

Industrial policy of the Slovak Republic

Introduction

The qualitative changes going on in the world economy become reflected in also the approaches to industrial policy. In the 1990s, the world economy started to be markedly ruled by processes directed towards new economy and globalisation. They have been based on a broad-range penetration of information and communication technologies into all areas of life of the society. Within the global economic space, the policy of competition started gradually replacing traditional industrial policies.

The document „Industrial Policy in Enlarged Europe“ (COM 2002) 714 Final developed by the Commission of the European Communities is considered as the start of the process of the review of the adequacy and balanced nature of the application of industrial policies in enlarged Europe. The document calls upon Member and Candidate States to review their industrial policies on national level so as to make them encourage and maintain the competitive ability of the grouping. At the same time, the institutional backyard of the process was strengthened by a newly created board on competition.

Competitiveness, i.e. the ability of the economy to provide the population with a high and increasing standard of life, high employment on a sustainable basis, has been the principal ambition of also the European Union. The Lisbon meeting of the European Council in the spring of 2000 set the goal to the EU to become the most competitive economy in the world by 2010. The key factors of competitiveness include above all development of knowledge, innovations and drive. The EU policy of competitiveness is directed above all towards securing the same conditions to improve the functionality of internal market. As a precondition for success and effectivity of the internal market, framework conditions must be met in the area of trade policy of competitiveness and monetary policy. The industrial policy of the EU is of a horizontal nature and focuses on the establishment of adequate framework conditions for a growth of competitiveness of production. The industrial policy of the EU is legally unbinding upon the Member States.

However, aiming at assuming the economic commitments under the future membership, all candidate countries have been adjusting, during the pre-accession period, the focus of their national industrial policies to parallel that of the EU.

Improved competitiveness as a precondition of the integration into the European structures has been a major priority of also the industrial policy of the Slovak Republic during the pre-accession stage; its main framework is comprised by:

- strengthening and consolidation of macro-economic stability and equilibrium,
- reform and completion of institutional environment building with major impact on the behaviour of the corporate sector,
- pursuing specific policies to support competitiveness improvement through horizontal sectors.

Similarly as other candidate countries, also the Slovak Republic has not been able to cope with the demands of the economic conditions of the EU yet, in spite of the progress achieved in the growth of its economy (economic level, productivity of labour).

After the accession, support from the EU Structural Funds will have to be utilised to the maximum extent possible. The frameworks of the support provided to industry and services in backwards regions of the Slovak Republic are identified by the principal programming document **Sectoral Operational Programme „Industry and Services“**.

Consequently, also industrial policy will have to respond to the enlargement process. Its revision will be mainly based on the development of synergies between industrial policy and other policies, directed towards the reaching of the Lisbon strategy goals.

I. Industrial policy of the Slovak Republic during the pre-accession stage, and results of its implementation

The qualitative changes occurring in the world economy have also influenced the direction of Slovakia's industrial policy during the pre-accession stage. A rich source of inspiration as well as a certain framework within which to shape Slovakia's industrial policy, was the actually implemented industrial policy of the EU whose basic parameters were defined in 1990. Since then, the approach to the principles has been steadily improving, with special emphasis on the key importance for global economy of knowledge and innovations.

The policy of the support of the corporate sector is based on four interconnected principles: support of business activities, SMEs, innovations, and support of keeping free markets. The initial financial support provided to selected companies turned into non –financial support. The responsibility for achieving competitiveness is with the companies themselves; the authorities restrict themselves to create a stable, easy-to-forecast, industrial activities-friendly environment. In the framework of the policy of competitiveness, state aid is getting minimized. State interventions are allowed whenever there is a need to eliminate imperfections of the market or to initiate development provided that the rules of competition won't get violated (the „de minimis“ principle). In practical terms, state aid mainly concerns the segments of SME, research and science, and environmental protection. Capital investment subsidies are justified with respect to new, developing sectors, not with respect to those which show depression.

Despite efforts spent to strengthen competitiveness of EU companies vis-à-vis the remaining world, a portion of industrial policy is still being implemented by governments of the individual countries. There is no clear-cut dividing line between actions and programmes of the EU and those of the individual Member States. They get drafted in cooperation; participation of Member States is implicitly assumed in the very implementation stage of the EU programmes. This at the same time is the way how to reach the general goals of the EU in improving competitiveness of the Community.

I. 1. Industrial policy of the Slovak Republic during the pre-accession stage, objectives, principles and results of implementation

Prior to 1998, Slovakia's industrial policy was conceived as an isolated part of economic policy with inadequate links to monetary and financial policy. The perception of industrial policy at that time was based on traditional forms which are characterised by direct interventions of the government with the development of sectors.

After 1999, the concept of Slovakia's industrial policy has been based on modern trends of industrial policies of developed economies, and industrial policy is being predominantly

viewed as policy of competitiveness. Connected to this is also awareness of the position of industrial policy within economic policy overall, and of its determination by the general macro-economic and institutional environment of the economy.

The breakthrough in the concept of industrial policy was due to recommendations of EU bodies to implement, during the pre-accession process in countries striving to join the EU „Action Programme to Strengthen Competitiveness of European Industry“ (Council Decision No. 96/413/EC). The new philosophy of the approach to industrial policy, including its institutional provision, was laid down in the document „Work-out of Industrial Policy of the European Union to the Conditions of the Slovak Republic“ which was adopted by Slovak Government’s Resolution No. 761 of 8 September 1999.

I.1.1 Assessment of the objectives of Slovakia’s industrial policy during the pre-accession period

The document „Work-out of Industrial Policy of the European Union to the Conditions of the Slovak Republic“ (1999) defines the objectives of industrial policy implemented since 1999 as follows:

- reduction of excess capacities of Slovakia’s industries,
- in parallel, re-direction of production factors,
- improvement of competitiveness of Slovakia’s industries, provided that the above mentioned processes have been successfully implemented.

The principal framework of industrial policy applied since 1999 has been the policy of competitiveness. The concept of the industrial policy is based on gradual shaping of conditions enabling Slovak companies to adapt to the demanding environment of the EU. Responsibility for achieving competitiveness was assigned to enterprises. The government should remain the co-ordinating body of the process, it is expected to enable rather than to finance.

I.1.2 Results of industrial policy implementation achieved

During the pre-accession period, the priority has been economic growth dynamics and structural shifts in the economy to raise the degree of the real convergence of the economy. Within 1999-2002, economic growth was at the year-on-year average of 2.8 % (Hungary 4.1 %, Poland 2.6 %, Czech Republic 2.0 %).

During the pre-accession stage, Slovakia’s economy development was accompanied by changes in sectoral structure of GDP generation. The share of industry on GDP generation was dropping to the benefit of services, similarly as in developed countries¹. In 2001, the shares of industry on GDP generation and on employment in Slovakia were 2.3 points and 4.9 points higher respectively than in the EU – 15. On the other hand, the share of services on GDP generation remains still smaller in Slovakia than in the EU (3.7 percentage points in 2000).

¹ In 1996, industry had a 30.4% share on GDP generation, the corresponding figure being 25.7 % in 2002; the share of services grew within the same period from 49.8 % to 57.5 % (in constant prices of 1995).

Added value is about 5 percentage points smaller in Slovakia's industrial production compared to the EU – 15. Compared to matching production in the EU-15, markedly smaller values of the parameter are achieved by mainly the key sectors of the Slovak Republic, including manufacturing of transport vehicles (approx. 11 points), production of metals (approx. 5 points), manufacturing of machines (approx. 7 points), manufacturing of electrical and optical products (approx. 5 points). On the other hand, much higher added value is produced by coke production and raw oil processing sector in the Slovak Republic (approx. 10 points) and some consumer goods industries (textile and clothing, leather and leather products, paper and printing industry).

