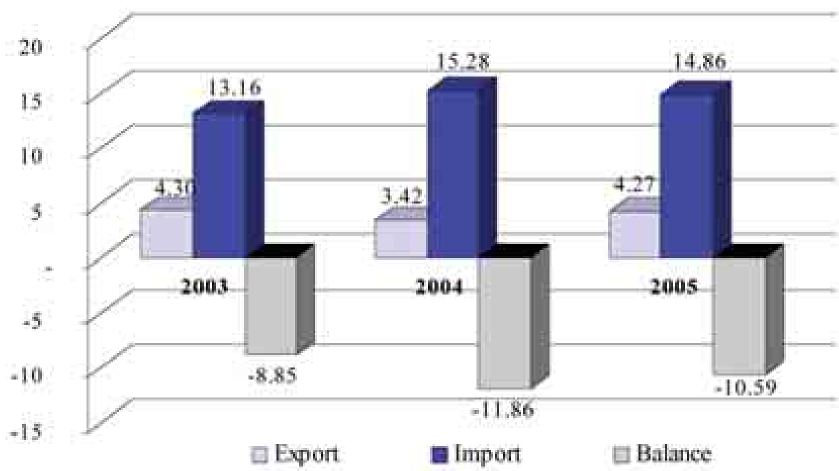


We have obtained information on imports and exports in three of the interdependent industries studied – radio, television and other audio-visual apparatus, photographic and cinematographic instruments and musical instruments. The information in every group is somewhat incomplete due to the confidential nature of some of it and this is most significant for musical instruments. The study did not manage to obtain information on the import and export of computers and equipment which is the second leading industry in the group but the data on the import and export of radios and television sets, tape recorders, CDs, DVDs and other sound and visual recording and reproducing equipment indicate that the major part of the value added is realized by imports. Throughout the study period, the ratio of imports to exports remained at about 1:4 and the negative trade balance exceeded €400 million in 2005, although in the conditions of significantly lower absolute values, the same ratio between imports and exports is valid for motion picture and photographic equipment where the negative trade balance exceeded €10 million in 2005.

Graph 22. Imports, Exports and Trade Balance for the Economic Activities in the Sector of Radio and Television Equipment and other Audio-Visual Equipment for the Period 2003-2005
(the information on around 6 percent of the activities is confidential)

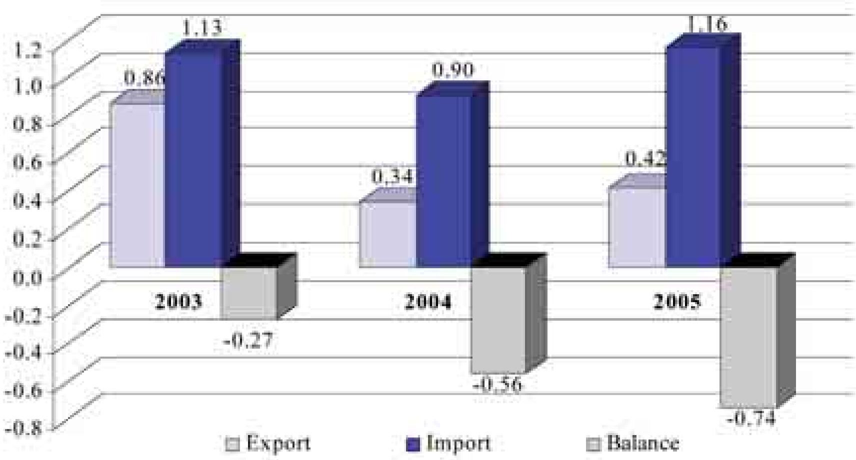


Graph 23. Imports, Exports and Trade Balances for the Economic Activities in the Sector of Motion Picture and Photographic Apparatus and Equipment for the Period 2003 – 2005
(the information on around 8 percent of the activities is confidential)



Despite the confidential nature of some of the information, the one regarding imports and exports supports the conclusion reached above on the relatively low economic contribution of the manufacture and sale of musical instruments. The negative trade balance grew slowly during the period studied. Imports varied at around €1 million while the fall in exports almost doubled.

Graph 24. Imports, Exports and Trade Balance for the Economic Activities in the Sector of Musical Instruments for the Period 2003 – 2005
(the information on around 22 percent of the activities is confidential)



The results obtained in the interdependent copyright industries paint a clear picture of the deindustrialization of the sector. Fifteen years ago, most of the industries were among the leaders and were clearly export-oriented. Today, with the exception of paper production, the manufacture and export of equipment and consumables servicing the core copyright industries are at a very low level and internal consumption is met primarily by imports. Similar to other cases of deindustrialization throughout the world, the situation here was related to the destruction of industrial assets, emigration of the most qualified researchers, engineers and technical staff or their move to other activities such as trading in and servicing of these products. As a result of the efforts of entrepreneurs from the former state-owned industries, small producers in specific niche industries such as manufacture of blank recording materials (CDs, DVDs, etc.) and other consumables, manufacture of optical and electronic components, etc. continue to operate. In such conditions, public policies should encourage foreign investment in these sectors; identify and support innovative local entrepreneurs and strategic investments in areas and niches of significant growth potential where the country has specific competitive advantages (research, industrial and cultural traditions, access to markets, attractive production factors, etc.).[1]

[1] An example is the manufacture of holographic protective and advertising materials developed in *DEMAX Print OOD* which is unique in South Eastern Europe *(see http://www.demax-bg.com/holograms_bg.htm).*

5. The Economic Contribution of the Partial Copyright Industries

The partial industries form the smallest group – 6.4 percent of all those employed in copyright-based industries work in them although they make up a mere 3.31 percent of the contribution of the copyright-based industries to the overall value added and gross output. In view of the value added their share amounts to a fraction of 1 percent.

Graph 25. Contribution of the Partial Copyright Industries to the Main Economic Indicators in 2005

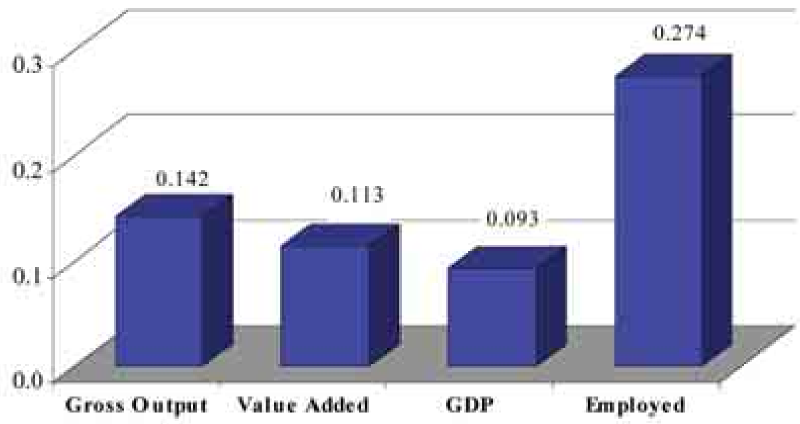


Table 9. Economic Contribution of the Partial Copyright Industries in 2005

CI group	Gross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
Apparel, Textiles and Footwear	12 711	0.014	4 892	0.014	0.011	1 245	0.051
Jewelry and Coins	2 966	0.003	1 192	0.003	0.003	213	0.009
Other Crafts	15 554	0.017	4 425	0.013	0.010	799	0.033
Furnitures	**31 157**	0.034	**7 974**	0.023	0.019	**1 554**	0.064
Household Goods, China and Glass	3 656	0.004	1 044	0.003	0.002	113	0.005
Wall Coverings and Carpets	2 295	0.002	622	0.002	0.001	80	0.003
Toys and Games	10 723	0.012	3 862	0.011	0.009	869	0.036
Architecture, Engineering, Surveying	**50 855**	0.055	**15 348**	0.044	0.036	**1 607**	0.066
Museums	1 330	0.001	528	0.001	0.001	201	0.008
Partial Copyright Industries	**131 247**	**0.142**	**39 888**	**0.113**	**0.093**	**6 682**	**0.274**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82,296**	**2 434 726**	**100**

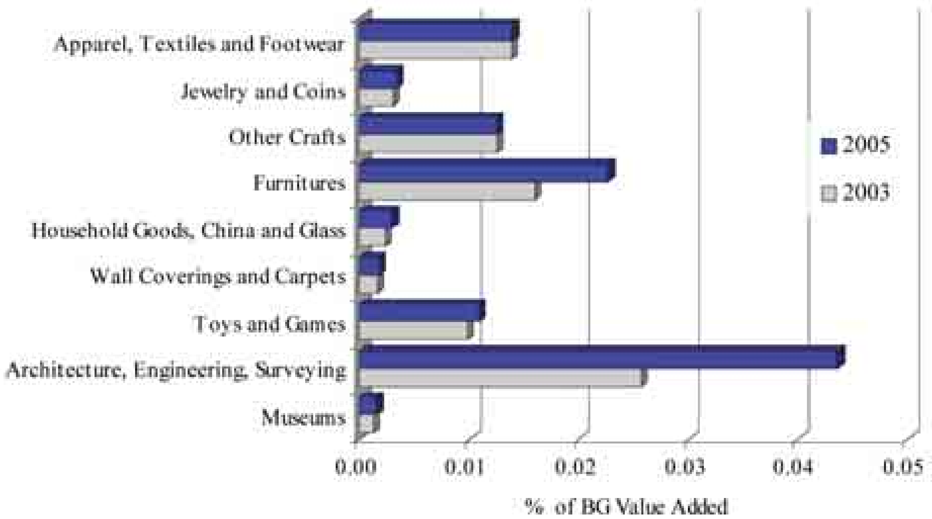
This is the group of industries where the information is weighted with a copyright factor which is specific for all (see the methodological section above, Table 4); in some of them, for example household goods, china and glass and apparel, textiles and footwear, the copyright factor is very low – 0.5 percent and 0.6 percent respectively. As for absolute values, textiles is the leading industry in the economy which provides almost one-third of the country's exports. Of the industries with a higher copyright factor, only architecture and related activities have higher absolute values, making it the leader in absolute terms.[1] That is why significantly lower absolute values are typical of the whole group – the leading group has a gross output of about BGN51 million with a value added of a little over BGN15 million and 1,607 employees.

In view of its gross output, value added and employment, furniture comes second. In addition to the relatively high copyright factor of 5 percent: this is also an indicator of the higher value added invested in the sector.[2] The largest sector by absolute values, apparel, textiles and footwear comes third in both gross value added and employment after weighting. There is a relatively high value added (in comparison to employment) in jewelry and crafts as well as in toys and games.

Unlike the first two groups of copyright-based industries where, depending on their economic contribution, there are several clearly-distinguishable leaders at a significant distance from the others, architecture is the only leading industry. The three industries following it at a significant distance make similar economic contributions (furniture, apparel, textiles and footwear and crafts) followed very closely by another industry with similar indicators (toys and games).

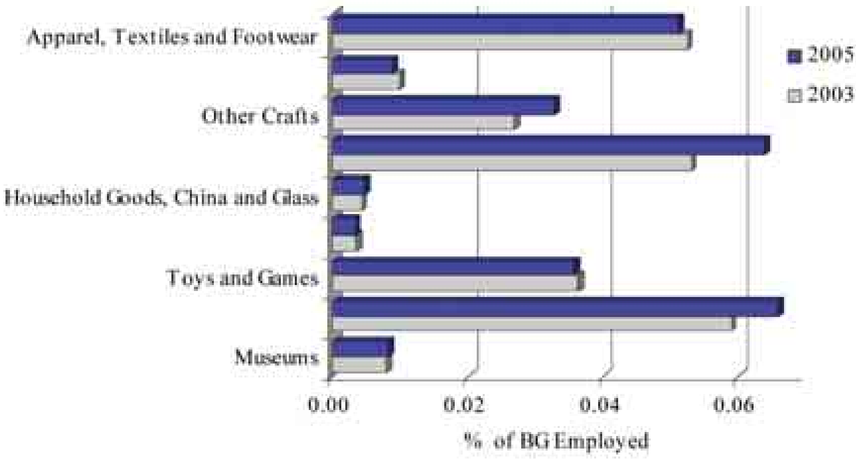
The dynamics of the partial copyright industries by value added and employment reveal another original profile (similar to the profile by gross output). The clearly-distinguishable opposing groups of the leaders and the industries with a low growth rate can be seen – for the three-year period, the growth in value added in the sector of architecture (with inflation taken into account) is 81 percent while it is 50 percent in furniture. Museums and household goods occupy a place at the center with an increase of a little over 30 percent while for all others the growth rate is below 20 percent (it is below 8 percent in crafts and textiles and footwear). The growth in value added in architecture is realized through a smaller increase in employment – third place with an increase of 16 percent after crafts and furniture.

Graph 26. Dynamics of the Partial Copyright Industries in Terms of the Change in the Share of the Value Added for the Period 2003 – 2005



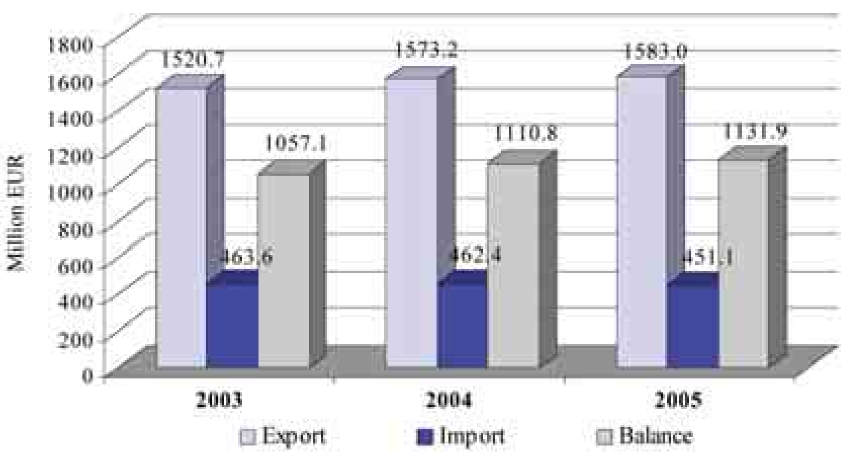
[1] As mentioned in *Appendix 11*, this is a very conservative evaluation because we have reason to believe that the real volumes of gross output and value added in visual and graphic arts and in some other sectors are signifi-cantly higher.
[2] In *Appendix 11* we have noted the existence of a large number of furniture producers producing original items, some of which are unique or in limited series, i.e. with a high level of artistic input.

Graph 27. Dynamics of the Partial Copyright Industries in Terms of the Change in the Share of Employment for the Period 2003 – 2005



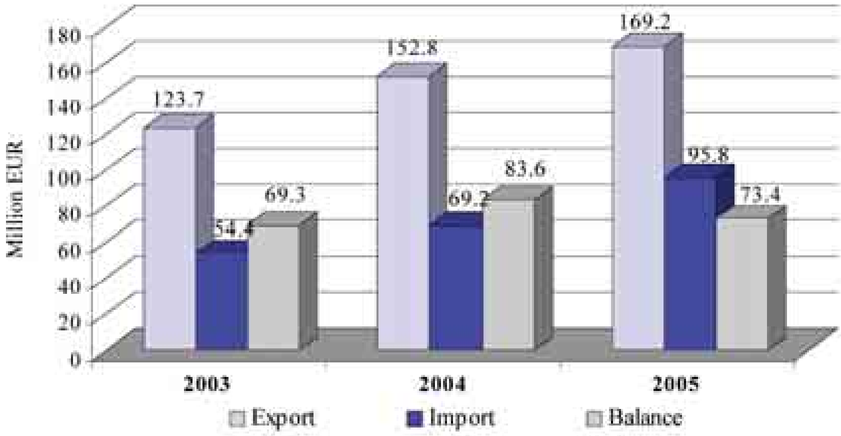
In terms of imports and exports, the partial copyright industries have the highest positive trade balance with high absolute values. The undisputed leader is apparel, textiles and footwear with a positive balance of 1 billion and €132 million. The interviews conducted with entrepreneurs in the sector and observations from experts show that, in apparel and footwear in the past, there has been a clear trend for enterprises to hire professional designers or to buy in the services of such while companies ever more often protect their original products and register trade marks. They explain this by both the growing competition and the desire to occupy market segments with a higher value added of the goods sold (so-called boutique textiles, etc.).

Graph 28. Imports, Exports and Trade Balance in Apparel, Textiles and Footwear for 2003 – 2005



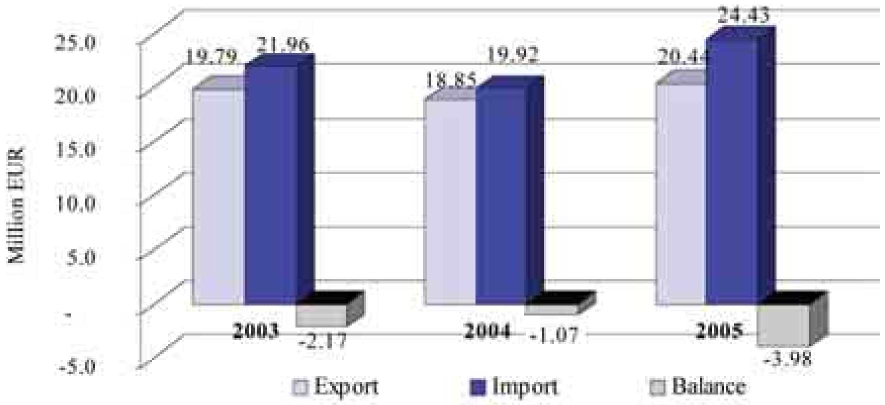
Furniture comes next with increasing volumes of imports and exports with a stable positive balance between BGN70 million and BGN80 million. Here we can see the effect of using the copyright weights because, as we have already seen above, the tenfold higher weight for furniture compared to textiles and footwear compensates for the lower absolute values and results in furniture being ahead in terms of its contribution to the gross output and value added related to the use of copyright and neighboring rights.

Graph 29. Imports, Exports and Trade Balance in Furniture for 2003 – 2005



In toys and games, imports and exports remained at about BGN20 million during the monitoring period with slightly higher imports. As the group discussions conducted have made clear, there is a significant informal sector and serious infringements on copyright in this industry (computer games). This has made the Bulgarian producers of games, some of which are already established, turn their attention primarily to the external market which can explain the relatively high levels of exports. In addition, it can be supposed that internal consumption of imported games and toys is higher than that shown in the official statistics.

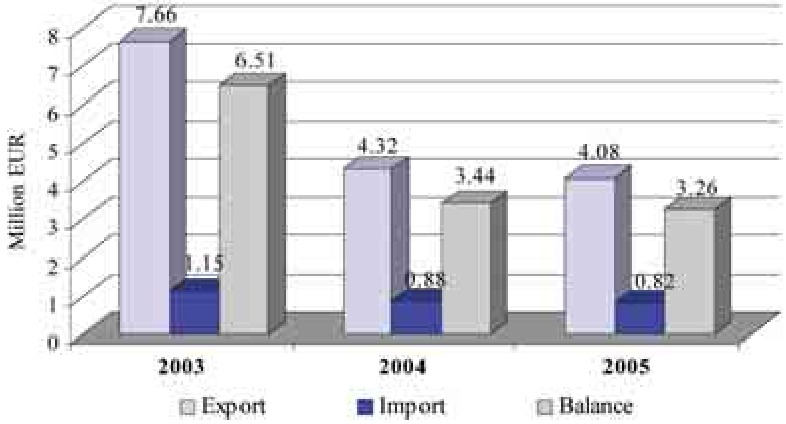
Graph 30. Imports, Exports and Trade Balance in the Industry of Toys and Games for 2003 – 2005
(the information on around 3 percent of the codes is confidential)



Although it is incomplete, the information on imports and exports of jewelry also shows a positive, albeit decreasing level in the trade balance in the past two years, given the relatively low volumes of several million dollars. The expert opinions obtained prompt us to think that significant contraband imports of cheap jewelry[1] have had a negative impact on the sector and caused Bulgarian producers to focus on the international market where they meet strong competition.

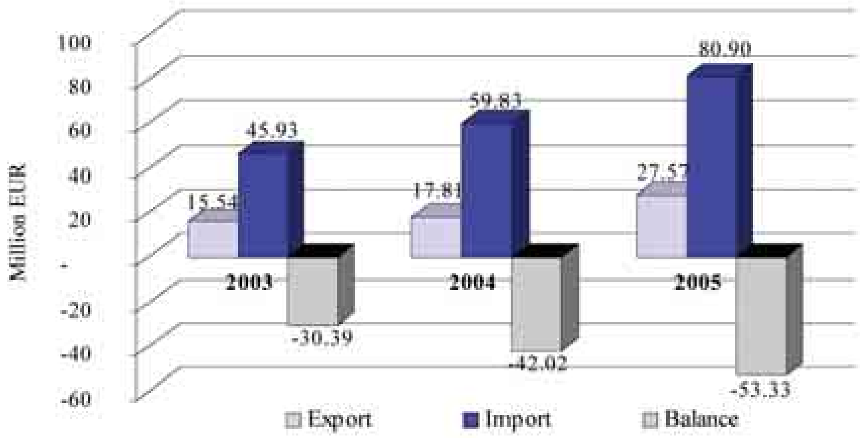
[1] "The inspectors at the Malko Turnovo border checkpoint have seized 2.325kg of gold jewelry amounting to more than BGN70,000, the Customs Agency press office has announced. A statement of violation was drawn up against a Turkish national with a Bulgarian permanent residence card. The customs officers in Malko Turnovo and Lessovo have prevented a total of five attempts at smuggling in the past week alone, according to the Bulgarian Telegraph Agency. 16.727kg of gold and 692g of silver jewelry have been impounded and this will be confiscated for the benefit of the state after the administrative and penal procedures." (Announcement of the Bulgarian National Radio, 22 April 2007).

Graph 31. Imports, Exports and Trade Balance in the Jewelry Sector for 2003 – 2005
(the information is on around 40 percent of the activities; the rest is either confidential or missing)



It is in the china and glass industry and the manufacture of household goods that we can see the familiar tendency shown in the interdependent industries – a high prevalence of imports over exports and a growing negative trade balance. What is positive in this sector is the slightly faster increase in exports in comparison to imports.

Graph 32. Imports, Exports and Trade Balance in Household Goods, China and Glass for 2003-2005
(the information on around 2 percent of the codes is confidential)



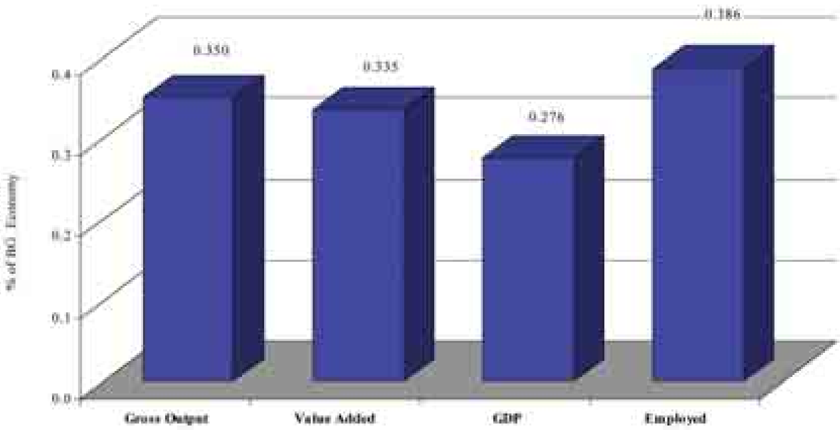
Alongside the specific measures supporting the fast growing leaders in the group (architecture and furniture), the relative homogeneity of the partial copyright industries in their economic indicators favors the development of common support strategies. Moreover, this is the group with the highest positive foreign trade balance. A possible strategy for the partial copyright industries could include efforts to improve general conditions for realization of the copyright element, especially now we have demonstrated that a number of entrepreneurs and managers in the sector already understand its importance.

A critical point concerning most partial industries and several core industries at the same time (visual and graphic arts, photography, etc.) is the rudimentary state of the design profession. Preliminary research and a study conducted in the city of Plovdiv in 2005 show that the profession has not yet established itself as an autonomous copyright industry. At present it exists in the form of a number of different activities associated with a specific modifier – fashion design, media design, web/graphic design, interior design, furniture design, etc. Some of these activities – such as web and graphic design – are an inseparable part of the software sector while media design is usually part of book publishing and printing and/or advertising. These designers are also involved in other activities. Only fashion design is relatively established. The spread of the sector and the lack of an independent institutional and organizational profile of design activities limit possibilities for its representatives to impose their copyrights. It is also an obstacle to the pursuit of long-term strategies for improvement of the artistic level of the products and services created in the partial industries, etc. and the professional and artistic development of its representatives. This should be the aim of the public policies in the sector supporting the real practitioners and creating legal, educational and organizational prerequisites for their establishment and development. Moreover, there is real potential in the field in Bulgaria, including training courses at the Design School with Rousse Technical University, certain faculties in the Academies of Arts, the New Bulgarian University and others. We also need to add design as a separate economic activity in the system of national statistics as it is currently dispersed throughout several unrelated codes.

6. The Economic Contribution of the Non-Dedicated Support Industries

Non-dedicated support industries form the third group in terms of their relative significance to copyright and neighboring rights (fourth only in terms of the number of employees after non-distributable industries). They account for the share that wholesale and retail, transportation and communication contribute to the creation, manufacture and dissemination of products of copyright-based industries.

Graph 33. Contribution of the Non-Dedicated Support Industries to the 2005 Key Economic Indicators



The copyright factor applied to their economic values for the year in question is reached as a ratio of the value added generated in the first three copyright groups (we have added a fourth undistributed group to them in the Bulgarian study) to the gross value added for the country (from which we have subtracted the contribution of the non-dedicated support industries themselves[1]). Our study shows 2.8 percent for 2005 and 2.1 percent for 2003.[2]

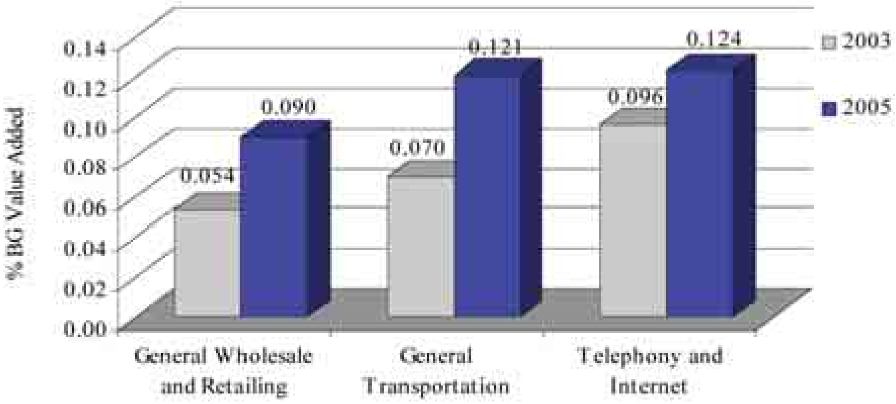
[1] Some researchers refer to them as distribution industries. i.e., whose task is the distribution of economic goods (trade, transportation and communications). For more information on the issue and calculation of the copyright factor, see the reports on the Singapore study in 2004 – *National Studies on Assessing the Economic Contributions of Copyright-Based Industries,* WIPO, 2006, p. 87.
[2] A week before the report was sent to press the NSI reconsidered the macroeconomic data on the country for the period 2003–2006. The changes concern primarily the gross public product and GVA. The team has managed to take into account the changes despite the need to recalculate the data.

The economic contribution of this group is about 0.34 percent of the GVA and 0.39 percent of employment in the Bulgarian economy. Transportation and communications have the greatest importance for the value added and employment for wholesale and retail.

Table 10. Economic Contribution of the Non-Dedicated Support Industries in 2005

CI group	Gross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
General Wholesale and Retailing	75 999	0.082	31 645	0.090	0.074	5 281	0.217
General Transportation	165 059	0.179	42 712	0.121	0.100	3 788	0.156
Telephony and Internet	81 080	0.088	43 616	0.124	0.102	340	0.014
Non-dedicated Support Industries	**322 137**	**0.350**	**117 973**	**0.335**	**0.276**	**9 409**	**0.386**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82.296**	**2 434 726**	**100**

Graph 34. Dynamics of the Non-Dedicated Support Industries in Terms of the Increase in the Share of the Value Added for the Period 2003 – 2005



The exchange rates of the value added in transportation and wholesale and retail are relatively high – 86 and 79 respectively (with inflation taken into account). The three sectors increased the number of people employed, this being highest in communications (67). The growth in these branches reflects the overall development of the economy and also the increase in the relative share of the copyright-based industries. The latter can be seen most clearly in the difference between the copyright factors in 2003 and 2005 where there is an increase of 33 percent.

