

FINAL REPORT

Project No.: SME 05 2013A

Research and Assessment of Prospects for Development of an Integrated Information Tool to Stimulate Involvement of SMEs of the Asia-Pacific Region into the Global Trade System, Global Production and Supply Chains

SMALL AND MEDIUM ENTERPRISES WORKING GROUP

Produced for

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INTRODUCTION

Currently, the world economy faces such challenges as the maintenance of stable economic development, employment promotion and assistance for self-employment. As it is well-known, small and medium-sized enterprises (hereinafter SMEs) are the backbone and driving force of any developed economic system and support of their internationalization, improving of competitiveness and assistance for their access to the world markets, as well as integration into global production chains are one of the priorities of any state.

Technology development, liberalization of national and international systems of economic regulation, the increasing use of international cooperation led to the formation of globalization trends in the global economy. Modern enterprises find new ways of entering the world market through exports, imports, strategic investments in foreign companies, receiving foreign investments, or through other forms of mutually beneficial partnership with foreign companies.

Currently not only large companies are involved in international business but also small and medium enterprises (SMEs). Entering the international level can provide them with more opportunities for growth and increase profitability. Therefore, the entry of SMEs of any country in the international market in the framework of the modern world trends is an objective process. For small and medium business, on the one hand, there are new opportunities caused by the availability of foreign markets and modern technology, on the other - a potential threat from competitors.

Today international opportunities for SMEs expand, as they can act as a supplier of specialized products, parts and components for large companies. This type of cooperation allows SMEs to access international markets with the support of large firms. With the right preparation, the SME will also be able to achieve significant success on the international level.

However, trying to enter the world markets and to find a niche in global production chains, SMEs are facing different internal and external difficulties and barriers often associated with search of information about business opportunities, potential business partners, market requirements, custom procedures, etc. as well as with their own limited resources and opportunities for such development.

To make an informed and correct decision how to penetrate the international market entrepreneur must possess the sum of both practical and theoretical knowledge. With the current update rate can be difficult to keep track of all changes in modern approaches to business, to assess the attractiveness of certain global trends, adopt new tools for facilitating the search and evaluation of partners.

There are various sources of information about foreign markets, opportunities and approaches for international business development. Under the conditions of a large amount of existing information, the more clearly understanding by SME the strategy of entering to the international level, the easier it will be to focus on the most important information. It is important that organizations and individuals, who can help, knew what capabilities enterprises are looking for, and what are its strengths and weaknesses. This can be achieved by networking, establishing and maintaining relations with representatives of the business community and state structures.

With this purpose it is necessary to form a unified integrated information resource for involvement of small and medium business into the global market, in particular for SMEs in APEC economies.

The APEC, since its creation, has three main objectives: promotion of sustainable economic development, the development of the multilateral trading system and, ultimately, the future economic prosperity of the member economies by encouraging economic cooperation between them.

Thus, the participation of SMEs in global value chains and international trading fits into the above goals and becomes one of the priorities of APEC, which has been repeatedly discussed at the meetings of Ministers of the APEC economies.

In the purpose of development of the free and open trade and investment promotion, stimulating and accelerating regional economic integration, to promote economic and technical cooperation, enhancing human security, creation of a favorable and stable business environment, promotion of economic cooperation at the level of SMEs and facilitate the internationalization of SMEs in APEC economies need to develop and use special instruments to support SMEs that would allow to overcome the existing barriers and difficulties and gain easier access to all relevant information and reliable contacts.

The main challenge facing APEC economies is to stimulate trade and investment, strengthening regional integration in the APEC region in order to achieve high rates of economic growth and improvement of living standards in our economies. An important role in this area belongs to the issues of business development that is the key for modern economic space.

To achieve this goal it is necessary to improve the administrative environment, to overcome barriers, to stimulate the development of small and medium-sized enterprises and innovation, to exchange experiences and share best practices in these areas.

For the continuous and sustainable economic growth it is important for APEC to focus on innovative development. Intensive interaction of the APEC economies to ensure economic growth includes the expansion of high-tech investment and the diffusion of technologies, strengthening cooperation in innovative and educational centers, and scientific institutions of the APEC economies, the development of the Internet economy, support of creative personality and improvement of cooperation in the field of education. These are the basic directions of cooperation in order to ensure the modern development of our economies.

Along with development of innovation business, access to finance and markets, the administrations of the APEC economies more often start to address the issues of novice and women's entrepreneurship, business of minority peoples, business ethics and support to small and medium enterprises in the case of natural disasters.

Any state aimed at development of the economy and establishment of competitive advantages of domestic goods, is interested in high-quality support of development of small and medium-sized enterprises and assistance in the promotion of such companies to international markets. For good reason most developed countries pay special attention to the support of this sector.

Contemporary economic history of the world's leading countries has shown that, despite all the difficulties inherent in the period of formation of the state, namely small and medium entrepreneurship remains a key "point of growth" of the economy. Better adaptation to changing market conditions, higher tax discipline, lower costs, and significant innovative activity also contributes to that.

Small and medium business is the basis for the formation and expansion of the middle class that is interested in political stability of the society, development of democratic foundations, improving the quality of human. More than anything else SMEs are able to provide competitive diversification of the economy with the necessary innovation component in global markets. Small and medium business is a natural reserve of the increases in the volume of exported non-energy and high-tech products, and products with high added value.

In addition, the development of SMEs is one of the decisive factors of innovative renewal - renewal on the principles of implementation of knowledge economy, human capital, growth of initiatives and responsibility. SMEs are the most adaptable and mobile in response to constantly changing market conditions, the emergence of new niches and market needs. Besides that:

- they provide high effectiveness of investment,
- form competitive environment,
- saturate the market with goods and services,
- increase tax revenues to budgets of all levels,
- provide quick generation of new jobs.

The activity of the main part of SMEs in APEC economies is focused mainly on the domestic markets, but at the same time numerous external factors are increasing their influence on the process of business development, including the need for SMEs to act on open world markets in the conditions of economic globalization, and therefore increased requirements for the overall competitiveness of enterprises and their products / services on international markets, international standards of quality and business management, efficiency of activity and promotion, etc.

Currently, the vast majority of SMEs in the Asia-Pacific region is still not quite ready for active output and activity in foreign markets; the reasons for this lie in the following:

- lack of information and knowledge about the situation on international markets, trends and existing niches (perspective directions and development, supply and demand in different sectors of activity and so on);
- lack of qualified specialists for the promotion of international markets and the conduct of foreign economic affairs;
- insufficient skills in the field of the export of goods outside the region and outside the economy (the inability to identify the target markets, ignorance of local markets abroad, the lack of culture in international business correspondence and negotiations, poor skills in marketing on foreign markets and so on);
- lack of or not enough well-organized process of commercialization of research results and innovative developments in enterprises (lack of or poor access to information, lack of financial resources, lack of knowledge of international requirements and standards, and so on);
- poor skills in the field of international marketing and creation of brand / product brands (lack of information on existing approaches to advertising materials, poor knowledge of foreign languages, lack of creativity, no regular marketing policy, etc.);

- insufficient attention to the need of protection of intellectual property in international markets:
- insufficient control of production processes (low quality assurance, failure to reduce costs, obsolete equipment and so on);
- insufficient knowledge of the existing capabilities of the state program of support of small and medium-sized enterprises, including the field of promotion on international markets and low motivation for their use;
- poor infrastructure, offering the necessary services for SMEs seeking to the international markets.

That is why the acting information resources within the framework of its activities should strive to provide competitive SMEs all the necessary information about the existing capacities in the Asia-Pacific region, mechanisms and instruments of international markets, including measures of the state program of business support, international projects and programs, activities of leading development institutions; to stimulate competitive enterprises for the more active use of these opportunities, mechanisms and instruments; to assist in improving their competitiveness and effectiveness; to develop and to offer complex services in the sphere of entering global markets.

The aim of this project is to support and promote effective integration of small and medium enterprises of the APEC economies into the world trading system and into the global production chains, as well as stimulating their internationalization process by providing access to relevant information in a unified information resource.

The major tasks of the project that will strengthen regional economic integration through free and open trade and investment are:

- assessment of the existing experience / best practices of the APEC economies and evaluation of prospects of development of the information resource based on a combination of scientific research and analytical activities;
- development of the concept of information resource elaboration for the promotion of international cooperation and integration of SMEs;
 - development of the detailed action plan for the creation of information resource.

For the development of their businesses, SMEs should receive all needed information from one and the same source ("one window", etc.) - different economies have different approaches, however, it may be useful for the development and use of one common information tool that will be used by the APEC economies seeking to support SMEs and to promote them to the world markets.

Of course, much has been done by APEC in the sphere of internationalization of SMEs and the experience and best practices will be explored and used for the development of the concept.

The present project aims to develop an integrated and unified resource of information to promote international cooperation and integration of SMEs based on a combination of analytical and organizational activities and on the proposal of the action plan for its effective implementation in SMEs in APEC economies.

The project corresponds to the objectives declared by the APEC SME Working Group for the promotion of free and open trade and investment and the development of economic and technical cooperation for achieving sustainable growth and equitable development, and promotion of the trade and investment in the Asia-Pacific region.

In this regard, for the analysis of the current situation in the sphere of information support of small and medium enterprises of APEC economies, the study of their needs and requirements, development of proposals and recommendations on further development of the integrated information system for the purpose of involving SMEs in the processes of internationalization, expanding their access to foreign markets, elimination of informational deficiency in this field, we have used the existing materials and data from different studies of APEC economies in the field of information support of small and medium business, results of surveys of representatives of the state sector, public organizations and development institutions of the APEC economies on the subject, and the results of the study by experts of the Russian Agency of support of small and medium business among enterprises of small and average business from different regions of Russia and APEC economies.

In addition, for the compilation of the present report there were used analytical and statistical data from various relevant public information sources.

CHAPTER 1. PROJECT BACKGROUND: PLANNED ACTIVITIES AND ACHIEVED RESULTS

The present project "Research and assessment of prospects for development of an integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global trade system, global production and supply chains" has been implemented by the Russian Agency for Support of Small and Medium Business in accordance to the Contract dated November 25, 2013 and the Corrigendum to the Contract dated September 24, 2014 (extension of the Contract duration till March 31, 2015).

The main objective of this project was to support and promote efficient integration of SMEs from the APEC member economies into the global trade system, global production and supply chains as well as stimulate their internationalization process through access to up to date relevant information under the internet based integrated information tool.

The main aims of the project were set as follows:

- to assess existing experience / best practices with APEC economies and evaluate prospects for elaboration of an integrated information tool for SMEs through a combination of research and analytic activities;
- to elaborate a concept for the development of an integrated information tool to stimulate international cooperation and integration of SMEs;
- to develop a detailed action plan for creation of an integrated information tool.

In accordance to the Contract the Russian Agency for Support of Small and Medium Business aimed to implement the following task and to produce the following expected outputs under each task:

Task 1: Development of an Action Plan for the project implementation with all the necessary indicators / criteria for assessment and evaluation.

Outputs:

- a) Guidance to qualification requirements for the Russian consultants / experts / specialists on the internationalization of SMEs and entrance to international markets to be subcontracted for implementation of the present APEC project is developed;
- b) Consultants / experts / specialists according to the scope of work to be done are identified and selected meeting all the elaborated requirements;
- c) The Action Plan for the subcontracted consultants / experts / specialists is developed;
- d) All the necessary indicators for results assessment and evaluation are developed.

This Task was implemented in the due time with all the expected outputs produced, presented and discussed with the authorized representatives of the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation.

Task 2: Research and analysis of various relevant international information resources for SMEs (websites / databases, etc.)

The Russian Agency for Support of Small and Medium Business intends to use a variety of national and international information resources (for example, Ministry for Economic Development of the Russian Federation, Vnesheconombank, EXIAR; Enterprise Europe Network; APEC member economies, etc.) to produce data that will yield the most effective results and conduct the research in accordance to the developed methodology.

Outputs:

- a) Guidelines (guidelines, requirements) to study and to assess the existing international experience related to the development and implementation of such integrated information systems / tools for SMEs in the field of internationalization and access to international markets, including analysis of the prospects for the development of online information systems are developed;
- b) Outcomes of assessment of the existing international experience related to the development and implementation of such integrated information systems / tools for SMEs in the field of internationalization and access to international markets, including analysis of the prospects for the development of online information systems are elaborated and presented.

This Task was implemented in the due time with all the expected outputs produced, presented and discussed with the authorized representatives of the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation.

Main findings of the research and analysis done under the project implementation process are presented in Chapters 2 – 6 of the present Report.

Task 3: Research and analysis of the Russian SMEs needs and demands in relation to such information resource (as a pilot group).

The Russian Agency for Support of Small and Medium Business plans to use its regional network that covers more 42 out of 83 of the Russian regions in order to identify operating exporters / importers as well as those SMEs that are interested in development of international cooperation and to carry our research and analysis of their needs and demands.

Outputs:

- a) Guidelines for the Russian SMEs needs and demands (at least 300 companies) research and analysis in the field of the integrated information tool to stimulate their involvement into the global trade system, global production and supply chains are developed;
- b) Outcomes of the Russian SMEs needs and demands (at least 300 companies) research and analysis in the field of the integrated information tool to stimulate their involvement into the global trade system, global production and supply chains are elaborated and presented.

This Task was implemented in the due time with all the expected outputs produced, presented and discussed with the authorized representatives of the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation.

Main findings of the research and analysis done under the project implementation process are presented in Chapters 2 – 6 of the present Report.

Task 4: Elaboration of a concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade.

Output:

Concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade is developed.

This Task was implemented in the due time with all the expected outputs produced, presented and discussed with the authorized representatives of the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation.

Main findings of the research and analysis done under the project implementation process are presented in Chapters 7 – 9 of the present Report.

Task 5: Presentation and discussion of the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade to the main stakeholders.

Output:

Report with the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade for the main stakeholders meeting is presented and discussed.