Internal structure of Slovakia's industry witnessed rather pronounced changes. The shares of exploitation of mineral raw materials and electricity, gas and water distribution on industrial production reduced markedly and became closer to the level of developed countries. On the other hand, the share of industrial goods on industrial production and GDP generation has grown. Within the industrial production structure, it were mainly manufacturing of transport vehicles, paper and printing industry, manufacturing of electrical and optical products, rubber industry and production of plastic materials, glass industry that could strengthen their positions. On the other hand, positions within industrial production that weakened include food production, manufacturing of machines and machine equipment, metals and metal products, chemical and pharmaceutical industry, textile and clothing industry, leather processing and leather products.

Compared to EU – 15 the production of food, chemical and pharmaceutical industry, manufacturing of machines and manufacturing of electrical and optical products are the main areas that remain under dimensioned in Slovakia's industrial production structure. Better represented are mainly metal production and manufacturing of transport vehicles. In general, the structure of entities with respect to the various technological sectors remains still unfavourable. The group of high-tech companies still includes as little as 2% of all processing industries entities. The share of high-tech on exports of industrial goods was 3.7% in 1992. The group of companies with medium-high level technologies includes 23%, and 27% of companies were classified as having medium-low technologies. As many as 48% of industrial enterprises were classified with the group of low technologies. From this point of view the internal restructuring process of Slovakia's industrial production has not yet been completed.

During the pre-accession stage, the economic development of Slovakia went on under conditions of high economic openness, Slovakia being the most open among the CEE-5 countries. Industry has a predominant position in the realisation of foreign trade: it realises 98% of exports and imports from and to Slovakia. As a typical feature of Slovakia's foreign trade relations, Slovakia's foreign trade shows deficit, reaching a historical maximum in 2001. This was above all due to the significant import intensity of industrial production. This is linked to the inadequate supply of domestic production, not only concerning raw materials and semi-products but also final products. The share of exports and imports to and from demanding EU markets gradually grew to reach the current level of 60%. In 2002, the largest volumes of exports concerned transport vehicles, metals, machines and equipment, and chemical and pharmaceutical industry products (in the EU, the ranking of sectors was: electrical equipment and electronics, transport vehicles, chemicals, rubber and plastic materials, machines and equipment). Ranking top in imports were again transport vehicles, machines and equipment, and products of chemical and pharmaceutical industry.

There are principal differences in mainly sectoral structure of the industrial production foreign trade balance between the Slovak Republic and the EU (positive in both the SR and the EU). The largest trade surplus in the EU concerns trade in machines and equipment, Slovakia's trade balance in this sector remains passive. The largest passive balance of the trade, both in the SR and the EU, concerns electrical and optical products. E.g., in the EU, the balance of trade in chemical, pharmaceutical products, and products of rubber and plastic materials industry (subcategories DG, DH) and food production (DA) is highly surplus while making high deficit in the SR. On the other hand, EU trade balance in raw oil processing (DF), textile and clothing industry, leather processing, production of leather products (DB, DC), metal production (DJ) is negative, while being positive in the SR.

Also, the small and medium enterprises sector witnessed a dynamic development. In small enterprises in the industry (up to 20 employees) there are approximately 100 thousand employees and approx. 72 thousand small trade licensees. Altogether, this makes up 28 % of all the employees in industry (in the EU, micro-enterprises alone employ 34 % of all industrial employees). In Slovakia, small enterprises and small trade licensees are most represented in light industry sectors, woodworking industry and mechanical industry (manufacturing of metallic structures). Small participation of small enterprises still concerns partial deliveries to larger manufacturers of sophisticated products and innovative associations. SMEs in Slovak industry are generally less prepared than large entities for the conditions arising from the entering the European market.

Productivity of labour from production in Slovakia's industrial production reached (in terms of EUR PPS, Purchasing Power Parity) 45 %, and that from added value 42 % of the corresponding EU levels in EU –15 in 1999.

Within 1999 – 2002, productivity of labour from production grew 3.5% (year on year) in the EU – 15, and that from added value 3.4 %, in the same period of time the growth dynamics of the productivity of labour was however substantially higher in Slovakia's industrial production: productivity of labour from production and from added value were growing 18.1% and 16.1% respectively per year in average. As a result of this development, the deficit of the productivity level of Slovakia's industrial production compared to that of the EU markedly changed, so that productivity of labour from industrial production in the SR reached 63% of the corresponding EU-15 level in 2002.

Compared with the EU, the best positions in 2002 was taken by productivity in manufacturing of transport vehicles (subcategory DM) and rubber industry products and plastic materials (DH). In manufacturing of transport vehicles, productivity of labour in Slovakia exceeded the EU level by 28% (as little as 65% of the EU level in 1997) and in rubber industry products and plastic materials by 5% (76 % of the EU level in 1997). Productivity of labour in paper and printing industry (97% of the EU level) and in production of metals and products of metals (90% of the EU level) came closer to the EU average. The position of the manufacturing of machines and equipment in Slovakia (DK) reached 49% of the EU average, that of chemical and pharmaceutical industry (DG) 65 %, coke production and raw oil processing (DF) 43 %. The worst standing in this respect show manufacturing of electrical and optical products (40 % of the EU level), processing of leather and production of leather products (DC), and textile and clothing industry (33 % and 27 % of the EU average, respectively), thus all productions with high proportions of re-processing regimes and high proportions of „standard production“.

Productivity of labour from added value in industrial production of the SR reached 51% of the corresponding EU-15 level in 2002. By the value of this parameter (as compared to matching productions in the EU), the best position took coke production and raw oil processing. In this production sector, the productivity of labour from added value in Slovakia in 2002 was 4% higher than in the EU. Rubber industry and pharmaceutical industry were at the 88% of the EU average level, paper and printing industry at 81%, manufacturing of transport vehicles at 78%, and glass, China and construction materials industry at 77% of the EU average. The worst positions were taken by machines (38 % of the EU average), textile and clothing industry (32 %), manufacturing of electrical machines and optical products (31 %), and mainly leather processing and production of leather products (26 % of the EU average).

The lower level of productivity and competitiveness of Slovakia's industrial production as compared to the EU is also connected with structural differences of the product ranges. Evaluation of the export structure of Slovakia's processing industries by segments suggested that products with inadequate competitiveness and structural problems account for almost one third of the export product range. An additional fourth of exports concern products which are competitive by price. The product ranges which are competitive by their quality account for 45% of Slovakia's exports; this makes up in the order of 10 percentage points more in developed countries. This structure witnesses but slow changes. Structural changes in Slovakia's industrial production lack aggressivity. This, no doubt, has to do with smaller inflows of FDI's into Slovakia's economy as compared with the other CEE-5 countries, although 48% of FDI's were directed to Slovakia's industrial production within 1996-2001, manufacturing of transport vehicles and chemical industry being the front runners in this respect. This fact showed then in the relatively best position of these sectors compared to the EU with respect to productivity.

The weaker competitiveness of Slovakia's industries is also connected with the R&D base and inadequate transformation of the structures of public (academic and university) sector of science and technology to assist the transfer of R&D knowledge to the business sector and of the innovative approach of the very business entities. Employment in R&D for the business sector dropped from 41,300 persons (1989) to 5,200 (2000). R&D expenditures in this sector decreased in 2000 to 40% of their 1989 level. Real per capita expenditures on research and development in the business sector were EUR PPS 24.6 in 2000, being EUR 199.4 in the EU (1999). A total of 37 R&D organisations were registered in industry. Chemical industry has the relatively best equipped R&D institutions. Corporate research – with but some exceptions (oil refineries, rubber industry) - disappeared. As a certain remedy to the inadequate links between research and development and the business sector, six sectoral technological research centres were established. R&D activities of the centre institutions are based on contracts worth approx. Sk 1bn, which however makes up but 55% of the corresponding level of 1999. This status of research and development for the business sector may seriously jeopardise its prospective development and competitiveness.