7. The Economic Contribution of the Industries in the Non-Distributable Group

As we have already mentioned in the methodology, the main reason for establishing this group in the Bulgarian study is the lack of national statistics which bring important activities from the core, interdependent and partial industries under common codes, thereby including them with other activities unrelated to copyright-based industries. We have managed to distribute the greater part of these mixed codes in various ratios among the copyright-based industries with additional studies and analyses of different sources as explained in *Appendix 4.* This has not been possible for the following three codes which make up the current fifth group:[1]

1) **Wholesale trading in other household goods.** This code encompasses activities with a significant economic contribution of BGN103 million in 2005 – wholesale trading in print editions, furniture, carpets, musical instruments, leather goods, basketry, wood and cork items which fall respectively within the core, interdependent and partial industries. It also includes wholesale trading in goods outside the copyright-based industries – sports goods, stationery, flowers, pets, watches. Their value on the basis of the sales in the indicated groups (*Appendix 7*) was evaluated at about 25 percent and was subtracted from the overall values. Due to the lack of a sufficiently-reliable basis for distribution of the other 75 percent among the three groups of copyright-based industries, the data were included in this new combined group of copyright-based industries. The presence of activities from the partial industries made it necessary to weight the data and the overall copyright factor was set at 0.55 on the basis of the statistical information about the volume of sales, interviews with managers and other data.

2) **Retail in specialized shops that has not been classified anywhere else.** Creating value added amounting to more than BGN176 million in 2005. It includes activities from the core and interdependent industries (souvenirs, arts and crafts, church plates, office and commercial furniture, office equipment, computers and standard software, photographic appliances, optical and high-resolution equipment, postage stamps and coins), activities from the partial industries with a copyright factor (toys and games, watches and jewelry, wallpaper and floor coverings, carpets and rugs) and activities which are not related to any copyright-based industries (telecommunications equipment, optical goods, sports and leisure goods, sport and hunting guns, flowers and seeds, heating materials, etc.). The share of the latter unrelated goods was assessed to be 35 percent while the remaining share was then weighted with a factor of 0.55 based on the arguments set out in *Appendix 4.*

3) **Rental of audio and video recordings, books, audio and video equipment, musical instruments, jewelry, furniture, textiles and ceramics, sports equipment, domestic machines, flowers and plants.** Here, only the last three activities are unrelated to copyright and neighboring rights. When a conservative approach was applied, the share of these non-dedicated activities was assessed to be 20 percent. The remaining part of the values under this code were weighted with the same factor of 0.55 based on the combination of a significant share of activities belonging to the core and interdependent copyright industries (lease of books, audio and video recordings, audio and video equipment, musical instruments) and activities from the partial copyright industries (jewelry, furniture, household appliances, textiles and ceramics).

[1] For detailed arguments in relation to the establishment of the three codes in a separate group and the weighting of the data, see also *Appendix 6*.

We therefore refer here to important activities related to the dissemination of copyright products and equipment for their creation which, according to the WIPO methodology, fall within the group of the core, interdependent and partial industries. They are comparable to the other groups (excluding the core industries) and, due to the conservative approach adopted, it is likely that the share of these activities is even greater!

Graph 35. Contribution of the Industries from the Non-Distributable Group to the Main Economic Indicators in 2005

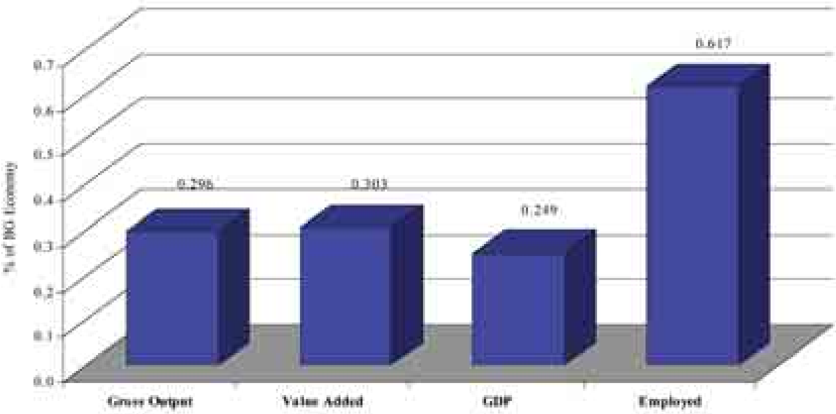
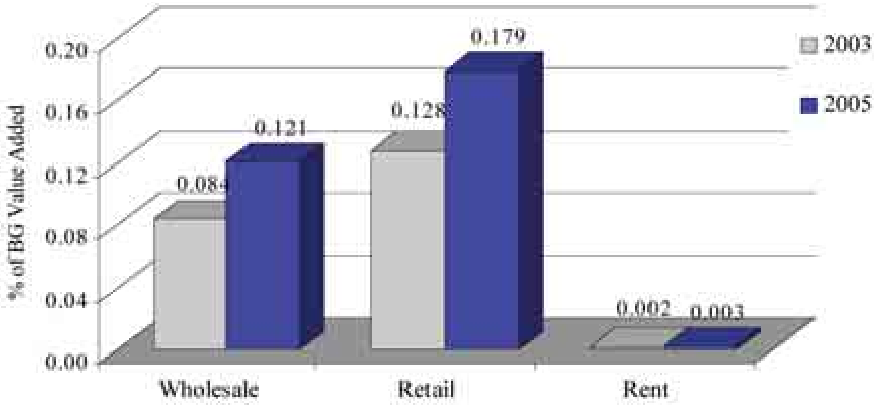


Table 11. Economic Contribution of the Industries from the Non-Distributable Group, 2005

CI group	Gross output		Value added			Employment	
	Thousands BGN	%	Thousands BGN	% of VA	% of GDP	Number	%
Wholesale	137 667	0.149	42 499	0.121	0.099	3 997	0.164
Retail	131 112	0.142	62 913	0.179	0.147	10 599	0.435
Rent	3 990	0.004	1 146	0.003	0.003	431	0.018
Non-attributable Group	**272 769**	**0.296**	**106 558**	**0.303**	**0.249**	**15 027**	**0.617**
Bulgarian Economy	**92 132 091**	**100**	**35 220 410**	**100**	**82.296**	**2 434 726**	**100**

The dynamics in the group are impressive. The growth in wholesale trading is more than 50 percent; in retailing it is close to this value; and in leasing, over 70 percent (but with a low volume in 2003). Given these figures, we can understand the significant increase in the share of these industries in the gross value added.

Graph 36. Dynamics of the Industries from the Non-Distributable Group in Terms of the Growth in the Value Added for the Period 2003 – 2005



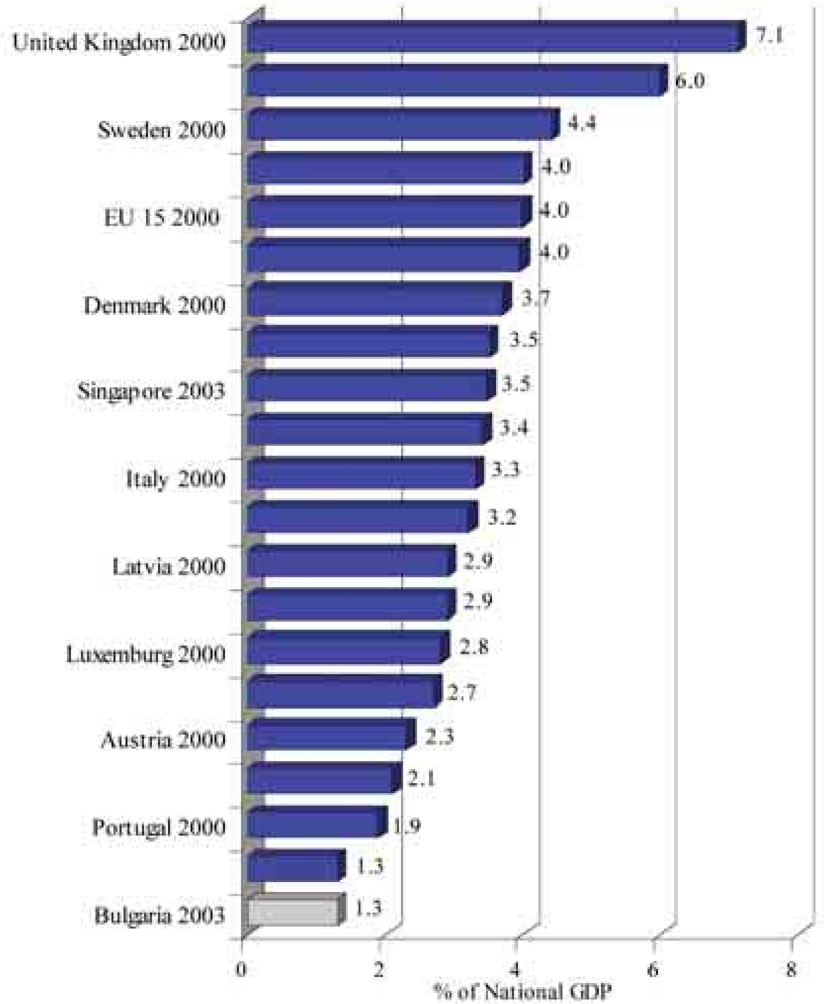
The measures proposed for improvement of the national statistics would in the future allow separate accounting for the data on the copyright-based industries from this group and include them in the respective groups of industries pursuant to the WIPO methodology. The separation of trading and leasing of products of the copyright-based industries under independent codes would also make it possible to measure more effectively and reliably the efforts to fight piracy and the compliance with copyright to the extent to which it is these activities (including through electronic trading) where change in the volumes of traded goods and services would first appear.

8. International Comparisons

In view of the share of the core copyright industries in GDP, Bulgaria, together with Greece, ranks at the bottom (after Portugal) among the countries which have conducted studies using this methodology. The comparison uses the recomputed values of the first three groups of copyright-based industries after the distribution of the values for the fifth group of mixed codes.

The interpretation of the data must take into account the lack of current comparative information, which has made it necessary to use the data for the year 2000 for most countries (the US – 2002, Hungary and Singapore – 2003). The data on Bulgaria in 2003 have been used but this does not reflect the significant growth in copyright-based industries in the past three years. Yet, what is valuable is the similarity in determining the core copyright industries and in collecting information about them to the extent to which all research teams have taken into account the recommendations in the WIPO methodology.

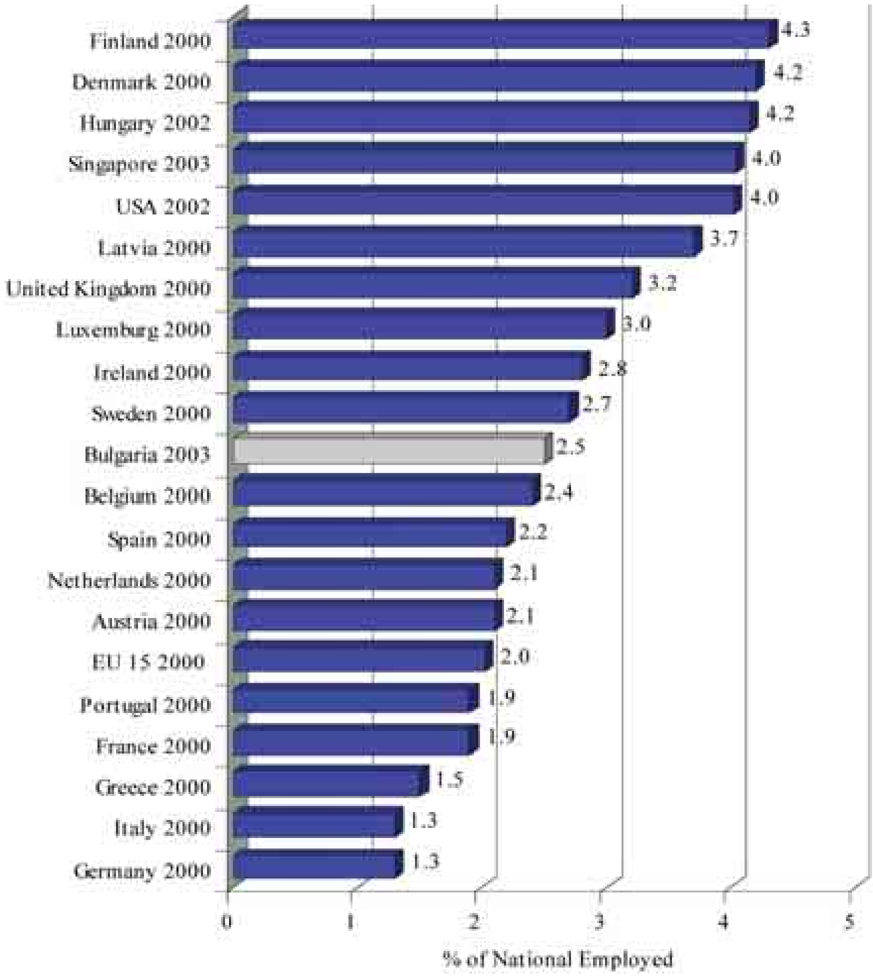
Graph 37. Share of the Core Copyright Industries in GDP, 2000 – 2003



Sources: Robert G. Picard, Timo E. Toivonen, Mikko Grönlund – *The Contribution of Copyright and Related Rights to the European Economy Based on Data from the Year 2000, Final Report, 20 October 2003; The Economic Contribution of Copyright-Based Industries in Singapore: An Update http://www.ipacademy.edu.sg/site/ipa_cws/resource/executive%20summaries/Exec_Sum_Economic_Upd.pdf;.*
Krisztina Penyigey, Peter Munkacsi – *The Economic Contribution of Copyright-Based Industries in Hungary, The 2005 Report.*
Robert G. Picard, Timo E. Toivonen: *The Economic Contribution of Copyright-Based Industries in Latvia, The 2000 Report.*
Stephen E. Siwek – *The Economic Contribution of Copyright-Based Industries in the US, The 2004 Report.*

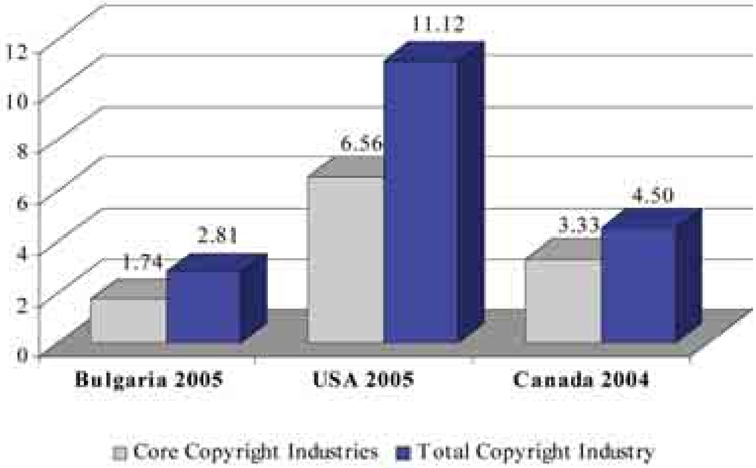
Bulgaria occupies a much higher place in the rankings in terms of employment in the core copyright industries with a value above the average in the 15 EU Member States.

Graph 38. Share of Employment in the Core Copyright Industries, 2000 – 2003



In the course of the study, we managed to obtain more recent data on the US and Canada which allow us to use the information about 2005 as a comparison:

Graph 39. Share of the Core Copyright Industries in GDP, 2004 – 2005

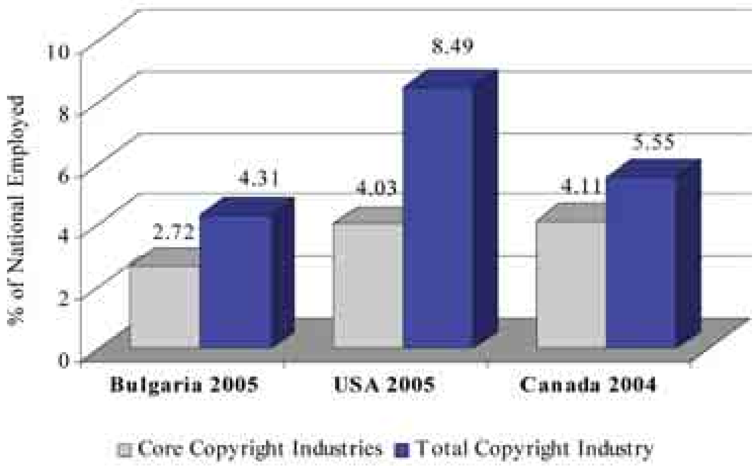


Source: Stephen E. Siwek – *Copyright Industries in the U.S. Economy,* The 2006 Report; CONNECTUS Consulting Inc. – *The Economic Impact of Canadian Copyright Industries - Sectoral Analysis,* Final Report, 31 March 2006.

The share of the copyright-based industries in the Bulgarian GDP is more than four times lower than that for the US and almost twice as low as that for Canada. The recalculated share of the core copyright industries in Bulgaria in GDP reaches 1.74 percent – more than three times lower than that for the US and almost twice as low as that for Canada.

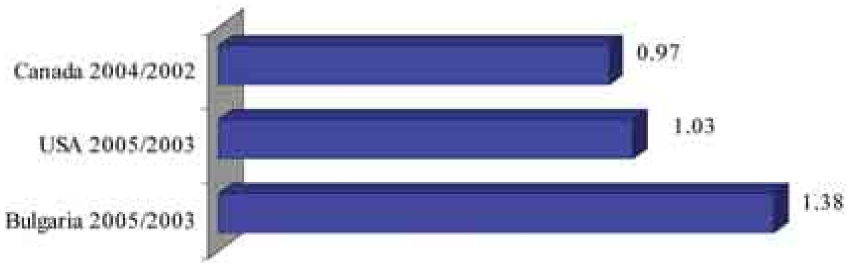
The number of people employed in the core industries and as a total for all copyright-based industries is about twice as low as that for the US. It is comparable to that of Canada, and, with the recalculation for the fifth group, the share of the core industries in Bulgaria is 2.72 percent.

Graph 40. Employment in the Core Copyright Industries, 2004 – 2005



For the period 2003–2005, the growth rate of core copyright industries in Bulgaria, computed as a ratio between the share of value added in GDP over the two years was 38 percent - significantly higher than in the US and Canada:

Graph 41. Growth Rate of the Core Copyright Industries from GDP, 2005 – 2003



9. Trends in the Development of some of the Core Copyright Industries

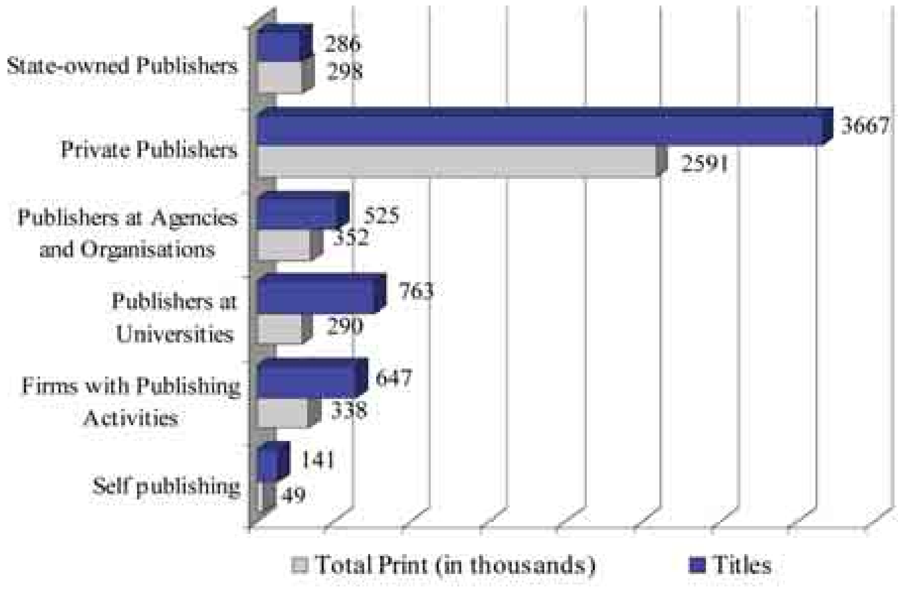
This section aims at presenting a general picture of the situation and the development of the core copyright industries on the basis of statistical information and analytical studies from the past several years.

Books and the Book Market

Bulgarian book publishing started developing commercially immediately after the political changes at the beginning of the 1990s. It was the first sector in the field of culture which was privatized gradually. In the early years after 1989, new companies targeting publishing activities appeared constantly (prompted most of all by the low initial investments and the fast return on the funds invested due to a hunger for books). The high number of registered publishing companies is a reflection of this development – 2,326 (2000 Reference Book of St. Cyril and Methodius National Library) and a publisher's code was given to 3,050 publishing houses from the creation of the national ISBN agency in 1991 up to 2003. Many of them, however, are not operating or produce only one or two editions. According to David Kingham, *(Bulgaria: A Book Sector in Difficulty), "...* Nobody knows for sure but there are an estimated 450 or so companies actively engaged in publishing of which about 40 or 50 are significant for their size and output."[1]

While the sector encompassed 27 state-owned publishing houses and more than 100 others with different departments in 1988, today more than 85 percent of the books published in the country are the product of private publishers.

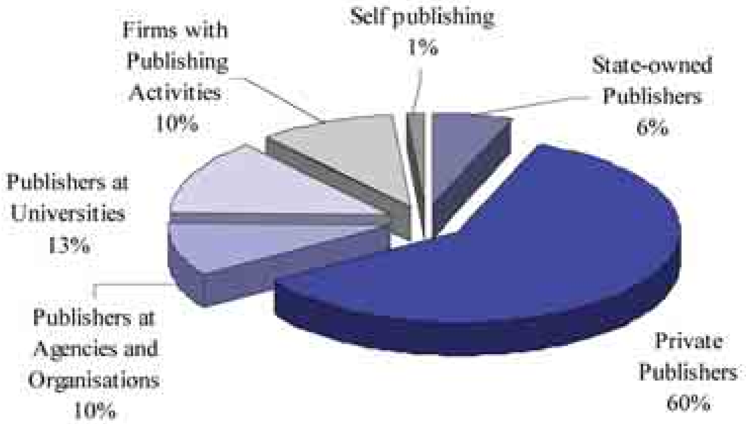
Graph 42. Distribution of the Publishing Houses in Terms of Ownership and their Production in 2005



When seen against the total number of print quires published, the share is a little lower – about 70 percent.

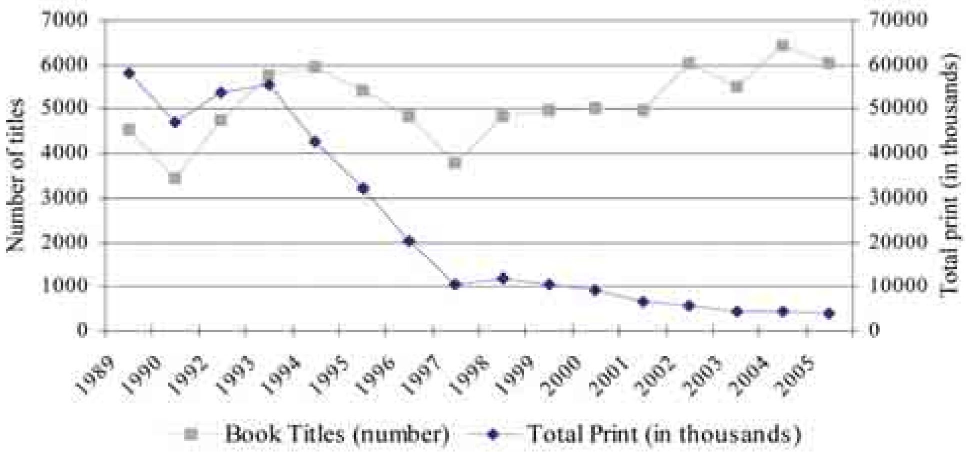
[1] There are only 78 publishing companies in the register of cultural organizations with the Ministry of Culture (having taken part in competitions for financial support from the National Book Centre). The financial assistance provided to publishing houses under the Help the Book, Periodical Editions and other programs in the field of books by the National Book Centre with the Ministry of Culture amounted to BGN241,824 in 2003 and BGN301,438 in 2004.

Graph 43. Distribution of the Publishing Houses in Terms of the Quires Printed in 2005



The number of publications dropped at the start of the 1990s, peaked in 1994 and then started falling again up to 2002. The total number of copies of books also declined abruptly and constantly – the total number of books and brochures published in 2005 was the lowest since 1989.

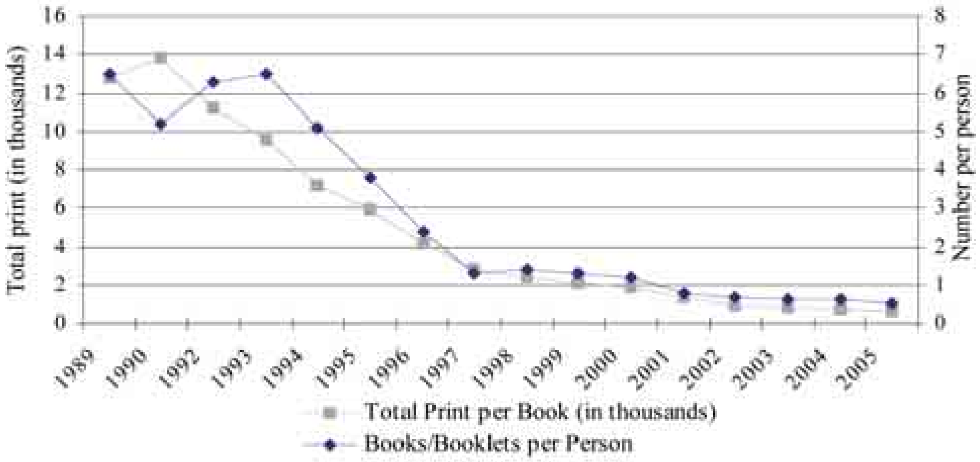
Graph 44. Dynamics of the Titles Published and Total Copies for the Period 1989 – 2005



It is obvious that the unrealistically high, economically inadequate and ideologically correct publications in the years of totalitarian rule cannot serve as a basis for comparison but the comparison with the period since 1992 shows a reduced market for book production. The total number of books published fell by 75.6 percent in 1999 in comparison with 1994. As the graph below indicates, average circulation today is 800 copies for Bulgarian literature and 1,200 copies for foreign literature and this average includes the higher circulation figures for textbooks, adult fiction (primarily in translation) and children's books. The circulation of some editions does not exceed several hundred copies.[1]

[1] There are several factors explaining the situation. 1) To meet the variety of interests, publishing companies try to expand the spectrum of topics the published works cover at the expense of circulation; 2) The purchasing power of the population; 3) The publishers are interested in the quick realization of a book with a view to ensuring fast returns; 4) Problems in the dissemination of books. Impact is also felt by the expanded possibilities to meet informational, educational and cultural needs with audio and visual and electronic means and technologies amounting to BGN241,824 in 2003 and BGN301,438 in 2004.

Graph 45. Dynamics of the Average Circulation and Books Published per Person for the Period 1989 – 2005



In the field of distribution, there are a number of unresolved problems the most important of which include:

- Limited number of book stores and storage space,
- Concentration of book trading in the large cities and relative isolation of the small population centers;
- Trading in the open which is still widespread;
- Short-term realization of book production.

There is no accurate information about the number of book distribution companies – according to different estimates, nationally there are about 130 private and 20 state-owned companies which are in the process of being privatized (data from 2000). There are also many retailers. The lack of a real book market has led to the opening of a significant number of book stores and book exchanges with publishing companies (about 60). Several electronic book stores have been opened as well. There is no professional organization of book traders and distributors which could represent their interests.

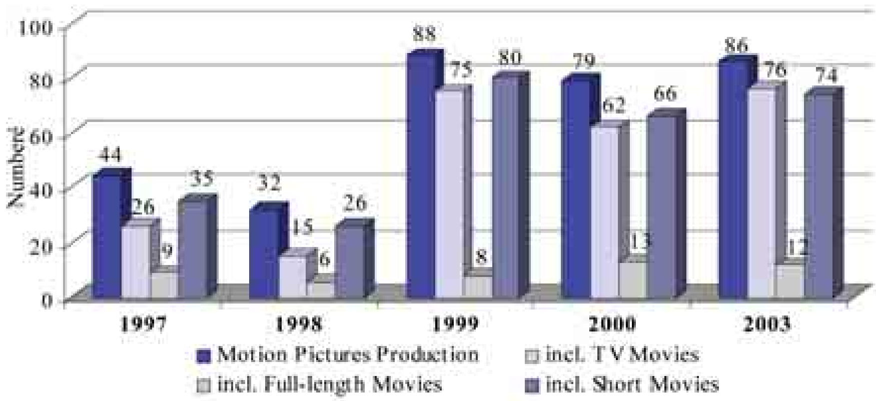
The general impression of book publishing since 1990 is that it has been developing successfully despite certain difficulties. Fewer publishing houses than before work in the sector and fewer books are published *per capita;* print runs are smaller but the number of titles published has been growing and production quality is much higher in several areas: selection of titles into thematic groups – the result of specialization among the publishers; improvement in the quality of translations and print layout. According to information from the Reading Bulgaria Commission, the volume of the Bulgarian book market is about BGN60 million a year.