To implement this Task the Russian Agency for Support of Small and Medium Business under the aegis of the Ministry for Economic Development of the Russian Federation organized and conducted four special seminars (working meetings) with the interested stakeholders from Russia and APEC economies during December 2014 in the premises of the Ministry for Economic Development of the Russian Federation.

Total number of participants of the conducted seminars (working meetings) made 63 people coming from the Ministry for Economic Development of the Russian Federation and the Ministry of the Russian Federation for the Development of the Far East, the leading development institutions of Russia (Vnesheconombank, EXIAR, Agency for Credit Guarantees), various SME associations and unions, public analytical centres and institutions, private consulting companies, etc. International participants came from different organizations and institutions based in Moscow, Russia, of such economies as China, Indonesia, Korea, Mexico, Philippines, Singapore, USA, Viet Nam. All participants were given a special set of hand-out materials in Russian and English for consideration that included report on the results of the analysis of practical experience of Russian small and medium-sized enterprises in the

sphere of use of information tools to promote them on international markets; report on the results of the review of existing information systems / tools for SME in the sphere of internationalization and access to international markets; the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade.

Also a special round table to present the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade was organized under the aegis of the International Conference «Foreign economic activities as factor for efficient development of the Russian Federation regions» that was conducted during December 04 – 05, 2014 in the city of Ulyanovsk, Ulyanovsk region. Among the organizers of the conference there were Ministry for Economic Development of the Russian Federation; Government of the Ulyanovsk region; Agency for Strategic Initiatives for promotion of new projects; Russian Agency for Export Credit and Investment Insurance; Development Corporation of the Ulyanovsk region; Enterprise Development Corporation of Ulyanovsk Region; Russian Agency for Support of Small & Medium Business; Association of Agencies for SME Support «Razvitie». There were more than 500 participants coming from 52 regions of the Russian Federation (out of 85 in total) and 12 countries.

Further on the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade was also presented to more than 300 participants that came from 11 regions of Russia (out of 85 in total) of the Regional Forum "New opportunities for development – substitution of import. Prospects for international cooperation at the present moment". Among the organizers of the conference there were Ministry for Economic Development of the Kaluga region; Regional Development Agency of the Kaluga region; Delovaya Rossiya; Institute of the Ombudsman under the RF President on protection of entrepreneurs' rights; Centre for New Industrialization; Russian Agency for Support of Small & Medium Business; Centre for coordination of support of export oriented SME of the Kaluga region; Kaluga agency for SME support; Association of Agencies for SME Support «Razvitie».

All participants of the International Conference «Foreign economic activities as factor for efficient development of the Russian Federation regions» and the Regional Forum "New opportunities for development – substitution of import. Prospects for international cooperation at the present moment" were given a special set of hand-out materials in Russian and English for consideration that included report on the results of the analysis of practical experience of Russian small and medium-sized enterprises in the sphere of use of information tools to promote them on international markets; report on the results of the review of existing information systems / tools for SME in the sphere of internationalization and access to international markets; the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade.

Also in order to have opportunities for discussion of the developed concept not only with the interested stakeholders and SME in Moscow but in various regions of the Russian Federation that differ by the level of their social and economic development the Project experts visited a number of the regions (this list was approved by the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation) to meet with the regional authorities, SME support infrastructure organizations and SME: Kemerovo region; Kransnoyarsky krai; Novosibirsk

region; Orenburg region; Primorsky krai; Republic of Bashkortostan; Tomsk region; Tyumen region; Ulyanovsk region.

Task 6: Improvement and finalization of the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade.

Outputs:

Draft Final Report that contains the concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade is developed, improved and finalized.

Based on the comments and feedback received from participants of four special seminars (working meetings), the International Conference «Foreign economic activities as factor for efficient development of the Russian Federation regions» and the Regional Forum "New opportunities for development – substitution of import. Prospects for international cooperation at the present moment" there were some improvements and changes made to the presented Concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade.

The final version of the document was presented and discussed with the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation.

Task 7: Submission of the report to the APEC Secretariat.

Outputs:

Revised Final Report is submitted to the APEC Secretariat.

The present report is the revised version of the finalized report to be submitted to the APEC Secretariat.

Task 8: The Russian Agency for Support of Small and Medium Business plans to provide interim monitoring reports and final reports, as per the schedule set by the APEC Secretariat:

- Interim Report 1: by April, 2014
- Draft Final Report: by August, 2014
- Revised Final Report: by September, 2014.

All reports will be produced in English, in MS Word.

The Final Report will be produced electronically (300 DVDs) for easy distribution and will be as well available on the APEC website.

Each Final Report DVD will contain 2 parts:

- a) concept for the development of the integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global supply chains and global trade; and
- b) the Final Report itself.

The contents of the DVDs will be open to make copies for further distribution.

Outputs:

- a) Interim Reports is provided as per schedule;
- b) The Final Report is provided as per schedule, for electronic distribution (on DVDs) as well as online distribution.

The Russian Agency for Support of Small and Medium Business developed and presented the Interim report in the due time set by the Contract and the Final report in accordance to the Corrigendum to the Contract.

Also the Russian Agency for Support of Small and Medium Business produced 300 DVDs with the content and design discussed with the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation and approved by the APEC Secretariat:



Thus, all the planned activities were timely carried out by the Russian Agency for Support of Small and Medium Business under the proper control of the Project Overseer from the Department for SME and Competition Development of the Ministry for Economic Development of the Russian Federation and all the expected results achieved and properly presented.

CHAPTER 2. PROMOTION SYSTEM OF SMALL AND MEDIUM ENTERPRISES TO THE GLOBAL MARKETS: INTERNATIONAL EXPERIENCE

Small and Medium Enterprises in the International Business

The development of the world economy has opened great opportunities for small and medium enterprises. Changes in the world economy include the following processes:

- Globalization of the economy, the consequence of which is merging of national markets into a huge global market space.
- The formation of a regional free trade areas, such as the European Union (EU), the Asia-Pacific Economic Cooperation (APEC), the North American Free Trade Agreement (NAFTA), which has an impact on countries that are not included in these zones, but wish to have trade relations with the member economies.
- Improvement of technologies that spread wider and have an influence on the ways of conducting business of many companies.
- Restructuring and reduction of business with the purpose of more efficient access to the international market, which is often accompanied by the transfer of specialized functions from large companies to small businesses.
- Awareness of the need and economic benefits from the use of eco-efficient, environmentally sustainable business practices.
- International standardization, in particular, the use of standards of the International Organization for Standardization (ISO), which significantly increases the credibility of the company on the international arena.

Changes in the global economy not only affect the large multinational corporations, but have an impact on businesses of any sizes, even when they operate on a national level. These changes largely determine the rules of the international business, which must be observed to those who intend to engage in them.

There are many reasons why access to the international market is beneficial for SMEs. Companies operating at an international level, have the opportunity to increase their profits and to expand its presence on the market. Below are the main advantages of doing business in a different to SMEs country:

- an increase of income due to entering the markets of other countries;
- economy of scale, providing the full production capacity.
- the profit from the sale of specific goods/services of the company, which can be claimed at the international level;
 - gaining access to the international capital;
- gaining access to the knowledge, technology and experience through cooperation with companies from other countries;

- access to foreign products, which can be in demand on the domestic market;
- ensuring lower costs of production (material, labor, and so on);
- diversification of production, which may be useful both in a sluggish economic environment and in the presence of strong competition on the domestic market;
- the renewal of the product life cycle by selling it in the country where the market is developed to a lesser degree;
- an opportunity to prevent a decline in demand for certain types of products/services, due to unfavorable demographic changes in the country.

The most obvious reason for entering the international market is the increase of income of the company by increasing the size of the market, i.e. sales of their products. It is usually said that a business must "either grow or die", and expanding international offers is a clear path to growth.

However, there may be other direct and indirect benefits of doing international business. Some products and services may be in a bigger demand in the markets of other countries than in the domestic market, and therefore can be sold at higher prices.

Search of the opportunities for doing business in international markets opens up the new ways to reduce production costs and access to technology or expertise through strategic partnerships.

It should be taken into account that, in carrying out its activities in more than one country, the company is less dependent on particular market and better able to protect their long-term interests.

Table 1 shows the main reasons for the business to enter the international level. It is shown that motivation can be internal, outgoing from the company, and external posed by the external environment, and, accordingly, the company may take the initiative or respond to external environment.

Successful companies are usually active in the search for the new opportunities and generating income from their sale, but at the same time, they can take up a position and response when the circumstances are in their favor.

Table 1 – Reasons for the SMEs to enter the international market

	Internal Causes	External Causes
Active Position	- goal of growth and profitability;	- opportunities offered by the international
	- a unique product/ technology;	markets:
	- the economy of scale;	- availability of foreign technology, expertise, or capital.
	- market advantage;	
	- motivation of the management team;	

		- other specific advantages.	
Position	of	- diversification of risks;	- the presence orders and proposals;
Response		- extension of product life cycle;	- stagnating or shrinking domestic market;
	-	available capacities, resources or material-technical base;expansion of seasonal sales.	- downturn or tough competition;
			- unfavorable demographic situation;
			- market saturation;
			- involvement in export of competitors.

This table shows that although there is no one single inducement to enter the business at the international level, it is equally important to determine the underlying reason why the company is interested in developing international markets.

Savings on producing, for example, require a different strategy than the extension of product life cycle. Last, probably, will only delay the inevitable reduction of sales volumes, but will not allow for economies of scale. On the other hand, such incentives as increasing economies of scale and risk diversification, can meet the opportunities of foreign markets and the availability of a sufficient number of orders for these markets.

In the result the international initiatives of SMEs will more likely lead to the intended objectives. Thus, the first step in the output of small and medium business at the international level is to clearly define the goal. You must set realistic goals and to focus the activities of the enterprise on their achievement.

A company's strategy in the international market should complement its goals in the domestic market, and should not be something completely new. The company does not have to "toss". The goal of entering the international market can be the following:

- raise of profitability;
- expansion of markets;
- creation of new production capacities.
- defending of its position or exploring of new opportunities.

The main thing is that the company knows why it enters the international market and what it hopes to achieve.

Problems and risks of international business for small and medium business

Like any other business activity, international business has its own complications and risks. It is only natural that the international business activity is more difficult than doing business inside the country. Ability to manage different situations and risks, of course, will increase the chances of SMEs' success.

Here are some key issues to be considered:

- *High start-up costs*; costs associated with the preparation of exports or attracting partners, can be substantial. They may include the cost of the feasibility study and feasibility study projects, foreign markets research (including company missions), services of interpreters, etc. In addition, the payback period in the international projects is usually longer than during domestic projects.
- *Financial risks*, due to the fact that during international business activities process of payment for goods sold is more complicated; it creates additional risk due to currency fluctuations, which may expose the firm to a high level of risk in the case of investing capital abroad. Services such as insurance of export, can reduce the risks, but this may cause some extra-costs.
- *Cultural differences* that may complicate the international business activity. Cultural differences in business cooperation with foreign companies range from business practices to religious rituals and require special attention and ability to adapt.
- Additional documents, which can be very significant in the development of the international project and includes contacts with the government-based SMEs, foreign governments of and foreign partners in accordance with their requests. Information on shipping and customs requirements, existing tariffs should be documented, increasing costs and efforts required for successful business abroad.
- *Modification of products* that may be required when entering international market. In case of exporting this may mean a change in appearance or characteristics of the enterprise's products in order to satisfy the needs of foreign markets. In case of purchasing the equipment from foreign partners for the production of products intended for the domestic market, may require adjustments, which may result in changes to the end product.
- *Factors of price and volume*, due to additional costs, inevitably increase the cost of products made with help of a foreign partner, regardless of whether it is sold in the domestic market or exported. The additional costs and risks mean that the level of profits should be high enough.
- **Political risks** associated with changes of the political situation in the country, the representatives of which small enterprises do business with, or in country-based SMEs, which may limit opportunities for international business and place the project under the threat of failure.
- A variety of marketing strategies, due to the fact that each new market segment requires detailed study and a plan of its development, including the various marketing strategies. Assessment of indirect or direct exporting strategies is a key to the development of new markets.

- *Logistics and distribution of products* related to getting your product to new markets is a far more complex venture than producing for the domestic market. The issues of marking, packing, logistics trademarks, insurance, transportation, customs, duties, storage and delivery require knowledge of regulations and a high level of organization.
- *Legal aspects* due to the fact that all international operations are associated with legal issues which require knowledge of law and business law of the country which SMEs intend to do business with. Legal assistance and confidence that the agreements are drawn up correctly in that case are crucial for success.

The relevance of these problems and risks for SMEs will depend on specificity of activity of the enterprise. However, it is very likely that some of them will have an impact on international activities of the enterprise, and hence on the activities of potential foreign partners. Joint work with a partner on the solution of these problems is often the best way to reduce risks and maximize benefits for all participants.

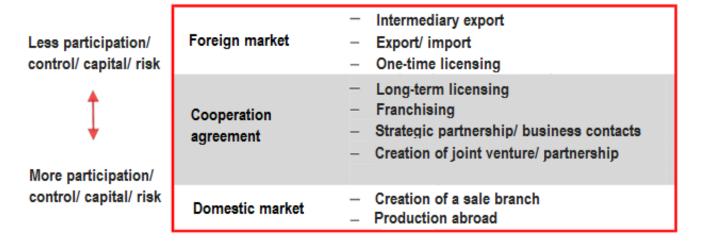
The main forms of international business

Regardless of whether the subject of the small and medium business is going to extend its activities in foreign markets or to attract foreign partners to expand business in the domestic market, there are many forms of doing international business.

SMEs need to analyze the various options from the point of view of the available resources and strategic goals of the enterprise. Advanced enterprises are developing new approaches to the establishment of partner relations with foreign companies and find new outlets in foreign markets.

The main forms of international business are shown in Figure 1:

Figure 1 - Main forms of international business for SMEs



As shown in the table, international business may merely represent the supply of goods to foreign enterprises for sale on their market by concluding long-term agreements on cooperation with intermediaries or through the organization of deliveries of the goods to the foreign market on their own.