The condition of research and development as well as economic factors principally influence also the introduction into Slovakia's economy of innovations. Innovation intensity in Slovakia's enterprises is generally markedly weaker than in the developed EU countries. So, in the SR it reached 3.2% in processing industries in 1999 and 3.7% in the EU (expenditures on revenues-related innovations). In small EU enterprises, innovation intensity reaches 5.1 % compared to as little as 3.4 % in the SR. Innovating enterprises in the processing industries in the EU make up 51% whereas only 17% in the SR. Even if in the SR, mainly food producing enterprises as well as manufacturing of machines, electrical and optical equipment are

represented above average among innovating enterprises, they still remain deep under the EU levels. The share of innovating enterprises which manufacture machines is at the 68% level in the EU, while being at as little as 25% in the SR.

There are no principal breakthrough trends evident in the pre-accession period concerning eco-effectivity of industry, which would signal a more aggressive account being taken of environmental aspects. Because of the slow restructuring of industry, inadequate introduction of new progressive technologies as well as the still high raw materials and energy intensity, the eco-effectivity of industry remains low. Technological processes in industry give rise to e.g. 48 % of all emissions discharged into the air (solid emissions, sulphur oxide, carbon monoxide). Industry generates 50% of all wastewaters discharged into water streams, this prevalence is even more evident with respect to hazardous wastes (57%) and other wastes (62% of the total production). In this way, industry strongly draws on non-renewable natural resources, burdens environmental media by negative influences, and occupies increasing land areas to deposit wastes.

The volume of investments into the environment made by Slovakia's industry in 2001 reached Sk 2.5bn. The integrated approximation strategy however envisages annual investments (during 35 years) into the environment of as many as Sk 11.6bn. The costs of harmonisation of Slovakia's environment to get to the EU level grossly exceed the potential of the business entities and the State Budget.

During the pre-accession period for full integration, Slovakia achieved a principal progress, mainly with respect to the gradual implementation of the Acquis as well as in macro-economic stability. The legislative, administrative and institutional environments could be pronouncedly upgraded. At the micro-economic level, market liberalisation and privatisation was accompanied by a significant restructuring of industry, which however by far has not been completed.

Gradually, the industrial model of Slovakia converges to the models prevailing in the EU. However, there are still some differences in the structure of industry. Performance and competitiveness of Slovakia's industry remains smaller and weaker compared to the EU-15 and to some accession countries, and this despite the undoubted success.

The growth dynamics of industrial production, profitability, degree of investments as well as the dynamic development of small and medium enterprises suggest that industrial policy has made a contribution towards the establishment of an environment favourable for development of business in Slovakia's industries.

I.1.4 Regional aspects of performance by Slovakia's industrial sectors as compared with the EU

From the aspect of the spatial distribution of GDP generation, the delay of the economic performance of Slovakia behind the EU-15 average is due to weak economic performance of a majority of the regions. The region of Bratislava is the only one performing at the EU average level (101% of EU average in 2001). The economic performance of the other regions ranges between 40 to 46 per cent of EU average (Eastern Slovakia 40 %, Central Slovakia 42 %, Western Slovakia 46 %).

To a significant extent, the above mentioned situation in regional GDP generation is connected with the availability of capital (capital assets per capita). In the region of Bratislava, per capita fixed assets exceeded Sk 1,900 thous., whereas the value of this parameter ranged between Sk 252-361 thous. for other regions (2000).

Also markedly unbalanced has been the regional distribution of Slovakia's industry. From the aspect of revenues from industrial production, rank one is taken by the Bratislava region, from the viewpoint of added value and numbers of employees, it is the Western Slovakian region that ranks first.

The existing industrial capacities are concentrated within a small number of industrially exposed areas. This gave rise to industrial micro-regions which are key to the production base of Slovakia's industry as well as to the social and economic situation within the given regions.

The micro-regions with a high concentration of industrial production mainly include Bratislava, Trnava, Nitra, Trenčín, Prievidza, Žiar nad Hronom, Levice, Žilina, Poprad, Košice, Michalovce.

The least developed industrial areas are located in the south-west of Slovakia (Záhorie, the Danube Lowlands), in southern and northern districts of the region Central Slovakia, and – except of three districts - within the whole region of Eastern Slovakia.

There are significant differences between the individual regions in the performance of their industry. Productivity of labour from revenues reached 246% of Slovakia's average for industrial production in the region of Bratislava in 2001, compared to 73% for Western Slovakian region. Productivity of labour from added value is at the level of 174% of Slovakia's average for the region of Bratislava, while being at 84% for Western Slovakian region. The highest added value is generated by industry of the region Central Slovakia (119 % of Slovakia's average) followed by Western Slovakia (115 % of Slovakia's average), the smallest being that for the Bratislava region (71 % of Slovakia's average). These results are predetermined by above all sectoral allocation of industries in the individual regions. The performance parameters of the Bratislava regions are influenced by the predominant position in its structure of transport vehicles industry and raw oil processing, of which a high turnover and relatively smaller numbers of employees, with a smaller added value are typical. The results for the region of Eastern Slovakia are determined by the position of production of metals within the region (high turnover, smaller added value), whereas in the region of Western Slovakia, it is the strong position of light industry productions (higher added value for a majority of the productions, with relatively higher numbers of employees).

Also, the implementation of industrial policy measures made a contribution towards the growth of the economic standard of Slovakia during the pre-accession period. Within 1999 – 2001, the economic standard of the SR (measured in terms of per capita GDP) increased compared to EU-15 average by 2 percentage points. From the regional perspective however, these developments were grossly unbalanced. Economic performance of the Bratislava region grew 6 percentage points compared to EU average, whereas that of the other regions of Slovakia grew as little as 1 percentage point.

I.2 Consequences of EU enlargement for Slovakia's industry

World's economy development provides evidence for the winner of the economic competition being the most developed market economies and the most powerful supranationals. The pursuing of their economic interests is accompanied by an ever stronger process of integration showing in the formation of additional special-interest communities and groupings of countries and companies. The integration process reinforces their economic power, competitiveness and predominance in economic competition.

Strengthening of the economic power of Europe and its companies within the global economic struggle also is the very purpose of the European Union enlargement process. The growth of the economic power of the EU is tightly linked with above all the ability of the industry to maintain and to develop its competitiveness and at the same time to strive broader social, environmental, and international ambitions. Enlargement is expected to bring about a significant contribution towards the growth of the competitiveness of industry. Enlargement will be the major source of opportunities for the industry for both the new and the current Member States of the European Union.

I.2.1 Major impacts of Slovakia's accession which will influence business in industrial production

EU accession will bring Slovakia speeding up of its economic growth. The GDP generation dynamics will positively influence an increased volume of foreign direct investments in particular, along with financial aid from structural funds and growing consumption as a result of changes in income levels, and the Slovak Republic will become part of the uniform single market and customs territory of the EU. Relations with the Member States will thus be of the intra-Union nature. Of the total foreign trade turnover, 80% will be realised with the future EU-25 countries in 2002. The foreign trade balance shows a surplus of Sk 26.4bn. Only relations with EU-25 non-member states will be deemed foreign trade relations. In 2002, trade with those countries accounted for 12% and 27% of exports and imports, respectively in total, the trade balance was negative at the Sk 123.0bn level.