Motion Picture and Video Production

Bulgaria produced about 20 feature films funded by the state up to 1989. The advent of democracy saw the national motion picture industry come into existence in the new market conditions and this caused a radical rethink: the ideological bias was discarded and the doors to European funds and organizations were opened. There was also a sharp drop in state subsidies to the motion picture industry – barely two or three films a year were made in the mid-1990s. Commercial US movies are also widely shown.

In 1991, Bulgarian cinema was the first in the field of culture to restructure itself by applying market principles: all professionals became freelancers and, in 1992–1993, all enterprises were registered under the Commercial Act and have been self-sustaining ever since. The new legislative framework was introduced with the Copyright and Neighboring Rights Act (1993) and the Radio and Television Act (1995). The state funds the production of features, documentary and animated films through the budget of the Ministry of Culture. The projects presented by independent producers compete before national committees and are subsidized only to a percentage of their real budget. A centre for the production of television films was set up with Bulgarian National Television (BNT) in 1998 and it applies the same funding principles and mechanisms as the National Film Centre. The BNT is the second source of funding for film production through the state budget. The film producers seek the rest of their funds from various sources – mostly specialized European funds. In October 1993, Bulgaria was accepted as a member of Euroimage, the European fund for supporting joint productions. Throughout its membership, Bulgaria has taken part in 32 European joint productions funded by Euroimage six of which are mainly Bulgarian projects. Euroimage provides annual financial support to four or five cinemas.

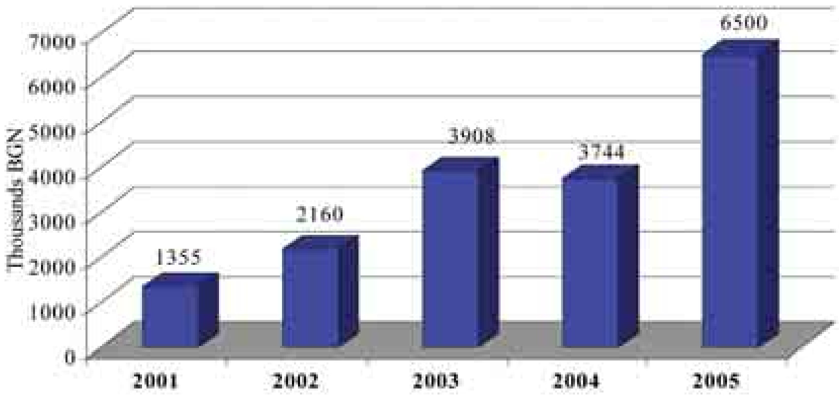
Graph 46. Dynamics of the Films Produced in the Period 1997 – 2003



At present, there are more than 40 specialized production companies with experience and international contacts working in the country. About 25 privately-owned studios were set up, offering technical services: audio recording, editing and computer animation and visual effects. Four or five international films are made in Bulgaria every year and the producers hire Bulgarian producers and technical teams. These include East West (winner of a 1999 Oscar, UGC – France), *Vercingétorix* (France), *Tuvalu* (Veit Helmer, Director, Germany), *The Profession of Arms* (Ermano Olmi, Director, Italy), *La Piovra* series and many others. These productions use the sets and technical facilities of Boyana National Film Centre which is the largest specialized film production base in the Balkans. Since the privatization of the film center in 2006, the owner, New Image, has pursued an active policy of attracting foreign film productions.

In the past few years, there has been a significant shake-up of the Bulgarian film market assisted to a large extent by the Film Industry Act – effective from the end of 2003. With it and through the National Film Centre Executive Agency, the State has committed itself to supporting financially the production, distribution and screening of Bulgarian films. Thanks to this law, there has been an increase in the number of Bulgarian films made since 2004. Financial support for film projects has significantly increased since its adoption.

Graph 47. State Subsidies for Motion Picture Art (National Film Centre Executive Agency) for the Period 2001 – 2005

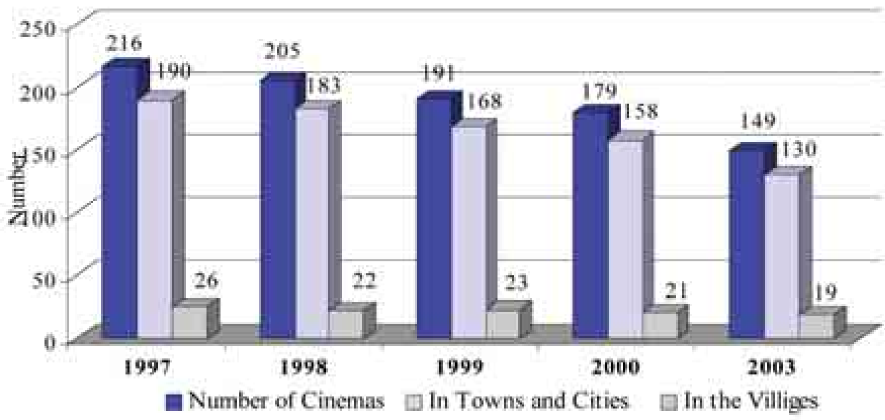


An average of four or five feature films a year for the period as well as five to seven documentaries and four to seven animated films (the number of animated films decreased from seven in 2001 and 2002 to two in 2005) have been funded. A state subsidy is provided for writing scripts for features, documentaries and animated films, for development of film projects, for production and distribution of short and full-length features, documentaries and animated films. State support is provided for the promotion of Bulgarian films at national and international film festivals. Only those registered with the Unified Public Register under Art. 19, para. 1 of the Film Industry Act may apply for such support: i.e., film producers, distributors and entities screening films. According to the Register, there were about 50 film distributors and 228 film producers as of December 31, 2006.

State funding for Bulgarian films is no less than 30 percent of the average budget for the respective film and no more than 80 percent of the budget of the project applying for funding. The National Cinema Council offers an annual funding quota for debut films which may not exceed 10 percent of the annual subsidy for film production.

The number of cinemas dropped drastically from about 1,500 in 1989 to 913 in 1992 and 120 in 1996. This resulted in the closure of cinemas in dozens of cities: the network of cinemas in villages was completely destroyed. According to NSI data, in 1999 more than half (46.6 percent) of cinemas nationally were already privatized. This trend was only overcome in 2000 when the first multiplex was opened in Sofia; the entertainment center Arena appeared in 2003 soon followed by another one and the largest entertainment center in the Balkans was opened in 2006 – it has 12 cinemas and a 3-D screen (Mall of Sofia). Even though the number of cinemas in 2003 was lower than that of 2001, the new multiplexes provide 200 screens.

Graph 48. **Dynamics of the Number of Cinemas in the Period 1997 – 2003**



State support for motion picture distribution is provided for Bulgarian films and films produced jointly with other European states in cinemas or for home viewing. Projects for the distribution of Bulgarian films are supported with up to 50 percent of the distribution budget. Projects for the distribution of European joint productions are supported with up to 25 percent of the funds expended on the distribution budget. These projects must apply to the Agency no earlier than one month from the date of the commercial premiere of the film.

State support for film screening is provided for Bulgarian films and films produced jointly with other European countries. The support for showing Bulgarian films and international joint productions amounts to up to 50 percent of the revenue from screenings of Bulgarian films and European joint productions over the six months preceding the date of application. Cinemas receive up to 25 percent of the revenue for screenings of European joint productions.

An important additional source of funding for film production is Bulgarian National Television – 10 percent of the state subsidy (BGN65.9 million in 2003, BGN66 million in 2004 and BGN67.8 million in 2005) is aimed at the production of Bulgarian feature films and documentaries. Thus, the National Television Art Center together with the BNT has turned the state-owned television in the past years into one of two state funds for promoting Bulgarian films. In 2005, the BNT produced 15 feature films, i.e., three times more than in 2004.

Radio and Television

Television

There are 203 TV channels in Bulgaria including seven terrestrial and 196 cable and satellite channels. There are three channels with country-wide broadcast licenses, i.e., Kanal 1, bTV and Nova TV. The other four terrestrial channels cover the four regions of Bulgarian National TV (BNT), broadcast respectively from Varna, Rousse, Plovdiv and Blagoevgrad.

There are telecommunication operators in Bulgaria active in TV broadcasting through the provisions of Art. 9, paras 1 and 3 of the Transitional and Final Provisions of the Radio and Television Act in 42 towns and cities. Television communication activities based on these provisions is concentrated on the large cities and targets substantial urban audiences. Priority is given to regional broadcasting – 107 TV channels broadcast with a regional or local range, and there are 76 offering national coverage. Of the TV channels which broadcast via satellite 102 offer a variety of themes and 81 are specialized (most often they are film or music channels). Specialized channels offer national coverage while regional stations offer the widest range of programs.

A total of 169 TV channels are broadcast by commercial operators and 17 by public broadcasters, which is proof of the liberalization of the television market and its governance by free market competition principles.

The three national broadcasters, BNT, bTV and Nova, aim at a nation-wide audience and are setting an increasing trend by broadening their national coverage.

The total market share of the three national channels was 72.4 percent for 2003, 71.3 percent for 2004 and 68 percent for 2005, although this fall does not result from increased viewing of cable television channels.

Cable television penetration in private homes accounts for 54 to 56 percent of households (38 percent in rural areas and an average of 66 percent in urban areas, with substantially higher values in the large cities – 79 percent in Plovdiv, 75 percent in Rousse, 83 percent in Blagoevgrad). The channels showing most dynamic growth are Diema 1 and Diema 2, Alexandra, Planeta, BBT, TV Europe and SKAT. No change is observed in Eurocom Sofia and MSAT.

Table 12. Television Stations (only those with Program Licenses)

Year	1997	1998	1999	2000	2003
Television stations	30	31	32	86	98
Programming in hours	261816	506698	177760	395369	498091

Based on the results of a sociological survey performed by BBSS Gallup/TNS there was a general decrease in viewing figures between 2003 and 2005 – in terms of frequency and length of viewing:

2003 – 212 minutes of average daily viewing
2004 – 198 minutes.
2005 – 199 minutes.

This trend is notable among youth audiences and those under the age of 40. The over-50s make up the most active television audience. The decrease in viewing figures is highest in the capital and in cities with populations above 100,000.

Radio

There are 143 licensed radio stations in Bulgaria and of these, three offer national coverage – the Horizont and Hristo Botev stations of Bulgarian National Radio (BNR), and Darik Radio. Forty-two radio stations offer local coverage for a total of 240 towns and cities throughout the country. In nine cities with populations of over 100,000 there are 115 radio stations offering local coverage.

There are 18 radio stations broadcasting only in the largest cities with populations over 100,000 and most of these cities are also regional centers.

There are telecommunications operators in 120 towns offering services under art. 9A, para. 2 and para. 3 of the Transitional and Final Provisions of the Radio and Television Act, with legal rights to provide radio broadcasting until competitions are held for each license.

Table 13. Radio Stations (only those with Program Licenses)

Year	1997	1998	1999	2000	2003
Number of stations	33	33	42	67	89
Programming in hours	314773	354664	392055	493376	525511

Music and Sound Recordings

The music industry in Bulgaria has been developing since the early 1990s. Up to 1989 there was a state monopoly with a single national music recording company and a single label – Balkanton. Musicians' rights were represented by the Muzika Agency and national radio. During the years of transition to a market economy, new private initiatives in music producing, publishing and representation evolved. These led to private recording studios, labels, concerts, video clips, tours, live performances, promotion activities, advertising, etc. After the promulgation of the Law on Copyright and Neighboring Rights (1993) and the constitution of organizations for collective representation of artistic rights under Article 40, there has been a growing number of companies producing licensed musical products. Parallel to this there has been an effort to curb the economic damage caused by distribution and sales of pirated products.

The first Bulgarian company representing an international label was founded in 1992.[1] This was the beginning of the legal music market in Bulgaria and companies of this type have since become the driving force in fighting music piracy. To date there are 10 publishers who are license holders for international labels.

There are 42 companies in the Bulgarian music industry sector. They publish and distribute licensed products on the major music labels and handle Bulgarian performers. Ten of the most outstanding production companies are members of the Bulgarian Association of Music Producers. PROFON (the Organization for Collective Representation) consists of 53 members, producers of recordings and of performers, of which 43 are corporate and nine are individual members.

[1] Virginia Records is an exclusive partner of Universal Music Group: *www.virginiarecords.com*; Currently there are representatives of the international companies EMI, Warner Music, Sony BMG, Edel Re-cords, as well as for other smaller labels.

The music production market is growing, and at the same time there is an improved economic status, an increase in purchasing power as well as more effective law enforcement which accounts for more effective collection of royalties on contracts between musical product users and the organizations for collective representation (PROFON and MUSICAUTHOR). The increase in producers and recording studios over the past few years has gone through a period of restructuring of companies from publishing and producing to those launching their own media (radio stations or specialized TV channels).

According to the survey, publishing and reproduction of audio recordings (National Classification of Economic Activity 2003 codes 22.14 and 22.31) have seen the most substantial growth, which shows this to be one of the most rapidly-developing sectors, comparable in growth with film and video, which is the top performer.

Payner Music Ltd - a Vertically-integrated Music Company
This is the only music company in Bulgaria which has its own full production facilities – from producing, through recording (audio and video tapes, DVD), distribution, print (covers, posters), agency (concerts and tours), a department dealing with stage management, a TV channel, professional film crews for the production of musical clips and commercials. The company owns a chain of 10 discos throughout the country and their artists perform there every evening. All staff members (about 350), including performers, writers, arrangers and musicians, have labor contracts with the company, and it owns the copyrights under the Payner label. About 80 percent of the music is original and about 20 percent cover versions. Payner works with another 1000 or so people for advertising, photography, make-up, props and sets, etc. According to some surveys their market share is currently over 50 percent, with 300,000 DVDs, CDs and audio tapes released in 2005 of which 200,000 have already been sold. This equals the sales of all other companies on the Bulgarian market combined.

Theater, Opera and Ballet
This major cultural industry is characterized by the extremely high share of funding (central and local government), as well as its fundraising, donations, special grants, sponsorship and advertising.

Theater
The reform that started in 1997 in the budget-funded areas has led to the transformation of a rigid structure to more flexible organizational and funding mechanisms. Some of the repertory companies have been replaced with a new type of theater – the open stage. The operatic and philharmonic associations have come to replace orchestras and opera and ballet companies which all used to exist separately. The system led to the establishment of new, independent organizations. Models of project funding were introduced which were made available for state subsidies and private organizations.

Subsidies[1] for performing arts, theater, opera and music over the period 2003-2005 have risen by 12.9 percent as a share in the overall spending on culture (0.72 percent of GDP for 2005). The subsidies for these art forms comprise 0.2 percent of GDP. Although it is impossible to link subsidies for a particular type of cultural organization to accounting outputs for theater, opera and ballet, the contribution of the latter to GDP remains among the lowest - 0.039 percent.

The National Statistical Institute publishes data on theaters in Bulgaria (including opera, ballet, operettas, opera and concert halls, puppet and drama/puppet theaters) against a set of indicators revealing their number and capacity, performance and audience numbers (in thousands).

[1] Source: Ministry of Finance, National Budget Act 2003; Ministry of Culture, Financial Department. Information provided by ERICArts Compendium of national cultural policy profiles *www.culturalpolicies.net.*

Table 14. Theater Activity in Bulgaria – 1998, 2000 and 2005

	1998	2000	2005
Number of theaters	85	75	75
Number of seats	28 694	30 277	30 105
Number of performances	12 627	10 465	10 776
Number of visits (thousands)	1 876	1 286	1 475

Source, NSI, 2006.

Of the 75 existing theaters 42 are state funded (either by central government or with mixed funding), eight are municipal and the remainder are run by private organizations. Over the period 1998-2005 there was an approximate decrease by about 12 percent in the number of theaters but the total seating capacity has risen by about 5 percent after the slight decrease in 2003.

The decrease in the number of performances in the late 1990s has now been overcome and in 2005 there was about 2.8 percent growth compared to 2000. Similarly the drop in audience numbers from the late 1990s has also been overcome and since 2000 there has been a growth of 14 percent.

Orchestras and music companies

Based on their genres these can be subdivided into opera, opera and concert performances, symphonies and chamber orchestras. Of a total of 29 orchestras, the four opera and philharmonic associations have been included in the statistics showing the audience capacity and number of visits. According to funding sources for 2005, Bulgarian orchestras can be classified as follows:[1]

Table 15. Types of Orchestras in Bulgaria for 2005 according to Type of Funding

State	Mixed funding	Municipal	Private
5	9	11	4

The activities within this particular intellectual property sector are closely related to the availability of regular budget subsidies for the entire cultural sector. National statistics provide only summarized data on commercial companies and separately on budget-funded organizations. Analyzing the two sources in parallel cannot be as thorough as it should be, thereby leading to further confusion in the division between state-funded and private companies. At this stage it is impossible to differentiate between the contribution of private music companies and producers from the theaters which run on subsidies but have box-office revenues albeit without generating profit. These specific traits are based on the tradition in most European countries of subsidizing the performing arts sector; even private initiatives and non-state funded organizations which do not generate profits.

[1] Georgiev, M., Bulgarian orchestras – *piano* or *forte* Information bulletin, Kultura, issue. 1, 2005.

Visual Arts

Data on artists in this sector is mainly provided by the Union of Bulgarian Artists – a not-for-profit organization which has existed under this name since 1953. Over 2700 artists and critics are currently members of the Union. The organization has 16 specialized sections - painting, graphic arts and illustration, sculpture, criticism, caricature, artistic spatial design, stage design, restoration, sculpture, design, ceramics, graphic design, "13" - new forms of expression, wood-carving, artistic processing of metals and leather, textiles.

Regional offices are set up throughout the country to serve members on a regional basis. Membership is individual and it is of the union itself, not of one section. Therefore an artist may be part of as many sections as he or she works in, which is why there are no statistics on the membership per section, although most members are involved in painting, graphics and illustration. The Union has branches in 26 towns throughout Bulgaria among which the most active and influential are those in Plovdiv, Varna and Veliko Turnovo.

The Union of Bulgarian Artists owns the largest exhibition complex specializing in presenting Bulgarian art. It hosts an average of eight exhibitions per month – one-man shows, collective shows, anniversary shows, retrospectives and visiting exhibitions. The Union has its own Creative Fund which provides funding for its activities. This Fund covers workshops all over the country and includes a publisher – the Bulgarian Artist. Production companies are Plastic UBA Ltd Sofia, Art Centre UBA Ltd Plovdiv, Dekart UBA Ltd Sofia, Artist UBA Ltd Spanchevtso. The fund also includes graphics workshops in Sofia and Samokov and creative centers in Balchik, Bojentsi, Veliko Turnovo, Varshets, Dolna Banya, Sozopol and Shkorpilotsi.

The Supporting the Arts in Bulgaria fund, affiliated to the UBA, was set up in 1993. Its main goal is to combine charity, contributions, creative and other initiatives of state, public and private organizations, companies and other private persons and corporate bodies, connected with the fine arts or working on behalf of Bulgarian artists. The funds thus raised are used for the annual awards of the UBA, for scholarships and competitions, for the financing of artists of different generations.

UBA supports its members by providing them with information on events and forums at local and international levels, and facilitates their art networking. Union members are able to benefit from copyright protection through the IZA ART Agency, which was set up by contract in 1997. Over 250 artists are members of IZA ART. The agency has contracts with associations of artists, publishers and advertising agencies in many towns throughout the country. Membership is individual. Collective rights protection is provided for contractual agreements on copyrights as well as in court proceedings concerning violation of the Law on Copyrights and Neighboring Rights.

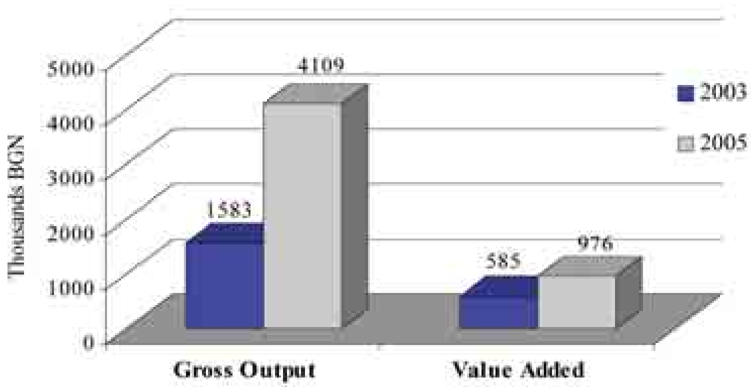
An important aspect in the development of visual and graphic arts since 1989 has been the development of private initiatives in the area as a result of the liberation from state control. Throughout the 1990s and the beginning of this century, private art galleries have opened in most Bulgarian towns. After initial problems, the private gallery owners have managed to gain the trust of artists and art-lovers, and were able to restore the important moderating role of private galleries which had been forgotten. Many of them have gradually specialized in a particular art form or have started working with particular artists.

> "There is a magazine called Art which dedicates one issue per year to galleries in Bulgaria. They called us last year – 'We're checking out who's left', they said, 'because many of the galleries that were founded in the early days of democracy are no longer part of the landscape. There are many people who think that opening a gallery is like going to bed and waking up a millionaire. This in fact is hard work over many years. One can't be so naive or optimistic – you can't open a gallery and just see the money flow in. It doesn't work that way." (Interview with a gallery owner from Plovdiv, 2005)

Having emerged onto the free market environment without solid traditions, including the normative or fiscal regulations in the sector, some galleries still exist on the borderline of the informal economy. Some artists still prefer to sell their works directly to art collectors and individuals outside the gallery structure, which is against their own interests.[1] It is also a fact that throughout most of the 1990s in the economically volatile environment, works by Bulgarian classical artists and prominent, promising young artists were deemed a secure investment. Many of the newly-emerging businessmen, private banks and other art lovers who could afford it have accumulated substantial collections. This process is still on the increase, due to the gradual emergence of a middle class. It is therefore too early to assess the real economic impact of private enterprise in the sector in terms of volume of sales, added value, employment, etc.

This conclusion is also supported by the description of the private enterprises in visual and graphic arts under the respective code for economic activity 92.52 – Gallery and Museum Activities. Over the period 2003-2005 only 29 entities have been covered by it. As the mapping of the cultural industries in Plovdiv reveals, for that city alone there are more than 10 private galleries. This means that most of the entrepreneurs in the sector if registered at all have done so under a different description. But even the very limited data from the national statistics demonstrate impressive development over the short term between 2003 and 2005 – taking into account inflation, sales (gross production) have increased 2.5 times, and added value has also increased by 50 percent with the number employed rising by more than one-third (from 171 to 232 owners and employees).

Graph 49. Dynamics of Economic Activity of Private Galleries and Museums for 2003-2005



Set against this background of development, the sector has been going through a process of structural reform and self-organization of the private galleries (mainly in the large cities) to address the sector's issues and to launch major events like the Night of Galleries and Museums.[2] This and other similar initiatives demonstrate that when there is real partnership with the authorities in the copyright sector, the sector itself can rapidly increase its economic and cultural contribution to the region.

[1] Nothing can replace the facilitating role of a good gallerist who can follow trends and show an artwork to its best advantage, thus offering a professional service to prospective clients.
[2] *http://www.gallery-night.info.*

Photography

Up to 1989 photography in Bulgaria was organized through the state association, Bulgarian Photography. In 1952 a photo archive was established as part of this Association and a number of outstanding photographers worked there, photographers like Nikolay Popov, Petar Bojkov and later the young Ivo Hadjimishev, etc. In 1967 the Association began publishing the Bulgarian Photo Magazine founded by Petar Boev, Ram Hadjulyan and with Albert Cohen as editor-in-chief. Some time later the Bulgarian Photographers Club was founded – to encourage the development of talented young people. The club was the first to begin organizing photo vacations at the seaside, the Biennial of Bulgarian Photography and other events. Although this was still a highly ideologically-limiting environment, Bulgarian photographers had the opportunity to develop and perhaps that is why over this period "the most severe political quarantine was aimed at Bulgarian film, TV and radio. Photography was left on the periphery. It was one thing to have your film script approved and a completely different matter to tour a photo exhibition of the Rhodope abroad." Another reason was the high aesthetic standards of the most outstanding Bulgarian photographers of the time who managed to preserve the art form. Even in those years many Bulgarian photographers became members of the International Federation of Photographic Art (FIAP), and of other foreign photographic organizations.

> "The Bulgarian Photo magazine was a very reasonable place and also a window to the best examples of art photography, a place setting the standards of the young people – because it was a window on the world." (Ivo Hadjimishev, interview)

Over this period a number of publications like the Pogled weekly and the Otechestvo magazine also played a formative role in the setting of professional standards and the development of art photography.

After 1989 the Bulgarian Photography State Association was transformed to a state joint stock company. Private companies which began to appear, run by Bulgarian entrepreneurs, as well as the newly established representative offices of the major international companies like Kodak, Konika-Minolta, Canon and others and began to destabilize the position of the association, causing it growing economic hardship. In the late 1990s the major part of its assets (mainly photographic studios in most Bulgarian cities) were sold by auction and the joint stock company was privatized by the Privatization Agency in 2002.

Where previously the professional organization existed, after 1990 a number of new photographic unions and associations emerged. The Bulgarian Photographic Association is of a fairly moderate size, "both a conservative and open to young talents club", which aims at preserving and developing the aesthetic standards of photography by organizing substantial projects. Another national community of mass appeal is the Photographic Academy founded in 1992 by Yanka Kyurkchieva and 32 other photographers from all over the country. The current Chair of the Association is Yavor Popov and Mrs. Kyurkcheiva is its honorary Chair. The statutes of the academy read that it "...unites the efforts of the photographic community towards a better awareness and reputation of Bulgarian photography in the country and abroad, and works towards the protection of professional interests of photographers in Bulgaria."

The change in the economic environment has led to more opportunities for Bulgarian photographers, but has also led to serious difficulties resulting in the closure of the Bulgarian Photography magazine, *Otechestvo* and a number of art photography centers. Between 1999 and 2003 the *Photooko* and the *Photo Model* magazines appeared and for a while they provided the meeting place for major events of Bulgarian and foreign artists. In 2003 the FO *Monthly Magazine for Art Photography, Classical and Digital Photo Technologies* and Pre-Press was founded. The magazine folded in 2005 due to financial problems. With the increase in new electronic media there are a number of websites and Internet forums with similar goals (e.g. the publishers of Photooko magazine now maintain the Photo Information Center - *http://photo-zine.com.*)

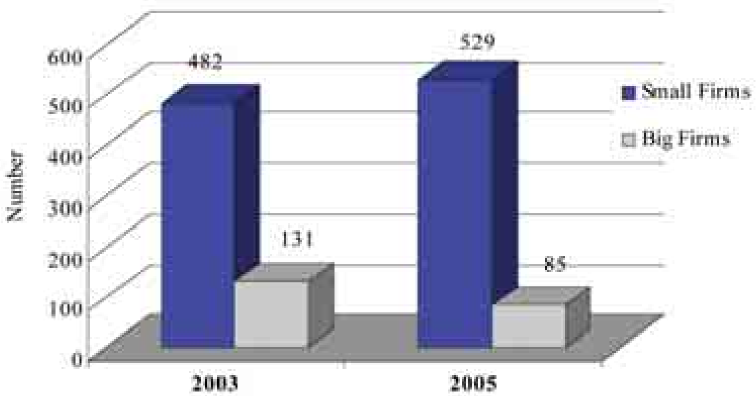
With the development of the media and advertising market many artists from the sector now find good possibilities for professional development although this sometimes calls for a professional compromise. With the collapse of the state photography sector in the mid-1990s, compensated to a large extent by the efforts of a number of prospering private companies who invested part of their income in the resurrection of traditional events, a number of new initiatives emerged in collaboration with the Photographic Academy, the Bulgarian Photographic Association and other professional organizations.

Fomus – One of the Major Private Sponsors of Art Photography
Fomus Ltd is the official distributor for Kodak and Gretag in Bulgaria. In September 1995 the annual photographic meeting Photo Vacation was organized by the Photographic Society – Bulgaria. In April 2001 Fomus celebrated its tenth anniversary and organized the National Competition of Contemporary Bulgarian Photography 1991-2000: 2220 amateur and professional photographers took part and a representative collection of the 425 best works by 134 artists was assembled.