Different forms of international business are characterized by greater or lesser degree of direct participation of SMEs, control, risk, and different scales of required capital.

Here are the basic forms of international business and some consequences of choosing a particular form:

- 1. **Intermediary export** involves the sale of goods with intermediary trading or another company, which is then responsible for the marketing and delivery of goods to the foreign market.
- 2. **Export / import** is a relationship of purchase and sale of goods directly from companies operating in a foreign market and using the purchased goods for their own use or for resale. Despite the fact that the transportation of goods and payment are significantly more complex than when trading on the domestic market, export/import is the least complicated form of international business and requires the least degree of participation of the company.
- 3. One-time licensing is selling of the rights to use, sale and product the goods of a company located in another country. In addition to the production license may also be granted to a service or production process related to these products. Licensing is often used in production when the company grants a license to a manufacturer in another country to manufacture products according to your technical requirements.
- 4. *Long-term licensing* is like a previous one, except that this form is a more general situation, when the license agreement extends over a specified period of time. Therefore, it involves a more close and lasting relationships between SMEs and foreign partner.
- 5. *Franchising* means that the company purchases the rights to another company's products, services, or business. The buyer usually has exclusive rights for a specified geographical area, which is one of the features distinguishing the franchise from licensing.
- 6. Strategic partnership/ business contacts network suggests a cooperation agreement in which two or more companies work together to achieve certain goals or for a specific project, while remaining independent organizations, which can act as competitors in relation to each other in other areas of their business.
- 7. Creation of joint venture/ partnership implies a formal agreement, often leading to the creation of new companies, separated from the founding of its partners. This company is co-owned and financed by all parties involved. In some cases, the agreement may involve direct investment of one company to another in exchange for a share of future profits, market access, or other benefits.
- 8. *The creation of sale branches* involves the creation of organizations engaged in the sale of company products in a foreign market. Many SMEs do not have the opportunity to use this form of doing international business.
- 9. **Production abroad** is the most advanced form of international business development and means the organization of production in another country. SMEs rarely carry out this form of international business.

Doing business in the distance, along with the necessary investments, always implies the existence of factors such as control and risk. As usual, the greater is the degree of participation of the company, the greater its control over the end result.

However, more intensive involvement usually leads to additional costs, which in turn gives rise to certain risks. The risk is not only increases depending on the chosen form of international business, i.e. from exporting through intermediaries to production abroad, but the risk may vary in different circumstances. For example, when exporting participation is limited to arranging the shipment of goods, and capital investments in research of market opportunities can be relatively small.

Control is limited, as the seller cannot influence what happens to the goods once they are shipped. The degree of risk, though higher than in trading on the domestic market is still quite small. The risk is mainly related to the possible non-payment for goods shipped or to the fluctuation of exchange rates, which may negate the benefits of the deal.

Although these risks cannot be eliminated, they may be controlled by applying a well-developed in international business practices. In case if the production is organized abroad, they require substantial effort and capital investment, and the company is exposed to the full spectrum of potential risks from financial to political. This form provides the highest level of control over the project in common, however, it may be insufficient to reduce the associated risks.

Cooperation agreements are widely used in the international business, as they most effectively can strike the balance between these elements of international business, as the involvement, control, capital, and risk.

Most SMEs do not have resources to engage in significant international activity, so they can benefit from cooperation with business partners from other countries.

Ultimately, the choice of the most suitable for SME forms of international business will depend on the objectives and resources of the enterprise, as well as from the ability to align goals and resources with the purposes and resources suitable foreign partners.

Evaluation of international business opportunities

Knowledge of the forms of international business is just a starting point. For the successful realization of business opportunities, the company needs to make research with the aim to focus on the best options.

A systematic approach will help SMEs to focus on the opportunities that are probably more profitable.

The diagram below (Figure 2) describes the gradual process of systematic selection of opportunities in international business, starting with the research of the existing situation within the company and ending with implementation of an exit strategy at the international level.

Figure 2 - Step-by-step process of systematic selection of opportunities in international business



- 1. Strengths and weaknesses of the company: the analysis of international business opportunities for SME must begin with a clear understanding of its strengths and weaknesses.
- 2. **Objectives and strategy**: setting goals of the enterprise on the basis of its strengths and weaknesses ensures that based on these purposes, the strategy will focus on harnessing the strengths of the company and the compensation of its weaknesses.
- 3. Forms of international business: in the framework of the strategic plan of development of the SME one or more of the above forms of international business will be the best for the company.
- 4. *The international market entering strategy:* the general strategy of attracting suitable is based on the analysis of the most relevant forms of international business. Although the real process of developing of international business opportunities rarely unfolds in such an orderly fashion, this scheme reflects the basic steps that allow the company to create a solid basis for an exit on the international level.

Marketing in international cooperation

If the company decides to enter the international market, it should, first of all, have the answers to the following questions:

- "What goods will be sold today, to whom and in what market?"
- "How and on what conditions must the deal be done and is it a good company?"

Marketing helps a company to convert the needs of buyers in the income of the enterprise. Marketing can be considered to be a modern concept of doing business, including market study and the actual needs of customers, the creation of the competitive product and, finally, maximizing of profit.

The marketing process generally includes the following steps:

- 1. Research of market opportunities: consumers, market conditions and its features, competitors, etc.
- 2. Research of internal and external opportunities of the company, its marketing environment. Analysis of enterprise's strengths and weaknesses (SWOT analysis).
 - 3. Choice of the most attractive segment in the market.
 - 4. Defining of the position and behavior in the market.
 - 5. Product creation and development of product policy.
 - 6. Development of price policy.
 - 7. Development of the program of distribution and promotion of the goods in the market.

Small and medium business using marketing approach perform their activities in accordance with its key principle: to produce what can be sold, and not to sell what can be produced.

Information sources and search capabilities

There are many different sources of information about foreign markets, opportunities and approaches to international business development. In conditions of the large amount of existing information, the clearer understanding of a SME's international market entering strategy is, the easier it will be to focus on the most important information.

It is important that organizations and individuals who can help, know what capabilities are looking for a company, and what are its strengths and weaknesses.

This can be achieved by networking, establishing and maintaining relations with representatives of the business community and state structures.

With this purpose it is necessary to form a single integrated information resource for small and medium business in the global market, in particular for SMEs in APEC economies.

The analysis of practical experience of Russian small and medium enterprises in the sphere of use of information tools to promote them on international markets is presented in the Chapter II of this study.

<u>Promotion of Small and Medium Enterprises to International Markets</u>

In order to develop a system aimed at support of SME in their strive for international markets it is necessary to define their needs and demands that could be presented in the following way (Figure 3).

Diagnostics / Presentation / Advertising & evaluation of support during promotion export potential negotiations Product improvement / Longer **MARKETING** innovations K duration С Ν Α **NEEDS & DEMANDS** 0 Legal support / W Ы OF EXPORT ORIENTED Lower cost IPR protection Т **SMEs** Н Α 0 W Wider access EXTERNAL ENVIRONMENT Certification of / guarantees products / services International Export markets / Fairs' promotion / information / participation / interaction requirements materials

Figure 3 – Needs and demands of export oriented SMEs

Based on the analysis of the needs and demands of export oriented SMEs as well as existing international experience of support to internationalization of SMEs, it is possible to note that the main and obligatory means of support on the state level are the following ones:

- legal database;
- network of state institutions and development organizations responsible for SMEs development and support that implement state policy in the sphere of SMEs internationalization and that interact efficiently and effectively with each other;
- SME support infrastructure organizations a well developed network of specialized organizations involved into provision of various services for SMEs interested to enter international markets:
- regular and significant financing allocated by the national budget that included measures of direct and non-direct support to export oriented SMEs;
- specialized programmes of international cooperation in the sphere of science and technology.

There is a whole set of instruments that is successfully applied all over the world to support export oriented SMEs. Of course, international experience of their application is much wider than the Russian one due to the longer period of their existence.

1. Stimulation of production for export in the form of:

- subsidies:
- tax privileges and holidays;
- guarantees for private investments;
- grants to production companies;
- stimulation of foreign direct investments;
- subsidies for scientific and research activities;
- participation in science and technology programmes and projects;
- establishment of free economic zones.

2. Direct support of export:

- export financing and credits;
- insurance of trade and investments from economic and political risks;
- participation in the authorized capital of companies registered in other countries;
- support of participation of national companies in fairs and exhibitions abroad;
- support in organization of business missions;
- support in searching for and provision of various information on international markets, partners, requirements, etc.
- 3. Measures of trade and political character to lobby and protect interests of national production companies on the international markets:
 - lobbying of interests, fighting with antidumping and other limitations on external markets;
 - promotion of hi-tech industries on the state level.

According to the international statistics such an approach on the state level provides serious competitive advantages to national SMEs operating on international markets: about 25% of the SMEs' products have become competitive on international markets and this figure is still increasing.

One fifth of the SMEs' products generate approximately 10% – 40% sales from trans- border activities of this target group. At present, SMEs occupy about one third of the global export of products, goods and services and attracts a considerable share of foreign direct investments.

Special attention is paid abroad to a systematic approach for support of innovative SMEs that use same mechanism of promotion to external markets and internationalization as all the rest SMEs.

In many of the developed economies different instruments are applied on the state level to stimulate innovative development of SMEs including export and internationalization – special financial support programmes and technical support programmes.

There are plenty of legal, financial, tax and other measures and mechanisms available on the state level to stimulate innovative development of SMEs in various spheres of activity.

Apart from that one of the most important financial instrument applied in many countries to support innovative SMEs is conclusion of state contracts for research and development activities. Intensive development and support of innovative activity of SMEs leads to the necessity to finance such R &D activities and to secure good interaction among SMEs, research institutions, universities and laboratories.

There are a lot of good examples and good practice accumulated all over the world to demonstrate effective and efficient cooperation of different state institutions in the sphere of support to R&D activities of SMEs. One of such examples is presented by two programmes carried out in the USA: «Small Business Innovation Research» (SBIR) и «Small Business Technology Transfer Programme» (STTR). Such programmes are implemented by many national governments.

Such state contracts foresee careful examination and agreement over all the main characteristics of the expected results, costs and terms of development. Usually the price is being fixed before the implementation process is launched and all the payments are done upon completion of the work. Subsidies are most of all provided to crucial and risky projects implemented by SMEs that are included into special registers proving their positive practical experience in the sphere of R&D.

State contract include the following important conditions and requirements among others:

- achievement of the expected results and outputs within the agreed period of time;
- provision of financial resources / credit to SME in charge of the R&D for the whole contract period;
- provision of guarantees for SME in charge of the R&D to purchase the results / outputs achieved.

In general the following forms and ways to support innovative activities of SMEs are applied all over the world:

- state programmes of financial and technical support for innovative SMEs that carry our R & D activities in the spheres / directions approved on the state level (USA, Japan, Great Britain, India, China, etc.);
- direct financing (subsidies, loans) that cover 50% of the costs related to development of new products and technologies (France, USA, etc.);
- provision of no interest loans (Sweden), grants to cover 50% of the project costs
 (Germany);
 - subsidies for R &D activities (practically in all developed economies);
- development of venture funds to support innovative projects that consider all commercial risks (Great Britain, Germany, France, Switzerland, the Netherlands);
- minimization of state fees / charges for individual innovators and provision of tax privileges for them (Austria, Germany, USA, Japan, etc.) as well as establishment of a special infrastructure for their support and economic insurance (Japan);
- deferment of fees and charges or their total cancellation in case the innovation is related to energy saving sphere (Austria);
- free of charge services of patent solicitors for individual innovators, cancellation of payments of fees and charges (the Netherlands, Germany, Japan, India);

- minimization of taxes for innovative companies for example, exclusion from taxation sphere of the costs related to R &D activities, provision of privileges for universities and research institutions (USA, Great Britain, India, China, Japan);
 - legal support on the state level to IPR protection (in all developed economies);
 - state programmes for risks minimization and compensation of risk losses (USA, Japan);
- creation of a wide network of venture capital funds used for implementation of innovative projects by SMEs (in all developed and developing economies);
- creation of a wide network of science parks, business incubators and technology development zones (in all developed and developing economies);
- creation of strong state institutions (corporations, agencies) that secure provision of scientific and technological, financial and production support and assistance to innovative SMEs (USA, Japan, India, China, etc.);
- specialized web-sites providing various information and search possibilities for modern technologies and innovative ideas that enable SMEs to get all the necessary information and to find potential partners.

A rather interesting experience is accumulated in the sphere of support to innovative SMEs through involvement of senior experts – highly qualified specialists (managers, engineers, scientists, financial experts, etc.) who have already retired but ready to apply their knowledge and experience.

Such networks exist practically in all developed economies with consulting points served by the senior experts (Service Corps of Retired Executives — SCORE). In the USA, for example, there are about 389 such consulting points where more than 11 400 retired experts offer their services to SMEs. Every year they serve more than 400 000 clients.

Similar structures operate in the EU to provide consulting support in the SMEs offices; they cover even some of the CIS member countries (European Senior Service Network — ESSN).

In Russia this strong intellectual capacity could also be used with little organization efforts and relatively small financial input. The local SME support infrastructure organizations could for example develop databases with information on highly qualified retired specialists living in the neighborhood and ready to interact with SMEs. With further development local databases could be transformed into the national project with Internet access by interested SMEs.

There is also some interesting practical experience accumulated in Japan where various city associations of product engineers and designers support SMEs – for example JIDPO / JIDA.

Clusters approach has become a very strong stimulating factor for economic and innovative development in many countries because usually clusters combine the most effective and efficient interrelated enterprises of various size that constitute a leading group of companies and secure highly competitive positions on the sector, national and global markets.

Cluster approach is actively used on the national level to develop state industrial policy as well as regional development programmes aimed at stimulation of innovative activities of SMEs through close cooperation of SMEs and big companies. Practical experience of the developed economies has proved

that cluster approach is the background for effective and efficient cooperation and interaction in the sphere of innovations of SMEs with the state, trade associations, research and education institutions.