After the accession, the trade relations of the Slovak Republic with non-Member States will follow uniform principles based on the application of equal tariffs and equal trade arrangements. They will be charges of Union customs tariffs upon imports (contractual or preferential), and these are higher than it is the case at present in the SR, in particular with respect to agri-foods and textiles. For the Slovak Republic this will mean a higher degree of protection of these domestic sectors. Also, the Slovak Republic will take over the system of EU measures of protection against unfair trade practices vis-à-vis third countries (dumping, prohibited subsidies, additional antidumping equalisation duties, i.e. SFG). After the accession, such measures will concern about 1 % of imports from non-Member States. Due to the EU regimes, the tariff burden upon those imports will increase from the current 3.5 % by additional 27.8 %. Protective tariffs will be subject of levies to the common EU budget. With respect to sectors, protective measures will relate to mainly chemical, metallurgical and mechanical industries. This will substantially raise the degree of the protection of domestic production branches, on the other hand the additional tariff burden also suggests higher costs of acquisition of the respective products for the economy as a whole as well as for the individual sectors. At the same time, the Slovak Republic will also apply the Union's regime of import licensing.

Access to third country markets for goods originating in the EU will be secured by concluding preferential agreements; on the other hand, the Slovak Republic will take over EU preferential regimes concerning aid to developing countries.

Competencies of the national authorities with respect to trade policy will be devolved upon EU bodies. The Slovak Republic will participate in the preparation and decision-making on common trade policy issues.

Also after the accession, pro-export policies will remain the full competence of the Member States. The extent of the aid provided to Slovak exporters will be dependent on mainly the potential and decisions taken by the SR. It is the granting of export credits only with respect to which provisions of EU directives and decisions concerning insurance and financing of exports with state aid will have to be respected.

The scope and reach of EU legislation in the environmental area is rather wide. A total of 7 transition periods have been granted to the SR to take over the environmental standards².

The most important legislative standard that covers all environmental media in the EU is the horizontal Directive 96/61 EC, whose purpose is to provide for integrated control of pollution from key sources, to minimize air, water and soil emissions, and to take measures to minimize generation of wastes, including their handling. Transition periods were negotiated for ten Slovak companies, thereof 6 from chemical industry.

In Slovakia, integrated pollution prevention and control is addressed by Act 245/2003 Coll.LL. Its objective is to set up a system of integrated licensing and restrictions of environmental pollution due to the operation of plants and activities specified in annex 1 to the Act. Pursuant to it, all forms of pollution shall be assessed in mutual connection, and all significant industrial places of operation shall be subject of approval process. The Act requires that technologies be installed according to Best Available Techniques (BAT).

From financial aspect, requirements concerning environmental standards are most demanding among all the requirements concerning Slovakia's accession to the EU (Sk 437bn until 2035). The competitive environment of the EU may disfavour those Slovak entities which will not meet environmental standards upon the accession.

The standards and procedures laid down in common legal regulations of the EU with respect to employment and the system of social protection represent a higher and/or wider level of protection, culture, efficiency of employment-related and social relationships compared to those guaranteed by the current legal regulations or policies of state and non-state bodies in the SR. Transition to the new standards and procedures represents several levels and stages of additionally spent material and financial resources. The individual measures requiring less

² Transition periods for the SR with respect to environmental issues:

- Council Directive No. 94/63/EC on VOC emission control from storage of petrol and its distribution from terminals to filling stations (until 2004 and/or 2007)
- Council Directive No. 94/67/EC on incineration of hazardous wastes (until 2006)
- Council Directive No. 91/271/EEC on treatment of municipal waste waters (until 2015)
- Council Directive No. 76/464/EEC on pollution by certain hazardous substances discharged into the water environment (until 2006)
- Council Directive No. 96/61/EC on integrated pollution prevention and control (until 2011)
- Council Directive No. 88/609/EEC (as amended by Directive 94/66/EC) on restriction of emissions into the air of certain pollutants from large incinerator plants (until 2010)
- Council Directive No. 94/62/EC on packagings and wastes from packaging (until 2007)

significant expenditures may, when summed up, mean a non-negligible burden upon both the individual entities and the sectors. Resources allocated to cover the costs connected with the application of the EU standards come from public budgets, business entities, domestic civil associations and foundations as well as from international agencies (specialised EU programmes and foundations and foreign financial institutions).

The implementation of the new European policy in the area of chemical substances and products, which will be reflected in the corresponding legislation under preparation, i.e. in the REACH system (registration, evaluation, authorisation of chemicals) represents a risk which may markedly influence the potential of the industry for development. The implementation will require significant costs, and the deadlines envisaged by the EC for the individual steps, represent a serious threat for the competitiveness of not only chemical industry but of all industrial sectors that use chemicals and products as inputs of their production. Also, the meeting of this system criteria may negatively affect the development of SMEs due to cost increases.

I.2.2 Areas requiring special attention

In conceiving industrial policy in the conditions of enlarged Europe, special attention will have to be paid to mainly regional policy, along with full implementation of the Acquis with respect to environmental legislation, SME development, and to specific conditions of the development of the various sectors.

Market alone is unable to resolve the problem of backwardness of the European regions. To eliminate inequalities between regions in economic and social areas, resources have been allocated from the EU structural funds. Some 22% of the population live in EU-15 regions presenting with the most problems. After EU enlargement, these regions will additionally include whole countries (with the exception of the regions of Prague and Bratislava³).

Slovakia's accession will have some differentiated impacts upon also the individual regions. Whether positive or negative effects will prevail, this will depend on the allocation of business entities able to retain their competitiveness. Generally, more developed regions are assumed to be better able to draw on EU funds. They have a better qualified labour available and have more opportunities to raise funds to be able to meet the requirements on co-financing. The chances and hazards EU accession is associated with will markedly concern areas along the borders with the present Member States and the future members in particular. After the accession, these regions close to the borders will have the possibility of drawing on funds under the INTERREG initiative as well.

For some sectors and entities of the SR, a problem of extraordinary importance is full implementation of the Acquis Communautaire, in particular as far as environmental legislation is concerned. In this respect, special attention has to be paid to mainly the competitiveness of the sectors and entities concerned. Full implementation of environmental legislation is a key precondition of a successful realisation of products, mainly on the internal market of the Union. The implementation-related costs may have negative impacts upon the costs structure of sectors and enterprises. Transition periods and an easier access to

³ With the exception of Bratislava, all Slovakia's regions fall within Objective 1, meaning that all of them will be eligible for funds from all the four structural funds. The region of Bratislava falls within Objectives 2 and 3, thus facing the opportunity to obtain funds from European Regional Development Fund and European Social Fund.

sustainable development technologies from the present Member States may help resolve this problem.

Also, entrepreneurship and SMEs are areas that require special attention. Entrepreneurship is a horizontal objective which requires concentrated efforts in education, internal market, financial services, training, and the legal area. The principles and measures for SME development are laid down in European Charter of Small and Medium Enterprises signed by also the candidate countries in April 2002. Actions directed towards the creation of entrepreneurship- and SME development-friendly environment may be implemented with the account being taken of the specific potential of the future new Member States.

At the same time, the industrial policy principles applied do not rule out a differentiated application of tools to specific conditions of the individual sectors. This approach requires, above all, in-depth analyses of the situation regarding competitiveness of the individual sectors. Setting up of such an armamentarium as well as of preconditions for subsequent continuous monitoring require special attention.

II. Suggestions for the direction of Slovakia's industrial policy after EU accession in the context of industrial policy challenges in enlarged Europe

Principally, the EU enlargement process is a co-ordinated adjustment of Member and Candidate States to the ongoing and prospective changes in the development of world economy. They are characterised by mainly continuing intensification of globalisation processes, broad-spectrum development and utilisation of new technologies, development of the inventive backyard, business skills, and progress in achieving sustainability. Industrial development is of particular importance for economic growth and competitiveness of EU-25.

Europe enlargement will bring in specific problems, in particular for industry of Member States. Enlargement of Europe will require industrial policy to be reviewed. What will remain in the centre of its goals will be development of the EU growth potential, i.e. higher growth rates, higher standard of living, numerous and stable jobs. A contribution towards all this will be brought by also an improved integration of other policies that affect competitiveness (trade policy, single internal market policy, energy and transport policy, research and development policy, competition-related policy, regional policy, interlinkage of macro-economic and structural policy).