The Bulgarian representatives for Konika-Minolta organize an annual photography review. With its large-scale exhibitions providing substantial prizes and with some of the leading photographers on the jury, Canon Bulgaria has also made a major contribution to the development of photography in Bulgaria. The activities of Alexander Bojinov and his Fodar Foundation based in Pleven are notable, with its Biennial of Experimental and Avant-Garde Photography. These are just a few of the events organized by entrepreneurs and art photographers.

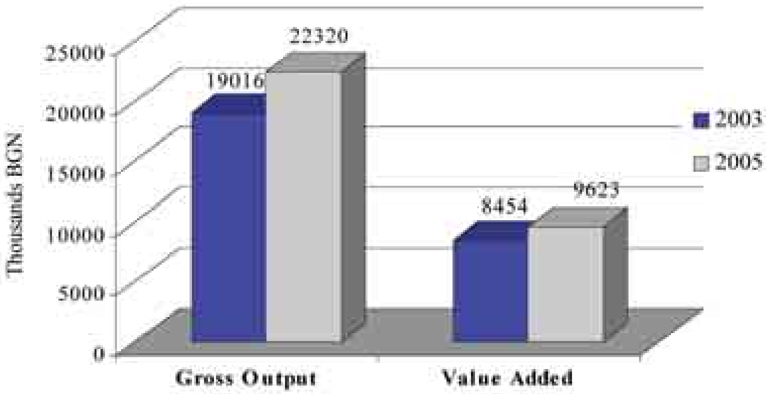
The data reveal that in the period 2003-2005 the number of companies and workers in the sector has remained stable – 613 companies and 2013 employees in 2003 and 614 companies and 2034 employees in 2005 respectively. These are predominantly small companies, although the decline in numbers of large companies is an indirect indicator of the growth of the sector as new small businesses emerge.

Graph 50. Number and Size of Photographic Companies for 2003-2005



As shown, the economic contribution of the sector for 2005 exceeds BGN22 million in gross production and almost 10 million in added value. According to these parameters photography is ahead of visual and graphic arts, as well as the organizations for collective copyright presentation. Its economic contribution is higher than all partial industries, with the exception of architecture.

Graph 51. Gross Production and Added Value in the Photography Sector, 2003-2005



Taking account of inflation over the period studied, gross production increased by 5 percent, added value by 2 percent and the number of employees by 1 percent. This is substantially below the average copyright industry indicators. These figures are the result of the major technological changes taking place – the increase in digital media and the decrease in orders from traditional studios. At the same time this restructuring accompanies a process of merging of photography with other copyright-based industries – more often a substantial part of photographic services and especially art photography are delivered as part of the advertising, book publishing, press, Internet and other sectors. This has been confirmed in discussions with experts. Ivo Hadjimishev speaks about the new challenges facing art photography, referring to the change in institutional conditions and respect of copyrights:

> "I recently performed a study of the private and state galleries involved in collecting photography in the US. One thing was repeatedly mentioned – young photographers who are just beginning their careers and have talent cannot survive on just art photography... Advertising agencies keep an eye on them and immediately attract them for one project, then another and another. That's where the serious money comes from... But that is also very dangerous. The photographers begin to lose their identity because there is the stylist hanging over you, then there are the make-up artists, and somebody writing the story-boards, and you are dead.
>
> Another area which is really professional is that of sport photography... Because you need talent, instinct, knowledge of the discipline, it is a huge business. The young generation of photographers can be seen on the pages of the lifestyle magazines and fashion magazines – that's where the money is. The industry of publications like the National Geographic is on the decline, and that was the Mecca of the breed of documentary photographers now killed by television. In this magazine they are replacing the management thinking that with a new editor-in-chief they will have a larger circulation. They don't realize that there is a change in generation and the current one does not read the paper edition – they are the generation of monitoring." (Ivo Hadjimishev, interview with the author)

We conclude with one of the major problems of the sector – the protection of copyright and neighboring rights. Photography, unlike other sectors where the issue has been regulated at government level, had been experiencing problems with copyright for decades before 1989. The leading photographers made great efforts to insist on being credited in publications for the work they had provided, and this issue has still not been overcome:

"They still have a problem with us when we go to a publisher and tell them, 'Look, here's the deal, you pay this amount towards a one-off publication of the image.' They can't seem to get it and still think they're doing us a favor by publishing the image, and then all you can do is start giving in, and be proud and happy that you're in this or that book... We have still not seen a photographer in Bulgaria sue a major publisher for violation of their copyright. Because the publisher passes over you like a tank..." (Views of experts in Sofia and Plovdiv.)

Advertising

The advertising industry in Bulgaria has been developing progressively since 1989. The constant demand for advertising services is driven by the booming market economy, the expanding private sector and the arrival of major international companies. Understandably, in the first half of the 1990s and even afterwards[1] the advertising industry appeared to be a convenient way of covert relocation of resources from the public sector into private hands in conditions of lingering privatization and political command of the economy. This has to be borne in mind as the performance of the advertising sector in that period did not always indicate a real revitalization of the economy. However, it was then that experience was obtained and contacts were established with the world's leading advertising agencies. Privatizations after 1998 and the arrival of major advertising conglomerates stepped up the development of advertising services countrywide.

The Association of Advertising Agencies – Bulgaria (ARA – Bulgaria) was established in 1995 as an independent public organization (*www.arabulgaria.org*). Its statutes define the organization's main goals as to the adoption of high professional standards and ethics among its members, the protection of their interests and the promotion of international exchange of information between the ARA – Bulgaria and other associations and organizations that have similar objectives. In 1996 the ARA – Bulgaria joined the European Association of Advertising Agencies which some time later was renamed to become the European Association of Communication Agencies (EACA). In 1996 the Association launched an annual National Advertisement Forum. Between 1997 and 1999, jointly with the Flag Consortium, the Association organized a series of seminars with Bulgarian and foreign keynote speakers. Another important ARA event was a PHARE Program-funded project implemented in 2000-2001 jointly with the *Association française des Agences Conseil en Communication* (AACC), the project title being: Technical Assistance and Transfer of Know-how to the Association of Advertising Agencies – Bulgaria. Since 2000 the ARA has organized an annual National Advertisement Festival and awards prizes.

In the opinion of Alexander Toromanov, manager of the Bulgarian liaison office of the US advertising agency McCann Erickson Sofia, 2001 saw a major change in the sector:

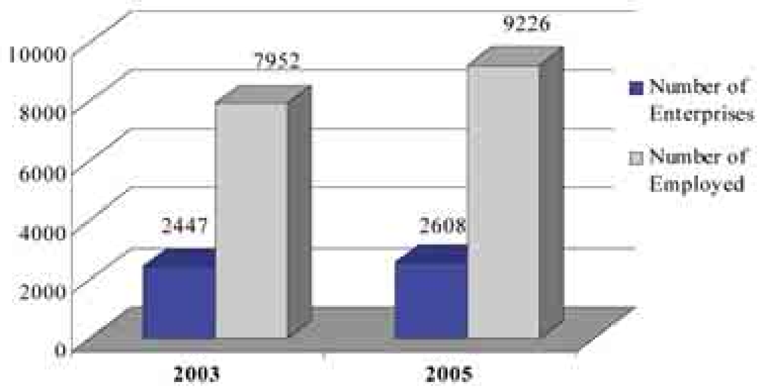
"Quite a number of advertisements were produced in Bulgaria prior to 2001. However, it is evident that the arrival of a second mobile service operator in a country totally changes the advertising market. The operators put a lot of money and know-how in their marketing and start making large quantities of TV adverts, which act as a spur on the local companies. The mobile service operator's aggressive marketing urges the other companies to do the same. Though it might be a coincidence: the market reaches a level where the major Bulgarian manufacturers that have not placed adverts so far nor have they realized the purpose of advertisement, decide on reorientation. (Interview in Dnevnik newspaper of 14 June 2002).

[1] Similar observable facts exist even today as evident from the recent exposures of the advertising contracts of the Government-owned company *Bulgartabac*.

To quote the President of the ARA Board, the state of the advertising industry in Bulgaria “mirrors exactly the state of our industry. All its deficiencies and problems do impact it. Naturally, the advertising industry is far better developed than government-owned sectors and entities as it is in the hands of international companies that control 80 percent of the whole market. They have established a *modus operandi* that is valid globally.” (interview of G. Nedelchev, Monitor newspaper, No 2899, 24.04.2007.)

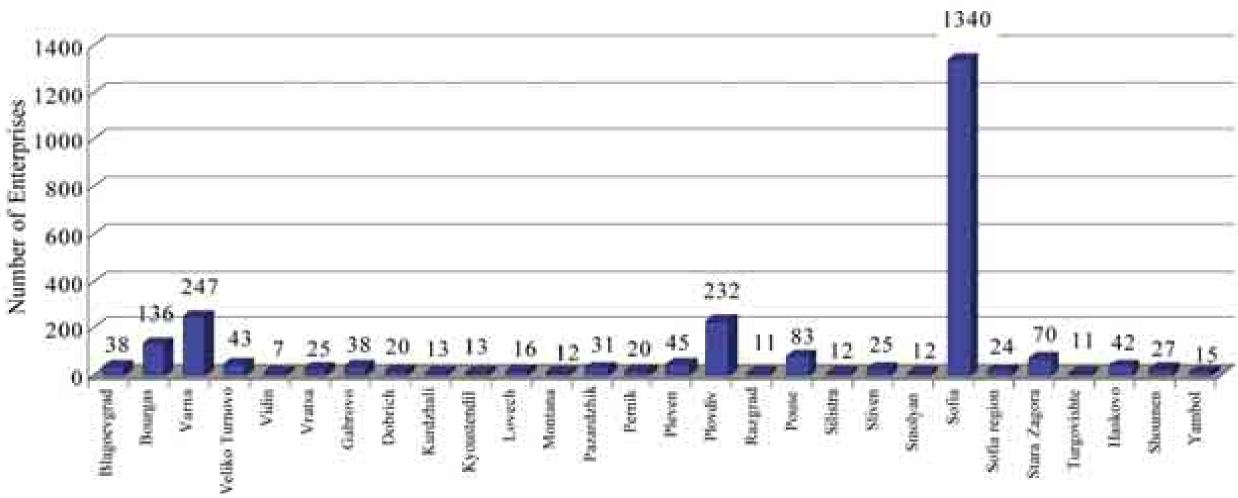
The advertising sector ranks third among the major copyright-based industries in terms of number of employees (9228 in 2005). That the number of companies and of their employees grew by 7 percent and 16 percent respectively between 2003 and 2005 is evidence of fast development. The chart below shows the change in the absolute number of companies and employment in the sector.

Graph 52. Number of Advertising Agencies and their Employees in 2003-2005



Over half of the advertising agencies are based in Sofia. The numbers in Varna, Plovdiv and Bourgas are significantly lower. Three-quarters of all advertising agencies are based in these four cities. The bottom position is taken by a group comprising eight regions with possibly fewer than 13 agencies.

Graph 53. A Regional Crosscut



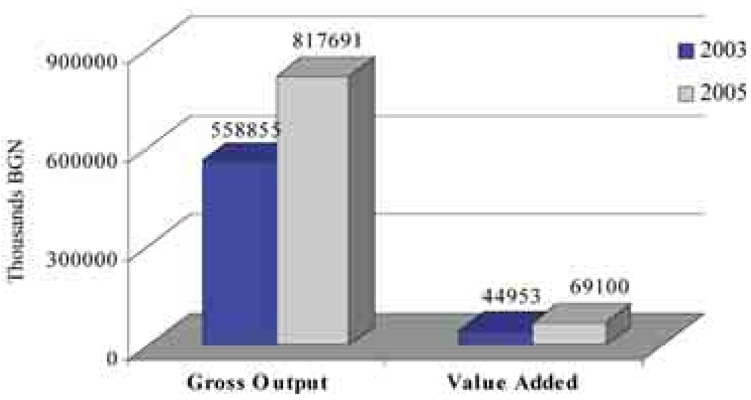
A relatively young private industry with a 15-year record finds it difficult to recruit highly-skilled staff. Advertising is taught only at the Faculty of Journalism and Mass Communications at the Sveti Kliment Ohridski University of Sofia, at the New Bulgarian University and at the American University in Bulgaria (AUB). The graduates of these three universities are therefore preferred by the advertising agencies. For instance Leo Burnett Worldwide which entered the Bulgarian market in 1994 replaced its team in 1996 with the first batch of AUB graduates. According to Nenad Lozovic, former representative of "S Team" Bates Saatchi & Saatchi in Sofia, now owner and manager of New Moment New Ideas, the non-availability of trained professionals is a real problem for the advertising business in Bulgaria: "...each newly appointed man or woman costs us a lot of investment in training as the advertising industry in Bulgaria has no traditions."[1] (www.yvox.net, 7 April 2005.)

Internet Advertising in Bulgaria in 2007

"In 2006 Bulgaria's gross agency market was worth BGN12.5 million (7 million net), annual growth rate of 110 percent. The highest spenders on Internet advertising in 2006 were the communications sector, followed by the banks, the financial services and the automobile industry. It is expected that in the next couple of years Internet advertising will constitute between 5 and 10 percent. Another leading trend on the Internet market is consolidation through purchasing smaller or larger sites. In 2007 the Internet advertising market will generate gross revenues of approximately BGN20 million whereas the net income will amount to BGN12 million. This is the forecast of the executive director of the Investor. BG Internet company Lyubomir Lekov." (source: *http://novini.dir.bg.*)

With a gross output amounting to BGN818 million in 2005 the advertising industry was the leader among the major copyright-based industries. However, the value added in the sector is significantly lower – BGN69 million or slightly more and thus the sector is out-performed by the book publishing and printing industry, software engineering and radio and television. The change in the advertising companies' gross output and value added in 2003-2005 indicates a sizeable growth rate with a 31 percent increase in the gross output and a 38 percent increase in value added, adjusted for inflation.

Graph 54. Dynamics of Gross Output and Value Added in Advertising in 2003-2005



Experts believe that in the first few years following Bulgaria's accession to the European Union the advertising market is expected to achieve a 20 percent annual growth rate which is well above the developed countries' average. This rate of growth is expected to continue for several years and then stabilize at globally prevailing levels. Reprinted below are two excerpts of forecasts made by leading figures in the advertising sector and printed recently in the Bulgarian media.

[1] Lozovic mentioned other problems facing the advertising industry: the relatively low percentage of long-term contracts. "…Long-term partnership with a customer makes it possible to plan units to serve exactly that customer. This is unobservable on our market, since some advertisers prefer to change the advertising agencies almost every year as they believe this will supply them with novel ideas." A third major problem, in his opinion, is the harsh restrictions on advertisements, which criticize some of the rules laid down in the Antitrust Law.

ARA President Krassimir Gergov announces a Record 35 percent Growth in Investment in 2007
Krassimir Gergov (one of the major stakeholders in the country's biggest media shop Piero 97), reported the 2006 advertisement net figures at the eleventh annual forum of the Association of Advertising Agencies. The estimates were based on Gergov's 'personal sources' and show a 38.33 percent increase which is €183 million in real terms of the 2006 investment in 2005. Internet advertising is the leader with 88 percent growth; radio advertising in second place with 42 percent; outdoor advertising ranks third with 38 percent and television advertising accounts for 37 percent with the printed media at 36 percent.

"In 2007 the total advertisement budgets will amount to €250 million which is net net investment (i.e., what remains after the discounts to the media and the agencies' commission). Hence the essential differences between these real sums and the gross sums that the monitoring agencies monitor and that Kapital publishes early in the year. According to Market Links data about investments in TV commercials in 2006 the advertisers put some BGN350 million in the media that they found most desirable whereas Gergov reports BGN182 million." (*Kapital* newspaper, No 20, May 2007.)

The Software Industry

The recent past

In the 1970s and 1980s Bulgaria was a traditional exporter of hardware and software within the framework of the former Council for Mutual Economic Assistance (COMECON) which was the socialist countries' economic community. In 1990 a team from the US National Chamber Foundation led by Richard Run estimated that: "…According to the official financial statistics for the year 1989, electronics and telecommunications technology accounted for 25 percent of Bulgarian industrial production, and the main part came from the eight large vertically integrated production organizations, while in the field of R&D, there were five main institutes, assisted by an interdisciplinary Coordinating Centre in the Bulgarian Academy of Sciences. In this branch a total of 130,000 people were working, 8000 of whom were highly qualified engineers. According to independent sources, in the financial year 1989 about 95 percent of the total production in this sphere was sold on the COMECON market, mostly to the USSR. In the last years of the 1980s, Bulgaria became the leading supplier for Soviet scientific-research and industrial institutes for fifth generation computer systems for scientific studies and projects. Moreover, Bulgaria covered a large share of the Soviet market for PCs." (Run, R. and Utt, R. /1990/, Bulgarian Economic Growth and Transition Project, National Chamber Foundation, Washington, p.22-1.)

Below is the observation of another US consultant group on the software situation in 1990.

The Bulgarian Software Industry in 1990: Short on Business, Heavy on Science
Commercially, Bulgaria is the least developed country we visited, but perhaps for that very reason its software community is among the most advanced. Because of the dearth until now of small businesses, much of the work is either custom systems for government outfits, or development tools and scientific or graphics packages, frequently for the Soviet Union, to which Bulgaria is a big supplier of both hardware and software.

The major commercial software house is Software Products and Systems Corporation, a giant state-owned combine with 1700 people that has been profitable by its own account and growing since it was assembled from a group of smaller companies in 1984. It reached revenues of $20 to $80 million last year. It also owns 40 percent of Novintech, a Soviet-based joint venture that's an umbrella for a hundred-plus computer-oriented small enterprises throughout the USSR. Right now, the management of SP&S and its many parts are trying to adjust to a rapidly changing world. The company has ploughed its profits back into "social development" such as cafeterias and company housing, and into its own expansion. It is building an impressive new headquarters complex near the center of Sofia, using Polish construction crews and materials from Poland paid for in computers and software. Another unit runs a training company which trains 5000 professionals a year. Recently it has opened a modern training center in Plovdiv (Bulgaria's answer to Silicon Valley) with 50 classrooms and a 200-bed residential complex.

Among SP&S's units is Interprogramma, a 200-programmer research institute owned in a joint venture with the Soviet Ministry of Electrotechnical Industry and Instrument-Making (MinElectroTekhPribor). Its products include a sophisticated mainframe text database, more than just an index-and-retrieval system, which manages documents as objects with structure and hierarchy; Multi-C, a hierarchical development environment for the C language that lets you manipulate and edit your code at four levels; and GrafCAD, a CAD package for the PC. *(Report of a US consultant group, source: http://findarticles.com/.)*

Eight years later a report on Bulgaria's market for computer software prepared by the Commercial Service of the US Embassy in Sofia concluded as follows: "…Bulgaria has many well educated, talented and English speaking software programmers, who are used for the development and implementation of software projects in Bulgaria. Ninety per cent of the software produced in Bulgaria is customized and only ten percent is off-the shelf application software. As there are no official statistics available, the size of the Bulgarian software market was estimated on the basis of interviews with Bulgarian industry specialists. The sales of locally produced software for 1998 amounted to $13 million, up from $10.4 million in 1997 and $8.3 million in 1996. The major part of the market is held by seven big local companies which produce software and localize the products. These companies have aggregate sales of $8 million per year. There are about 200 small software developing companies which typically produce five or six customized products per year for the amount of $100-150 each, which would indicate total annual sales of under $180,000 total. Many of these small software developers are working in the field of development of customized application software in the area of accounting, payroll and business management, and database management, which is very well accepted on the market, because it is in compliance with the Bulgarian legal and accounting framework. However, the software developed locally until now does not provide global solutions." (Source: CEE Business Information Center /CEEBIC/, U.S. & Foreign Commercial Service, 1998.)

The report mentions software piracy as a serious issue in Bulgaria and notes that the Bulgarian Government is taking measures to stimulate the use of legal software starting with the State Administration, as exemplified by the agreement signed with Microsoft in 1998 to use only licensed Microsoft systems and software applications.

The Heaviest Blow to Software Piracy in Bulgaria

February 2001: A total of 6000 pirated CDs and 5 computer configurations installed with unlicensed software were seized by the police in the course of a large-scale operation last Thursday at Slaveikov Square. This is the first anti-piracy operation in the open which traced and searched two warehouses that supply street vendors with pirated disks.

The highest number of unlicensed software street vendors is found at Slaveikov Square. For years its name has been synonymous with buying and selling pirated products and of vendors who go unpunished. The operation involved over 30 officers from the Economic and Criminal Police of the Ministry of the Interior, Sofia Division. The computer club at 4 Khan Kroum Street which is very near to one of the warehouses that supply the vendors with disks was searched within the framework of the operation. Thirteen computer systems with pirated software were seized. Six vendors and suppliers were arrested. The police are investigating three other persons.

Last January, within the framework of the anti-piracy program of the Ministry of the Interior (MoI) and of the Business Software Alliance (BSA), the Sofia Police Division searched Prolife Engineering OOD in Sofia and the gamers club of a one-man company, VIM, in Pancharevo for pirated software. All computer systems with pirated software were seized. Both cases are being investigated.

The BSA Committee for Bulgaria was founded in early 1999. Today its members are ActSoft, Datex, NTCHS, Microsoft Bulgaria and ProSoft. (Source: *www.microsoft.com/bulgaria/press/news_02022001.mspx*.)

The Software Industry today

A study by CBN Panov & Stoichev commissioned by the Bulgarian Association of Information Technologies (BAIT) showed that in 2005 the real number of IT companies was approximately 1000. Further, the study showed that 2005 was the most successful year for the IT business (sales of PCs, software, networks and services) in Bulgaria. The previous year's revenues of €682 million represent a 22.4 percent increase over 2004 when the market development rates were better than at any previous time with a 14.7 percent growth rate. It is expected that the 2007 IT sector earnings will exceed 1 billion. The IT business concentration is growing: in 2005 over 68 percent of all earnings were generated by the top 50 companies. The agency reports that software companies have earned €96.4 million and the Internet companies, €46.6 million.

The CBN study that covered 821 IT companies shows that with 12,812 long-term contracts of employment they account for 0.44 percent of the permanently-employed workforce. With a further 1000 jobs in the IT sector they boast a 7.7 percent increase over the previous year. The 2006 IT sector job forecasts indicate a further 2000 or so new jobs.

The study exposes the deepening crisis within the IT sector caused by the shortage of skilled manpower. The number of young specialists being trained is insufficient and their skills are unsatisfactory. The study predicts that Bulgaria's EU accession will aggravate the problem and will be one of the factors to be considered for the under-performance of many small Bulgarian companies. The shortage of specialists destroys to a great extent the Government's effort to build the Information Society in Bulgaria. (Source: *http://www.bait.bg. Data about the companies' financial results and jobs in 2005.*)

Bulgaria in the World Software Market

Bulgaria ranks among the countries most desired by the world's major software companies for their IT projects. This is the conclusion of the Economist Intelligence Unit. The analysis summarizes the opinion of 500 company managers worldwide. Number 13 in the company of 60 states in terms of being attractive for outsourcing, Bulgaria performs better than the US, the UK, Chile and Romania. India and China are the top countries, according to the analysis, yet it is expected that Eastern Europe will benefit from this situation.

"Bulgaria is the right location for the expensive, fast and non-conventional boutique projects of the software giants," explained Kuncho Kouzhouharov, the BAIT press officer, to Monitor newspaper. "Bulgarian advantages are the availability of highly-competent IT engineers and its inexpensive manpower. Another advantage is that Bulgaria is in the time zone of the central offices of the contracting companies." IT sector experts claim that most Bulgarian companies are currently engaged in boutique projects with 90 percent of the contracts being for Europe, the US, Canada and Australia. (C. Dinkova, C. Tzolov, Monitor newspaper, 24.02.2005).

Other interesting data on the 2005 software industry are reported by *Computerworld*, No 24 of 2006. The annual rating of the 100 leading ITC companies included 40 Bulgarian software engineering companies. The results published give the following profile:

- The software business has generated BGN103 million (52.8 million), the breakdown being: software sales – BGN32 million; software development – BGN41.8 million; software installed in system integration projects – BGN30 million. Over one-third of the BGN42 million revenue was generated by the development of software earmarked for export.

- In 2005 the software developers amassed BGN41.8 million which constitutes a 22.2 percent increase over 2004. The ten leading providers are responsible for 75.2 percent of the total amount of revenues generated by software development.

- Twenty-three of the 29 companies that have reported revenues from software are Bulgarian of which six are partially or entirely foreign-owned.

- The average monthly income of an engineer in a software development company is BGN719. The highest reported monthly income is BGN1573.

- On average the rated software companies have 102 recruits. In 2004 the average figure was 94.

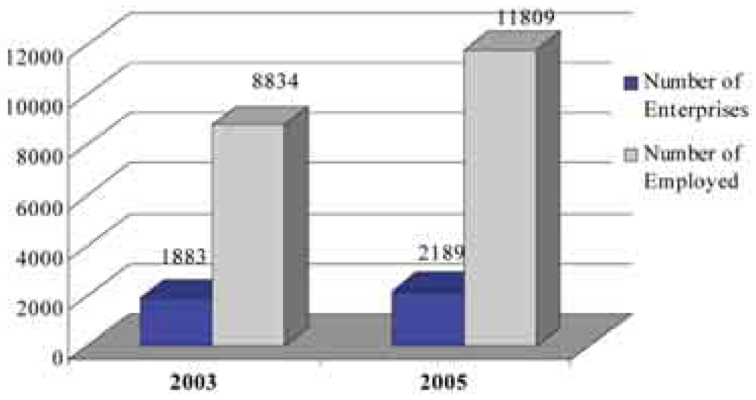
- Companies whose core activity is software development report a saving of BGN80,401 per recruit (the ratio of personnel costs to revenue). In the previous year the ratio was BGN31,619 per recruit.

- Nine of the companies that participated in the Top 1000 Software Developers work for export: Fadata, Sirma, Sciant, Rila Solutions, CNSys, Seeburger Informatics, Nemet-schek Bulgaria, DMT, Interconsult Bulgaria. On average 67.86 percent of their output is earmarked for export. In 2005 their software development for customers abroad generated BGN16.3 million of revenues which is 45.5 percent higher compared to the preceding period.

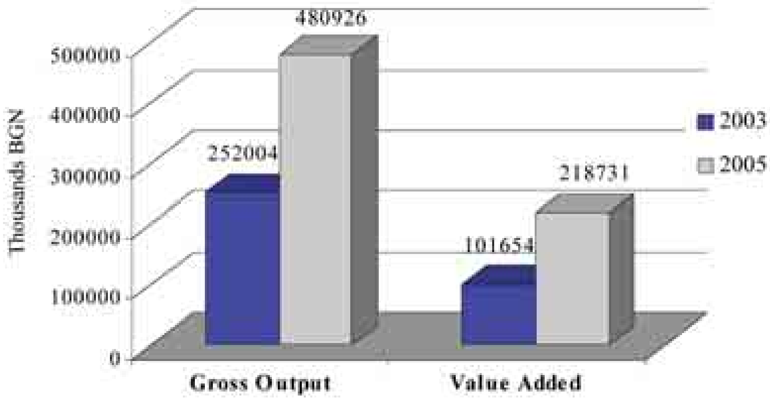
These are consolidated figures computed on the basis of what the companies which responded to the survey chose to report. The experts think the figures are understated and the survey ignores significant aspects of software development in the country. Proof of this is the commentary in the Internet version of the newspaper: "… Your analysis is flimsy and it is my guess it leaves out many western and small players. The former simply repatriate their real profit rather than fill in a tax return for their Bulgarian companies; the latter are small and you left them out. I know of at least five or six companies that go as one small company in your ranking and I know several companies that are not in your ranking though they have between 50 and 80 persons in their employment." (*A software developer who has chosen not to disclose his identity, 04.03.2007.*)

This criticism from an anonymous software developer compares to a certain extent with the data provided by the national statistics. Yet these data are more reliable, since they refer to all software companies, not only to the largest. As mentioned above, software and databases are one of the fastest developing copyright-based industries. During the period 2003-2005 both the number of firms and the number of their employees has increased, while the value added generated almost doubled:

Graph 55. Dynamics of Software Firms and their Employees during the Period 2003-2005

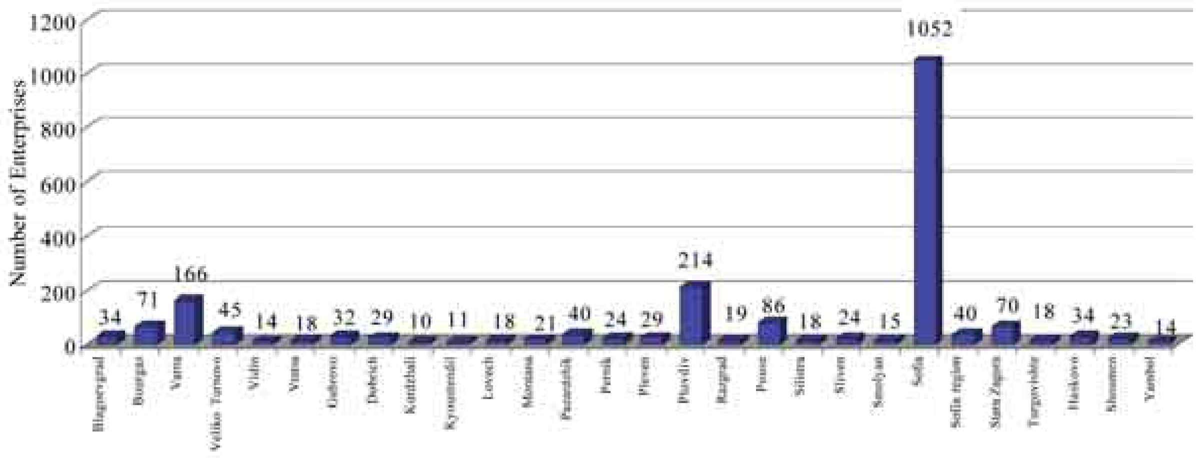


Graph 56. Gross Output and Value Added in Software and Databases during the Period 2003-2005



The current geographical distribution of software companies according to Bulgaria's 29 administrative districts mirrors the distribution of the former centers of the electronics industry up to 1989. Half of the software firms are located in Sofia, followed by Plovdiv and Varna. The other three centers with relatively large numbers of software firms are Rousse, Bourgas and Stara Zagora, as well as those in Pazardjik and the Sofia region.