Being aware of the need to improve its economic potential various national governments allocate considerable amount of money into the sphere of innovations, R & D activities – for example, US invests about 280 bln USD per year; Japan – about 100 bln USD, leading EU countries - 50 - 60 bln USD per year, China in the period from 1995 to 2002 increased this amount 4 times – from 18 to 72 bln USD. In Russia annual amount of budget allocations into this sphere is about 20 bln USD.

Different countries require different period of time needed to launch, support and speed u- the innovative development of their economic systems. There are some good examples of the countries that moved gradually towards innovative development but as well there are some countries that made an innovative jump due to implementation of the relevant state policy (the starting point here usually is the adoption of the corresponding key legal act / programme).

The results of analysis of the state innovative policy of some countries presented below is aimed at finding trends and common features in applying state measures for support and stimulation of SMEs' innovative activity. Mainly the difference in approaches is related to application of specific measures aimed at speeding up innovative development (like privileges, financial support, improvement of science and business interaction) as well as with clear definition of the state and private sector roles in these processes.

In many EU countries there is a serious growth of innovative activities of SMEs (Great Britain, France, Finland).

In general, the EU member countries have a rather well developed infrastructure for support of innovative SMEs in the form of techno parks and technological incubators but the degree of the state's involvement into such institutions differs from country to country. In France and the Netherlands, for example, techno parks are fully financed by the state, in Great Britain the state is not at all involved into this process but at the same time there is an efficient system of private capital support for all techno parks done through membership fees paid by consumers of innovative products. In Germany there is a mixed system; financing of techno parks is done from the state and private means and also there is a considerable support provided on the regional level by the local authorities.

However, the best practical experience in the sphere of techno parks is accumulated in Finland that has more than 200 techno parks operating in different spheres of activity. All of them are combined in one network; such an approach enables any new company willing to enter this or that techno park to select the most appropriate one. Any company may stay within a techno park for 2 – 5 years and it gets full support in the sphere of financing, marketing and sales, business plan development, etc.

It is necessary to note that universities create the core of each and every techno park in Finland. From one side, it attract financial resources to universities themselves and on the other side, it secures flow of young qualified specialists ready to work within a techno park. As soon as a company reaches a certain level of its business development where it is ready to exist by itself, than it has to move out of the techno park.

One more well spread instrument for support of innovative companies in EU member countries are special programmes for equipment depreciation that become a strong argument for modernization of equipment and technologies within SMEs. Thus, for example, in Great Britain and Germany for SMEs involved into R & D activities it is allowed to write off correspondingly 100% and 40% of the costs of equipment. Such a programme also exists in Sweden where for innovative SMEs it is allowed to write off equipment with depreciation period of up to 3 years.

In **Great Britain** before the year of 2000 there was no centralized policy / strategy for innovations support and development. In the year of 2003 the national Trade and Industry Ministry published the governmental strategy in the sphere of technological development; in the year of 2004 a special Technology Strategy Board that invests into new technologies and supports their development and commercialization. More or less complete long term innovations development strategy was formulated in Great Britain on the state level only in the year of 2008.

In Great Britain state financing of R & D activities is known as "double support" system. Strategic financing is done through one time subsidies. Alongside the Department for innovations, universities and competence provides financing for Research boards that in turn finance research and development activities through specific projects.

Thus, one time subsidies provide for stable situation and secure strategic resources that could be used by universities in accordance to their priorities and development programmes; at the same time the system of project financing implemented by Research boards stimulates good competition among various projects.

In Great Britain there is a lot of innovation centres of the following two types: the ones that are oriented at development of specific technology and its promotion (established as reaction to the needs and demands from the side of business, for example, Printable Electronics Technology Centre, PETEC) and the ones that are focused on a certain sector or market (established to combine complementary scientific spheres, technological components, etc.).

Such centres are usually seen as drivers for economic development on the regional level. The main drawback of such centres is the fact that they are not integrated into the national innovation support system and are not related to the wider development programmes, for example, those that are being implemented by the Technology Strategy Board.

Application of regional approach to investing into the centres led to high dispersion of innovative activity and duplication of efforts – for example, at the moment on the territory of Great Britain there are 8 innovation and technology centres operating in the same sphere of composites.

The innovative start-ups pay 1% profit tax in Great Britain; also some additional measures of indirect stimulation are applied to stimulate innovative companies such as additional tax privileges, increase of the number of private venture capitalists through easing of legal restrictions for them.

Thus, one of the main success factors of the British innovations development policy is related to orientation for private initiative. Unlike many other countries, in Great Britain the leading role in the

national innovations development belongs not to the state but to stimulation of private demand carried out on the regional level.

In **Ireland** transition to innovative way of development was done just recently – in the year of 2007 the national Government allocated 8,2 bln Euro for implementation of Strategy for Science, Technology and Innovation that is aimed at improvement of human capital, physical infrastructure, development of science, technology and innovations through various projects.

The state plays a significant role in Ireland: in particular, it decides on attraction of foreign investments for the development of hi-tech industrial sectors. One of main measures to stimulate the development of innovative companies is allocation of grants for R & D companies and decrease of tax burden. In spite of the fact that in Ireland there lives only 1% of the total EU population, 25% of the total investment flow that comes from USA to EU goes right to Ireland.

The state in Ireland also invests into many projects aimed at improvement of SMEs access to information, consulting and educational resources. To attract researches and scientists to Ireland, the Government actively follows the EU Directive on Mobility of Researchers from Third Countries.

There are some initiatives to develop cooperation between education and industry – for example, establishment of Centres for science, engineering and technology aimed at accumulation and exchange of knowledge as well as development of opportunities for innovations. Research centers at higher educational institutions work with researchers to identify commercial opportunities of projects, conclude agreements with enterprises, protect intellectual property rights. Moreover, cooperation between academic researchers and the industry is conducted within Strategic research clusters which specialize mainly on bio - and computer technologies.

In Ireland, although the private sector is the main generator of innovations, it is the state that produces basic conditions of innovative development. The success of its national innovation system can be described by the three basic components: the inclusion of Ireland in the global financial system which has led to a significant growth of foreign investments in the economy and arrival of multinational corporations; creation of innovative "clusters" of development on the basis of the country's participation in international movement of technology and various forms of international information-technological cooperation; improvement of the quality of human capital due to immigration of qualified specialists (mainly former expatriates) in the country.

The **Finnish industry** could switch to the production of goods with a large amount of value added in the period from the mid-60s to 80s thanks to intensive partnership between the state and the private sector. A state fund Sitra has become a pioneer of venture financing. It was established in the 1980s; since 2000s it has become a key investor in biotechnologies.

Innovation activities in Finland are regulated by the Decree of the Government on the Council in the field of science and technology of Finland, Communique of the Government on the National

innovation strategy of Finland to the Parliament 2009, laws on intellectual property rights, small and medium enterprises, regional development and other laws and regulations.

In Finland great attention is paid to the development of technological parks which are regarded one of the most important elements of the innovation infrastructure. Twenty-two technological parks have been created by municipal authorities of Finland on the basis of the 20 Finnish universities.

In Finland innovation infrastructure is developed at a very high level and includes several types of agencies providing support for innovative businesses. For example, existing "centres of excellence" provide grant financing of innovative projects at their early stages. "Seed financing" funds together with private investments provide financial and information support at the stage of transition from utility models to launch of pilot production. Technology transfer centers provide assistance to small enterprises in legal and institutional areas.

Thus, the main success factors in case of Finland can be considered state ownership in key Finnish companies; regulation of interest rates; state support to the private sector; a combination of state support of and competition with the industry. The leading role in the development of telecommunication industry of Finland and the industry in general has been played by Nokia, the long-term growth of which has been largely fuelled by state financing, in particular, the Tekes agency which has financed 8% of all Nokia expenses on research and development.

The first attempts of realization of innovation policy in **Denmark** was made in the early 1980s when the government launched the program of technological development aimed at the development of information technologies which was considered to be one of the priority areas. In the last 20 years Denmark has experienced a full-scale transformation of the applied economic policy: a traditional short-term stabilization policy was replaced by long-term structural policies.

In Denmark, the universities are financed mainly from the state budget. The interaction between universities and the industry in Denmark is less developed than in many other countries. An important part of the Danish innovation system consists of specific scientific research institutes. They are attached to various ministries and are engaged in conducting research according to the needs of the respective Ministries. Institutions receive basic funding from the national budget; they may also receive funding from public funds distributed through open competition through research councils, ministries or other institutions, and from commercial activities.

An important part of the Danish innovation system are GTS-institutions ("Godkendt Teknologisk Service" - "approved technological services provider"), acting as a bridge between public and private actors. GTS-institutions are private, independent consulting company that develop and sell applied knowledge and technology services for private enterprises and government institutions. GTS-Institute is a non-profit organization established by the Ministry of science, technology and innovation for the period of three years. There are three main areas of activity GTS-institutions: independent development knowhow, participation in joint projects with public research institutions and private companies, as well as commercial activities. Another important element of the Danish innovation system - scientific parks, cofounders of innovation incubators. The country has created a powerful innovation infrastructure.

However, a large part of the innovation activity is reduced to small innovation aimed at improving the production process.

In **Norway**, great attention is paid to interaction of education and science: there are a large number of both public and private research institutions (accounting for almost 23% of all expenditure on research activities, and about 27% of all scientific research). All higher education institutions Norway are obliged to carry out fundamental research and training of researchers, using the work of graduates of universities and programs of doctoral students. Higher education institutions are responsible not only for fundamental research and the training of scientific personnel, but also for commercial use of the results of inventions made by their employees. The share of public investment is relatively high, as in other countries with a low share of R&D to GDP (about 1.7% of GDP).

Norway has been able to ensure that foreign corporations operating on the local market, conducted the localization of their technologies in the country or transferred them to the Norwegian research institutions. This was done through various incentives, and rewards. As a result, a shipbuilding company was created in Norway, as well as an IT sector linked to the oil and gas production, innovative developments in the monitoring of reserves in remote places, as well as in technologies of drilling and offshore production.

The government of Norway co-funds R & D activities of raw-material companies. The ultimate goal of the Norwegian state is the creation of the scientific environment of the world level and accumulation in Norway of knowledge in the field of oil production. To encourage the development of R & D activities in Norwegian industries the Norwegian state has introduced has a system of tax deductions in spending on research and development. High taxes on oil production in Norway directly stimulate oil and gas companies to develop new technologies, allowing to reduce production costs and increase the production of oil from the reservoir.

In Norway supports fundamental research in institutes and universities is one of the main priorities of the Norwegian innovation policy. Free education makes it possible for admission to leading universities and colleges children from remote regions and the poor. At the same time, the practice of lifelong education can increase the skills of workers throughout life.

For encouragement of development of research and development in the industry in Norway the system of tax deductions is provided at implementation of expenses on research and development. Heavy taxes on oil production directly stimulate the oil and gas companies in Norway to development of the new technologies, allowing to reduce cost of production and to raise extent of oil production from layers.

In Norway support of basic researches in institutes and universities is one of the main priorities of the Norwegian innovative policy. Free education does possible receipt in leading universities and colleges of children of the remote regions and needy segments of the population. At the same time, practice of lifelong education allows to increase qualification of workers throughout all life.

Innovative development of **Sweden** was carried out consistently and has long history. Nevertheless, in Sweden only in 2005-2008 4 priority spheres for research and development financing were defined: medicine, biotechnologies, environment and sustainable development, development in Sweden of "the centers of high technologies" (centers of excellence) which represent connection of research and commercial forces in interests of fast and effective commercialization of innovations.

In Sweden the majority of expenses on research and development is carried out by a business sector. Support by the research and development government in a business sector, is generally limited to carrying out researches in the defense sphere (13% of all public financing of research and development). At the same time, basic researches are financed mainly by the state whereas the share of a business sector is smallest.

Important distinctive features of Sweden are a high education level and qualifications taken in public sector, effective work of the state institutes, stable political system. In Sweden the market of the venture capital is developed. Nevertheless, the national system of support and stimulation of commercialization of results of research and development through creation and development of the new enterprises is often characterized as rather weak and fragmentary.

Low productivity regarding commercialization of results of research and development became the reason of creation of the whole chain of the organizations responsible for performance of policy concerning development of business. Innovatsionny Bridge (The Innovation Bridge), supports commercialization of results of scientific researches and provides (limited) financing at a preseeding stage (pre-seed); ALMI Business Partnership (ALMI Business Partner) supports business creation (not carrying out research and development); The Industrial Fund (the Industrial Fund) is the state venture investor; and the Agency on investments into Sweden (the Invest in Sweden Agency, ISA) promotes inflow of investments.

It is considered one of the most serious problems of the Swedish innovative system rather low level of the knowledge-intensive production outside several large, technically advanced multinational corporations. Their technical achievements behind a small number of exceptions are historically connected with traditional technologies and branches.

Key factor of success of innovative development of Sweden are long large-scale investments in education that promoted science development.

The state strategy of innovations of **Spain** was approved in 2010. Management on realization of GSI is performed by the Ministry of science and innovations of Spain (THINK). 6720 million euros were allocated for GSI realization from the state budget of the country in 2010.

In Spain the main directions of the state innovative policy are implementation of projects of creation of consortia of technological researches (CENIT, NSKTI), Fund of funds and the Torres Quevedo program. The National Strategic Consortia of Technological Researches (NSCTR) represent a practical form of realization of a problem of improvement of interaction of the state and private

organizations by creation and joint financing of NSKTI. For obtaining grants and other support from the state, formed with NSKTI have to satisfy to a number of conditions.

The fund of funds unites funds of the venture capital for support of processes of creation and formation of the hi-tech companies. Participants of fund are the state and private companies, presence of the private sector: more than 30%. The Torres Quevedo program according to which saturation of the private sector by university shots is carried out. According to the program the conclusion of contracts with doctors of science and technologists for support of research projects in firms is financed.