Knowledge derived from comparisons of industrial policies suggest that there is no generally applicable model for them. **A successful industrial policy** is a policy which responds, in time, to changes in internal and external conditions, maximizes synergetic developmental effects, chooses and applies corresponding configurations of methods and resources.

In the context of the enlargement process and the key trends in the development of world economy, industrial policy of the EU will require concentrated efforts, in particular in three key areas:

- Definition of limits within which industry and business may act. The objective is to establish a forecastable legal framework within which the society as a whole accepts business sector activities.

- Guarantees of conditions for the development of industry. Priorities of EU policy makers will focus on mainly availability of technologies, qualification and educated workforce, positive approach to entrepreneurship.
- Effective functioning of frameworks, institutions and tools of industrial policy for business environment and industry.

The nature of industrial policy will remain horizontal in also the conditions of enlarged Europe, it will be responding to specific needs of the new Member States, regions, as well as to specific characteristics of the individual sectors. As before, corrections to appropriate policy combinations will be based on analyses and monitoring of the competitive situation. Decisions on the application of the most appropriate policy combination will be preceded by consultations with the parties concerned.

The outcomes of Slovakia's economy restructuring suggest that the response of the previous development to the challenges and the key trends of processes connected with the new economic globalisation were less efficient than those of the economic system of the EU.

EU accession will speed up the actual completion of the transformation of Slovakia's economy, while at the same time providing a wider space for targeted establishment and utilisation of dynamic comparative advantages.

The EU subscribed to this line in its conclusions concerning industrial policy developed in 1990 and at the Lisbon Meeting in the spring of 2000. Its continuation is also expected in the conditions of the enlargement. This strategy is also comprehensively contained in the document Industrial Policy in Enlarged Europe, from December 2002.

II. 1 Slovakia's approach to industrial policy in the post-accession period

Even if a major part of the EU industrial policy is being implemented by the Member States, its central line defined at the EU level remains determining for both the present and the new Member States. The national industrial policy of the SR will be closely linked to the EU policy, and will be stimulating the meeting of the integration goals of the entire integration grouping. Slovakia's industrial policy will be based on factors substantial from the viewpoint of the achievement of competitiveness and growth. In addition to the traditional activities concentrated in the horizontal areas, they will above all include direct factors of growth and productivity (knowledge, innovations, entrepreneurship, sustainable development) and framework conditions and tools to improve the competitiveness of business entities. Industrial policy tools will equally refer to all sectors and regions. Sectoral and regional specifics however require differentiated application. The contents of the industrial policy will be interlinked with economic policy priorities, they will be determined by the overall macro-economic and institutional environment of the economy so as to include the following as the basic principles:

- concept of open and competitive market,
- systematic creation of environment favourable for business, with the participation of the other relevant policies,
- realistic economic basis for support of industry and business environment,
- establishing of conditions to support efficient entities and to push out from the market enterprises showing weak efficiency over the long-term.

In achieving the above priorities, a specific of Slovakia's industrial policy will be support from EU structural funds.

II.1.1 Horizontal support factors of competitiveness and growth

Horizontal factors represent the traditional assets of industrial policy to achieve competitiveness and growth. They are mainly concentrated on systemic creation of an environment favourable for business. Also, other relevant policies participate, as well as sectors in charge of the implementation.

The strengths of the horizontal competitiveness and growth support base in the SR in the EU-25 context will mainly include:

- stable macro-economic environment and its legal framework promoting business activities,
- single internal market, which creates new business opportunities and extends the market space for enterprises (its economic potential got multiplied by the introduction of the common currency),
- high level of social cohesion, well trained and flexible workforce, which is at the principal element of knowledge-based economy,
- long-term experiences in the dialog of social partners, mouting in employers and employees' interests becoming harmonized,
- standard of services making a contribution towards competitiveness of sectors which take advantage of them,
- advanced energy, transport and telecommunications sectors.

II.1.2 Priority of the direct factors of competitiveness and growth

In developing modern industrial policy, the key role is played by direct factors of competitiveness and industrial growth. Also, the Lisbon Strategy counts with a more marked orientation towards direct factors of growth and productivity in the EU. Their predominant significance is also defined by the document Industrial Policy in Enlarged Europe. It specifies them mainly in the areas of knowledge, innovations, entrepreneurship and sustainable development, labelling them driving forces of industrial growth and productivity.

Key factors of modern development must get to the centre of attention of also Slovakia's industrial policy. The current gap of structural and innovations-related adjustment existing between Slovakia's and developed Europe's economies, and thus the gap in the competitiveness of the former may not be closed unless such efforts are undertaken.

The process of the improvement of the **technological level** of Slovakia's industry lacks sufficient aggressivity. The share of capital assets on processing industry production grew from 18.5 % (in 1993) to 31.0 % (in 2001). It is identical with the level in the Czech Republic and Slovenia, being however markedly lower than in Hungary. The position of the sectors which produce low-grade processed products was weakened but partially. New, dynamically developing branches take no pronounced share on structural characteristics, maybe except the automotive industry.

The shares of goods with various degrees of human capital intensity on exports of industrial goods show increases (23.0 %, in 1995 compared to 44.2 % in 2001). The carriers of the

growth are mainly passenger cars and their parts (which as a rule are parts of medium technologies). The share of exports of goods which meet high-tech criteria remains rather small (accounting for 3.7 % of exports of industrial goods in 2001). The substantial part of the exports of industrial goods are labour, capital and raw materials-intensive goods (77.0 % and 55.8 % in 1995 and 2001, respectively). The coverage of imports by exports was 122.1% in this category of goods in 2001, being 78.9% in technologies, and as little as 29.9% for high-tech.

The key determinant of the closing of the technological and innovations-related gap, and thus backwardness in real productivity and overall quality-related competitiveness between Slovakia's economy and the developed world will be inflow of foreign direct investments. Enlarged Europe will show gradual homogenisation with respect to FDI's nature and volumes.

Efforts to attract new strategic investors into industrial branches will remain a priority of state's industrial strategy even after the accession. The changes necessary for Slovakia's industrial production being able to make its way with technologically advanced products can only be implemented with the assistance of strategic investors. In this respect, also EU resources and institutions (structural funds and cohesion fund, in particular in less developed regions) will be made active use of, as will be other entities from domestic and international business sectors (Investment Incentives Act and Industrial Parks Act do not distinguish between domestic and foreign investors). The new strategy to secure inflow of foreign direct investments to the SR (April 2003) makes preference of their direction towards automotive components, with the emphasis being laid upon electrical engineering and electronics, precise mechanical engineering, chemistry focusing on biotechnologies and nanotechnologies, pharmaceutical productions and services with high added value, high-tech services and application software, i.e. sectors whose development is based on direct factors of competitiveness and which are at the centre of the development in also the EU. In accordance with the previous development of the EU-15 as well as with the conclusions of Industrial Policy in Enlarged Europe, it is desirable that modern technologies penetrate more into sectors presenting moderate or less technological demands. Some of them play a significant role in mainly creation of permanent jobs in the problem regions of the SR (some light industry branches).

Permanent attention will also be paid to improvement of environmental quality for FDI's, its transparency and forecastability.

Seeking and attracting FDI's and creation of the necessary conditions for their realisation will be the result of common efforts spent by the state, regional governments and the business sector.