Graph 57. Geographical Distribution of Software Companies



Software industry prospects

An interview for the Bulgarian version of the newspaper *Computerworld* with a manager of a leading software company accurately summarizes the prospects provided to the sector by Bulgaria's accession to the European Union in January 2007 and the problems that might be caused by EU membership.

Software in Bulgaria – Prospects for 2007

"All Bulgarian IT companies, my company included, expect that the business would grow in 2007 and that the Government would start making an efficient use of the structural funds that are available to us. As I see it, the reason for not having the desired speed at the start is that the Government institutions find it difficult to define and manage good projects. On the one hand this is to be attributed to the lack of competence within the Civil Service and on the other hand, to persistent corruption.

"The economic context in which our companies will operate in 2007 is far friendlier than before. The reduced corporate tax rate will enable companies to invest more; the imprecision of the Value Added Tax Act vis-à-vis the export of software and services is rectified. Naturally, the Government can do more than that – for instance it is very logical that the Government should offer the preferential treatment now reserved only for foreign companies that plough their profits back into Bulgaria to Bulgarian companies that do the same. The promotion of investment in high technologies is something that governments of vision have been doing for many years now (India, Romania) and the policy has proved to be beneficial for the national economy.

"Unfortunately the problem of highly qualified engineers for the IT sector becomes worse with every passing year. The absence of an adequate human resource policy badly impacts the sector. The entry of IT businesses with low value added (maintenance centers, call centers, etc.) and their presentation as huge investments by foreign companies disturbs the IT labor market. This impacts negatively both the sector and the economy as a whole: extensive businesses deplete government institutions, banks and companies of their IT staff before our eyes. Of course, the market is capable of self-regulation; yet, the big red alert currently is that the acute shortage of highly qualified workers is observed nationwide and not just in the IT sector.

"Membership in the European Union presupposes easier access to the markets in Europe. Understandably, it will take the Bulgarian companies some time to develop their marketing and sales in a way that will make them active players on this market. I believe investment in Bulgarian IT companies will increase. It is increasing even now… In parallel, the wages are going up, hence the need to find other competitive advantages over the western companies. If the Bulgarian companies are to survive, they will have to make a U-turn from the price-based sales model to sales based on other competitive advantages like specific expertise, products, unique services, etc. This is related to new investment in better marketing, in offices in other countries, etc." *(Tzvetan Alexiev, Sirma Group, Computerworld - No. 4, 200.7.)*

The future development of the sector is closely associated with the promotion of copyright in software development and the fight against intellectual property theft. An IDC survey commissioned by the Business Software Alliance (BSA) forecasts that a 10 percent decrease in piracy in Bulgaria between 2006 and 2009 would result in a 103 percent increase in the IT sector which means that in 2009 it could be estimated at US$622 million, that over 2000 new well-paid jobs would be created and that the sector would add another US$130 million to its contribution to GDP. To quote Beth Scott, BSA Vice President who is responsible for BSA operations in Europe, the Middle East and Africa: "…The software has transformed the productivity and competitiveness of any company in any market segment in the world and made the IT industry the driving force of economic development. The survey showed that even the humblest and most achievable decrease of piracy rate could result in a huge advantage for the local economy. With determination and hard work the IT sector's growth in Bulgaria will continue and will go even at a faster pace." *(BSA Bulgaria, www.bsabg.org.)*

PART FOUR - Conclusions from the Survey and Practical Policies Toward the Copyright-Based Industries in Bulgaria

In this final section we highlight certain points in the analysis of the data, which show certain copyright activities making a particular contribution within the period studied. This must focus the attention of governmental and public institutions and could serve entrepreneurs and other economic agents in the respective sectors as a directive for their activity in developing strategies, lobbying, etc.

This analysis was made possible thanks to the specific methodology applied in this study, giving information on the major economic indicators to the lowest possible level – NCEA-2003 (NACE) codes. This will guarantee an analysis not only of separate activities within the four major groups, but also of the economic activities this group encompasses. The team also uses information gathered during interviews with experts and group discussions, telephone interviews, secondary analyses of previous studies, etc.

The Copyright-Based Industries – a Rapidly-Developing Center, which could become one of the Drivers for Economic Growth in Bulgaria

The picture that emerges after comparing copyright-based industries with other sectors is one of a small, but significant sector – with higher or similar values to sectors such as energy production, hotels and restaurants, health and social welfare activities, and the extracting in-dustries. This picture, however, does not show the growth rate, where the copyright-based industries are among the leaders. The survey registered significant growth in this sector for the period 2003-2005 – in only two years the gross value added, calculated on the index of current prices, grew by 50 percent, the gross output grew by 33 percent, and the number employed by 13 percent. The increase in value added exceeds by far the growth rates of the economy as a whole (11.5 percent). We are therefore seeing a rapidly-growing industry, which, with adequate public support, could become one of the motors of economic growth in Bulgaria in the next few years.

Public Policy in the Culture Industries – from the Distribution of Public Goods to compensating for Market Failures and providing Seed Capital for new Businesses

Calculated separately, the value added of the main copyright-based industries makes up 2.12 percent of Bulgaria's GDP for 2005. With this it exceeds the share of the extracting industries and is close to the share of value added generated by the hotel and restaurant industry. Apart from software and advertising, the remaining seven main industries amount to a share of 1.27 percent of the Bulgarian State Standard. At the same time, the budget subsidies for culture in 2005 made up 0.72 percent of GDP – i.e., a mere third of the economic contribution of the main copyright-based industries, almost twice as low as the contribution of the seven main industries directly connected to culture.

These results have a direct bearing on public policy in the sphere of structuring and man-aging of subsidies for cultural activities. They should not be considered simply as public goods, distributed in accordance with long-term cultural and social needs, but as a partial compensation from copyright-based industries for their efforts in meeting the cultural and social needs of society: as a means to correct market failures in meeting these needs and as seed capital for new businesses. This presupposes significant growth in public-private partnerships in managing these subsidies.

The indices used for comparing copyright-based industries are interconnected, and behind the figures and classifications there are concrete problems in the development of each industry. Every company and organization is constantly solving problems related to increasing revenues by means of intensifying production, improving quality, renewing equipment and technologies, expanding markets, etc. That is why current needs and critical points in the development of each of the sectors differ greatly. In some cases it can be lack of specialists (software, advertising), in others product promotion and services abroad (cinema and videos, visual arts), in others, technological renewal (book printing, photography) and so on. The preceding section of the report shows the current state in these sectors; there are extensive possibilities for setting up targeted public policies and for elaborating adequate strategies for their development.

With Bulgaria's accession to the EU it is expected that some of the problems outlined will be addressed by specific EU measures and policies. The tendency towards mobilizing cultural and creative resources in the EU with the aim of increasing their economic weight, encourages the EU Commission and the Member States to make more efficient use of structural funds and the Cohesion Fund for supporting small and medium-sized enterprises (SMEs) in the creative sector (where the copyright-based industries fail). A future survey on the potential of copyright-based industries in the six economic regions in Bulgaria would facilitate local SMEs in their future application under Operative Program measures (mainly OP for regional development, developing the competitiveness of the Bulgarian economy and for developing human resources).

Three Centers of Exceptionally High Growth – two Core and one Partial Copyright Industries

The Film industry: Taking inflation into account, the growth of the gross product for the period 2003-2005 is calculated at 62 percent, and that of value added at 197 percent. In the production of cinema and video films alone: in 2005 the gross output was almost BGN70 million, and value added BGN21 million – compared to BGN36.6 million and BGN5.8 million respectively for 2003, i.e., an increase of over three times of value added. As a comparison, the state subsidy for the Agency's National Film Centre increased from BGN3.9 million in 2003 to BGN6.5 million in 2005 (a growth of 60 percent at current prices), with no change in the subsidy for feature films and documentaries for Bulgarian National Television (about BGN6.5 million).

Software and databases: When inflation is taken into account this industry shows a 115 percent growth of value added and 91 percent of gross output, and we also observe significant growth in numbers employed – 34 percent (as compared to seven percent in the film industry).[1] Other activities on developing software alone, including development of original software according to the client's needs and web design, marked an even higher growth rate and compensated for the lower increase in the production of standard software. It is extremely important to note that growth in this sector occurred with four times higher real values: value added for 2005 here is BGN219 million with 11,809 employed (compared to BGN42.5 million and 2,182 employed in the film industry). With respect to the value added generated, the software industry is almost on a par with the leading sector: book publishing and printing, with higher labor productivity (2.2 times fewer people employed).

Architectural and Engineering Activities and Technical Consultations: For the period surveyed this sector shows an increase of 102 percent of value added and, with inflation taken into account, a 37 percent growth in gross output and a 16 percent growth in employment. In real values this is a small sector with a gross output of BGN50 million and BGN15.3 million value added, and it involves copyright (10 percent in the survey). The importance of this sector, however, should not be underestimated, because it has a lot of potential, which is not taken into account by national statistics due to the peculiarities of the building sector as a whole. According to experts, the share of the informal economy here is significantly higher than the 50 percent average for the country as a whole.

[1] In our opinion, the increase in film production is related to higher employment, but it is dependent on the specifics of this type of production, where a number of ancillary activities are contracted out (for instance, transport, prop making, hiring of premises, etc.) or are paid at an hourly rate (with or without a contract). This is not the case with software production.

These are the three main copyright-based industries where the survey observed the highest growth and that is why they are worth a more detailed study with the aim of clarifying the sources for this growth and the related specific needs and problems. From surveys of such rapidly-growing industries in other countries, we can suggest, even at this stage, that public policy here should mostly assist the efforts of the private sector by facilitating the introduction and enforcement of copyright legislation in support of the export potential of these industries and aiding the education and qualifications of people employed. Interviews with experts show that the transition from an entrepreneurial (small and medium-sized enterprise) to a corporate business is a serious issue and the lack of experienced corporate managers becomes an obstacle to further growth.

We should note that in the group of partial copyright industries there is a specific internal structure – different from the core and interdependent industries, where we observed several clearly delineated leaders significantly above the rest, the leader being architecture. We cannot talk about "champions" and "outsiders" as the sections differ widely one from the other. From a practical point of view this consists of efforts towards improving the general conditions for realization of the copyright element.

The Fight against Piracy and Protection of Intellectual Property – a Priority and Major Factor for Development of the Sector

Concurrent with specific measures in support of the rapid growth in book publishing, software, architecture, and furniture production, the relative homogeneity of the predominant part of the core and partial copyright industries favors development of common policy measures for their support. The positive trade balance in most of these industries is an additional argument in this respect. Possible strategies include improving general conditions for protec-tion of copyright, whose importance is already widely-recognized among entrepreneurs. In more specific terms, it is necessary to introduce:

- Measures for improving the administrative capacity of the societies for managing collective rights, increasing their functions, stimulating transparency at every stage of their activities and optimizing their dynamic link with law enforcement authorities.

- Strengthening the implementation of intellectual property law, especially in the distribution of protected items and services via the Internet. This should include tightening controls on LANs and cable TV networks in the cities and towns.

- Improving competence in and knowledge of copyright among the representatives of the legal system in Bulgaria, especially among judges and prosecutors and adopting consistent good practices in pretrial procedures in cases connected with infringement of copyright and neighboring rights.

- Measures for overcoming the lack of competence on copyright and related issues on the part of judicial institutions, by means of consistent and systematic distribution of information and specialized training, as well as through the formation of specialized judicial teams with a thorough knowledge of copyright.

- A consistent policy for disseminating information on economic and moral loss brought about by piracy both in the economic sector and in the sphere of individual consumption, with the aim of creating intolerance towards piracy and infringement and supporting a media lobby in defense of copyright and neighboring rights.

The Need for a Long-term Strategy to Overcome the Consequences of De-Industrialization in Interdependent Copyright Industries

The results for the interdependent copyright industries show evidence of deindustrialization. Only 15 years ago most industries in this group had a clear export orientation. Currently, with the exception of paper production, production and export of equipment and consumer durables for the core copyright-based industries are exceptionally low and the needs of the internal market are met mainly by imports. Similar to other cases of deindustrialization this was connected to destruction of industrial assets, emigration of the most qualified researchers, engineers and technical personnel, or their reorientation to other activities such as trade and servicing of these products. Due to the efforts of entrepreneurs from the former state industries, Bulgaria has preserved small niche industries such as the production of packaging materials (CDs, DVDs, etc.) and other consumer durables, the pro-duction of optical and electronic components, etc.

With this in mind, public policies should encourage foreign investment in these sectors; for identifying and supporting innovative local entrepreneurs and supplying strategic investment for areas of significant growth potential, where the country has a specific competitive advantage (research, industrial and cultural traditions, access to markets, attractive production factors, etc.).[1]

Strategies for Increasing the Export of Copyright and Other Intellectual Property Products

The survey provided results for one especially significant economic characteristic – royalties, i.e., copyright payments from abroad and to foreign countries. They enable us to obtain information about Bulgaria's place in the international exchange of intellectual property products and neighboring rights. The data provided by the Bulgarian National Bank, however, are not specific and do not allow for a more detailed analysis of the import and export of rights in the different categories of intellectual property. That is why it is important in the future that the monitoring system for this important indicator be improved and for the National Statistical Institute to collect information on these specific economic activities.

Urgent Need for Improvement of the National Classification and Registration System of Economic Activities

At present a number of important copyright industry-related economic activities are classified under large mixed codes combined with other, unrelated activities. This requires much additional effort and resources and at the same time makes it impossible to correctly evaluate the copyright industry's economic contribution. We recommend the establishment of a special task force comprising representatives of the National Statistical Institute, the Ministry of Culture, University of National and World Economy Intellectual Property Department and members of the Bulgarian WIPO research team to revise the Bulgarian version of NACE and suggest necessary changes.

Such changes would correspond to the rapid development of copyright-based industries in the country and would provide relevant information for practitioners and policy makers. We especially recommend changes in the 12 codes, described in *Appendix 4* of the present report, as well as the number of copyright industry-related codes in the Bulgarian Custom Tariff. Changes in the existing rules for classifying export-import data are also needed.

In general, the proposed improvements in providing Bulgarian economic statistics will help public policy in the field of copyright-based industries and will make a valuable contribution to current efforts to combat piracy, allowing for adequate measurement of the effects of anti-piracy campaigns.

[1] An example would be the production of holographically-protected materials. *DEMAX Print LTD, unique for Southeast Europe* (see *http://www.demax-bg.com/holograms_bg.htm*).

This process which was timely in view of the recommendations of the EU Council of Minis-ters (9021/07, May 2007), was made following research by the EU Economy of Culture, towards the European Commission to intensify the work of Eurostat on the definitions and methodologies for improving and harmonizing cultural statistics[1] in Member States. The Council appealed for the incorporation of a cultural element, including the cultural industries in the statistical program of the Union 2008-2012,[2] and with this in mind, cooperation of all institutions concerned is sought.

In this respect, the present survey can be viewed as a concrete step by Bulgaria towards EU targets – a survey with the aim of determining the contribution of copyright-based industries to the national economy, and thus to the fulfillment of the aims of the Lisbon strategy.

[1] Council Resolution of November 20, 1995 on the Promotion of Statistics on Culture and Economic Growth, OJ C 327, 7.12.1995, p. 1.
[2] Commission proposal for a Decision of the European Parliament and of the Council on the Community Statistical Programme 2008 to 2012, doc. 15536/06.

APPENDIX 1

Development of Legislation on Artistic Property in Bulgaria

Forms of Protection of Copyright and Neighboring Rights

1. Development of Legislation on Artistic Property in Bulgaria

In spite of the unified system for protection of the objects of artistic property every state has certain specific legislative rules relating to certain aspects: terms, rights, forms and ways of use of the works as well as the terms for protection and options for transfer, succession or renting copyright against remuneration. A brief review of the development of Bulgarian legislation in the field of copyright and neighboring rights will be made to present certain specifics in the regulations.

The first legislative rules on copyright referred to the rights of publishers and authors on conclusion of publishers' contracts. Publishers' contracts formed a separate part of Section Three in the Commercial Act of 1897. The first Bulgarian Copyright Act was adopted in 1921, published in State Gazette (SG), issue 86/1921, amended and supplemented in SG, issue 246/1936 and SG, issue 73/1939. It was subsequently abrogated, based on the Act on the Abrogation of All Acts Issued up to September 9, 1944, SG, issue 93/1951.

In 1951 the second Copyright Act was adopted, SG, issue 92/1951. Subsequent amendments and annexes to the Act were published in SG, issues 10/52, 55/1956, 35/1972, 30/1990, and 32/1990. The Copyright Act was in force until August 1, 1993.

Until 1972 copyright law was consistent with Soviet legislation in this field. The changes made in 1972 reflect European tendencies: the free use of works on radio and television was removed, and the term of protection of authors' works was extended to 50 years *post mortem auctoris.*

The Copyright Act of 1951 also regulated the issues of the author's remuneration. The first authors' tariffs were determined starting with those for writers. In 1971 a unified system including eight different tariffs for authors' work in any field of art and for the work of the performing artists was introduced by Decree of the Council of Ministers /DCM/ No 10/1971, SG, issues 31, 32, 33, 34/71. Two additional tariffs were adopted in the period 1975-1985 for performers in places of entertainment and advertising. The main rule during this period regarding remuneration prohibited payment for activities not specified in the tariffs or payment of higher amounts than those provided for. Exceptions were allowed based on the decision of the Ministry of Culture and the Ministry of Finance. The maximum amount was double the amount specified by the tariff.

The tariffs were abrogated after November 10, 1991 by force of DCM No 19 of 1991, SG, issue 16/1991. Their abrogation marks the start of free contractual relations in determining the amount of remuneration due. Outside the Decree's scope the so-called statutory licenses remained. In 1993 these were also removed by virtue of DCM No 160.

Until the adoption of the Copyright and Neighboring Rights Act in 1993 matters related to publishers' contracts, contracts for public presentation of artistic works and for creation and use of audio-visual works were regulated by the Contracts and Obligations Act.

In an international context, Bulgaria joined the Berne Convention for the Protection of Literary and Artistic Works in 1921. In 1974 it joined the Universal Copyright Convention comprising part of our internal legislation as of June 7,1975.

At present, the following laws regulate the areas of artistic property and the related industries in Bulgaria:

- The Copyright and Neighboring Rights Act from 1993, SG, issue 56/29.06.1993, amended and supplemented SG, issue 99, amended. SG, issue 105/2005 effective from 10.01.2006, amended. and supplemented. SG, issue 29, issue 30/2006;

- Administrative Regulations of the Production and Trade with Optical Disks, Matrixes and Other Bearers, Containing Copyright and Neighboring Rights Objects, SG, issue 74 of 13 September 2005. The law provides for the administrative rules and control over the production (including reproduction), distribution, import and export of optical disks, matrixes and other carriers of works protected by intellectual property and related rights. Special registration is provided for production of matrixes with record and the reproduction and distribution of optical disks and other carriers of works protected by intellectual property and related rights. According to this law producers of optical disks and matrixes are subject to a highly restrictive licensing regime.

- The Obligatory Depositing of Copies of Printed and Other Works, SG, issue 108/29.12.2000;

- Act on the Amendment and Supplementation of the Radio and Television Act, SG, issue 138/1998;

- The Telecommunications Act, SG, issue 88/2003;

- The Film Industry Act, SG, issue 105/2003;

- The Protection and Development of Culture Act (PDCA) SG, issue 50/01.06.1999;

- The Protection of Competition Act (PCA), published in SG, issue 52/98, amended. issue 101/05;

- The Radio and Television Act, SG, issue 138/199;

- The Crafts Act, SG, issue 42 of 27/2001.

2. Scope of Artistic Property – Types of Works regulated by Bulgarian Legislation

According to the national legislation regarding intellectual property, artistic property is considered as a separate sub-system. It covers creativity in the fields of literature, science and art. National legislation on artistic property does not use the terms 'literary and artistic works' but refers to objects of copyright law.

Objects covered by copyright law are works resulting from creativity expressed in any way and presented in any objective form. In order to receive legal protection, creativity should represent the creation of a work. Bulgarian legislation protects the author, while a presumption of authorship is made at the moment of creation of the work.

Copyright protection is granted on creations which are:

- the work of a certain author from the moment of creation or dissemination;
- the result of creative activity where creativity is expressed as the author's vision;
- works presented in any way, i.e., all known methods of expression by means of which the work can reach the consumer are permitted and relevant. The notion of objective form also includes material forms such as audio records, video records, books, etc.

Works are classified in three main groups as objects of copyright:

- *original works:* these are works resulting from spontaneous creativity such as literary works,[1] musical works, stage acts – drama, opera, mime, choreography, etc. films and other audio-visual works, works of art, works of applied art, design and handicrafts architectural works, photographic works, projects, maps, schemes, plans, etc., referring to architecture, city planning, geography, topography, museum works and in any field of science or technology; graphic design.
- *secondary works:* these are revised original works in which changes in the sound, means of expression and representations of objective form have been introduced. The authors of secondary works obtain a separate copyright over them, different from the copyright over the revised work such as translations, remakes, arrangements, adaptations and dramatizations. National legislation considers a remake of a folk tale as similar to a work of a certain author.
- *collective works:* these can be classified in two groups: the first includes collective works comprising different works with separate authors. The second group comprises separate works and materials. Materials are not considered as objects of copyright.[2]
- *part of a work:* this is also a separate object of copyright under national legislation. This part should be sufficient in volume to reveal the contents of the work.

Bulgarian copyright legislation aims to provide protection for works created and/or disseminated in an objective form and not the idea for such work.

3. Exclusive Right over Artistic Property

According to national legislation, copyright is an exclusive right of authors to use a work and to authorize its use by others. "Use" is understood as the realization of the economic rights of the author specified under the law.

[1] According to Bulgarian legislation in the field of copyright law, computer programs are considered literary works. Protection is provided for the sequence of zeros and ones. This is equal to the sequence of letters in a sentence.
[2] Bulgarian legislation provides for separate rules as regards databases although these are considered collective works, being a collection of materials only. The specific right is granted to the producer of the database for 15 years starting from the date of their creation.

It is an important principle that copyright arises **automatically** from the moment of creation of the work. An element in the nature of copyright is the existence of **originality** in the ways of expression and the objective form. The work should be **disseminated** at a place before an unlimited number of persons[1] and at a time chosen by the author.

Copyright protection is not based on registration. There is no statutory requirement for the author to use his/her work.[2] As regards copyright licensing, an agreement in which the author agrees to transfer all his/her rights for future works is considered void. Copyrights are licensed by means of contracts.

The main economic rights of the author which relate to the realization of the economic potential of the objects of copyright are as follows:

- ***reproduction:*** the direct or indirect reproduction of the work or any part thereof in any way and in any form, permanent or temporary including its saving in digital or electronic format.

- ***distribution:*** the sale, exchange, donation, rental and preservation in commercial quantities, offers for sale or rental of originals and copies of the work;[3]

- ***public presentation or performance*** of the work in recorded or live broadcasts;[4]

- ***broadcasting the work by wireless means*** – broadcasting by radio, television or underground transmission, installing a constant telecommunications network in a satellite, transmitting signals or carrying programs under the control and responsibility of the broadcasting organization to be directly or individually received by the public with or without the intermediary of an organization other than the broadcaster;

- ***transmission and retransmission by cable*** carried out by an organization, different from the broadcaster, upon condition that it possesses the right to broadcast the work by wireless and that the transmission is simultaneous with the broadcasting in a full and unchanged manner on the same territory. In this case no separate remuneration is due. If this right is given to an organization different from the broadcaster, authorization should only be given by a collective management organization;

[1] National legislation does not provide for a definition of the notion "an unlimited number of persons" – whether the unlimited number refers to the number of persons itself or to the free access to the place where the work is disseminated. So far there is no case law in the matter.
[2] The Copyright and Neighboring Rights Act protects unpublished works upon expiry of the copyright for a period of 25 years in favour of the person who disseminated the work.
[3] *The right of distribution of the author is exhausted* after the initial sale or other transaction on the territory of the European Union by means of which ownership over the work or its copies is transferred by the author or with his/her consent for the territory on which the ownership is transferred except for the right for further renting. *Renting copyrights or neighboring rights* consists of authorization for use of the object for a certain period of time without direct or indirect economic use through publicly accessible places.
[4] According to Bulgarian legislation, "coded signal" is any radio-television signal transmitted, broadcast, re-transmitted and re-broadcast by any technical measure, the features of which have been purposely changed to limit access for a certain territory only.
"Technical protection measures" means all technologies, devices, or parts thereof which in their normal use can prevent unauthorized activity by the title holder against an object of copyright or neighboring rights, although these devices can be controlled by the title holder by means of an access code, blurring or other change of the object or mechanism for control over the copy.

- ***public display*** of a work of art or of a photographic or analog work;

- ***translation*** of a work into a foreign language;

- ***adaptation*** – modification and changes to a work, as well as its use for the creation of another derivative work;

- ***realization of an architectural project*** – the construction or manufacture of the site for which the architectural project is designed;

- ***offering of the work by wireless means, by cable or another technical device:*** allowing access to the work by an unlimited number of persons at a place and time of their choice;

- ***import and export*** of copies of the work in commercial quantities irrespective of whether these copies have been legally produced.

4. Inheritance and Transfer of Copyright

An author is legally guaranteed a copyright to realize the economic potential of his/her work, alone or with others. This continues for 70 years after the author's death. According to Bulgarian legislation all economic rights and certain non-economic rights of the author can be inherited and transferred. Specific rules are provided for regarding the author's non-economic rights, such as: the right of the author to request authorship recognition and for his name or initials to be mentioned in relation with each use of the works which cannot be inherited or transferred. The heirs are unable to exercise the following rights until the expiry of the term of protection: modification of the work or cessation of use. The non-economic rights can be transferred only explicitly and in writing.

5. Limitations on the Copyright Exclusivity

National legislation provides for limitations in two main ways: first as regards the objects explicitly excluded from the scope of copyright protection, and, second, as actions admissible irrespective of the main principles of exclusivity of copyright.

1/ The following have no copyright protection under national legislation:

- *regulatory and individual acts of state authorities and their official translations.* According to national legislation unofficial translations are copyright protected. Official translations are considered to be those made by a translation agency recognized by the Council of Ministers;

- *ideas and concepts:* an idea can be protected by copyright only if presented in an objective form in any of the fields of science, literature or art;

- *works of folklore:* national legislation provides for indirect protection of works of folklore in cases of: adaptation based on an original folk tale; unpublished work or handicrafts;

- *news, facts, information and data:* protection is not provided due to the public's interest in access to information.

2/ Permitted uses of copyright objects

Free use of works is allowed only in the cases specified by law, where no remuneration is due to the author, or there is compensatory remuneration provided. The former allows use of the work without the author's permission in the public interest. The name of the author should be mentioned. This type of free use is not allowed for computer programs and should not be for commercial gain.

The free use of a work with payment of compensatory remuneration is allowed only in the following cases:

- Reproduction of printed works except for music materials – on paper or other similar carrier through reprography or by other similar means;

- Reproduction of works irrespective of the carrier by a natural person for his/her own use.[1]

Limitations on free use are provided for computer programs and architectural works. Their use should not be for commercial purposes. The free use is consistent with the preservation of the technical means for protection of the work should such have been used.

6. Neighboring rights

Neighboring rights include two main groups of rights – economic and moral. ***Economic rights*** include various possibilities for the holders. ***Moral rights*** include the right to require placing or announcing in a suitable way the name, artistic sign or pseudonym of the rights holder for each and every type of use.