The main directions of regional innovative policy of the **Netherlands** pursued now were set in 2003. The ministry of the economic relations realized the program "A way to innovations: fight against Lisbon ambitions", urged to improve innovative climate, to stimulate the companies to conducting innovative activity and concentration of bigger quantity of resources in strategically important spheres.

The innovative policy in the Netherlands is characterized by prevalence regional components, and there is a shift from support of lagging behind northern regions on support of economic advantages of the regions which are a driving force of national growth. The insufficient density of research activity belongs to shortcomings of national innovative system of the Netherlands in the Dutch companies (1% in comparison with the average level on OECD in 1,5%) and increasing shortage of doctors of science on scientific and technical specialties.

Participation of the Netherlands in the international programs for innovative cooperation is centralized and is coordinated by the main ministries and agencies within their main specialization. At the organization of participation in the international innovative projects the main attention is paid to attraction to researches of the enterprises of small and medium business, and also the perspective innovative companies.

Selective support of leading innovative regions, and also the developed scientific and educational complex which includes system of support of students, system of a transfer of technologies in the scientific sector, the developed network of scientific universities with public financing became major factors of success in the Netherlands. In Spain the main role in innovative development is played by interaction activization between the government and private institutions.

Since 1998 in France the state plan of stimulation of patenting of inventions works with domestic-owned firms. In 1999 the Law on innovations and the scientific researches, urged to reorganize and modernize national innovative system in the direction of more effective commercialization of research potential was adopted. Implementation of the law led to acceptance of a number of decisions of the government and special "the innovative plan" (2002) which purpose consists in creation of the general legal base stimulating development of partnership between the public scientific sector and non-state participants of innovative process. Since 2007-2008 dot tax measures for support of investments into innovations were undertaken, for example, in the first 5 years of the existence of the MSP company are exempted from payment of a profit tax or have possibility of its decrease for 50%,

In France the share of the state expenses for research and development in the general costs of these purposes makes 49,9%. Other part of financing it is provided with the private sector, and 70% of expenses for research and development are the share of the industrial companies. The French innovative policy is directed on stimulation of private investments into science, interaction improvement between all key participants of innovative process within poles of competitiveness and on support of development of small and medium enterprises (RME).

For this purpose with state participation, and also non-state structures various actions including the international, national and regional levels of interaction are carried out. For improvement of cooperation of participants of the project and a transfer of technologies, in France special innovative clusters are created ("Sofia Antipolis", "The Marseilles innovative cluster"), in the country the special program of "Competitiveness poles" is developed and started.

The poles of competitiveness allowing the enterprises, universities and researchers-developers became one of the main strengths of national innovative system of France, promoting its innovative development to work in a sheaf.

In the innovative sphere of **Belgium** creation of "Group of high level of 3%" (High Level Group of 3% / Haut conseil of 3%), consisting of industrialists, scientists and members of the research organizations became a serious event in support of innovations at federal level. Innovative process is stimulated in Belgium with cluster policy, thus in process of a transfer of technologies are involved both scientists, and students; effective regional programs of support of innovative activity (Flanders) work. To the enterprises participating in innovative process, for the federal law taxed the income can decrease by 110%.

Besides, in the Kingdom there is a law on investments according to which budgetary funds (to 150 million euros) for a transfer of technologies are attracted through universities and scientific research institute. From the scientific and technical budget about 150 million euros are provided on introduction of results of researches and development in the industry. As a result the share of the enterprises which are carrying out technological innovations, makes about 60% of total number of the enterprises.

For stimulation of the companies and scientific centers to carrying out innovative policy, the interest-free credits and subsidies the amount of joint financing from which can reach 25% are allocated. Besides close attention to a transfer of technologies, support is given also to basic researches. In Belgium there is no special regulation of activity of science and technology parks though many of them effectively function.

The balanced regional innovative policy and the thought-over system of financial support of innovative activity became the main factors of success of Belgium in innovative development.

Innovative capacity of **Austria** is characterized by high level of expenses on research and development, high degree of dependence on public financing (the share of the enterprises receiving the state subsidies for innovative activity) and thus – a lack of shots and low return from new development is

high. In recent years in Austria the tax mechanisms, urged to stimulate research and innovative activity of the enterprises were improved. So, for the made expenses on researches and experimental development by the Austrian tax legislation deductions from base of a profit tax of 25% of the made expenses for researches and introduction of new technologies, for expenses for education – 20% of the made expenses are provided. Limiting factors, still, remain a low share of graduates with the higher and higher technical education, and also considerable lag in the field of development of venture financing.

At advance on the foreign markets of hi-tech production, especially at implementation of large infrastructure projects, the Austrian enterprises in many cases act as a part of clusters – associations of the enterprises. Such clusters will be organized on the basis of the advanced enterprises in industry sectors, first of all, connected with infrastructure development where competitive positions of the Austrian firms in the international markets are strong.

It allows to provide also entry into the market of a large number of the small and medium-sized companies which independent participation in large infrastructure projects is impossible. Now there are four such clusters: Austria Rail Engineering (ARE), Austrian Power and Environment Technology (APET), Austrian Health Care System (AHS), Austrian Technology Corporation (ATC).

Besides, in Austria there is rather large number of various forms of the organization of the business, research and production centers – specialized scientific and technological business centers, business incubators, the kompetents-centers, an impulse centers, etc.

The success of Austria on a way of innovative development was promoted by structural programs of support which were accepted for the organization of cooperation of the hi-tech enterprises without rigid binding to the concrete technological directions.

Besides, in the country cooperation between the highest professional schools and small and medium-sized enterprises in the sphere of creation and introduction of innovative development is well developed. Successfully the network of science and technology parks which create optimum conditions for development of the MSB enterprises, including innovative develops. At the state level formation of clusters is initiated that also is one of methods of support of hi-tech export.

The government of **Switzerland** realizes the programs directed on transition of the state from industrial economy to economy, based on knowledge, since 1950th years. The structure of the state departments supervising formation of economy, based on knowledge, innovative economy which exists and now was in the nineties created.

In Switzerland the main directions of innovative policy didn't undergo essential changes from 2000 to 2007. A number of changes concerned, first of all, education, scientific researches and technological sector. The government increased expenses in these sectors on the average by 6% every year during the period between 2004 and 2007.

Besides, the government corrected the areas of work of the National centers of competence of area of scientific researches (National Centres of Competence in Research, NCCR) – NCCR started since 2004, became more focused on humanitarian and social sciences.

The government also allocated some priority directions of development of science and economy besides NCCR – networks of competences of structure of universities of applied sciences, increase of value of knowledge, dialogue encouragement between science and society, etc.

Since 2007 the government defined priorities of development of the country and the primary innovative branches with prospect of industrial introduction for which the main state resources are allocated are planned.

Questions of commercialization of innovative development in Switzerland aren't supported by direct state investments. The transfer of innovative technologies in the industry is carried out within existing forms of support of firms, including startups, mainly in the conditions of science and technology parks, both on federal, and at regional level.

Due to the lack of direct state support of innovations in business sector, tools of innovative policy are generally focused on the offer of applied scientific researches. Other complexity is connected with the human capital: despite considerable expenses for education, the share with the higher education is rather small, limited mobility within an education system remains also.

The sequence of carried-out innovative policy became important factors of success of innovative development of Switzerland, first. Secondly, the significant role was played by its international orientation: the close attention is paid to support of the national innovative enterprises in the international research programs.

The beginning of purposeful innovative development of **Germany** belongs to the period after World War II when the main role in formation of national innovative system was played by the government bodies defining the directions of conducting research activity.

An initial stage of post-war restoration of Germany the special role was played by the help of the USA according to the plan of Marshall within which financing was provided to the enterprises in the most developed branches of economy – mechanical engineering, automotive industry, the chemical industry, etc. Since 1950th together with the American researchers collaborations in spheres of space, aircraft and nuclear power during which the country got access to the American development were conducted.

Financing of subjects of innovative activity in Germany began in the 1950th with programs of individual target support of certain directions. During the 1970th the first venture funds aimed at the development of the innovative companies in the sphere of small business started arising.

In the 1970th programs of the private and state partnership in the research sphere thanks to what the share of the budgetary system in expenses on research and development was reduced from 70% in the 1970th to 30% now started being implemented.

In Germany the legislative base of the innovative system which legal acts can be divided conditionally into three groups – relating to educational institutions, to the research organizations and to business sector is so far created. The operating system of the patent laws, providing, among other, the simplified registration of inventions admits especially successful.

Efficiency of the patent legislation of Germany is confirmed by increase in number of patents since 1977 by 20 times. At the same time in the sphere of nanotechnologies there is no full-fledged legislative base because of what it is regulated by legal acts from allied industries (for example, pharmaceutics).

In total now allocate three main directions of support of national innovative system – improvement of conditions of conducting innovative business, a development of education and sciences for training of the qualified experts and improvement of quality of conducted researches and financing of innovative business.

In innovative development of Germany the important role was played by cooperation with the USA (post-war economic recovery), and also development of the mechanism of the state-private partnership which has become in certain degree replacement to venture financing, not widely adopted in Germany.

The government of Germany in the innovative policy places emphasis on financial support of development of long-term and risk researches in key areas of a scientific and technical and production activity. Here mechanisms of the state guarantees in case of failure at implementation of the MSP innovative projects are rather widespread – for these purposes create special financial institutions at which as the guarantor and the major shareholder the state acts. Not less important type of the state support of innovative small business in Germany is the preferential mode of the taxation.

Development of innovative system of **Canada** began in the mid-forties and was in many respects connected with progress of the USA in the same sphere. By this time certain prerequisites for development of science and technologies were created – the system of university education where scientific researches were in parallel conducted is created, including together with the British and American scientists and the government bodies which were purposefully engaged in development of science are founded.

Now the main document which regulates development of innovative system in Canada, the strategy accepted in 2007 "Mobilization of science and technologies for achievement of market advantages of Canada" which assumes development of the following directions – protection of ecology, power and natural resources, medicine and information technologies is.

In Canada in modern structure of management of innovations there is no body uniform at federal level, and functions on stimulation of researches are distributed between the governments of provinces and the separate ministries that often causes bureaucratic problems at implementation of various programs. Now in Canada about 100 higher education institutions in which 1,5 million students from which 13 universities take leading positions in carrying out scientific researches are trained are and enter number 200 of the best educational institutions of the world. At the same time, smaller participation of private business, in comparison with the USA, in financing of higher education institutions is noted.

In the late sixties in the country on a sample of the USA in Canada started appearing the first venture funds, for financing commercialization of scientific development, in 1973 there was the Association of the venture capital which has united all venture investors.

The Canadian venture sphere shows much smaller influence on economy, than American – if innovative firms in the USA provide 12,1 million workplaces from 115 million or over 10% of their total number, in Canada they provide only 150 000 workplaces or 1,3% of their total number. On the other hand, the Canadian venture firms show big stability in the market.

The modern state innovative policy of the **USA** was created in the second half of the 1990th years: the priority was designated in 1997 when the president B. Clinton read to the Congress the report "Science and technology: forming the XXI century". Besides, in years preceding adoption of this policy the state carried out demonopolization of various branches of economy – power, transport, communication. Thanks to such decrease in influence of large players in economy, the small innovative companies had an opportunity of entry into the market.

It is necessary to distinguish emergence of the main institutes of the innovative sphere actually independent of federal government bodies from characteristics of development of the American innovative sphere (science and technology parks and venture funds).

The second feature of the innovative sphere of the USA is exclusively high activity of the small innovative companies existing thanks to consecutive creation by the U.S. Government of favorable conditions and realization of purposeful measures for support of business. It is in no small measure connected with existence of special state programs of support of such firms, and also with development and availability of the venture capital – the main source of means.

Other features of the American innovative system are the considerable share of educated immigrants and high level of the competition among all participants of the innovative sphere. As weakness of innovative system in the USA need of formation of legislative base for regulation of financing of small enterprises is noted.

In the USA support of innovative activity is considered long ago as a basis of scientific and technical development of the country and a priority in creation of competitive production. In 1982 in the USA the law on development of innovative activity in small business which is directed on attraction of talents to the activity connected with technological innovations, and also on stimulation of participation of MSP in innovative activity was adopted.

This law promotes use of opportunities of small and medium business for implementation of the state orders for performance of research and development and helps with commercialization of their results. In this normative legal act the increase in a share of the companies of small business admits to one of main objectives the list of firms of the USA which work in the innovative sphere and satisfy national needs for the qualified researches and development.

- The law "About Development of Innovative Activity in Small Business" added a number of national programs, first of all, directed on the help to the scientific and innovative companies of small and medium business in realization of their development. Among the incentives provided by these programs, it is possible to call an exception of the taxation of the expenses connected with carrying out tests, acquisition of the equipment and any documentation, costs of patent services, etc.
- Effective activity of the innovative companies in the USA is in many respects caused by implementation of such national programs, as "The program of Innovative researches in small business" (The Small Business Innovation Research SBIR) and "The program of the Transfer of technologies of small business" (The Small Business Technology Transfer Program STTR).
- Within the first program as main customers of innovative ideas ten largest national ministries and agencies which make competitive selection on distribution of subsidies, to receiving grants on performance of scientific researches and developmental development by the companies of small and medium business act and independently establish types and volume of financial support.
- These organizations define subjects research and development and are capable to subsidize over \$100 million for their performance. SBIR is a program of financial support of innovative activity of small and medium business in the sphere of researches and development of scientific and technical problems of the state importance, thus selection of the companies is based on such criteria, as profitability, existence of considerable commercial potential, professionalism of busy researchers and developers.

This program includes three phases of design activity:

- initial phase (definition of scope of research and development, types and volumes of subsidies; determination of professional and innovative capacity of the companies of small and medium business; determination of economic efficiency; definition of opportunity to carry out the specific project; determination of expediency of further capital investments).
- phase of continuation of works (further extension of the innovative project; determination of the size of a subsidy or grant (no more than 750 thousand dollars); assessment of commercial potential).
- phase of introduction of results (introduction of the innovative project on the market; large-scale commercial application).