Industrial policy cannot be successful unless there is an integrated and co-ordinated approach towards the acquisition of modern technologies and their application in industry, unless there is a close link between research and the need for technological standards improvement and competitiveness of industry. Demands dictated by the new economy and globalisation, as well as by the experiences of the developed countries of the world make Slovakia's economy face **the necessity of supporting research, development, innovations and development of the inventive backyard.**

In the view of the size of its economy and the status quo in the above mentioned areas branded by transformation-related recession, Slovakia cannot have the ambition to apply

results of science, research and development at the world standard. Rather, there will be a purpose-oriented combination of efficient taking advantage of imported knowledge with selective development of domestic research able to bring about, independently and in international cooperation, a relevant shift of knowledge to the benefit of industry. This will be directed towards improved performance and competitiveness of domestic production and exploitation of domestic natural wealth, environment, infrastructure, energy sector, areas linked with specific businesses of the SR and areas, in which Slovak science, research and development could reach international reputation. Efficient use of imported knowledge will have to be purposefully combined with selective development of domestic research whose support will be oriented towards its integration into the European space (ERA) and framework EU programmes of research and technological progress. Through establishing centres of excellence, domestic research teams will prepare themselves for integration into the European network of national centres. The total expenditures on science, research and development will be gradually increased to reach the level of the small EU countries. This in particular will concern the corporate research which has suffered worst by the transition to market economy; in accordance with the European trends, Act No. 132/2002 Coll.LL. will have to be amended to introduce motivation factors (in particular concerning depreciations) to improve support of research from enterprises' own resources.

Similarly as the EU system, the present **innovation system** of the SR entirely fails to translate new knowledge into new or improved products, services or processes which would bring values. In order to restructure economy to the benefit of sectors which will provide for the above mentioned translation of knowledge into new products, resources of state research and development programmes will have to be used effectively.

Similarly as R&D policy, also industrial policy will create better conditions for encouraging innovations after the accession. Together, they will support transfer of modern technologies from research institutions to the business sector through building appropriate infrastructures, speak scientific and technological parks, business and innovative associations, networks and centres. Technological policy measures will focus on enhancing supplies of technological innovations, on support of demand for them, as well as on the development of the business environment that will encourage both their supply and demand. Aiming at speeding up the restructuring of the economy to the benefit of sectors and branches oriented towards productions requiring more demanding and better qualified labour, the policy of science and technology will be harmonised with the overall economic policy.

Another key factor to raise the innovation dynamics, and thus a priority starting point of industrial policy is an effective programme of targeted **improvement of the education level** of the population reflecting new tendencies in the development of world economy, with the emphasis on both, training of the young generation and lifelong education. The education level of the population and the continuous improvement of their qualification are among the principal prerequisites of a successful development of modern economy, *conditio sine qua non* of higher-order innovations, and capacity for absorption into the domestic environment of outcomes of science, research, development, and know – how.

Currently, there is a significant discrepancy between demand and supply of labour in the most progressive and most prospective areas in the SR. Lack of workforce in highly specialised and qualified professions is the result of the slow adjustment of the education system to the needs of the rapidly developing industrial sectors. On the labour market, there is also demand for qualified graduates from several branches that present medium or low technological

demands. A higher degree of harmonisation of demand with supply is needed in the training of apprentices as well as in the area of re-training, education and training of corporate managers, training of business people for small and medium enterprises. The current education system of Slovakia requires principal changes in particular in this respect, to be able to more flexibly respond to the actual needs of the industry. Also, development of lifelong education at all the levels, language training programmes and computer literacy programmes require support.

Both educational institutions and the very enterprises will have to play an active role in the training process of the workforce for the industry.

Small and medium enterprises play a significant role in the development of EU and Slovakia's industry alike. Generally, SMEs present with a dynamic ability to respond to the needs of new markets, to create new job opportunities, and to participate in the resolution of problems concerning social and regional development.

EU SME support measures are laid down in the European Charter of Small Enterprises, and Slovakia is among the countries – signatories of this document.⁴ This is the spirit in which also policy of SME support in the SR should be extended, supplemented and/or conceived anew.

The principal long-term objectives of SME support policy in the SR will include:

- growth in numbers and performance of SMEs with favourable effects on the creation of new job opportunities, and elimination of substantial differences between the individual regions,
- development of SMEs which introduce new technologies and innovated progressive forms of production, and involvement of such SMEs into activities of innovative associations,
- improved cooperation of SMEs with large enterprises home and abroad, in particular under partial delivery programmes, control of such a supplier network using information and communication technologies (ICT).

The pointed competitive environment after EU accession will motivate large Slovak entities to abandon activities which are not their core business (outsourcing) and to take decisions on downsizing of their staff to save money or to increase profits. Support will therefore be directed towards also encouragement of the development of self-employment and establishment of micro-enterprises. Principles of the development of entrepreneurship in enlarged Europe will be defined by Green Paper on Entrepreneurship.

Development of SMEs in the SR also assumes ongoing maintenance and improvements of the key horizontal factors which support competitiveness and growth.

⁴ Areas addressed by the European Charter for Small Enterprises:

- education and professional training for doing business,
- cheaper and more expedient start of business,
- better legislation and regulation,
- availability of skills,
- improved on-line access to information,
- more advantages arising from the single market,
- taxation and financial issues,
- reinforcing the technological capacity of small enterprises,
- electronic commerce and support of top small enterprises,
- representation of small enterprises at the Union and national levels.

Among the key driving forces of industrial growth and productivity there is also efforts to achieve a **sustainable structure**. This frequently results even in restriction of productions which pollute the environment, in any case however, it means an increase of the cost level in sectors and entities. On the other hand, this orientation is a prerequisite of the position being kept vis-à-vis competitors, in particular on developed markets. At the same time, it also is an opportunity for the development of new productions, penetration of new markets, and changes in the organisation of labour.

Slovakia's environmental legislation reflects European directives. The adoption rates of environmental standards in Slovakia are rather high. Also, EU environmental standards present rather high demands.

Under its commitments from the World Summit on Sustainable Development from Johannesburg, the European Union will be further strengthening and developing the policy of sustainable production. The strengthening will rely on existing activities. It will be developed upon consultations with the production sector and the other stakeholders. Demands presented by the European environmental standards will increase. At the same, the opportunity appears for active involvement of Slovakia's industry into this process, as well as for suggestions of additional actions.

Of specific impacts upon Slovakia's industry will also be the effectivity of the act on integrated prevention and pollution control. The tight timeframe for submission of applications and granting of integrated permits will require closer partner cooperation of the parties involved.

II.1.3 Framework conditions and tools of improved competitiveness of business entities

In general, industrial policy may be defined as application of corporate policy tools to industrial sectors. This view of industrial policy guarantees its close links with the needs of the micro-sphere and a higher effectivity of the measures. The principles of EU corporate policy are defined by the working document of the Commission staff „On Corporate Europe: Work Plan for Corporate Policy 2000 – 2005“. Several important framework conditions are defined straight at the EU level, Member States play key role in some other areas (tax regulations). As a matter of fact, they represent a summary of business conditions which affect competitiveness, growth and performance of enterprises (general market conditions, rules concerning specific categories of products, institutions which enable market functioning, wider conditions affecting entrepreneurship).

For EU countries, the major factor of competitiveness are business conditions on the single internal market. They were improving, following the definition of the industrial policy principles (1990), and the European industry greatly benefited from this (this opportunity opens up to also Slovakia's industry after the accession).

Improvement of framework conditions defined at the EU level is desirable in particular when it comes to the regulatory framework, so as to avoid burden upon enterprises with respect to new approaches. Improvement measures are included in Action Plan of Facilitation and Improvement of the Regulatory Environment.

Among the main priorities of Slovakia's economic policy after 1998 has been creation of a more favourable business environment, i.e. good conditions for free business. Analysis of the condition of the business environment in the SR conducted by Ministry of Economy of the SR confirmed improvements over time. They however signalled persistent barriers to business in the form of excessive administrative and financial burden (taxes, levies, charges) and in that of a variety regulatory interventions with free business (price regulation, regulation of employment relations, environmental regulation). The infrastructure for doing business in the SR provided through markets in production factors (financial and capital market, labour market, market in land), through key markets in goods and services (telecommunications, energies, transport) as well as through state-financed assets and services, is not fully completed and requires improvements.