The right is applicable on the realization or dissemination of the record or performance and lasts for fifty years. Similar to copyright, neighboring rights are exclusive in nature. They can be transferred and inherited. However, moral rights cannot be inherited.

Holders of neighboring rights

• **phonogram producers:** neighboring rights protect the first record made by the phonogram producer. According to the law he/she is a natural or legal person who has organized and provided the resources for the first recording.

• **film producers:** the film producer enjoys neighboring rights protection for the original film and any copies. He/she is a natural or legal person having realized the initial record of the film or audiovisual work;

• **performing artists:** neighboring rights cover the artist's performance. Performers are the persons singing, reciting, dancing or performing with puppets, in music halls or in circuses;

• **radio-television organizations** have neighboring rights over a program when it is created separately by the organization. Protection extends also to the signals transmitting the program.

[1] National legislation lacks a forwarding or descriptive provision providing for a definition of 'personal use' and the number of copies permitted thereby.

7. Forms of Legal Protection of Copyright and Neighboring Rights. Competent Institutions in the Field of Copyright and Neighboring Rights in Bulgaria

• **Administrative protection** is applied for: reproduction, distribution of video and audio carriers of recorded works, organization of public display of audiovisual works; providing audio or video recording services to others for gain; organization of public displays of live or recorded performances; broadcasting by wireless or cable of works or radio-television programs; publication or distribution of already published works; reproduction and distribution of computer programs, photographic works, designs, handicrafts; failure to pay compensation; violation of the rights of a database producer.

• **Civil protection** is available for any person who has legally acquired the exclusive right to use a work and thus has the right to one of the following actions: compensation for damages caused through violation of copyright and neighboring rights; restraining the illegal use of objects of copyright and neighboring rights and data bases; seizure and destroying illegal copies of any work, record or data base as well as matrixes, clichés and other reproducing equipment; seizure and disabling copying and reproducing equipment used exclusively for committing violations; establishment of the holder of the violated rights; illegal benefit and action for ownership over material, carrier of the protected object of artistic property. Civil protection also provides for security measures through initiation of proceedings and imposition of border controls. A specific feature of our legal system is in continuity of action: customs proceedings – customs seizure > imposition of security measures > civil claims.

• **Criminal protection** is provided to protect against danger caused to the public. National legislation in the field of artistic property criminalizes: counterfeiting, falsification of copyright and neighboring rights containing the name of the author; plagiarism – presenting or publishing another's work or parts thereof as one's own without mention of the true author; forced joint authorship – abusing one's official position by recording as joint author a non-participant in the creation of the work. Amendments to the Criminal Code of 2006 criminalized the stockpiling of pirated products or illegally-acquired or produced matrixes as well as their sale or offer for sale.

Due to the changes in the social and political situation in Bulgaria since 1989, it was necessary to adopt the new Copyright and Neighboring Rights Act in 1993. The old law was created under a system whereby a person's rights were subordinate to the state. Copyright fell within the sphere of private legal relations. Despite the cover provided by this law, Bulgarian authors remember how the old law was applied and how much higher was their remuneration. Before 1993, the State Copyright Agency protected authors' rights and was connected with several state-owned enterprises and departments which used the works.

The Copyright Agency, which had a monopoly, concluded contracts only with Bulgarian National Radio and Television for broadcasting, and two organizations covering public performances and food and entertainment establishments, with one company producing gramophone records, and several state-owned publishing houses and cinema studios. These organizations received funds from the state budget for payment of copyright to the authors through the Agency and the relationship between author and user was clear. In addition, there were stated rates for remuneration, obligatory for both parties. However an author was not autonomous although he/she was better remunerated.

The situation now is different – authors' works are used by hundreds of private legal entities – radio and television stations, cable operators, entertainment establishments, concert organizers, private publishing houses, producers of audio recordings and film producers. There is no doubt that the situation and the relationships between authors and users are more complex as, in all these areas, the authors or the collective management societies representing them need to be in contact with each user individually, to ensure payment for the use of the works, the sum due being that set out in the rates of the organization. These rates are not approved by a government body and it is difficult to convince users to pay the sum in question.

It is obvious that complete freedom of negotiation between the authors and their representatives on the one hand, and the users on the other, granted to them under the Copyright and Neighboring Rights Act is ahead of the socio-economic development of the country and there is a discrepancy between the requirements of the law and reality. The application of the law is significantly hampered and the organizations of authors and owners of neighboring rights are at a disadvantage as they are economically weaker. The intellectual level of the majority of the users is low and they cannot or do not want to realize that the use of an intellectual product must be in exchange for payment and that permission of the rights owner must be obtained in advance.

That is why the role of the state is significant for application of the law. An Intellectual Property Protection Council within the Ministry of Culture was set up in 2006, uniting the representatives of all stakeholder institutions and private businesses. At the monthly meetings of the Council, legislative amendments in the area of intellectual property are discussed, prepared and tabled with the National Assembly and complaints and proposals from non-governmental organizations and copyright collective management societies are heard. The Council is the engine for implementing legislative changes in the area of intellectual property. It consolidates the activities of law enforcement bodies and also draws up contacts between government institutions and private businesses with the collective management societies. The Council also plays the role of mediator in any dispute between representatives of the owners of rights and users and supports societies in defending their legal demands for payment of remuneration.

Given that the public has not yet understood the problems of intellectual property protection, the Ministry of Culture organized a mass campaign in 2006 to raise awareness. This was popular and discussions started which achieved the purpose of the campaign, namely that protection of copyright and neighboring rights would no longer be anonymous. The campaign will continue throughout this year and the target groups identified include young people and journalists – the former as the most prolific Internet users and the latter who pass the infor-mation to the public.

In the past few years, government institutions have improved the level of their administrative capacity by increasing the number of staff in their law enforcement units, by holding seminars and conferences and conducting practical training on the application of the respective law. The state, in the face of the relevant institutions in the area – the Ministry of Culture and the Ministry of the Interior, has intensified its pressures on those who infringed intellectual property rights in the past by launching campaigns to confiscate pirated products, impose fines and sanctions on offenders in the field of cable retransmission, radio and television broadcasting and unauthorized use of entertainment and business software. Very important in this process has been the close cooperation between the Ministry of Culture, the Ministry of the Interior and the Prosecutor’s office.

Three conclusions can be drawn:

1. In the past two years, the government has demonstrated a political will to deal with the problems neighboring to the protection of intellectual property. Experience has shown that the political will of those in power combined with adequate legislation and effective law enforcement is the only way to reduce piracy to the levels in the European Union.

2. The application of the Copyright and Neighboring Rights Act in Bulgaria was based on the old law and many positive practices already applied in the field of copyright collective management, conclusions of agreements for protection of authors' rights between organizations and users, distribution of remuneration, conclusion of reciprocal agreements with foreign companies with a view to mutual protection of authors' rights and relationships between writers and publishers, producers of audio recordings and producers of audiovisual works and authors have been retained and developed further.

3. In spite of the seemingly unfavorable social situation in the country with respect to protection of copyright and neighboring rights, the revenue from collective management societies and of the authors themselves has been increasing year on year and the number of regular users has increased as a whole as have the sums paid under individual agreements. The public attitude to the problems of protection of intellectual property rights is slowly changing but, unfortunately, state interference in the provisions for these legal relations is still significant. The further development of our young democracy will bring about a positive change in public attitudes to the problems of intellectual property, assisted by the public information campaigns from the Ministry of Culture.

8. International Copyright and Neighboring Rights Legislation

International and European Conventions

- The Convention for the Protection of Literary and Artistic Works – The Berne Convention
  Ratified by Bulgarian State Council Decree No. 1389 on August 29, 1974 – State Gazette No. 53/ July 6,1974 г., the Paris Edition of the Berne Convention was ratified by Bulgarian State Council Decree No. 887 from September 18, 1980 - State Gazette No. 76/ September 30, 1980.

- The Universal Copyright Convention
  Ratified by Bulgarian State Council Decree No. 1 from December 26, 1974 – State Gazette No. 5/ January 3, 1975 г. Published by the Ministry of Culture and Tourism in State Gazette No. 44/ May 27, 2007, applied in Bulgaria since June 7, 1975.

- The Convention Establishing the World Intellectual Property Organization (WIPO).
  Ratified by Bulgarian Parliament Presidium Decree No. 3 from January 8, 1970 – State Gazette No. 5/ January 16, 1970. Changes ratified by Bulgarian State Council Decree No. 1887 from September 18, 1980 – State Gazette No. 76/ September 30, 1980, applied in Bulgaria since June, 1984.

- The Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations
  Ratified by 37th Bulgarian Parliament Law from April 19, 1995 – State Gazette No. 39/ 1995. Published by Ministry of Culture in State Gazette No. 111/ December 22, 1995, applied in Bulgaria since August 31, 1995.

- The Geneva Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms
  Ratified by 37th Bulgarian Parliament Law from April 19,.1995 - State Gazette No. 39/ 1995. Published by Ministry of Culture in State Gazette No. 111/ December 22, 1995, applied in Bulgaria since September 6, 1995.

- The Convention for the Protection of the Architectural Heritage of Europe (Granada 1985)
  Ratified by Bulgarian Parliament January 25, 1991, – State Gazette No. 13/ February 15, 1991, applied in Bulgaria since May 1, 1991;

- The European Convention on Cinematographic Co-production (1992)
  Ratified by 39th Bulgarian Parliament Law from April 1, 2004 - State Gazette No. 30/ April 13, 2004. Published by the Ministry of Culture in State Gazette No. 86/ October 1, 2004, applied in Bulgaria since August 1, 2004.

- The European Convention for Trans-Borders Television (1989)
  Ratified by 36th Bulgarian Parliament Law - State Gazette No. 117/ December 10, 1993, applied in Bulgaria since May 1, 1993. The Record of Change and Complement ratified by Bulgarian Parliament law - State Gazette No. 7/ January 25, 2000, applied in Bulgaria since May 1, 2002.

- The European Convention for Audio and Visual Heritage and Recording (2001), signed on November 8, 2001, not applied in Bulgaria.

- The TRIPS Agreement on Trade-Related Aspects of Intellectual Property Rights, State Gazette No. 93/1996

- The WIPO Copyright Treaty - State Gazette No. 7/ 2001

- The WIPO Performances and Phonograms Treaty - State Gazette No. 7/ 2001.

European Union Directives

- European Directive 91/250/EC concerning the legal protection of software;

- European Directive 96/9/EC concerning the legal protection of databases;

- European Directive 93/83/EEC concerning coordination of some rules referring to copyright and neighboring rights, applicable to broadcasting via satellite and cable;

- European Directive 92/100/EEC concerning rental rights, as well as some rights related to copyright in the field of intellectual property.

- European Directive 93/98/EC on harmonizing the terms of protection of copyright and neighboring rights;

- European Directive 2001/29/EC on harmonizing some aspects of copyright and neighboring rights in the information society;

- European Directive 2001/84/**EO** concerning the right of remuneration of the author in resale of fine arts works

- European Directive Télévision sans frontières, 89/552/**EO**, changed on June 30, 1997 by Directive 97/36/EC.

APPENDIX 2

Custom Tariff Codes, related to Copyright-Based Industries

1. Polygraphy

BG code	Description
4901	Printed books, brochures, leaflets and similar printed matter, whether or not in single sheets
4902	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material
4903	Children's picture, drawing or colouring books
4904	Music, printed or in manuscript, whether or not bound or illustrated
4905	Maps and hydrographic or similar charts of all kinds, including atlases, wall maps, topographical plans and globes, printed
4906	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; handwritten texts; photographic reproductions on sensitised paper and carbon copies of the foregoing
4907	Unused postage, revenue or similar stamps of current or new issue in the country in which they have, or will have, a recognised face value; stamp-impressed paper; banknotes; cheque forms; stock, share or bond certificates and similar documents of title
4908	Transfers (decalcomanias)
4909	Printed or illustrated postcards; printed cards bearing personal greetings, messages or announcements, whether or not illustrated, with or without envelopes or trimmings
4910	Calendars of any kind, printed, including calendar blocks
4911	Other printed matter, including printed pictures and photographs

2. Knitwear

BG code	Description
6101	Men's or boys' overcoats, car-coats, capes, cloaks, anoraks (including ski-jackets), wind-cheaters, wind-jackets and similar articles, knitted or crocheted, other than those of heading No 6103
6102	Women's or girls' overcoats, car-coats, capes, cloaks, anoraks (including ski-jackets), wind-cheaters, wind-jackets and similar articles, knitted or crocheted, other than those of heading 6104
6103	Men's or boys' suits, ensembles, jackets, blazers, trousers, bib and brace overalls, breeches and shorts (other than swimwear), knitted or crocheted
6104	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts (other than swimwear), knitted or crocheted
6105	Men's or boys' shirts, knitted or crocheted
6106	Women's or girls' blouses, shirts and shirt-blouses, knitted or crocheted
6107	Men's or boys' underpants, briefs, nightshirts, pyjamas, bathrobes, dressing gowns and similar articles, knitted or crocheted
6108	Women's or girls' slips, petticoats, briefs, panties, nightdresses, pyjamas, negligees, bathrobes, dressing gowns and similar articles, knitted or crocheted
6109	T-shirts, singlets and other vests, knitted or crocheted
6110	Jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted
6111	Babies' garments and clothing accessories, knitted or crocheted
6112	Track suits, ski suits and swimwear, knitted or crocheted
6113	Garments, made-up of knitted or crocheted fabrics of heading No 5903, 5906, or 5907
6114	Other garments, knitted or crocheted
6115	Panty hose, tights, stockings, socks and other hosiery, including stockings for varicose veins and footwear without applied soles, knitted or crocheted
6116	Gloves, mittens and mitts, knitted or crocheted
6117	Other made-up clothing accessories, knitted or crocheted; knitted or crocheted parts of garments or of clothing accessories

3. Clothing

BG code	Description
6201	Men's or boys' overcoats, car-coats, capes, cloaks, anoraks (including ski-jackets), wind-cheaters, wind-jackets and similar articles, other than those of heading No 6203
6202	Women's or girls' overcoats, car-coats, capes, cloaks, anoraks (including ski-jackets), wind-cheaters, wind-jackets and similar articles, other than those of heading No 6204
6203	Men's or boys' suits, ensembles, jackets, blazers, trousers, bib and brace overalls, breeches and shorts (other than swimwear)
6204	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts (other than swimwear)
6205	Men's or boys' shirts
6206	Women's or girls' blouses, shirts and shirt-blouses
6207	Men's or boys' singlets and other vests, underpants, briefs, nightshirts, pyjamas, bathrobes, dressing gowns and similar articles
6208	Women's or girls' singlets and other vests, slips, petticoats, briefs, panties, nightdresses, pyjamas, negligees, bathrobes, dressing gowns and similar articles
6209	Babies' garments and clothing accessories
6210	Garments, made-up of fabrics of heading 5602, 5603, 5903, 5906 or 5907
6211	Track suits, ski suits and swimwear; other garments
6212	Brassières, girdles, corsets, braces, suspenders, garters and similar articles and parts thereof, whether or not knitted or crocheted
6214	Shawls, scarves, mufflers, mantillas, veils and the like
6215	Ties, bow ties and cravats
6216	Gloves, mittens and mitts
6217	Other made-up clothing accessories; parts of garments or of clothing accessories, other than those of heading 6212

4. Shoes

BG code	Description
6401	Waterproof footwear with outer soles and uppers of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes
6402	Other footwear with outer soles and uppers of rubber or plastics
6403	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of leather
6404	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of textile materials
6405	Other footwear
6406	Parts of footwear (including uppers whether or not attached to soles other than outer soles); removable insoles, heel cushions and similar articles; gaiters, leggings and similar articles, and parts thereof

5. Ceramics and China

BG code	Description
6910	Ceramic sinks, wash basins, wash basin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures
6911	Tableware, kitchenware, other household articles and toilet articles, of porcelain or china
6912 00	Ceramic tableware, kitchenware, other household articles and toilet articles, other than of porcelain or china
6913	Statuettes and other ornamental ceramic articles
6914	Other ceramic articles

6. Furniture

BG code	Description
9401	Seats (other than those of heading 9402), whether or not convertible into beds, and parts thereof
9402	Medical, surgical, dental or veterinary furniture (for example, operating tables, examination tables, hospital beds with mechanical fittings, dentists' chairs); barbers' chairs and similar chairs, having rotating as well as both reclining and elevating movements; parts of the foregoing articles
9403	Other furniture and parts thereof
9404	Mattress supports; articles of bedding and similar furnishing (for example, mattresses, quilts, eiderdowns, cushions, pouffes and pillows) fitted with springs or stuffed or internally fitted with any material or of cellular rubber or plastics, whether or not covered
9405	Lamps and lighting fittings including searchlights and spotlights and parts thereof, not elsewhere specified or included; illuminated signs, illuminated name-plates and the like, having a permanently fixed light source, and parts thereof not elsewhere specified or included
9406 00	Prefabricated buildings

7. Toys and Games

BG code	Description
9501	Wheeled toys designed to be ridden by children (for example, tricycles, scooters, pedal cars); dolls' carriages
9502	Dolls representing only human beings
9503	Other toys; reduced-size ('scale') models and similar recreational models, working or not; puzzles of all kinds
9504	Articles for funfair, table or parlour games, including pintables, billiards, special tables for casino games and automatic bowling alley equipment
9505	Festive, carnival or other entertainment articles, including conjuring tricks and novelty jokes
9508	Roundabouts, swings, shooting galleries and other fairground amusements; travelling circuses and travelling menageries; travelling theatres

8. Glass

BG code	Description
7001	Cullet and other waste and scrap of glass; glass in the mass
7002	Glass in balls (other than microspheres of heading No 7018), rods or tubes, unworked
7003	Cast glass and rolled glass, in sheets or profiles, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7004	Drawn glass and blown glass, in sheets, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7005	Float glass and surface ground or polished glass, in sheets, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7006	Glass of heading 7003, 7004 or 7005, bent, edge-worked, engraved, drilled, enamelled or otherwise worked, but not framed or fitted with other materials
7007	Safety glass, consisting of toughened (tempered) or laminated glass
7008	Multiple-walled insulating units of glass
7009	Glass mirrors, whether or not framed, including rear-view mirrors
7010	Carboys, bottles, flasks, jars, pots, phials, ampoules and other containers, of glass, of a kind used for the conveyance or packing of goods; preserving jars of glass; stoppers, lids and other closures, of glass
7011	Glass envelopes (including bulbs and tubes), open, and glass parts thereof, without fittings, for electric lamps, cathode-ray tubes or the like
7012	Glass inners for vacuum flasks or for other vacuum vessels
7013	Glassware of a kind used for table, kitchen, toilet, office, indoor decoration or similar purposes (other than that of heading No 7010 or 7018)
7014	Signalling glassware and optical elements of glass (other than those of heading No 7015), not optically worked
7015	Clock or watch glasses and similar glasses, glasses for non-corrective or corrective spectacles, curved, bent, hollowed or the like, not optically worked; hollow glass spheres and their segments, for the manufacture of such glasses
7016	Paving blocks, slabs, bricks, squares, tiles and other articles of pressed or moulded glass, whether or not wired, of a kind used for building or construction purposes; glass cubes and other glass smallwares, whether or not on a backing, for mosaics or similar decorative purposes; leaded lights and the like; multicellular or foam glass in blocks, panels, plates, shells or similar forms
7017	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated
7018	Glass beads, imitation pearls, imitation precious or semi-precious stones and similar glass smallwares, and articles thereof other than imitation jewellery; glass eyes other than prosthetic articles; statuettes and other ornaments of lamp-worked glass, other than imitation jewellery; glass microspheres not exceeding 1 mm in diameter
7019	Glass fibres (including glass wool) and articles thereof (for example, yarn, woven fabrics)
7020	Other articles of glass

Radio and Television Sets, Sound Recording and Reproducing Devices, Computers and Equipment

BG code	Description
8517	Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones
8518	Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets
8519	Turntables (record-decks), record-players, cassette-players and other sound reproducing apparatus, not incorporating a sound recording device
8520	Magnetic tape recorders and other sound recording apparatus, whether or not incorporating a sound reproducing device
8522	Parts and accessories suitable for use solely or principally with the apparatus of headings 8519 to 8521
8523	Prepared unrecorded media for sound recording or similar recording of other phenomena, other than products of Chapter 37
8524	Records, tapes and other recorded media for sound or other similarly recorded phenomena, including matrices and masters for the production of records, but excluding products of Chapter 37
8525	Transmission apparatus for radio-telephony, radio-telegraphy, radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras; still image video cameras and other video camera recorders; digital cameras
8527	Reception apparatus for radio-telephony, radio-telegraphy or radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock
8528	Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus; video monitors and video projectors
8529	Parts suitable for use solely or principally with the apparatus of headings 8525 to 8528
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made-up into panels; light-emitting diodes; mounted piezo-electric crystals
8542	Electronic integrated circuits and microassemblies
8544	Insulated (including enamelled or anodised) wire, cable (including coaxial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made-up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors

10. Photography and Cinematography

BG code	Description
9001	Optical fibres and optical fibre bundles; optical fibre cables other than those of heading No 8544; sheets and plates of polarising material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked
9002	Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked
9006	Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 8539
9007	Cinematographic cameras and projectors, whether or not incorporating sound recording or reproducing apparatus
9008	Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers
9009	Photocopying apparatus incorporating an optical system or of the contact type and thermo-copying apparatus
9010	Apparatus and equipment for photographic (including cinematographic) laboratories (including apparatus for the projection or drawing of circuit patterns on sensitised semi-conductor materials), not specified or included elsewhere in this chapter; negatoscopes; projection screens

11. Musical Instruments

BG code	Description
9201	Pianos, including automatic pianos; harpsichords and other keyboard stringed instruments
9202	Other string musical instruments (for example, guitars, violins, harps)
9203	Keyboard pipe organs; harmoniums and similar keyboard instruments with free metal reeds
9204	Accordions and similar instruments; mouth organs
9205	Other wind musical instruments (for example, clarinets, trumpets, bagpipes)
9206	Percussion musical instruments (for example, drums, xylophones, cymbals, castanets, maracas)
9207	Musical instruments, the sound of which is produced, or must be amplified, electrically (for example, organs, guitars, accordions)
9208	Musical boxes, fairground organs, mechanical street organs, mechanical singing birds, musical saws and other musical instruments not falling within any other heading of this chapter; decoy calls of all kinds; whistles, call horns and other mouth-blown sound signalling instruments
9209	Parts (for example, mechanisms for musical boxes) and accessories (for example, cards, discs and rolls for mechanical instruments) of musical instruments; metronomes, tuning forks and pitch pipes of all kinds

12. Art

BG code	Description
9701	Paintings, drawings and pastels, executed entirely by hand, other than drawings of heading 4906 and other than hand-painted or hand-decorated manufactured articles; collages and similar decorative plaques
9702	Original engravings, prints and lithographs
9703	Original sculptures and statuary, in any material
9704	Postage or revenue stamps, stamp-postmarks, first-day covers, postal stationery (stamped paper), and the like, used or unused, other than those of heading 4907
9705	Collections and collectors' pieces of zoological, botanical, mineralogical, anatomical, historical, archaeological, palaeontological, ethnographic or numismatic interest
9706	Antiques of an age exceeding one hundred years

13. Jewelry and Precious Metals

BG code	Description
7101	Pearls, natural or cultured, whether or not worked or graded but not strung, mounted or set; pearls, natural or cultured, temporarily strung for convenience of transport
7102	Diamonds, whether or not worked, but not mounted or set
7103	Precious stones (other than diamonds) and semi-precious stones, whether or not worked or graded but not strung, mounted or set; ungraded precious stones (other than diamonds) and semi-precious stones, temporarily strung for convenience of transport
7104	Synthetic or reconstructed precious or semi-precious stones, whether or not worked or graded but not strung, mounted or set; ungraded synthetic or reconstructed precious or semi-precious stones, temporarily strung for convenience of transport
7106	Silver (including silver plated with gold or platinum), unwrought or in semi-manufactured forms, or in powder form
7107	Base metals clad with silver, not further worked than semi-manufactured
7108	Gold (including gold plated with platinum), unwrought or in semi-manufactured forms, or in powder form
7109	Base metals or silver, clad with gold, not further worked than semi-manufactured
7110	Platinum, unwrought or in semi-manufactured forms, or in powder form
7111	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured
7113	Articles of jewellery and parts thereof, of precious metal or of metal clad with precious metal
7114	Articles of goldsmiths' or silversmiths' wares and parts thereof, of precious metal or of metal clad with precious metal
7116	Articles of natural or cultured pearls, precious or semi-precious stones (natural, synthetic or reconstructed)
7117	Imitation jewellery
7118	Coins

APPENDIX 3

Final List of Codes of Bulgarian National Classification of Economic Activities - NCEA-2003 (Corresponding to the WIPO Classification of NACE Codes for Copyright-Based Industries)[1]

I. Core Copyright Industries

1. Press and Literature	22.11 Publishing books, brochures and other publications
	22.12 Publishing newspapers
	22.13 Publishing journals and other periodicals
	22.15 Other publishing activities
	22.21 Printing newspapers
	22.22 Printing other edited materials and printing products
	22.23 Binding printed materials
	22.24 Pre-press (pre-printing)
	22.25 Service activities related to printing
	52.47 Retails of books, newspapers and office materials
	52.50 Retail of used goods in shops (retail of second-hand books)
	74.87 Other business services
	92.31 Artistic and creative activities
	92.40 Activities of new agencies
	92.51 Activities of libraries and archives
2. Music, Theater, Opera	22.14 Publishing of audio recordings
	22.31 Reproduction of audio recordings
	51.43 Wholesale of home electric appliances and lighting devices, radio and television goods
	52.45 Retail of home electric appliances and lighting devices, radio and television goods
	74.87 Other business services
	92.31 Artistic and creative activities
	92.32 Exploitation of theater buildings, music and concerts halls and studios
	92.34 Other recreational activities
3. Motion Picture and Video	22.32 Preproduction of video recordings
	51.43 Wholesale of home electric appliances and lighting devices, radio and television goods
	74.87 Other business services
	92.11 Production of motion pictures and video

[1] Codes in red are included in more than one group of CI industries. Their values are shared between these industries with a corresponding weight coefficient (see *Appendix 4*).