It should be noted that the third phase doesn't provide the state financial support. For these purposes venture firms are created, funds of private innovative funds are raised, state contracts consist, and also other sources of financing are attracted. Considerable support at this stage is given by various structures of support of small and medium-sized enterprises.

As a whole, the initial phase of the SBIR program takes about half a year. The stage of further expansion of innovative development lasts no more than 2 years, thus this phase successfully finish no more than 35% from total of projects.

According to data of department of technologies of Administration of small business which supervises the SBIR program, every year as a result of implementation of this program more than six thousand innovative projects for the sum over 2 bln. dollars get financial support. By it is explained that

fact that in the USA the enterprises of small and medium business are the engine of technical progress and show high activity in innovative activity.

As confirmation of it comparison of innovative activity of small and large business serves in the USA – the small companies advance large on an indicator of quantity of innovations at the rate on one research associate - by 4 times, at the rate on 1 dollars of expenses for research and development - by 24 times.

The department of technologies of Administration of small business coordinates one more important program – "The program of the Transfer of technologies of small business" (STTR). The purpose of this program consists in stimulation of small business enterprises to interaction with noncommercial research institutes. Here as main customers of innovative ideas the largest governmental departments of the USA therefore financing of this program is carried out at the expense of means of the federal budget (over 1 bln. dollars a year) act. The scope of the research and development which is carried out within the STTR program, touches on the most important state issues and the strategic directions of development of the country.

As well as according to the SBIR program, in a basis of competitive selection on receiving subsidies / grants the assessment of innovative and commercial potential of each project is put. For the innovative projects which have won competition three phases of their realization which, in fact, are very similar to phases of the previous program are provided. The third phase according to the STTR program also doesn't provide financial support in commercialization of development. The enterprises of small and medium business independently look for means or in the private sector, or in public sector, for example, among other departments of the government which didn't take part before in project financing.

It is possible to note rather high efficiency of the program of a transfer of technologies of small business (STTR). About 1000 innovative projects are realized according to this program annually, thus the emphasis is placed on realization of theoretical development for the purpose of receiving new technologies and products with high competitiveness and a demand on the market. The majority of the small business enterprises getting financial support within STTR, are characterized by high profits on commercialization of their development that, first, promotes strengthening of positions of the MSP innovative companies in economy of the USA and, secondly, stimulates technological development of the country as a whole.

Among other instruments of support of the innovative companies of small and medium business operating in the USA, it is possible to call such programs, as "Investment companies of small business", "Business information centers", "The case of consultants from among the former top managers", "Researches about productivity of research and development in small business", etc. So, the program "Investment Companies of Small Business" (– to SBIC) supports Small Business Investment Company the company of small and medium business during their start and the subsequent development, providing small business by the risk and investment capital.

Within this program about 400 investment companies – SBIC work, and the general capital makes more than 20 bln. dollars. These investment companies besides use of own means actively attract the borrowed capital and carry out different investments into the companies of small and medium

business on the basis of guarantee certificates of Department of technologies of Administration of small business. The majority of the companies – SBIC are directed on granting venture investments into the innovative companies of small and medium business which are focused on production of new goods and services on the basis of carrying out research and development.

Within other program - "Researches about productivity of research and development in small business" - the annual assessment of efficiency of federal capital investments and in the research and development which is carried out in sector of small and average business is carried out, and also the register of the innovative companies of small and medium business which successfully realized any research and development is formed. Such mechanism gives the chance to estimate efficiency of innovative small and medium business and the basis for a choice of the companies of small and medium business for the purpose of financial support in process of competitive selection.

In Japan, despite active work of the government of development of strategy and programs of innovative development, the most part of scientific and technical development of applied character is still carried out in laboratories of large industrial corporations and remains within the same corporations, without wide transfer to potential users in scales of the relevant branch. The state scientific researches have mainly fundamental character, extent of their introduction in practice remains insufficient. Between the state basic scientific researches and applied researches in the private sector necessary coordination isn't always observed.

In Japan venture financing and venture business as a whole is poorly developed. Shortage of professional shots is noted, rather unsuccessfully there is a development of science and technology parks and business incubators. Low efficiency of innovative policy of the government was shown also by results of a state program of development of hi-tech scientific and industrial regional clusters.

The international scientific and technical relations are carried out in Japan as through the state scientific centers and research institutes with financing allocation from budgets of the relevant ministries, and in the area of public and professional scientific and technical societies and associations, and also the private research organizations and the industrial companies.

In the 1950th years of the XX century Japan went on the way of prompt development of economy in which basis active use of the advanced foreign technologies and a know-how was put. In the 1980th accumulation of own scientific and innovative potential by a way of creation of technopolises, the scientific and technical centers, national science and technology parks, scientific parks, the innovative centers for assistance to small and medium-sized enterprises in research and development realization, etc. became a priority of the country.

In Japan instruments of support of small and medium business, including innovative, are characterized by effective interaction on state, regional and municipal levels, speed of reaction of public administration on changes of the world market, and also a high role of municipal authority in support of small and medium business that is expressed in granting side benefits and releases from a number of municipal taxes.

Adoption of law "About small and average business" in which innovative business is understood as "significant improvement of activity of small enterprise by development of new products or their production, creation and rendering new types of service, implementation and introduction of new methods of products or their sale, and also application of new ways of rendering services, or use of new methods of management by the enterprise or application of other innovations in business" became an important impulse in development of innovative small and medium business.

The system of support of the innovative companies of small and medium business is accented on any creation of privileges at formation of joint innovative small and medium-sized enterprises on the basis of universities, scientific research institute and the centers of technological development, on acceleration of commercialization of results of research and development and IT – development, and also on strengthening of competitiveness of the Japanese industry in the world market. In this regard financial support innovative малыхи medium-sized enterprises – for 35% in the research and development sphere considerably amplifies, financial support of young scientists increased by 27% in the field of research and development commercialization in the industry and for 23%. On projections, in five years the number of the patents, granted to universities, has to increase by 10 times. It should be noted that at the moment in Japan 4 strategic directions of support of innovative activity - science about vital processes, IT, studying of environment, nanotechnology and development of the new materials which realization is capable to develop science and technologies of the country on the highest level in the world are allocated.

Japan actively makes use of experience of other developed countries in the sphere of support of the beginning innovative companies of small and medium business. Agency of small and average business of Japan which carries out activity coordination on support of the companies of small and medium business in the country, together with administrations of municipalities and Chamber of Commerce and Industry the venture centers of support of business (VCSB) which are engaged in financial management, selection of perspective projects, patenting for the hi-tech and intensively developing enterprises of small and medium business, both the municipal and regional centers of support of business (MTsPP and RTsPP) which are focused on requirements of the relevant municipalities or the large cities created. Heads and staff of these centers are either local businessmen, or successful, highly skilled managers.

Besides organizational, property, information and technical support measures for creation of the credit and financial organizations financing research and development and the innovative companies, realizing the most perspective projects are taken. Legal and economic conditions for an exit of the innovative companies of small and medium business to new spheres of business activity are for this purpose created.

In recent years the whole package of measures on an intensification of innovative activity of the companies of small and medium business is realized. In Japan the program very similar with American on attraction of financial opportunities of the state departments in the form of grants, credit guarantees, etc. for support of innovative small and medium business (The program of innovative researches of small business – SBIR) works. Thanks to the considerable funds allocated for the organization of joint activity of research institutes, universities and the innovative companies of small and medium business, it turned

out to create more than 1000 new affiliated innovative companies of small and medium business at universities.

In Japan the Law "About Support of Innovative Activity in Small and Average Business" is also adopted, one of which forms of support is creation of "Partnership of venture investment" for investment in the local venture companies of small and medium business. The Agency of small and average business of Japan has to be the obligatory participant of such partnership, and management company, as a rule, are private venture funds. Also there is an active attraction of the investment capital at the expense of individual investors.

Such active support of the innovative companies yields the results – their share in the sphere of production and in the field of development of new technologies makes more than 60%, in the sphere of trade and the sphere of new kinds of activity – more than 40%. Thus the highest rates and more positive dynamics are shown by the enterprises in Tokyo which is the largest megalopolis in the country. The city government created the Tokyo shopping center which is carrying out together with credit and financial institutes financial support of a number of large-scale projects – "Transition to the ISO standards", "Technical development of the enterprises", "Technologies for new productions", "Development of the new markets", "The business organization", etc. I act some special economic zones - "The center of support of small business of Tam", "A zone of advanced technologies" which successful experience gave an impetus to formation of some other innovative clusters in Japan.

The government of Tokyo pursues systematic and planned policy on support of small and medium business in the field of development of difficult productions and on accumulation of labor potential which is considered as a basis of hi-tech development. Among created for realization of this policy of institutes it is possible to call "The center of nanotechnologies", "University of development of small and medium business", a wide network of the MTsPP centers, the territorial center "Mutual Aid Systems", "Japanese Institute of Research of Small Business", "Local Center of Information Service", etc.

According to Strategy of social and economic and innovative development of Japan till 2030 puts national economy transformation in the direction of reduction of dependence on imported raw material and energy resources and improvement of ecology of Japan in total with health system. In 2010 start of commercialization of innovative development in the field of decrease in consumption of hydrocarbonic and other natural resources that assumes creation of new products and services and growth of national economy is planned.

The economy of **Israel** up to the 80th developed mainly extensive way. Basis of high growth rates was use of the considerable number which has arrived to the country of immigrants, the foreign help, human and resources from controlled Arab territories.

In the mid-eighties smooth transition to a way of innovative development begins: conversion of the sphere of research and development which consisted in reorientation of development of a dual purpose to ensuring needs of the civil industry, relative reduction of purely military researches and encouragement of inflow of the private capitals in creation and commercial use of not military

technologies was carried out. In 2005 the law on research and development according to which transfer abroad the know-how received as a result of researches, financed by the state is allowed was adopted.

In Israel as one of the main tools of innovative policy the international funds of support of innovations work. The powerful instrument of cultivation of own profitable projects, also with success the used Israel, the system of grants on research and development in which the state co-finances projects of commercialization of technologies in different proportions depending on a stage of development of the project is. It is possible to mark out the following important features of this system: availability of grants, speed of decision-making on financing.

At universities of Israel along with educational activity scientific and applied researches in interests of other interested organizations and establishments are conducted on a commercial basis. Practically in each Higher Education Institution there is the division which task is commercialization of the projects created on the basis of Higher Education Institution.

State initiatives in the field of innovative development include recently: start of several new programs directed on support of small and medium business and traditional branches; creation of fund of development of nanotechnologies (21 million euros) and biotechnologies (25 million euros); start of the program of development and commercialization of technologies of processing of water and development of other instruments of researches in the sphere of a hydrology and renewables.

In Israeli universities, along with educational activities are conducted on a commercial basis of scientific and applied research in the interests of other interested organizations and institutions. Almost every university has a department, whose goal is the commercialization of projects, created at the university.

The state's initiative in the field of innovative development in recent time include: launch of several new programs aimed to support small and medium business and traditional industries; creation of Fund of development of nanotechnologies (EUR 21 million) and biotechnologies (EUR 25 million); launch of the program of development and commercialization of technologies of water treatment and the development of other research tools in the field of hydrology and renewable energy sources.

In Israel, the source of personnel and technology, from which the Israeli high-tech industry arose, became the defense industry. Great attention in Israel historically was paid to the problem of introduction of new technologies into production. Also, the Israelis have learned capital management from international investors in the course of the Yozma program, which played a decisive role in the establishment of venture capital investments in Israel. An important role played the field of scientific cooperation, which is one of the central units linking Israel with the Jewish Diaspora in different parts of the world.

In the framework of modernization of national industry since the middle of 1980s **China**'s innovation policy in the absence of legislative base has been realized through implementation of target programs aimed at the exploring of foreign and development of own high technologies. In China since 1980s various preferential administrative-territorial units play a significant role in the development of

innovative businesses: there are special economic zones, zones of trade and economic development, industrial parks etc. These institutions became a powerful tool to attract foreign companies and specialists to cooperation due to special privileges.

In 2002 two fundamental laws which laid the basis for the legal regulation of innovative activity have been approved: the law of the PRC "On stimulation of small and medium enterprises" and the Law of the People's Republic of China "On popularization of science and technology". In October 2010, the state Council of the PRC published "the Decision to accelerate the development of new strategic industries".

Skilled labor is also actively involved in innovations: the system of the national personnel training abroad is an important component of familiarization with foreign innovative achievements. In 2009, 51 thousand citizens of the PRC were educated abroad, 14 new international channels of higher education have been opened. In addition, during 2009, 480 thousand foreign specialists of the scientific and technical profile were engaged to work in China.

In order to overcome the scientific and technical backwardness of China from developed countries, in 1982, the program of innovations in social and economic sphere has been adopted on the basis of the idea of creation of science parks. Understanding the necessity of realization of large-scale innovative and scientific-technical projects, the government has launched a wide program of creation of science parks, business incubators and special technological zones to ensure export of the production. So in 1985, near Hong Kong, China, Shenzhen, the government has allocated free of charge land (316 ha) and has funded work on the creation of the first science park. Place in the park was granted only to companies possessing advanced or new technology and the opportunity for their implementation. There was also a market niche for production and export orientation of production. The Chinese government has provided to these firms substantial incentives (tax holidays, privileges in the sphere of export and import, scientific grants and other). Companies-participants of the credits have been allocated from state banks at low interest rates. For ten years in the Shenzhen park more than 90 new technologies and products, many of which have won international recognition, had been explored. Later in China 53 science and technology parks have been created, including special technological zones.