The analyses have identified inadequate quality and forecastability of legislation and insufficient enforceability of law as the major barriers to free business in Slovakia.

Significant progress has been achieved in mainly the reinforcement of the position of the private sector in Slovakia's economy.

Upon EU accession, the SR will take over a portion of Union's legislative frameworks for doing business. As a typical example, we may mention protective measures concerning imports, import and export licenses.

II.1.4 Industrial policy tools

Slovakia made principal progress during the pre-accession period in the field of making business conditions more transparent, in accordance with the EU rules, as well as in harmonizing approaches to industrial policy with those usual in the EU. The principal requirements have been met to make the frameworks, institutions and tools of Slovakia's industrial policy work efficiently also in the conditions which will prevail after the EU accession.

In the area of industrial policy, the role of the EU will continue to reside mainly in the legislative field. The focus in all partial areas of industrial policy will remain in the **development of specific tools and programmes and their application at the Member States level**. They will continue to pursue their own objectives concerning support to domestic companies, while at the same time reaching also EU objectives with respect to competitiveness improvement.

Slovakia's industrial policy will continue the approach of **supporting all enterprises** (not only industrial) of various sizes. On the other hand, **all companies will have to abide by the same rules**. With respect to competition policy, the Slovak Republic will be pursuing the policy of **minimalisation of state aid**. In accordance with the Implementation Rules of State Aid (published in Collection of Laws of the SR No. 186/2002), state aid will be granted in accordance with the „de minimis“ principle or with support schemes pursuant to some regulations concerning exceptions. State aid will be justified in particular in the SME segments (their financing, training, education), science and research, and environmental

protection.⁵ Also eligible will be investment subsidies to new expanding sectors, but not to those showing depression.

After the accession, horizontal selective tools will be applied in the direction of Slovakia's industrial policy, predominantly focusing on creation of framework conditions for production competitiveness. The focus of the tools, measures and programmes, in reference to the conclusions of the Lisbon Summit, will be shifted towards direct support factors. Innovation and technological policy, development of entrepreneurship and SMEs, sustainable development policy will predominate.

From the long-term aspect, support tools of Slovakia's industrial policy in the field of innovations, knowledge and research will be mainly focused upon:

- raising investments into research and development,
- more efficient utilisation of public funds for industrial research,
- establishing framework conditions for private sector investments into research and development,
- effective involvement of Slovak entities in the European Research Space Initiative,
- promotion of investments into non-tangible assets and human capital,
- support of the establishment of innovation associations and networks,
- support of innovations through the establishment of an adequate regulatory framework and financial incentives.

Support of entrepreneurship and SMEs will be focused upon improvement of:

- education to business and workforce training (initial professional training programmes as well as those for the employed),
- access to funds for SMEs at the initial stages of their existence and for expanding and „high – tech“ companies,
- access of SMEs to outcomes of research and innovations.

Specifically in these areas there are many examples of support of entrepreneurship and SMEs from the current EU Member States, which may be inspiring for also the SR.

Support of entrepreneurship and SMEs in the SR will follow the measures contained in the European Charter of Small Enterprises.

The key elements of the strengthening of the sustainable production policy in the SR will include:

- strengthening of a widespread acceptance of best practices to improve eco-effectivity,
- support of commercially utilisable recycling sector and adoption of best practices,
- implementation of the life cycle method for integrated products by its voluntary acceptance, environmental product standards, and declarations,
- support of the development and spreading of clean technologies,

⁵Commission recommendation No. 96/280/EC defines SMEs as enterprises with up to 250 employees and a turnover not exceeding EUR 40m a year. The definition is of importance for decisions on state and structural funds (a new definition will be adopted in 2003). The European Commission is about to draft new measures to direct state aid towards increased expenditures into science and research, aiming at raising their GDP ratio to 3 %.

- extended use of environmental management schemes while accounting for the specific nature of SMEs.

Industrial policy tools will equally apply to all sectors and regions. The various types of aid under industrial policy will be differentiated for the individual regions in dependence upon their development status, unemployment rates and other relevant criteria. The application will also be differentiated according to the specificities of the individual sectors.

As far as the format of aid is concerned, the aid will prevalingly concern non-financial aid to a wide range of enterprises, in particular in the form of provision of government-paid services. In this way, the government will regulate the most recent directions of development which the business sector can take advantage of. State aid will preferentially be directed towards regional development programmes as well s towards horizontal programmes (research and development, environment, SMEs). Maximum advantage will be taken of the potential offered by EU structural funds and cohesion fund.

II.1.5 Cooperation of other policies in competitiveness improvement and sustainable development from economic, social and environmental perspectives

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Conditions for competitiveness improvement of industry will be created by industrial policy only provided that its contents will be linked to state economic policy priorities. The achievement of these objectives will require adequate integration of SR's policies in all areas. Within the strategic context, this step is even more important since the three dimensions: economic, social and environmental must be balanced.

The direction of Slovakia's economic policy through 2004 is defined in the document Joint Assessment of Medium-term Priorities of Slovakia's Economic Policy (March 2000). This joint document of the Slovak Government and the European Commission represents the agreed set of medium-term measures of economic policy unavoidable for the completion of the economic transformation of Slovakia and preparation of its economy for joining the European Union.

The long-term objective of the **monetary policy** is to stabilize the EURO exchange rate and to gradually reduce interest rates. The **fiscal policy** will be oriented towards decreasing the deficit of public finances. This direction will have a positive impact upon the development of business and competitiveness of industry.

The most important objectives of the **tax system** reform concern reduction of the burden upon income of persons (both natural persons and legal entities). Additionally, neutrality of the tax system will be reinforced. The main area within which harmonisation with the EU system is going on is value added tax and excise taxes. The changes will help improve the business environment of the economy as a whole and of industry in particular.

The levies-related burden of costs of wages is rather high in the SR and represents one of the barriers to a higher contribution of industry towards employment.

The keeping of stable public finances and a sound business environment requires a reform of health insurance and pension security systems.

Policy of wages has a strong effect on the competitiveness of the micro-sphere as well as on macro-economic stability. The medium-term policy of wages is based on support of mechanisms of collective wage bargaining. The feasibility of the reforms will also depend upon the social partners.

The **policy of employment** lays emphasis on encouraging employers to create new job opportunities (active employment policy) and on labour market flexibility. The tasks in this respect are comprehensively laid down in National Employment Programme. The dealing with employment issues will above all be based upon the policy of competitiveness improvement and upon the establishment of conditions for sustainable economic growth.

In order to strengthen **protection of competition**, amendment to Act No. 136/2001 Coll.LL. increased the level of agreements on restriction of competition to 10% of contracting parties' shares on the relevant markets. Also, threat of restriction of production and temporary abuse of economic strength for the purpose of eliminating competition were made activities deemed abuse of the dominant market position. The above mentioned and some other regulatory

frameworks result in a strengthening of competitiveness of industry, and they encourage companies to improve their efficiency.

Infrastructure is a key factor influencing productivity and competitiveness of Slovakia's industry and economy as a whole. From industry's viewpoint, infrastructure sectors should operate under conditions which will force them to transparency, cost reductions, efficiency improvement, while at the same time not protecting their monopolistic and/or dominant position. All measures taken on the telecommunications and energy markets as well as on the market of transport services (railroad, air and coach transport) through 2004 are directed towards these objectives. The construction of the motorway network and speedways goes on according to the government-approved procedures linked to the financing potential.