	92.12 Distribution of motion pictures and video 92.13 Motion picture projection 92.31 Artistic and creative activities
4. Radio and TV	92.20 Radio and television activities
5. Photography	74.81 Photographic activities
6. Software and Databases	22.33 Reproduction of computer recordings 72.21 Publishing of standard software 72.22 Other activities in software development 72.30 Database activities 72.40 Other activities related to databases 72.60 Other activities in the field of computer technologies
7. Visual and Graphic Arts	74.87 Other business services 92.31 Artistic and creative activities 92.52 Activities of museums and galleries, activities in preservation of cultural heritage
8. Advertising Services	74.40 Advertising
9. Copyright Collecting Societies	74.87 Other business services

II. Interdependent Industries

1. TV sets, radios, VCRs, CD players, DVD players, cassette players, electronic gaming equipment and other similar equipment	32.30 Manufacture of television and radio receivers, sound and video recording or reproducing apparatus 51.43 Wholesale of home electrical appliances and lighting devices, radio and television goods 52.45 Retail of home electrical appliances and lighting devices, radio and television goods
2. Computers and equipment (including photocopiers)	30.02 Manufacture of accounting and computing machinery 51.84 Wholesale of accounting and computing machinery, peripherals and software 51.85 Wholesale of other office equipment, office machinery and office furniture 71.33 Renting office, accounting and computing machinery, without operators
3. Musical instruments	36.30 Manufacture of musical instruments 52.45 Retail of home electric appliances and lighting devices, radio and television goods
4. Photographic and cinematographic instruments	33.40 Manufacture of optical instruments and photographic equipment

5. Blank recording material	24.64 Manufacture of photographic chemical materials 24.65 Manufacture of blank recording material
6. Paper	21.11 Manufacture of pulp 21.12 Manufacture of paper and paperboard 24.30 Manufacture of dyes, varnish and similar materials, printing ink and paste 29.55 Manufacture of machinery for pulp, paper, paperboard and other items 51.56 Wholesale of other non-agricultural intermediate products

III. Partial Copyright Industries

1. Apparel, textiles and footwear	17.60 Manufacture of knitted fabrics 17.71 Manufacture of socks and tights 17.72 Manufacture of classical pullovers, waistcoat and similar items 18.10 Manufacture of leather clothes 18.21 Manufacture of working clothes 18.22 Manufacture of wearing apparel, without working clothes 18.23 Manufacture of shirts, blouses and other underwear 18.24 Manufacture of other clothes and accessories 19.30 Manufacture of footwear 29.54 Manufacture of machinery for textile, apparel, leather and leather clothes 51.42 Wholesale of apparel and footwear 52.41 Retail of textile 52.42 Manufacture of apparel and other cloths 52.43 Retail of footwear and leather items
2. Jewelry and coins	36.21 Cutting coins 36.22 Manufacture of jewelry and related articles, made of precious metal and stones 36.61 Manufacture of imitation jewelry
3. Other crafts	36.63 Other manufacture
4. Furniture	36.11 Manufacture of chairs and seats 36.12 Manufacture of office furniture (without chairs) 36.13 Manufacture of kitchen furniture (without chairs) 36.14 Manufacture of other furniture (without chairs) 36.15 Manufacture of spring-beds and matrices kitchen furniture (without chairs) 51.85 Wholesale of other office equipment, office machinery and office furniture 52.44 Retail of furniture, lighting devices and household goods, not falling under other codes
5. Household goods, china and glass	20.51 Manufacture of other wooden items 20.52 Manufacture of goods of cork, knitted and crocheted fabrics and articles

	26.12	Forming and treatment of flat glass
	26.13	Manufacture of glass household goods and packing
	26.14	Manufacture of glass fibers
	26.15	Manufacture of other glass products, including for technical use
	26.21	Manufacture of china and ceramic household and decorative goods
	26.22	Manufacture of sanitary ceramics
	26.23	Manufacture of ceramic insulators
	26.24	Manufacture of ceramic items for technical use
	26.25	Manufacture of other ceramic goods
	26.26	Manufacture of fireproof ceramic goods
	28.75	Manufacture of metal goods, not falling under other codes
	31.50	Manufacture of lamps and lighting devices
	52.44	Retail of furniture, lighting devices and household goods, not falling under other codes
6. Wall coverings and carpets	17.51	Manufacture of carpets and rugs
	21.24	Manufacture of wall covering
	21.25	Manufacture of other paper and paperboard goods
7. Toys and games	36.50	Manufacture of games and toys
8. Architecture, engineering, surveying	74.20	Architecture, engineering, surveying
9. Museums	52.50	Retail of second-hand goods in shops (retail of antiques)
	92.52	Activities of museums and galleries, activities in preservation of cultural heritage

IV. Non-dedicated Support Industries

1. General wholesale and retail	51.11	Commission trade with agriculture goods, animals, raw materials for textile and semi-manufactured goods
	51.12	Commission trade with fuel, ores, metals and chemical products
	51.13	Commission trade with wood and other building materials
	51.14	Commission trade with machinery, industrial equipment, boats, ships and airplanes
	51.15	Commission trade with furniture, household goods, iron items
	51.16	Commission trade with textiles, apparel, footwear and leather items
	51.17	Commission trade with food, drinks and tobacco goods
	51.18	Commission trade with other goods
	51.19	Commission trade with different goods
	51.41	Wholesale of textiles
	51.43	Wholesale of home electric appliances and lighting devices, radio and television goods
	51.44	Wholesale of china, glass, wall coverings and detergents
	51.45	Wholesale of perfumery and cosmetics
	51.46	Wholesale of pharmaceutical, medical and orthopedic goods
	51.47	Wholesale of other household goods
	51.81	Wholesale of industrial machinery and their components

51.82 Wholesale of machinery for mining and construction
51.83 Wholesale of machinery for textile, apparel, footwear and leather manufacture
51.86 Wholesale of electronic components and equipment
51.87 Wholesale of other machinery and equipment in manufacturing, trade, navigation and transportation
51.88 Wholesale of tractors and other agricultural machinery and their components
51.90 Wholesale of other goods
52.11 Retail in non-specialized shops of food, drinks and tobacco
52.12 Retail in non-specialized shops of diverse items
52.45 Retail of home electric appliances and lighting devices, radio and television goods
52.48 Retail in specialized shops with other goods
52.50 Retail of used goods in shops
52.61 Retail of firms, executing orders by mail
52.62 Retail of goods at open markets
52.63 Retail of other goods not sold in shops

2. General transportation

60.10 Transport by rail
60.21 Other scheduled land transportation
60.22 Taxi land transport of passengers
60.23 Other non-scheduled land transport
60.24 Cargo transport with trucks
61.10 Sea and coastal transport
61.20 River transport
62.10 Scheduled air transport
62.20 Non-scheduled air transport
63.11 Cargo handling
63.12 Storage and warehousing
63.21 Other supporting transport activities
63.22 Other supporting activities in water transport
63.23 Other supporting activities in air transport
63.30 Activities of travel agencies and tour operators, tourist assistance activities
63.40 Activities of other transport agencies
64.11 National postal activities
64.12 Courier activities other than national postal activities

3. Telephony and Internet

64.20 Telephony and Internet

IV. Non-attributable Group

51.47 Wholesale of other household goods
52.48 Retail in specialised shops with other goods
71.40 Renting personal and household goods

APPENDIX 4

Assessment of the Relative Weight of Copyright Legal Economic Activities in Undifferentiated Codes under the Bulgarian Version of NACE (National Classification of Economic Activities, NCEA-2003)

This section contains a description of the methodology for determining the relative weight of activities related to copyright and neighboring rights in the mixed or undifferentiated codes under NCEA-2003 – in which the relevant economic activities have been mixed with other activities, unrelated to copyright. Twelve such codes are included in the survey. Undifferentiated codes do not allow for a precise specification of the economic contribution of new and dynamically-developing sectors such as those based on copyright and neighboring rights. The research team put significant effort into raising the necessary quantitative information, expert assessment and other data which will provide for a more precise evaluation of the share of copyright-related economic activities under these mixed codes. The methodology used in weighting the data by each code is described below.

1. Weighting and Distribution of Code 92.31 – Services of Artistic and Creative Work

The activities under this code fall under four major copyright laws - publishing and printing; music, theater and opera, film and video production, and visual and graphic arts. The simple proportional distribution according to the summarized data of these major industries results in serious distortions of the structure of the major code indicators, which we judge indirectly.

Table 1. Proportional Distribution of 92.31 based on all Industries

	2003				2005			
	Number of enter-prises	Number employed	Gross output	Value added	Number of enterprises	Number employed	Gross output	Value added
I.1 Publishing and Printing	181	471	11 890	3779	211	531	17 754	6586
I.2 Music, Theater, Opera	2	7	194	106	3	9	453	271
I.3 Film and Video Production	23	51	1764	298	24	60	2997	1048
I.7 Visual and Graphic Arts	2	4	44	18	2	6	124	37
92.31 Services related to Artistic and Creative Activities	**207**	**534**	**13 891**	**4201**	**240**	**607**	**21 328**	**7942**

This distortion is a result of the fact that code 92.31 is characterized by a high relative share of the value added in the products and services produced. Unlike this code, the summarized data of the major cultural industries encompasses industries with a low relative share of the value added (printing, recording and reproduction, sales, auxiliary activities, etc). To more adequately calculate this code's contribution to the respective major industry, these sub-codes should be excluded. The resultant ratio will largely correspond to the code's internal structure. Thus, the base on which the ratio relating to the contribution of code 92.31 to the four major copyright law industries I.1, I.2, I.3 and I.7 is calculated is the data of the activities falling under the following codes:

Table 2. Proportional Distribution of 92.31 by the Key Industries' Share in the Respective Major Industries

	2003				2005			
	Number of enter-prises	Number em-ployed	Gross output	Value added	Number of enter-prises	Num-ber em-ployed	Gross output	Value added
I.1 Publishing and Printing (*22.11 Book publishing*)	123	287	7010	2077	127	311	8688	1628
I.2 Music, Theater, Opera *22.14 Sound recording and reproduction (22.31 Production of audio recordings)*	11	64	1136	802	19	85	2313	1781
I.3 Cinema and Video *22.32 Video recording and reproduction (92.11 Film and video production)*	57	139	5451	1174	75	144	9619	4285
I.7 Visual and Graphic Arts	16	44	294	148	19	67	709	248
92.31 Services related to Artistic and Creative Activities	**207**	**534**	**13 891**	**4201**	**240**	**607**	**21 328**	**7942**

2. Weighting and Distribution of Code 52.44 – *Retail Sales of Furniture, Electric Lighting and Household Goods, not included under other Codes*

Under this code the different types of trade in furniture and household goods are distributed in proportion to the share of the respective industries. Since both industries are similar in respect to the internal correlation between gross output and value added of the codes that comprise them, there are no significant distortions in the shares of the code in its distribution.

Table 3. Proportional Distribution of 52.44 based on All Industries

	2003				2005			
	Number of enter-prises	Num-ber em-ployed	Gross output	Value added	Number of enter-prises	Num-ber em-ployed	Gross output	Value added
III.4 Furniture	926	3816	29 028	8689	999	4782	47 663	18 673
III.5 Household Goods, glassware and porcelain	753	3113	37 372	13387	791	3575	57 246	25194
52.44 Retail sales of furniture, electric lighting and household goods, not included under other codes	**1679**	**6929**	**66400**	**22 076**	**1790**	**8357**	**104 908**	**43 867**

3. Weighting and Distribution of Code 51.43 – *Wholesale of Electrical Household Goods, Lighting, Radio and TV Appliances*

In determining the distribution ratio of value added and other major parameters (gross output, number of enterprises and number employed) under this code (see I.2, I.3 and II.1 in the table below) the following methods were simultaneously applied: expert assessment (five interviews with managers of large companies, trading in "black" and "white" appliances) and calculating the ratio in the sale of relevant groups of goods from "Information on sales of trade companies" for the respective year – records, cassettes and CDs, video cassettes and DVDs, radio and TV goods (see *Annex 9*).

First, based on the mean assessment of the share of sales of radio, TV and other goods, the share of economic activities not related to copyright was determined to be 65 percent under this code. The next step was the distribution of the remaining 35 percent of the economic contribution among the three copyright-based industries. It was impossible here to apply distribution based on their relative share, since we recorded a difference 30 times greater between the gross product (and respectively of the value added) of the single code in II.1 (32.30 Production of radio sets and other appliances for the reproduction of sound and picture) and sales volumes of these appliances (and the value added obtained). This is explained by the fact that Bulgaria is a relatively small producer of this type of appliance and the major part of wholesale and retail are mainly imports.

Therefore, in determining the ratio of value distribution of mixed code 51.43 between (I.2, I.3 and II.1) the ratio in sales volume of the respective groups of goods according to "Information on sales of trade companies" for 2003 and 2005 (Annex 9) was used as being more realistic.

Table 4. Sales according to Groups of Goods and Weights in the Distribution of the 35 percent of Economic Contribution under Code 51.43, related to Copyright

Industry	Wholesale of:	Code	2003		2005	
			thousand BGN	%	thousand BGN	%
I.2 Music, Theater, Opera	Music recording carriers – audiocassettes and audio CDs	0915	6785	*0.7*	7558	*0.6*
I.3 Cinema and Video (only code 92.12)	Video recording carriers – videocassettes and DVDs	0916	3408	*0.3*	6753	*0.6*
II.1 Radio and TV sets, cassette players, CD and DVD players, computer games accessories and other amusement accessories	Radio and TV goods	0911	348 247	*34.0*	415 132	*33.8*
	Total		358 440	*35.0*	429 443	*35.0*

4. Weighting and Distribution of Code 51.47 - Wholesale of other Houshold Goods

This is one of the most complex codes, encompassing a large number of diverse activities. Together with value added of BGN59 963 000 for 2003 and BGN103 026 000 for 2005 it is one of the most significant. Apart from copyright and neighboring rights industries it only includes sports goods (including skis, bicycles, sports equipment, camping equipment), stationery, flowers, pets and watches, falling under the fourth group of industries, not connected to copyright and neighboring rights. The remaining significant number of activities, (trade with mass products such as printed matter, furniture, carpets, musical instruments, leather goods, wicker articles and goods made of wood and cork) fall into the first three groups.

Since we lack a reliable basis for distribution among the industries, the only assessment we can make is to determine the specific copyright factor for these activities, leaving an **independent fifth group**.

In determining the copyright factor for the latter group we adopted the principle of proportionate distribution of common (mixed) codes – the separate industries are taken in respect to those codes comprising them, which to the highest degree are connected, in respect to content, to the distributing code. It was proved that industries with the greatest difference between the codes from the point of view of internal ratio of gross output and value added showed the largest disproportions in redistribution of mixed codes.

That is why in determining the copyright factor we assessed sales values of four types of goods using "Information on sales of trade companies" in Annex 9:

- *Wholesale of books, newspapers, magazines and stationery* (0950). Since stationery is not connected with copyright, we adopted a more conservative approach and sales value for this category was decreased by one-third;
- *Musical instruments* one-third of the sales came under code 0920 (durable goods for leisure time activities, musical instruments);
- *Photographic and optical goods* (0912) – the activities of optical shops, which we assessed as comprising two-thirds of sales volume, do not fall under the WIPO classification either. What remains is one-third of the value of photographic goods;
- *Games and toys* – one-third of the value of code 0930.

Calculated together, they amount to 43 percent and 33 percent of the gross output of this code respectively for 2003 and 2005. Wholesale of furniture, carpets and floor covering, wooden and cork articles, jewelry and leather goods make up the second large share of wholesale of interconnected industries. We can assume that their share in sales values is comparable and even bigger than the sales in the first four groups and is between 35 and 40 percent.

Therefore, on the basis of our expert knowledge and interviews conducted with National Statistical Institute experts and representatives from some of the industries included, the share of sales of goods outside of copyright and neighboring rights industries under this code is estimated to be between 20 and 25 percent. For reasons of caution, we accept the higher share – 25 percent, and this value should be subtracted and added to the value of activity 4.1. General trade – retail and wholesale.

The remaining share of 75 percent we can single out as one activity in group five retail and wholesale of copyright and neighboring rights industries. This activity should be ascribed a copyright factor, since it includes sales of goods by partial copyright industries. Obviously, it can be determined by means of expert assessment, where the presence of mass products should be taken into account, for instance, books, newspapers and other printed matter (main industry), together with musical instruments and photographic materials (interrelated industries). As main and interrelated industries, they all have the highest copyright factor – 1. Some of the other trade activities also have a high copyright factor – jewelry (0.25), games and toys (0.1), and only two of the activities have a very low factor - furniture (0.05) and household goods (0.005).

Table 5. Distribution of 51.47 in Ratio 75:25

	2003				2005			
	Number of enterprises	Number employed	Gross output	Value added	Number enterprises	Number of employed	Gross output	Value added
V. Non-distributable group of copyright activities	887	5916	151 841	44 972	920	7267	250 304	77 270
I.V.1 Total sales – retail and whole-sale	296	1972	50 614	14 991	307	2422	83 435	25 757
51.47 *Wholesale of other household goods*	**1183**	**7889**	**202 454**	**59 963**	**1226**	**9689**	**333 739**	**103 026**

Using the same basis as above, our assessment is that the copyright factor should be close to or even a little above 0.5, since activities with factor 1 provide for about one-half of the sales values (after deducting the share of general wholesale trade). We adopted a factor of 0.55.

Notwithstanding the number of conditionals in the procedure, it allows for a more precise determination of the share of the fourth group and to calculate its copyright factor, based on the share of the first three groups of industries in relation to the GDP, where the fifth group should be added.

5. Weighting and Distribution of Code 51.85 - *Wholesale of Other Office Equipment and Office Furniture*

This mixed code includes wholesale of office furniture (III.4.) and word processors, calculators and photocopiers (II.2). We do not take into account mechanical typewriters because it is an insignificant and constantly diminishing group.

From the sales figures in Annex 9 we can obtain the wholesale figures under II.2. On this basis, by subtracting the value of code 51.85 we get the assessed sales value for under III.4.

This ratio is close to the inner ratio between gross output and value added codes for each of the two industries II.2. and III.4. That is why we apply the same approach for the proportional distribution of the values, used with code 52.44.

Table 6. Distribution of Code 51.85

	2003				2005			
	Number of enter-prises	Number employed	Gross output	Value added	Number of enter-prises	Number employed	Gross output	Value added
II.2. Computers and computer accessories and equipment (including pho-tocopiers)	43	164	6811	2613	39	139	5683	2766
III.4. Furniture	125	879	15 504	4836	120	730	14 338	4700
4.1 Total sales – retail and wholesale	the only group that is not included in II.2 and III.4 is typewriters, whose share is insignificant and we do not take it into account, i.e. VV.1. is excluded							
51.85 *Wholesale of other office equipment and furniture*	**168**	**1042**	**22 314**	**7449**	**159**	**869**	**20 021**	**7465**

6. Weighting and Distribution of Code 52.45 - *Retail Sale of Electrical Household Appliances; Records, Cassettes, CDs, DVDs; Musical Instruments; Radio and TV Goods*

Here again, we used two approaches for determining the ratio of distribution of value added and other major parameters (gross output and number of people employed) of the mixed code among the respective industries (I.2, II.1 and III.3) – expert assessment (interview with traders of "black" and "white" appliances) and sales ratio of the relevant groups of goods from "Information on sales of trade companies" for the respective year – records, cassettes and CDs, video cassettes and DVDs, radio and TV goods (see Annex 9). Based on the mean assessment of the share of sales of radio, TV and other goods, the share of economic activities not related to copyright was determined to be 65 percent in this code.

The next step was the distribution of the remaining 35 percent of the economic contribution among the three industries. Similar to code 51.43 in determining the ratio of distribution of values in the mixed code 52.45 between I.2, II.1 and III.3, the ratio in sales volume of the respective groups of goods was used as more realistic, and not that between the three industries.

Table 7. Sales according to Groups of Goods and Weights in Distribution of the 35 percent of Code 52.45

Industry	Retail sale of	Code	2003		2005	
			thou-sand BGN	%	thou-sand BGN	%
I.2 Music, Theater, Opera	Music recording carriers – audio cassettes, audio Ds and video cassettes and DVDs	0915 0916	11 707	2.4	16 425	2.4
II.1 Radio and TV sets, cassette players, CD and DVD players, computer games accessories and other gaming equipment	Radio and TV goods	0911	149 007	30.9	216 126	30.9
II.3. Musical Instruments	Durable goods for leisure time activities, musical instruments	1/3 f 0920	7971	1.7	12 009	1.7
	Total		168 685	35.0	244 560	35.0

7. Weighting and Distribution of Code 52.48 – *Retail Sale in Specialized Shops, not classified elsewhere*

There is also a complex code with a great number of diverse activities. Together with value added of BGN106 006 000 for 2003 and BGN175 981 000 for 2005 it is the largest of the mixed codes. It encompasses retail sales of three groups of goods:

activities with copyright factor 1, falling in I and II groups of industry
souvenirs, works of art and craft, church decoration;
office furniture, office equipment, computers and standard software;
photographic articles, optical and precision equipment;
postage stamps and coins.

activities with lower copyright factor, falling in group III
games and toys – 0.50;
watches and jewelry – 0.25;
wallpaper and floor covering, carpets and rugs – 0.02;

non-related industries (IV group)
long distance communication equipment;
activities of photographic shops;
sports goods, fishing goods, camping gear, boats, bicycles;
guns for hunting and for sport, pneumatic and air rifles and guns and ammunition;
flowers, plants, seeds, fertilizers, pets and pet food;
heating materials
other non food goods.

Similar to code 51.47, there is no reliable basis for the distribution of value added and the other parameters among the separate industries. We tried, however, to assess the share of the last group of unrelated industries. Again using information on the sales of groups of goods connected to copyright and neighboring rights in accordance with Annex 9, in the section on retail sales of computer and office equipment (with factor 1), we obtain values for 2003 and 2005, equal to 26 percent and 33 percent of the value of sales under this code respectively. Here we find such mass products as carpets, wallpaper, photographic accessories, etc. Together with the activities already under code 51.47, a new element: souvenirs, works of art and crafts, church decoration is included in the activities with a copyright factor.

On the other hand, different from items under code 51.47, code 52.48 includes two other types of activities, not connected to copyright and neighboring rights (IV group), linked with sale of mass products – heating materials, long distance communication equipment and other non-food goods. For instance, the retail sales values of long distance communication equipment for 2003 and 2005 (according to Information on sales of trade companies) are 14 percent and 11 percent respectively of the total sales value for code 52.48.

On the basis described above, we determine the share of the sale of goods by industries, unrelated to copyright and neighboring rights under this code, to be 35 percent. This is an increase of 10 percent in relation to the share of this group of activities, which we determined in the process of weighting the code 51.47 (25 percent).

Table 8. Distribution of 52.48 in Ratio 65:35

	2003				2005			
	Number of enterprises	Number employed	Gross output	Value added	Number of enterprises	Number employed	Gross output	Value added
V. Non-distributable group of copyright activities	5207	17 015	164 717	68 904	5953	19 271	238 385	114 388
IV.1 total sales – retail and wholesale	2804	9162	88 694	37 102	3205	10 377	128 361	61 593
52.48 *Retail sale in specialized shops not classified elsewhere*	**8011**	**26 177**	**253 411**	**106 006**	**9158**	**29 648**	**366 746**	**175 981**

The remaining share of 65 percent of the activities of the first three groups taken together is included in the above-defined fifth group, with the same copyright factor of 0.55. The logic behind the determination of this factor is the same as for determining factor 51.47.

8. Weighting and Distribution of Code 74.87 – *Other Business Services*

This code encompasses three groups of business services:

Services, related to the main group of copyright-based industries:

– fashion design, connected with textiles, clothes, shoes, jewelry, furniture and other interior design, other fashion goods, as well as other personal articles and household goods;
– activities of graphic designers;
– activities of interior designers;
– activities of designers of stalls and pavilions;
– activities of agents and impresarios on behalf of and at the expense of individual performers, seeking employment in film, theater or other productions, or in sports;
– selection and distribution of cinema, theatre, TV parts (casting services);
– finding publishers, directors, producers, etc. for books, performances, works of art, photography, etc.;
– managing copyright and royalties (without copyright on films);
– activities of independently-employed auctioneers.

Services, not related to copyright-based industries

– collection of bills, payments, receipts, assessment of credit ratings in connection with credit profile or business practice of companies or physical persons
– business mediation in the sphere of organizing the sale or purchase of small and medium-sized enterprises, including offices for freelancers
– emission of coupons and stamps for discounts enabling a purchase after collection of the requisite quantity
– assessment other than for the purposes of insurance
– organizers of fairs, exhibitions and congresses
– franchisers, consultants, other than technical and engineering, not classified elsewhere
– reading of gas meters, water meters, electrical meters and heat meters of households
– managing of industrial property rights (patents, licenses, trademarks, franchises, etc.).

The total value added, calculated for this code is BGN31 020 000 for 2003 and BGN43 920 000 for 2005. The presence of such a large undifferentiated code in the classification of economic activities, adopted by the National Statistical Institute of Bulgaria shows how underdeveloped some of the copyright and other activities are.

On the basis of the expert knowledge of the research team, as well as interviews and group discussions with representatives from some of the industries under this code connected to copyright and other neighboring rights' industries (different types of design), as well as the value added generated by independent sources, generated in the societies for collective management of copyright[1], we can conclude that value added of "designer" activities here is comparable to that obtained by societies for collective management of industries connected to copyright and neighboring rights – i.e., about 10 percent. This share is added to the data for activity 1.7: Visual and Graphic Art.

[1] According to the data provided to the team directly by copyright collecting societies, the value added was BGN2 930 000 for 2003 and BGN5 155 000 for 2005, i.e., about 10 percent of the value added in this code.

Table 9. Distribution of 10 Percent of 74.87 – Other Business Services

	2003				2005			
	Number of enterprises	Number employed	Gross output	Value added	Number of enterprises	Number employed	Gross output	Value added
I.7 Visual and graphic art	88	360	10 212	3102	146	530	15 747	4392

We assessed the share of value added, generated in different types of mediation in theater and music, the cinema, TV, book publishing and art at **25 percent.** This share is distributed proportionally to the share of the respective main industries, applying the same parameter as for code 92.31.

Table 10. Distribution of 25 Percent of 74.87 According to *Main Industries*

	2003				2005			
	Number of enterprises	Number employed	Gross output	Value added	Number of enterprises	Number employed	Gross output	Value added
I.1 Book Publishing and Printing (*22.11 Publishing of books)*	131	484	12 883	3834	193	678	16 036	2251
I.2 Music, Theater, Opera *22.14 Production audio recordings (22.31 Production of audio recordings)*	12	108	2087	1481	28	185	4269	2463
I.3 Cinema and Video *22.32 Production of video recordings (92.11 Production of cinema and video films)*	61	234	10 019	2167	113	315	17 754	5924
I.7 Visual and Graphic Art	17	75	541	273	29	146	1309	343
25% of 74.87 Other business services	**220**	**901**	**25 530**	**7755**	**364**	**1325**	**39 368**	**10 980**
74.87 Other business services (including graphic design)	**879**	**3602**	**102 120**	**31 020**	**1455**	**5299**	**157 471**	**43 920**

The remaining 65 percent of value added, generated by business services under this code and not related to copyright, is outside the scope of this survey.

6. Weighting of Code 71.40 – *Rental of Audio and Video Recordings, Books, Audio and Video Equipment, Musical Instruments, Jewelry, Sports Equipment, Furniture, Textiles and Ceramic Articles, Manual Household Machines, Flowers and Plants*

This code contains a small part of the activities under group four of industries not connected to copyright and neighboring rights – rental of sports equipment. The situation here is similar to code 51.47 – it is necessary to separate a small share of untypical activities and to ascribe copyright factors to the remainder, which included activities in comparison to the first three groups of copyright-based industries (main, interrelated and partial industries). On this basis, this code should also be added to the fifth group.

Among the activities, the most popular is rental of video recordings and sports equipment (skis, boats, water wheels, etc.). Adopting a more conservative approach we can also assess the share of untypical activities at 20 percent, which is added to the activities in IV.1 General retail and wholesale.

The remaining 80 percent of the values under this code will be included in group five and should be weighted with a copyright factor. We detect a combination of a significant share of activities with factor 1 (rental of books, audio and video recordings, audio and video equipment, musical instruments) and activities with a lower factor (jewelry, furniture, household utensils, textiles and ceramics) – a situation similar to that of code 51.47. That is why we adopted the same copyright factor of 0.55.

Table 11. Distribution of 71.40 in Ratio 80:20

	2003				2005			
	Number of enter-prises	Num-ber em-ployed	Gross output	Value added	Number of enter-prises	Num-ber em-ployed	Gross output	Value added
V. Non-distributable group of copyright activities	179	645	5873	1054	126	784	7255	2083
IV.1 Total sales – retail and wholesale	45	161	1468	264	31	196	1814	521
71.40 Renting out of goods for personal or home use	224	806	7342	1318	157	980	9069	2604

10. Weighting of Code 92.52 – *Activities of Museums and Galleries; Preserving Cultural Monuments*

From the section in the report referring to the economic contribution of cultural institutions financed by the budget[1] it becomes clear that the data contained in code 92.52 does not apply to museums, financed by the budget. At the same time, this code classifies in one group museums and galleries, which under WIPO's classification fall under visual and graphic arts. All activities connected with maintaining national heritage sites are also classified here.[2] The expert assessment of the subjects under this code shows that it contains information mainly about private art galleries, as well as the small number of private (or non-state)

[1] See Part 2: Identification of NCEA-2003 codes and the sources of statistical data

[2] The share of private firms on the latter is low – there are few examples such as the *Trakart* gallery in Plovdiv that received a 20-year concession on antique mosaics located at the subway near the central square.

museums. That is why we have divided the indicators in this code (gross product, value added and number employed) in a ratio 4:1 between visual and graphic arts and museums.[1]

11. Redistribution of Code 52.50 - *Retail Sale of Second-Hand Goods in Shops*

This code covers three subgroups: 1) sale of second-hand books; 2) sale of antiques and 3) sale of other second-hand articles. The analysis of the companies in the last group given here shows that they are mainly shops that sell second-hand automobile parts and second-hand clothes, which have nothing to do with the copyright-based industries. This group includes a significant number of companies and demonstrates significant turnover, higher than those in the remaining two groups. Adopting a conservative approach we decided to ascribe to the first group – sale of second-hand books, 10 percent of value added under this code, which is included in the book publishing and printing sector of the main copyright-based industries. Value added of 10 percent is also ascribed to the group covering sale of antiques, which is included in museums for the partial copyright industries.

The remaining 80 percent share of value added under code 52.50 is included in total wholesale and retail in the group of non-specialized, supporting industries. We realize that judging by the trafficking in exports of antiques and the multitude of illegal excavations of archeological sites in the country, it is possible that the sale of antiques may generate significant profits in the sphere of the informal economy and be unaccounted for in national statistics.

12. Redistribution of Code 92.34 - *Other Leisure Activities, not classified elsewhere*

This code includes: dance schools and dance instructors; organization of circus shows; puppet shows, rodeos, shooting galleries, firework displays; etc. Most of them, which have a high turnover, such as puppet shows and circus performances, fall under music, theater and opera under the main copyright-based industries. Expert assessment ascribed 80 percent of value added to this code to be included in this main copyright industry.