In March 1986, the Chinese government approved the "863 Program" aimed at development of science and technology in which priority directions of development of science-intensive sectors were identified: microelectronics and Informatics; aerospace; fiber-optic communications; genetic engineering and biotechnology; new energy-saving technologies; environmental machinery and equipment for environmental protection; medical equipment. For the development of the rural economy through the application of scientific and technological achievements in the same year the implementation of the state "Spark" program began. Then in 1988 the general "Torch", program aimed at development of science and technology for the rapid introduction of leading domestic manufacturers has been adopted. In the framework of this program, businesses are assisted in the commercialization of innovative developments for the growth of high-tech goods production. In order to further enhance of innovation activity in the SME sector, in 1987, China began to create incubators of scientific enterprises for search and support of innovative projects and their subsequent implementation by creating high-tech SMEs.

The next step in scientific and technical development of China was the creation in 1988 of the Beijing experimental zone for new and high technologies, which is the largest technological park in the country. On its territory of 100 sq.km. there are dozens of educational institutions, 130 scientific research institutes and laboratories with more than one hundred thousand specialists. The second largest technological park in China, "Nangkhu", is located in the city of Shenyang and covers the area of 22 sq.km. There are 12 universities, 30 research institutes, 220 enterprises of high technology, including 30 companies with participation of foreign capital of more than \$7 billion.

In 1990 the state plan of priority introducing scientific and technical achievements started to act, funding sources of which were mainly state loans, investments, own funds of enterprises, public savings, funds of industries or provinces. This largely contributed to the development of innovative entrepreneurship in existing and newly created technology parks. Now in China technological parks are functioning throughout the country, including the cities of Central and North-Eastern provinces and there are about 16.5 thousand enterprises involved in research and implementation activities. In fact, technological parks are in the territorial and administrative intersect with special economic zones. This allows to the technological parks to interact very effectively with the foreign companies and to participate in international scientific exchange. Due to the state support already in the early 1990s, China began to create the so-called "high technologies zones" (technological parks). The Chinese Ministry of Science and Technology reports about120 exploration areas of high and new technologies of different levels and 53 have a national significance. In addition to favorable conditions provided by the central government, local administration and committees also produce additional favorable provisions in order to encourage and attract domestic and foreign investors. For example, enterprises in the area of development of new and high technologies in Harbin enjoy the following additional benefits:

- 1. the enterprises (from the date of accreditation) are completely exempted from income tax for the first 3 years, 50% of a tax () pay for a tariff of 7.5% for the second 3 years, and since 7th year they pay income tax completely (on a tariff of 15%);
- 2. the enterprises, production cost for which export exceeds 50% of its annual gross output, pay income tax for a tariff of 10%;
- 3. imported devices and the equipment intended for carrying out researches and development of high technologies which aren't released by the local industry, are exempted from the customs import duty;
- 4. the enterprises use a number of preferential terms when carrying out capital construction in the zone territory.

In 1992 in China according to the decision of the Governments started organizing "The centers of production support of small and medium-sized enterprises". In 1995 in the country the national association "Centers of production support", representing interests of all structures of support and development of small and medium-sized enterprises was created. Activity of these Centers is directed on increase in productivity of the enterprises of sector of small and medium business and at increase of their competitiveness. Now in China it is created 1218 such centers operating in all regions and in many cities of the country. These centers specialize in mechanical engineering, metallurgy, materials science, in the

chemical industry, agriculture, the space equipment which is light for industry, etc. Such centers render consulting services, introduce new technologies, carry out production test, provide information service of small and medium business, provide the areas for incubation of new small enterprises, provide training and select experts for work at various enterprises. The total cost of fixed assets of these centers reached 16 bln. dollars and 12,5 mln. dollars are annually allocated for their financial support from the state budget. In these centers about 200 thousand experts were trained, and consultations for 92 thousand of MSP are provided.

In 1996, implementation of the scientific and technical program of social development till 2010, the life directed on improvement of quality and habitat improvements, harmonization of the relations of the person with the nature and assistance to scientific and technical progress in the social sphere was begun. This program covers health care, improvement of municipal services, rational use of natural resources and conservation, improvement of the ecological environment and protection against natural disasters.

In 1998 the state initiated experimental work on the project of "creation of new knowledge" for which within three years about 600 mln. dollars were allocated. The purpose of the project was creation of the functional mechanism of intellectual innovation and the organization of the international centers of knowledge. The same year the government of the People's Republic of China allocated about 120 mln. dollars for establishment "Fund of medium-sized and small enterprises of a scientific and technical profile", intended for creation of mechanisms of risk investments and transformation of scientific and technical achievements in real production. Thus, it was supposed to provide fast technological development of the small and medium-sized enterprises making difficult production, the most demanded in the world markets.

Important stage was creation of national system of development of the innovative activity promoting disclosure of scientific and technical potential of sector of small and medium business, based on:

- 1. To development of the general strategy concerning innovative small and medium enterprises;
- 2. Creation of administrative body on coordination of innovative activity in sector of small and medium business;
- 3. Providing tax preferences for being modernized small and medium enterprises;
- 4. Creation of system of financial support of innovative development;
- 5. Providing information, consulting and maintenance of innovative small and medium enterprises;
- 6. Creation of business incubators, science and technology parks and special technological zones for support of quickly developing small and medium enterprises;
- 7. Assistance in the organization of venture funds for small and medium enterprises.

In 2004 in the country about 500 business incubators and among them over 200 various "incubators of the scientific and technical enterprises" worked. Thus 109 business incubators are the

certified national centers of support of small and medium business among which 24 specialize in the software and 58 more are the scientific and technical centers at universities and colleges. Business incubators have 1515,1 million square meters of floor and office spaces on which about 3 million small and medium-sized enterprises are located that makes nearly 25% of all small and medium-sized enterprises of the country.

The governmental agency on management of incubators is in structure of the Ministry of science and technologies therefore the majority of incubators of China render services to the companies which are engaged in technologies. The main part of incubators is located in the large cities. For example in Shanghai there are more than 30 incubators the biggest of which serves 300 companies. Many of the innovative companies were created so-called by "the come-back scientists" who got an education abroad and came back to China to create the new companies.

In 2008 in the country worked 7298 educational and research organizations. On number of researchers working in them China came to the second place in the world after the USA, having outstripped Japan and Russia. Total number of the engineering centers created in China with attraction of foreign investments, increased for the last four years with 200 to 750. State regulation of activity of the scientific and technical organizations, science and technology parks and the engineering centers is shown, first of all, in definition of the directions of researches and in development hi-tech productions, and also in the budgetary financing of strategically important development. The success in development of technological parks and business incubators promoted prompt expansion of innovative activity especially in the sphere of small business that served as a powerful impulse for formation in the People's Republic of China of the market of the venture capital, Now in the country more than 180 various venture investment companies (90% — governmental, 8% — foreign, and other 2% — joint) with a total amount of capital investments about 30 bln. dollars work.

- In the country the system of the state and public support and development of innovative small and medium enterprises which provides effectively works:
- rendering financial support of small and medium-sized enterprises for compensation of possible risks, granting working capital and subsidies according to operating "The law on support of small and medium business". Articles of expenses for creation of special funds are entered into the state budget for development of small and medium-sized enterprises and assistance to financial institutions serving small and medium-sized enterprises;
- reduction of possible enterprise risks, especially at early stages of development of the
 enterprises, increasing their chances of achievement of success. The special attention is paid to
 possibility of fast attraction in sector of small and medium business of the private venture capital
 on rather favorable conditions taking into account the preferential taxation;
- rendering free state technological support to small and medium-sized enterprises, including
 providing results of the scientific and technical development executed in the state scientific
 research institutes and laboratories, and also by timely information and consulting support of
 businessmen;
- the state support in ensuring steady interaction of small and medium-sized enterprises with the large enterprises with simultaneous assistance in their restructuring and optimization of use of available resources. The special attention is paid to preferable placement in sector of small and

medium business of the state orders for goods and services. The policy of the government is directed on support of export opportunities of small and medium-sized enterprises at simultaneous stimulation of businessmen to investments abroad.

Within the special program of development of the hi-tech sector, the science developed by the Ministry and technologies of China, only on an initial stage in 1997 — 2001 about 13 bln. dollars were annually put in basic and applied researches. These funds were allocated for the help to the academic institutes and the small innovative companies for commercialization of results of basic researches and research and development in the sphere of electronics and information technologies. The government provided to the Chinese manufacturers of computers and electronics tax privileges and considerably protected their interests from foreign competitors. For the purpose of stimulation of penetration of high foreign technologies to China, the law under which the foreign companies could enter the Chinese market was adopted, only having founded joint venture with the Chinese firm. The American, European, Japanese and Chinese Taipei manufacturers of the electronic equipment in a mass order began to place the productions in the People's Republic of China and to give fat contracts to the local companies that allowed China to come in 2007 to the second place in the world after the USA on output of the electronic equipment.

One of important problems of reforming of national economy, transfer of function on management of scientific and technical progress from the state organizations in maintaining authorized private scientific and technological specialized agencies is. In this regard, since 2003, the Ministry of science and technologies pays considerable attention to creation of a national network of the scientific and technological intermediary agencies organized on the basis of some research institutes. Existence of such agencies and hi-tech small and medium-sized enterprises is one of the major conditions providing lifting of national innovative system. Intermediary agencies play the main role promoting of technological innovations, in their production appendix, in an assessment of new scientific and technical achievements and in distribution of innovative ideas. Intermediary scientific and technological agencies, act on the basis of accurate rules of interaction with clients by transfer and realization of new development. Such agencies are entrusted with the development of scientific and technical programs and innovative projects, as well as organizational support of their realization. Relying on opinion of consulting services and scientific and technical agencies, the Government defines the state scientific and technical strategy for the perspective period. On the basis of this strategy, government bodies make the decision on carrying out this or that research and development and then charge to the relevant private scientific and technical agencies to organize implementation of the most perspective projects.

Now in China about 6 million scientific and technical intermediary organizations on which nearly 110 million experts are occupied. The government of the country approved the status of "The innovative enterprise". This status is given to 90 enterprises which have own brand and, thanks to technical innovation, possess high competitiveness in the world market.

In "Basic provisions of the state plan of average and long-term development in the field of science and equipment for 2006-2020" need of further strengthening of innovative and scientific activity is noted. It is supposed that by 2020 the share of capital investments in scientific researches and opening will increase in gross domestic product of China to 2,5%; more than the coefficient of a contribution of science and equipment will grow to 60% in economy; external technical dependence will decrease to

30%. For this purpose the Government of China consistently increases investments in researches and development so in 2004 the general size of such investments made 108,9 bln. dollars (1,5% of gross domestic product), in 2005 — 125,4 bln. dollars, in 2006 — 139,6 bln. dollars and in 2010 expenses on scientific researches will reach 220 bln. dollars that by 11 times exceeds similar expenses in the Russian Federation.

The ministry of science and equipment of the People's Republic of China assumes that by 2020 China will be among the states of innovative type which the USA, Japan, the Republic of Korea and Finland treat, in particular. It will be provided with creation of complete scientific and technical system of development of innovative activity in the country. Nowadays in the scientific and technical sphere of the People's Republic of China 38,5 million people and on number taken in scientifically technical sphere are concentrated, China takes a leading place in the world.

In the Republic of **Korea** the first programs of innovative development were started since 1999, and development of innovative sector very quickly progressed. Fast successful innovative development of Korea became possible thanks to active loan of foreign technologies and competent patent policy. The important role "economic miracle" of Korea was played by large financial and industrial groups (чеболи) which for many years were a basis of development of national economy.

In Korea initially modernization was constructed on loan of foreign technologies which happened in different forms: "turnkey" contracts, licensing, advisory services. Studying of foreign experience happened, mainly, by creation of joint venture firms to Japanese partners. Now, in spite of the fact that Korea on many hi-tech positions is in the lead in world export, the economy still in many respects depends on import equipment because of insufficient development of own basic technologies.

In 1998 the government carried out restructuring of the state research centers, creating the competitive environment. From this point research institutes provided backs-offam office platforms and laboratories for carrying out researches. One of distinctive features of innovative development of Korea is purposeful support, generally large companies. Now, on the contrary, disaggregation, and in some cases liquidation of financial and industrial corporations (cheboly) admits to one of the main progress of post-crisis adaptation and structural reform of Korea.

The Korean patent system is considered one of the most productive in the world. The Korean department on intellectual property (KIPO) since 1997 was reoriented on loan of the principles of regulation of patent activity of the USA. The patent policy played an important role in development of small business and capitalization of universities. Earlier professors needed to transfer the patents of the governments since the inventions made at the state institutes were considered as property of the Republic. Revision of patent rights facilitated technology of transfer of patents through the legal entity.

Brazil since the end of the 90th accepted a number of laws for increase in number of scientific researches, stimulations of innovations in the private sector and establishments of more productive partnership between scientific institutes and business. In 2006 the Innovative law, in 2005 – the "good"

law (Good Law) which provides tax incentives for implementation of private investments into research and development was adopted.

The coordinated state support of development of nanotechnologies in Brazil began since 2001 with creation of 4 national networks on nanotechnologies and a nanoscience which unite today about 40 scientific institutes across all Brazil.

In Brazil the public sector always dominated in science funding and technologies at an increasing role of the private sector (by 2005 the share of the private sector made 50%). Nevertheless, 80% of research projects are carried out at the state universities and research institutes. As a whole, innovative development happens mainly thanks to a state policy.

Except tax incentives of R&D, subventions and joint financing of interest rates, the important tool in the sphere of financial assistance to the innovations, in the 1990th and 2000th, creation of branch funds which direct part of the means received from the taxation of key industries, on R&D the projects chosen by the state committee was applied. About two thirds of means of branch funds are used by the joint private and state companies.

It is possible to carry low level of converting of knowledge to shortcomings of innovative policy of Brazil in innovative production, concentration of innovative system on the academic scientific researches, and also insufficient coordination between processes of scientific researches, development of technologies, production and commercialization of development. Besides, in Brazil almost completely there is no policy on attraction of highly skilled foreign labor and interaction with diaspora.