The ongoing reform of the **education and re-training system** is bound to prevent lack of employees for highly-specialised and qualified occupations from becoming a hindrance of structural changes and to make the whole system to more flexibly respond to the needs of Slovakia's industry and economy.

Regional policy is directed towards elimination of differences in economic levels between Slovakia's regions, while at the same respecting the principles of **environmental conservation and protection**. Environmental protection may require restrictions or even prohibition of certain inputs or technologies. The task of industrial policy is to foresee such situations and to encourage adjustments of production systems to make industry benefit from them at the national as well as global levels (new markets for clean productions and technologies).

Medium-term economic policy of the SR and its measures provide general frameworks for a positive development of industrial entities. Clearly, no full integration of the individual policies with industrial policy can be secured during the peri-accession period. A qualitative shift in this area is mainly expected from the wording of the direction of related policies after EU accession. This should be a matter of the economic policy of Slovakia under preparation connected with the membership in the EU– 25.

II.1.6 Industrial policy response to specific needs of the SR and of the individual economy and industry sectors

The principles of industrial policy in enlarged Europe developed by the Commission of the European Communities take account of also the specific situation of the newly acceding countries and they thus enable the application of industrial policy tools according to specific characteristics of the individual sectors.

Specific tools of Slovakia's industrial policy are envisaged in mainly the following areas:

- creation of an environment favourable for entrepreneurship,
- qualification improvement,
- SME development,
- sustainable development.

Additional areas which may require special attention include:

- support of the development of services for the corporate sector,

- support of culture of cooperation between companies,
- increasing the dynamics of the establishment of innovative associations.

Specific support will be provided to new Member States also from structural funds.

At the same time however, implementation of tools while accounting for the specific situation of Slovakia must guarantee efforts to achieve the same progress on the road towards the social, environmental and economic objectives of the Union.

Similarly, the application of the policy to specific characteristics of the sectors does not mean atomisation of industrial policy. Its application to a given sector will be in accordance with the interests of other sectors. Moreover, approaches tested in a sector may subsequently be made tools of industrial policy to be used as an example in another sector.

Commission's consultations with the countries involved will play an important role in assessments, subsequent decision-making and application of the most appropriate policy combinations. Provided that the Slovak Republic is actively involved in this process, this may mean that many specifics of this country (regional disparities, disparities in performance of industrial sectors, eco-effectivity, the level of the innovation system, imbalances on the labour market, criteria of SMEs activities in the conditions of open competition, etc.) may become projected into approaches to the industrial policy of the Union as a whole.

II.2 Method of industrial policy implementation

The previous strategy of Slovakia's development was primarily based on the meeting of the criteria of EU accession. The very accession will require a new strategy so as to allow the SR operate, from systemic conditions and real prerequisites aspects, within the European integration community in an emancipated way. Progressive economic strategy of Slovakia's development must be based upon principal qualitative restructuring of the economy resulting in its high competitiveness on international markets. In this respect, the principal role will be played by improvement of Slovakia's industry competitiveness.

Improvement of the competitiveness of the Slovak industry, and thus its contribution towards the meeting of EU objectives, will be determined above all by a close **link between industrial policy and the overall strategy of the economy, as well as by an improved integration of other policies**, whose task is to create an environment favourable for industrial development, and this will in turn require tight cooperation of all state administration bodies involved, as well as strengthening of the dialog with the business sector.

II.3 The role of structural funds in the implementation of priorities of Slovakia's industrial policy

During the pre-accession period, the EU allocated funds from PHARE⁶, ISPA, and SAPARD programmes to assist candidate countries in their preparation for membership and to make them acquainted with the EU structural policy.

Structural funds and cohesion fund serve to implement the EU structural policy. On 12 March 2003, the government of the Slovak Republic approved National Development Plan; the drafting of which has been one of the principal conditions for receiving funds from the EU structural funds. Naturally, financial aid cannot be claimed unless good quality projects have been developed and the required co-financing on the part of the applicant is guaranteed.

The programming document with respect to industry and selected services is Sectoral Operational Programme „Industry and Services“, drafted by Ministry of Economy of the SR. For the industry sector, it includes **Priority 1** – „Raising the competitiveness of industry and selected services taking advantage of the development of prospective business entities of domestic growth potential“. The focus of this priority is dealing with development problems of existing prospective business entities and with the development of new enterprises, improvement of their competitiveness within the economy and the EU single market, and adjustment of the development of business to the conditions of the international division of labour and encouragement of direct investments and through promotion of trade, information and communication technologies, and e-commerce.

The Sectoral Operational Programme „Industry and Services“ relates to support of all Slovak regions at the NUTS II level, except Bratislava. The activities will be financed from European Regional Development Fund.

Grants from European Social Fund, which is the fund intended to cover the needs of the Sectoral Operational Programme „Human Resources“ (SOP HR) may help realise measures to reduce unemployment, to improve education level, to create jobs, mobility of labour, professional training, human potential in science and research. The opportunity to receive grants from the fund concerns all Slovakia's regions. SOP HR was drafted by Ministry of Labour, Social Affairs and Family of the SR.

Cohesion Fund is not part of structural funds. Grants from it may be received for domestic environmental projects and transport infrastructure projects.

II.4 Accordance and interlinkages of the new direction of Slovakia's industrial policy with those of EU Member States, and its contribution towards meeting the EU sustainable development strategy

The first step towards the convergence of Slovakia's approaches to industrial policy to its perception in the EU was taken in 1999. Based on recommendations made by EU bodies, Slovakia practically implemented „Action Programme to Improve Competitiveness of European Industry“. Additional suggestions with respect to convergence were contained in

⁶ Also, several measures under industrial policy priorities were implemented in Slovakia under the PHARE Programme – stimulation of SME growth, technological and production innovations, implementation of quality management systems, development of international cooperation, consultancy, education, electronic signature, development of tourism, etc.

the document of the Commission of the European Communities entitled „Industrial Policy in Enlarged Europe“. It calls upon Member and Candidate States to review their national policies to make them encourage and maintain the competitiveness of the Community.

The substantial portion of the industrial policy of the EU is being implemented on the national level. The direction line of industrial policy is set by the EC Commission. Decisions and application of the most appropriate policy combinations are preceded by Commission consultations with the countries involved. The EU industrial policy line represents the consensus of the Member States upon the wording as well as subsequent implementation. It represents the guarantee of the accordance of the policy at the EU and Member States level and their interdependence and interlinkage.

This is the approach that will be also applied under conditions of enlarged Europe. To pursue the process which started by EC Commission Communication „Industrial Policy in Enlarged Europe“, Committee for Economic Competition was established. It will guarantee an improved interlinkage of the policies at the EU and Member States level also under the conditions of enlargement.

Conclusion

Upon joining the EU, the SR will become part of the single market with strongly unified rules; nevertheless, business environment will have to be further shaped, while keeping to the rules of competition, to make it sufficiently attractive to investments since development and competitiveness of industry require steady growth of effective investments. In this context, direct support of investments directed towards outputs with product ranges with high added value and good prospects of sales should not be forgotten either; in the presence of a shortage of budgetary means, it will focus on mainly maximum use of structural funds under SOP IS. It will however be important to seek, at least in the framework of the de minimis approach, options to support innovative goals in industry, also outside of the SOP IS.

The following can be taken as priorities of Slovakia's industrial policy after the accession:

- systematic creation of an environment favourable for business, aiming at providing space for enriching the structure of the economy by adding new elements based on innovations, under the participation of all relevant structures and interest groups,
- continuous development and expansion of the inventive backyard of the economy based on transfer of knowledge from abroad and support of domestic science, research and development,
- permanent development of the education level of the population and steady improvement of their qualification,
- systematic building of technological and information infrastructures enabling and supporting spreading of knowledge and innovations,
- systematic review of potential development trends aiming at being able to respond to them in advance.