[1] It was decided to retain the share of data for museums as the basis for comparison in further studies, although their determination was based on expert judgment. There is good ground to believe that this sector will develop further in the coming years. This was also strongly recommended by WIPO consultant Prof. Robert Picard.

APPENDIX 5

Methodological Notes Concerning GDP Calculation Procedures in the Bulgarian System of National Accounting

GDP is one of the main economic indicators. The annual GDP figures started to be compiled in 1980 following the UN's F20 methodological procedure for transformation of economic data from MPS to SNA. The direct implementation of the NA system started in the early 1990s when GDP started to be estimated as a result of implemented annual sets of non-financial national accounts – production accounts, generation of income accounts, use of disposable income accounts and capital accounts – all of them integrated in the frame of SUTs. Quarterly estimates of GDP were introduced in 1995 – initially based on production only as a sum of generated value added by the economic sectors and industries. The independent quarterly estimates of GDP were introduced in 1998 with procedures for reconciliation between the two approaches.

The European System of National and Regional Accounts (ESA '95) is the methodological basis for compilation of the national accounts. Two independent approaches are used for the compilation of GDP for the estimation at current and constant prices – the production and expenditure approach. The third approach based on income generation is not treated as independent as the other two use the same data sources.

GDP for Bulgaria is a balanced estimate of the data calculated independently by production and by final expenditure.

GDP by production characterizes the final result of the economic activity. It is measured by the total gross value added generated by all resident institutional units, which are producers of goods and services. From the production aspect, GDP at market prices is calculated as a sum of the gross value added adjusted as a basis for the economy as a whole. Adjustments include net taxes on products plus non-deductible VAT and import duties less financial intermediation services indirectly measured (FISIM), because of their specific monitoring.

Gross output is shown on the resource side of the production account and covers the market output, the output produced for own final use (including housing services produced for own consumption by owner occupiers) and non-market output. Gross output consists of:

- goods and services sold including barter transactions;
- goods and services used for payment in kind;
- goods and services supplied to another establishment belonging to the same enterprise or to a non-market producer;
- resale of goods less their book value;
- goods and services produced by households for their own final use; rent for owner-occupied dwellings; goods and services retained by their owners for own final consumption or gross fixed capital formation;
- goods and services supplied free or sold at prices uneconomically significant to other institutional units; change in inventories of finished goods and work-in-progress.

The gross output is valued at basic prices, which do not include net taxes on products as distinct from the producers' prices. Until 1996 the subsidies from the state budget were treated as "other subsidies on production" and did not affect basic prices. Subsidies have been included in the basic prices since 1996.

The holding gains/losses are accumulated in the value of inventories of finished goods and work-in-progress due to high inflation, i.e., they are not a result of production activity. Since 1994 data on gross output excludes holding gains/losses.

Intermediate consumption shown in the production account is valued at purchasers' prices and consists of:

- goods and services consumed as inputs in the process of production i.e., either transformed or used in the production process;
- goods and services provided to employees while on active duty;
- small tools and equipment used exclusively or mainly at work;
- current repairs and maintenance;
- purchased external services, e.g., research and development, staff training, marketing, advertising, communications, rentals, subscriptions etc.

Gross value added balances the production account between gross output and intermediate consumption.

Net taxes on products covers taxes on products less subsidies granted by the state budget for certain goods and services, produced by non-financial units.

Non-deductible VAT is the VAT payable by a purchaser which is not deductible from his own VAT liability, if any. It is equal to the estimated value of VAT due to be paid to the state budget, reduced by the tax reimbursed to taxpayers or by tax deducted against other tax liabilities.

The total value of ***FISIM*** is measured as a difference between interest received and interest paid by financial intermediaries respectively on credits and deposits plus net revenues from transactions with securities.

The ***income generation account*** is compiled in parallel with the production account and shows the activity, economic and institutional sector in which the primary in-comes originate.

Gross operating surplus and/or mixed income is a balancing item, which is estimated as the difference between gross value added at basic prices and compensation of employees and net taxes on production.

Compensation of employees includes the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period, employers' social contributions (actual and imputed), health insurance contributions and contributions to unemployment according to the labor legislation in force.

Other taxes on net production represent payments by employers to the state budget less subsidies granted by it to the economic units. Until 2000 it consisted only of subsidies granted, and since 2001 other taxes on production have been included.

GDP by final expenditure is calculated as a sum of individual consumption, collective consumption, gross fixed capital formation, changes in inventories, net exports of goods and services.

Individual consumption is measured by:

a) *Household final consumption expenditure:* purchases of goods and services except those for intermediate use; goods produced by households for their own final consumption; purchases of services, fully or partially paid; rent of owner-occupied dwellings; income in kind. Since 1996 individual consumption of households is calculated according to the national concept i.e., including the consumption of residents abroad and excluding the consumption of non-residents. Since 1997, household final consumption expenditure is calculated in accordance with COICOP – Classification of Individual Consumption by Purpose, which is used in SNA '93 and ESA '95. The consumption expenditure is presented as 12 main divisions;

b) *Final consumption expenditure of non-profit institutions serving households* - these are expenditures of trade unions, religious organizations, charities and other NPISHs rendering goods and services to households free or at economically insignificant prices;

c) *Government final consumption expenditure* - these are expenditures incurred by the state budget for the provision of individual services free of charge to households: health, social insurance, education, sports, culture and arts.

Collective consumption is measured by final government expenditure on collective services provided to society as a whole. These are services for maintenance of settlements, fundamental science and part of scientific services, government administration, defense and security.

Gross fixed capital formation includes investments for the following types of fixed assets: tangible fixed assets (crops, productive and draught animals, buildings, machinery and equipment, transport facilities, agricultural equipment); intangible fixed assets (R&D products, software, mineral exploration and construction, research and design). Gross fixed capital formation is measured by expenditures on acquisition of fixed assets (including those under construction) less the revenues from sales of existing fixed tangible assets.

Inventories consist of materials and supplies, work-in-progress, finished goods and goods for resale; young animals and animals for fattening. Four quarterly estimates for holding gains/losses and changes in inventories are made and the annual values are the sum of the quarterly figures. The holding gains for work-in-progress and finished goods are excluded from the estimates of gross output in the production account. Since 1997 the intermediate consumption has been adjusted by the value of holding gains for raw materials and supplies. Changes in inventories included in GDP by final expenditure are calculated on the basis of information for all four types of inventories.

The estimates for all inventories were carried out using the following approach: The value of inventories by type and by activity, at the beginning and at the end of the corresponding quarter, is deflated by the specific price indices and transformed into the average preceding year prices. The difference between these values represents the estimate of the physical change of the corresponding type of inventory at constant prices. The change in inventories at quarterly current prices is obtained through inverse inflation by the price index for the quarter in question.

The values of holding gains/losses are maintained for 1991-1993 at current prices and for 1992-1994 at preceding year prices.

Net exports of goods and services are measured by the difference between the exports and imports of goods and services. Exports and imports are valued f.o.b.

APPENDIX 6

Structure of the Primary Statistical Data for Economic Activites used in the 2007 WIPO Study

Non-Financial Enterprises, supplying a Balance for 2005

1. Press and Literature

NACE code NKID 2003	Number of enterprises	Property rights	Software	Products of R&D activities	Other lasting non-material assets	Lasting non- material assets	Costs of materials	Costs of hired services	Other costs	Depreciation of assets	Provisions	Tangible fixed assets in progress and costs on liquidation fixed assets	Amend of inventory and unfinished items of production
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2211													
2212													
2213													
2221													
2222													
2223													
2224													
9251													
5247													

Continuation

NACE code NKID 2003	Profit from main activity	Profit	Net income from sale of products	Net income from sale of goods	Net income from sale of services	Rents incl.	Other incomes	Net sales income (general output)	Carrying amount	Number employed
1	15	16	17	18	19	20	21	22	23	24
2211										
2212										
2213										
2221										
2222										
2223										
2224										
5247										

Non-financial enterprises, not supplying a Balance for 2005

1. Press and Literature

NACE code NKID 2003	Number of enterprises	Costs of materials	Costs of hired services	Other costs	Tangible fixed assets in progress and costs on liquidation fixed assets	Amend of inventory and unfinished items of production	Profit	Net income from sale of products	Net income from sale of goods	Net income from sale of services	Others	Net sales income	Carrying amount	Number employed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2211														
2212														
2213														
2221														
2222														
2223														
2224														
9251														
5247														

APPENDIX 7

Wholesale and Retail of Some Groups of Goods, Related to Copyright-Based Industries

Wholesale and Retail of Copyright-Related Goods for 2003 in BGN'000 (including VAT)

Group of goods	Code	Wholesale	Retail
		1	2
Telecommunication equipment	0812	197 195	136 652
Radio and television goods	0911	348 247	149 007
Optics and photographic accessories	0912	57 080	25 626
Computer and office equipment	0913	834 302	257 839
Carriers of audio-visual data, photographic equipment and machines for information processing	0914	66 724	29 635
Carriers of musical audio-recordings – audiocassettes and audio CD	0915	6 785	8 574
Carriers of video-recordings – videocassettes and DVD	0916	3 408	3 133
Durable items for recreational activities, musical instrument	0920	50 993	23 913
Toys and games, sport and camping equipment, flowers and pets	0930	217 319	84 273
Books, newspapers, journals; office goods and consumables	0950	381 836	326 483

Wholesale and Retail of Copyright-Related Goods for 2005 in BGN'000 (including VAT)

Group of goods	Code	Wholesale	Retail
		1	2
Telecommunication equipment	0812	254 193	166 003
Radio and television goods	0911	415 132	216 126
Optics and photographic accessories	0912	74 023	37 737
Computer and office equipment	0913	1 058 384	489 701
Carriers of audio-visual data, photographic equipment and machines for information processing	0914	78 674	52 441
Carriers of musical audio-recordings – audiocassettes and audio CD	0915	7 558	11 862
Carriers of video-recordings – videocassettes and DVD	0916	6 753	4 563
Durable items for recreational activities, musical instrument	0920	71 014	36 026
Toys and games, sport and camping equipment, flowers and pets	0930	247 878	109 028
Books, newspapers, journals; office goods and consumables	0950	468 884	374 300

APPENDIX 8

Data from Related Studies and Calculations, used in Defining the Copyright Factor in Partial Copyright-Industires and Non-Dedicated Support Industries

I. Generalized Data from a Telephone Survey with Managers in Copyright-Based Industries

Total Number of Interviews carried out – 44 managers and owners

PARTIAL COPYRIGHT INDUSTRIES	How important is copyright in the daily operations of your firm?						Possess* copyrights	Possess nonmaterial assets (total)	Income from selling IP	Buying of copyrights, licenses, patents	Average on 1, 2, 3, 4, 5
	Very significant	Significant	Slightly significant	Insignificant	Total	Mean					
Weight	1.00	0.5	0.25	0		(1)	(2)	(3)	(4)	(5)	
Apparel, textiles and footwear	4	2	4	2	12	0.50	0.00	0.67	0.00	0.17	0.27
Jewelry and coins	0	2	0	1	3	0.33	0.33	1.00	0.00	0.00	0.33
Other crafts											
Furniture	2	0	1	2	5	0.45	0.20	1.00	0.20	0.20	0.41
Household goods, china and glass	1	4	3	4	12	0.31	0.08	0.67	0.00	0.00	0.21
Wall coverings and carpets	2	3	1	1	7	0.54	0.00	0.43	0.00	0.00	0.19
Toys and games	2	0	1	2	5	0.45	0.20	0.60	0.00	0.20	0.29
Interior design	1	1	2	0	4	0.50	0.5	0.75	0.25	0.00	0.40

* - values in columns 2-5 represent the shares of positive responses in the group

II. Secondary Analysis of some Primary Statistical Data on NCEA-2003 Codes, relevant to Copyright-Based Industries (durable non-material assets over 3-year period)

PARTIAL COPYRIGHT INDUSTRIES	2003	2005	2003	2005	2003	2005	(LNMA2005-LNMA2003)/(NSI2005-Prof2005)
	PR/NE	PR/NE	LNMA*/NE**	LNMA/NE***	LNMA/(NSI - Prof)	LNMA/(NSI - Prof)	
Apparel, textiles and footwear	0.29	0.32	3.5	.,9	0.6%	0.7%	0.1%
Jewelry and coins	0.00	0.00	2.6	1.4	1.4%	0.3%	-0.8%
Other crafts	0.37	0.80	0.9	5.8	0.2%	0.7%	0.6%
Furniture	0.13	0.28	1.1	2.0	0.2%	0.2%	0.1%
Household goods, china and glass	5.95	4.92	9.3	8.5	0.9%	0.9%	0.0%
Wall coverings and carpets	0.00	0.00	5.4	4.7	0.7%	0.6%	-0.1%
Toys and games	0.08	0.63	1.9	0.9	0.9%	0.1%	-0.2%
Architecture, engineering, surveying	1.70	0.50	3.8	6.1	1.6%	2.2%	0.7%
Museums and galleries	0.10	0.08	0.4	0.6	0.3%	0.2%	0.07%
Interior design	0.31	0.14	196.7	9.5	86.3%	3.7%	-66.1%

LNMA* – lasting nonmaterial assets
NE** – number of enterprises
LNMA/NE*** – in thousands BGN

III. Calculation of the Copyright Factor for Non-Dedicated Support Industries according to their Share in GDP

General Distribution on after Redistribution of the 12 Mixed Codes		2003 Value added (tBGN'000)	2005 Value added (BGN'000)
Weighted data	Core copyright industries	394 479	672 270
	Interdependent industries	172 454	267 539
	Partial copyright industries	25 486	39 888
	Non-attributable group	63 212	106 558
Non weighted data	Non-dedicated support industries	3 088 617	4 213 332
BG economy	National Value added	**29 604 494**	**35 220 410**
	National GDP	**34 627 545**	**42 797 407**

Copyright factor	**Value added (Core + Interdependent + Partial + Non-attributable)/Value added (National - Non-dedicated)**	2.5%	3.5%
	Value added (Core + Interdependent + Partial + Non-attributable)/(National GDP - Value Added Non-dedicated)	**2.1%**	**2.8%**

APPENDIX 9

Reasons for Taking Decisions Regarding the Copyright Factor of Partial Copyright Industries

Table 1. **Copyright Factor for the Partial Industries in Bulgaria in Comparison to the Values in Singapore and Hungary**

Partial copyright industries	Singapore 2004 %	Hungary 2003 %	**Bulgaria 2007 %**
Ready-to-wear clothes, textiles and shoes	0.4	0.5	**0.6**
Jewelry and coins	25.2	25.0	**20.0**
Other crafts	42.0	40.0	**40.0**
Furniture	5.0	5.0	**5.0**
Household goods, glassware and porcelain	0.6	0.5	**0.5**
Carpets and wallpaper	1.7	2.0	**4.0**
Games and toys	42.0	50.0	**40.0**
Architecture, engineering activities and technical consultations	8.3	10.0	**10.0**
Museums and galleries		50.0	**50.0**
Interior design	8.3		

Ready-to-wear clothes, textiles and shoes: Textiles give the second most significant result from the survey of the sectors of partial copyright industries, equal to that of design and interior design. Only two of the 12 managers interviewed said that copyright does not apply to their activities. From the point of view of the ratio in the change of [(LNMA2005-LNMA2003)/(NSI2005-Prof2005)] we see the same value as with furniture and higher than that for household goods, glassware and ceramics (*see Annex 8, item 2*). Moreover, in the last few years, textiles made up for 28 percent of the country's exports. According to interviews the country has preserved its position mainly on account of boutique goods (originals, limited series and high quality) as a means of combating competition from Chinese textiles. These expert assessments, together with the survey results oblige us to increase by 20 percent the copyright factor for this industry compared to Hungary, by setting it at 0.6 percent.

Jewelry and coins: Interviews with experts and companies demonstrated that large quantities of mostly imitation jewelry are freely imported from Turkey and other Middle Eastern countries without any compensation for the copyright of designers of such articles. The team therefore ascribed a copyright factor lower by 25 percent than that adopted in Hungary and Singapore for this industry.

Other crafts: For this industry the value of the Hungarian copyright factor was adopted – half the interviews conducted with experts showed that here too a significant section of the artistic crafts production is found in the informal economy and is not included in the national statistics.[1]

[1] According to the study by Stati Startev, GDP in Bulgaria was around 50 percent lower than that declared (see Statev, S. (ed.) (2003) – *Economic Growth and Stabilisation,* University of National and World Economy, De-partment of Economics, chapter 1).

Furniture: The same copyright factor as Hungary and Singapore was adopted. Interviews with five managers gave the same result as in the games and toys sector (see Annex 8, item 1). The calculated ratio of change in intangible assets in respect to the change of revenues and profits [(LNMA2005-LNMA2003)/(NSI2005-Prof2005)] is the same as in the sector for textiles and shoes (see Annex 8, item 2). However from discussions with representatives from the sector (Rousse, Plovdiv) we established the presence of companies, making high quality and original furniture with a high share of activity, protected by copyright, whose products are often borderline works of art. Therefore, the factor for Bulgaria should not be lower than that for Hungary and Singapore – 5 percent.

Household goods, glassware and porcelain: Our Hungarian colleagues adopted a lower copyright factor for this industry compared to the one in Singapore – 0.5 percent instead of 0.6 percent. Whereas among the 12 managers interviewed low figures for the significance of copyright predominated (an average of 31 percent), as well as a zero value for [(LNMA2005-LNMA2003)/(NSI2005-Prof2005)], for this industry, we adopted a copyright value, identical to Hungary – i.e., 0.5 percent (see Annex 8, items 1 and 2).

Carpets and wallpaper: The production of wallpaper in Bulgaria is limited, but there are several traditional centers for the production of carpets with original designs, which are the products of traditional crafts. That is why we decided to increase the copyright factor by doubling the comparatively low values in the Hungarian and Singapore surveys, setting it at 4 percent.

Games and toys: There is only one computer gaming company in Bulgaria positioned on the international market but several that are of national importance. Among the five managers surveyed we received differing views with a slight predominance of the negative ones (see Annex 8, item 1). Therefore, similar to jewelry, the copyright factor in this industry in the Bulgarian survey should be decreased by 20 percent compared to that of Hungary and thus it is set at 40 percent (close to that of Singapore).

Architecture, engineering activities and technical consultations: The preliminary evaluation of the share of architecture companies in the total number of companies, registered under the codes of this industry, as well as interviews with experts in the sector conducted in 2005 provided sufficient information to claim that the situation in Bulgaria is similar to that of Hungary and therefore we left the value of the factor unchanged at 10 percent.

Museums: Assessing the copyright factor for this industry, we noted the low value of the gross output and the value added. As already mentioned, in justifying the manner of distributing mixed code values (code 92.52, covering museums and galleries, part of the main industry of visual and graphic arts), national statistics do not give a full account of the economic contribution of the museum sector, due to its being combined with galleries, and also due to the higher number of subsidized museums, on which economic data are not collected. We discovered that for 2005 the gross output under this mixed code 92.52 was BGN5 133 000, while the survey conducted by us at the end of the same year in the second largest city in Bulgaria showed, that the gross sales of private galleries were close to BGN2 million per annum, which is 40 percent of that recorded by the national statistics. Therefore, while we adopted a copyright factor equal to the Hungarian survey we consider it to be a conservative assessment with the realistic value added significantly greater than that given in the economic statistics.

APPENDIX 10

Summary of the Interviews and Focus Group Discussions with Representatives of Collecting Societies, Leading Companies and Legal Consultancy Firms in Different Sub-Sectors of the Core Copyright Industries

Four Focus Group Meetings with the Research Team took place on November 13, 15, 16 and 21, 2006 with:

I. 4 collecting societies, (PROPHON, MUSICAUTOR, FILMAUTOR, THEATERAUTOR);
II. 2 companies importing and distributing entertainment software;
III. BSA/ARSIS Consulting – a representative of the business software association and one from a business software distribution company (BMG);
IV. BAMP – the Bulgarian Association of Music Producers;
V. Representatives of the music industry – producers and licensed representatives of music companies
VI. A representative of the largest private TV station with national coverage (BTV);

The participants outlined the main issues and obstacles in their respective fields, but also gave their professional opinions on the progress made over recent years.

I. The COLLECTING SOCIETIES, according to Bulgarian law are non-profit organizations. Their legal status is laid down by the Bulgarian Copyright and Neighboring Rights Act /art. 40/ and the Law for the Non-profit Corporate Bodies.

Greatest achievements common to all the collective societies:

- Since their inception in the 1990s the collecting societies have managed to increase significantly the number of members, as well as the number of contracts with users and, therefore, to increase their revenues.

For instance, in 2004 the amount collected by PROPHON doubled to BGN800 000 (around 400 000) in comparison with the total amounts for 2002 and 2003. This trend is valid for 2005 as well and this brings in greater remuneration for redistribution among the producers of phonograms and performing artists.[2]

- The percentage for administrative costs included in the contracts of the collecting societies is between 10 percent for PROPHON, THEATERAUTOR and 25 percent for MUSICAUTOR.

- There is no overlap between collecting societies and, therefore, no competition among them[2]. The principle is: one society for one kind of rights.

[1] Separate annual data was gathered from the collecting societies.
[2] The monopoly of the organizations, and PROPHON in particular, was mentioned only once as an issue – by a representative of the most powerful music business company; the reason for that is the fact that there is one single tariff in the contracts, which was seen as price domination of one collecting society int the market.

Main issues and obstacles for all the agents[2]:

- Legal enforcement of the existing copyright legislation involved very slow procedures; difficulties in collecting evidence; inefficient implementation of court decisions;
- Reforms and improvements in this area in Bulgaria will be driven by the need for harmonization with EU legislation;
- Lack of competence in the matter by judges at central and regional levels; lack of court practices and case law in this area;
- Insufficient control on content, illegal Internet up-loading and down-loading through local LAN providers, as well as on the availability of pirated products;
- Low level of public awareness – both in terms of product consumption and in terms of the moral and economic losses of piracy;

PROPHON

www.prophon.org.

The collecting society for the neighboring rights of phonogram producers and performing artists, founded in 1998. The organization is authorized to collect remuneration from public performances, broadcasting, cable retransmission and copy levies.

Main issues and obstacles:

- Difficulties in convincing the public, the main users of the music repertoire in Bulgaria to sign contracts;
- Retransmission and broadcasting licenses – no tradition in Bulgaria for paying royalties; prejudices regarding the 'intangible' rights.

MUSICAUTOR

www.musicautor.org

Main issues and obstacles:

- Recent amendments in VAT legislation, leading to compulsory registration of the collecting societies. This has set a precedent in financial practice in Bulgaria and is the subject of a joint proposal on behalf of four collecting societies to the Ministry of Finance to regulate this issue.

FILMAUTOR

www.filmautor.org

The collecting society for the copyright and neighboring rights of film authors and producers of audiovisual works in Bulgaria, founded in 1993.

Greatest achievements:

Good practice – the campaign for distribution of legal DVDs with the national daily newspapers brought higher revenues to the authors, more than they had ever received through traditional distribution chains.

---

[1] Emphasized as key issues by almost all the organizations interviewed.

Main issues and obstacles:

- Very limited number of users of the rights – few TV and cable operators broadcast/transmit Bulgarian films, therefore the limited number of contracts leads to lower revenues;
- Inadequate legislation in the field of audio-visual and communications; lack of adequate regulation of cable operators etc.

THEATERAUTOR

The collecting society for the copyright of playwrights and composers in Bulgaria.

Greatest achievements (apart from those stated for other collecting societies):
Out of five legal procedures started, three have been successfully finalized and two dropped by mutual consent. Some of the cases are used as examples in the new positive practice of the courts.

TRANSFER GROUP, LTD. – PLOVDIV

www.transferbg.com
Distributor of games.
One of the firms that has contributed greatly to the establishment and development of the computer gaming business in Bulgaria. Started up in 1990.

Greatest achievements:
Thanks to Transfer Group most of the existing cybercafés in Plovdiv became legitimate through the license contracts they concludes and flexibility in pricing.
Active participation in anti-piracy campaigns and seminars.

PULSAR

www.pulsar.bg
The biggest distributor of licensed entertainment software in Bulgaria.

Greatest achievements:
Overcoming market challenges through flexible pricing and successfully introducing legal software to Internet gaming clubs and other chains of collective users.

Recommendation 1: Specialized education and training of judges and prosecutors in interpretation and implementation of the copyright legislation;
Recommendation 2: To limit Internet piracy, particular attention must be paid to the prevention of illegal downloading on the Internet.

PAYNER Studio

Greatest achievements:

- Copyright and neighboring rights-based business with considerable investments in development and licensing of copyright products, generating revenues from copyright realization;
- Diversified product – a private TV music channel offering possibilities for TV and advertising production.

- Registration of trade marks and network of clubs for simultaneous promotion of the main product and for raising revenues.

ARSIS Consulting

Greatest achievements:

- Long-term experience in promotion and protection of intellectual property rights and copyrights in particular;
- Well-developed partnership network in cooperation with collecting societies, BAMP, institutions, firms etc.
- Important work on awareness raising and training of judges, prosecutors, police officers, etc. on specific intellectual property issues for improving penal procedures.
- A guide for investigation of offences against intellectual property rights for prosecutors is in preparation.

Main issues and obstacles:

- Software piracy as a global issue is part of the BSA focus. ARSIS Consulting is working on this issue at national level with particular attention being paid to the economic losses occasioned by software piracy (According to the Third Annual BSA and IDC Global Software Piracy Study, software piracy in Bulgaria in 2005 accounted for about 71 percent of the market).
- Low level of public awareness about economic and moral damages, both in the business and individual sectors; lack of consumer culture;
- Enforcement of the existing legislation: slow and ineffective procedures during criminal investigations and court procedures; difficulties in evidence gathering; lack of legal experience in IPR cases; copyright abuse in the regions causing gaps to occur between the interpretation of the legal texts in the different district courts;
- Insufficient control of the Internet content and the distribution of Internet providers (namely local LAN providers).

Recommendations:

What the awareness campaign of the Ministry of Culture has achieved – putting the copyright issue at the forefront of public attention – must be continued by adequate measures and carefully chosen action for sustainable effect.

- by emphasizing the losses to the national economy through provision of concrete data on the sector
- by drawing the public's attention to the economic advantages of the consumption and distribution of legal software products.

BMG

The leading business software distributor in Bulgaria which represents the major world software companies on the Bulgarian market.

Greatest achievements:

- Increasing business and revenues from its core activity – distribution of business software (as a production factor).
- Trend in Bulgaria towards entire product manufacturing, not only outsourcing and/or working out of software components.

Main issues and obstacles:

- Enforcement
- LAN networks, as an obstacle to the distribution of physical products
- Mass supply and distribution of illegal products.

Positive aspects for business from the use of legal software:

- lower risk for the products (for those firms using software as a production factor);
- stimulates more efficient use of their assets and enhances competitiveness.

BAMP

http://www.bamp-bg.org/

The Bulgarian Association of Musical Producers

A non-profit organization - members include Bulgarian producers of sound recordings and music videos. Founded in 1996, BAMP is the only organization, which represents and protects the neighboring rights of music producers in Bulgaria. The main priority of the association is to cooperate with the authorities in the process of fighting piracy in the field of music, including the pursuit of illegal sales of sound or video recordings and Internet piracy.

Greatest achievements:

- Significantly improved cooperation with the ministries of the Interior, Justice and Culture as well as NGOs, collecting societies and private business, in pursuit of illegal sales of unlicensed recordings.

Main issues and obstacles:

- Insufficient capacity for prosecuting IPR cases.

Virginia Records and Animato music

Greatest achievements:

The first company to offer licensed music products from Universal Music, and, despite market challenges, the two companies are convinced that there is great potential for the Bulgarian market to absorb music production as there is a long musical tradition in Bulgaria.

Main issues and obstacles:

- Low level of sales of original music in Bulgaria;
- Difficulties for Bulgarian musicians and producers to produce and sell locally-produced music;
- No distribution network, scarce opportunities for on-line sales;
- Physical sales outside the capital are high;
- Abuse of copyright and non-respect of collecting societies mainly by cable operators and private radio stations; few restaurants clubs or advertisers pay royalties;
- The level of public awareness is low.

BTV - the largest private TV broadcaster with national coverage

Greatest achievements:

- Leader in the national TV market in terms of transmissions of programs, movies, etc.
- Contracts with all the relevant collective societies;
- Close cooperation with the institutions responsible for media legislation.

Main issues and obstacles:

• The rapid development of new technologies outstrips legislation; issues such as mobile television still remain unregulated;

• Existing Bulgarian providers of TV by Internet may not cause problems for Bulgarian producers, but for channels paying royalties to import programs which could be watched for free on the Internet, this would be an obstacle.