The first measures for support of innovative development in **Thailand** were taken in 2007-2009 when the National agency on development of science and technologies of Thailand (NSTDA), together with Federation of industrialists of Thailand realized the project "Industrial and Technological Clinic" within which support to 2500 enterprises of small and medium business in carrying out scientific researches was given. Significant progress of Thailand in increase of competitiveness of the production and attraction of the foreign capital, observed in the last decade, is explained, first of all, by purposeful steps of the government on development of production infrastructure and business.

In Thailand much attention is paid to development of nanotechnologies. The national agency on nanotechnologies of Thailand (NANOTEC) developed the concept on country transformation by 2013 in one of the regional centers of South East Asia on development of nanotechnologies.

Creation of a network of the hi-tech parks including local universities, the state and private scientific research institutes, including with involvement of the foreign scientists which activity will be focused on three main areas – creation of new nanomaterials, development of nanobiotechnologies and a nanoelectronics is begun. Development of biotechnologies is connected with creation of the National center of genetic engineering and biotechnologies (BIOTEC).

Major factor of successful development of the innovative sphere in the countries which aren't relating to leaders of innovative development (Kazakhstan, Belarus, Indonesia, India, etc.), is interaction with other countries and loan of technologies and fundamentals of the state innovative policy.

In **Indonesia** the system state scientific and technical, innovative policy is in process of formation, considerable funds are allocated for research of nanotechnologies (in 2010 – more than 27 mln. dollars).

The Republic of Indonesia aspires to an exit to qualitatively higher technological level, however still tests an acute shortage of the qualified experts and financial means for research and development. The country leaders actively adopt experience of creation of science and technology parks, industrial parks, special economic zones with emphasis on development of hi-tech productions and scientific and technical development. However all of them still are at different stages of development. One of the main obstacles is the bureaucracy and insufficient financing.

In Indonesia in the sphere of nanotechnologies the Ministries which were in system of researches and the Institute of Natural Sciences (LIPI), National Agency technologies of atomic energy (BATAN), National space agency (LAPAN), Agency on research and introduction of technologies (BPPT), the Research center at the industry Ministry, and also a number of the state and private research institutes - in total, more than 120 organizations are engaged in researches. Spheres of researches concern, first of all, nanomaterials, further there are a nanopharmaceutics, power, nanobiotechnologies and a nanoelectronics. Among problems which Indonesia faces, shortage of information, on the second – concrete applied technologies, on the third – deficiency of experts, further – insufficient financing is on the first place.

The foundation to development of own innovative system in **India** was laid soon after obtaining independence of Great Britain in the early fifties, and the main sector of economy where scientific development had to be used, there had to be a heavy industry at simultaneous import of technologies and the capital at the initial stage. Since 1974 government bodies started the beginning pursuing policy of support of private scientific researches and development. The Indian companies conducting scientific researches, got support on access to the foreign equipment and raw materials, and also separate tax privileges. Much attention from 1947 to 1990 was paid also to development of own education system.

In 1991 the Indian government proclaimed new economic policy within which it was planned to carry out transition to market science funding that was shown in reduction of the corresponding state expenses and simultaneous decrease in rates of development of science and new technologies. Such practice was recognized unsuccessful therefore the budgetary financing was increased.

The purposeful policy on development of the largest sector of innovative system of India – information technologies – started being pursued in the early seventies, creation of new workplaces for the qualified experts for the purpose of "brain drain" prevention to the developed countries was its purpose. For this purpose at large universities the computer centers started being created; the new round of development of sector of information technologies fell on the 1980th when licensing procedure was cancelled, the specialized research centers are created, and the government adopted laws on IT sphere development. In 1991 in India specialized science and technology parks on production of the software for export started being created.

In economy of India sectors of innovative system world (or comparable to world) level, – automotive industry, information technologies, communications, pharmaceutics, and also nuclear power,

space branch are created. In the country 45 science and technology parks which in total make 80% of exported production of the IT sphere work. Besides, thanks to the taken measures of the state support of the Indian information technologies, 65% of the world market of outsourcing are the share of India – so, more than 300 multinational corporations transferred to it the divisions on development of computer programs. Such appeal to foreign business is connected with high qualification of the Indian IT specialists with simultaneous low cost of their work – salaries of similar workers in the USA are on the average 6 times higher.

In India now the government more finances development of basic researches in a counterbalance applied because of what the considerable part of scientific researches doesn't find practical application.

The country remains to the poorest and, as a whole, it is possible to characterize it as having high quality of innovative system with the lowest indicators in other spheres of economy.

In India for the last 4 years there were large changes in the organization of the state support of business. Two earlier existing ministries of support of small and medium-sized enterprises in 2007 were united in one Ministry of Micro, Small and Average Business (MMSP) which coordinates activity of powerful and very branched infrastructure of support of MMSP having the divisions in all large and average years.

Nowadays in the country works:

- 30 institutes on MMSP service with 248 branches;
- 6 centers of innovative development of business;
- 52 scientific and technological centers;
- 17 test stations with 2 centers of certification of production;
- 58 integrated centers of industrial development;
- 75 production and training centers;
- 20 branch centers of development of the production technology;
- 60 technological business incubators;
- 26 scientific and technical parks, including 9 parks for software development;
- 348 operating zones of economic development.

The important body promoting creation of the new enterprises and to providing industrial development in the country is "National corporation of small business" (National Small Industries Corporation Ltd — NSIC) which is a part of the ministry of MMSP.

The corporation directly directs implementation of various specialized programs through 8 regional representations, 5 technical service centers, 9 technological parks on development of software products and by means of offices in all states of the country. NSIC provides the technological help of

MMSP through system technical service centers (NSIC Technical Service Centres - NTSC) with a set of branches, local offices and the laboratories scattered over all country.

In these centers and their branches give technical consultations, tests are carried out, it is provided floor spaces, the equipment and the tool and other special works and as training on application of high technologies is provided will be performed, the latest information connected with technological updating is provided. In the largest cities 8 Centers for a transfer of new technologies on small enterprises are organized. (Technology Transfer Centre).

Progress in development of small innovative business substantially is defined by policy of the government of India which is carried out in the following main directions:

- stimulation of innovative processes and guaranteeing intellectual property rights;
- development of regional associations of small enterprises in the form of clusters at simultaneous hardening of communications between the small and large enterprises;
- providing small enterprises with financial and technological support, professional development of employees, improvement culture and qualities of production for every possible to development of export opportunities.

The main objective of the Government is strengthening of competitiveness of national sector of MMSP, paying special attention to support of innovative activity in export-oriented branches in the following directions:

- 1. carrying out uniform policy when crediting innovative MMSP through various financial institutions and banks;
 - 2. financing of projects of technological updating and modernization;
 - 3. expansion and improvement of infrastructure of service;
 - 4. providing to sector of MMSP of equal opportunities of access to production infrastructure;
- 5. creation of a network of modern laboratories for carrying out tests, quality control and production certification;

6.active advance of the latest methods of management by the enterprises at continuous professional development of the operating personnel in specialized educational institutions.

MMSP ministry, for increase of competitiveness of micro and small enterprises actively realizes three following programs "The Financial Help at Development of New Technologies"; "Increase of competitiveness of the enterprises"; "Ensuring transition of the enterprises on the ISO 9000 standards".

For acceleration of development of the software and strengthening of export in this field of activity, the Government of India founded independent association "Technological Parks of the Software of India" (Software Technology Parks of India — STPI). Members of this association have to satisfy needs of the country for creation of the enterprises exporting 100% of developed software products.

Besides, the STPI association has to carry out functions of head structure owning all necessary resources for rendering the daily help to members of association in implementation of all formal requirements connected with their activity.

A part of this association are 9 of "Technological parks of the software of NSIC" (Software Technology Park NSIC or NSIC — STP). The infrastructure of NSIC — STP parks allows to provide to users production and office rooms, means of communication, office the equipment, the communication equipment, the allocated channels of broadband communication.

In such science and technology parks, industrial zones and scientific centers all enterprises are focused only on release of export production. The created science and technology parks are provided to all necessary for successful work of the new innovative enterprises. Procedures in registration of copyright by transfer of new development to production or to foreign partners are thus simplified.

Thus, information exchange in difficult infrastructure of research, innovative and manufacturing enterprises is provided. It was over the last 10 years created 15 scientific and technical centers providing in one person all necessary services for the free and fast organization of export of software products and information technologies.

Technological parks give to the associated enterprises the following opportunities and services:

- help in elimination of organizational and legal obstacles in activity of the enterprises which are engaged in development and delivery to export of software products.
- implementation of projects with delivery of the import equipment to the sum up to \$10 million, invested from the Indian sources, with providing the accelerated customs procedures with authorized representatives.
- the organization of the enterprises from 100% participation of the foreign share capital.
- implementation of duty-free import of all types of the equipment, materials and components, and also permission to re-export of means of production.
- priority implementation of internal purchases, with release from excise payments for ensuring export requirements.
- the conclusion of subcontractual agreements for acceleration of development of software products.
- granting to parks and the enterprises which were in them, vacation on income tax for up to 10 years.

The NSIC corporation actively gives help to small enterprises in advance on the market, goods made by them and services by the organization of special exhibitions. During such exhibitions interaction between the businessmen finding new technologies and their sellers is established. Questions of a transfer of technologies, possibilities of cooperation or interaction of businesses are discussed. The NSIC corporation plays the leading role in industrial development of deep and backward regions of the country, supporting MMSP in the following directions:

- granting preferential terms for acquisition and rent of the domestic and import equipment;
- develops special concession agreements for MMSP located in remote regions of the country;

- promotes advance for export of production of MMSP and encourages development of exportoriented productions;
- carries out selection of the most qualified enterprises for participation in implementation of the state orders;
- develops prototypes of cars and the equipment for the subsequent statement on commercial production in MMSP sector;
 - carries out training and professional development of workers of sector of MMSP;
- carries out deliveries and distribution of domestic and import materials and raw materials among the enterprises of sector of MMSP.

An important role in technological development of MMSP is played by the clusters uniting a large number of small enterprises. According to UNIDO in India over 2000 clusters from which 388 clusters of an industrial orientation and 1657 clusters are focused on interaction of the mechanical enterprises work. Clusters deliver over 60% of export production of the country, and some large clusters make to 90% of separate types of production let out in the country.

By the data provided by the "The Indian national center of scientific documentation" (Indian National Scientific Documentation Centre — with INSDOC) in 14 large cities of the country now works 80 biggest clusters uniting about 23 thousand small industrial enterprises. Their number includes 6900 export-oriented MT. The number of small enterprises operating as a part of various clusters fluctuates from 40-50 to 1700 enterprises.

Approaches of the Indian government in stimulation of growth of export opportunities of clusters in development of hi-tech productions and services (communication technologies, the software, pharmaceutics, etc.) are especially effective. Now MMSP Ministry together with administrations of states realizes "The program of development of clusters from micro and small enterprises [Micro & Small Enterprises - Cluster Development Programme (MSE - CDP)] for the purpose of technological updating of the enterprises entering clusters, increases of their productivity and competitiveness.

The center of scientific and technical progress in India is Bangalore and adjacent territories where communications between research institutes and high-tech industries of electronics, telecommunications, the industry and mechanical engineering defense, interacting with a set of small and medium-sized enterprises are closely bound.

The decision of the Indian government within the last 30 years realizes the national program of scientific and technical development within which, Bangalore is turned into the center of intensive technologies. Thanks to the state investments sent to institutes and on the enterprises of this city, it was succeeded to organize steady process of technical innovations in many sectors of the industry.

In **Kazakhstan** the main institute of the development responsible for innovative activity in the republic, the National welfare fund "Samruk-Kazyna" and its JSC National Innovative Fund subsidiary (NIF) is.

In addition the active position in the Republic of Kazakhstan in the field of support of innovative activity is taken also by the large national companies (100%-e state participation). In the republic the two-level system of science and technology parks – national and regional is created, 3 of 13 Kazakhstan science and technology parks are located in the territory of higher education institutions, such, as TREASURY of al-Farabi, NPU of K.Satpayev and VKGTU of D. Serikbayev; the others 10 carry out the activity in the territory of the large industrial enterprises and scientific centers.

In the legislation of **Belarus** for subjects of innovative infrastructure preferences for scientific and technological parks, the centers of a transfer of technologies and residents of scientific and technological parks (the rate of a profit tax is established of 10%) are provided. Possibility of receiving means from the republican budget on the organization of activity and development of material base of the venture organization is also provided.

Thus the mechanism stimulating distribution in the market of results of research and development, practically stays idle. Offered results of research and development find weak practical application in economy. Level of innovative activity of the enterprises is 4 times lower, than in the European Union countries.

According to the Belarusian experts, the current legislation regulating innovative activity, doesn't answer fully to the modern market relations and creation of mechanisms of motivation and stimulation in the sphere of innovations.

On the basis of the analysis of innovative systems of a number of the countries it is possible to draw a conclusion that in modern conditions the successful competition to leading players of the world market without creation and continuous improvement of national innovative system is impossible. In the majority of models of national innovative systems or the main, or one of key players is the state.

Concrete successful realization of idea of national innovative system can vary significantly depending on a historical and economic context, for example, owing to the historical reasons, the American system is the most diversified and flexible, and Finnish, on the contrary, - more structured. Thus both systems are effective.

Nevertheless, it is possible to formulate some basic provisions, substantially the general for the different countries. Successful development of national innovative system is promoted by the following factors:

1. consistent and long-term innovative policy of the state with accurately formulated purposes and tasks:

- 2. rational use of available innovative potential as the base for construction of innovative economy and realization of innovative policy;
- 3. systematic efforts on adjustment and strengthening of cooperation between private, research and educational sectors;
- 4. identification and target support of the important directions for the innovative and technological potential, insufficiently quickly developing or not developing independently;
- 5. coverage as it is possible the bigger volume of potentially innovative firms by means of providing the state support to them;
- 6. the developed programs of commercialization of the innovations created and borrowed technologies;
 - 7. reasonable attraction of foreign investments of multinational corporations;
 - 8. existence of the developed legislation in the field of intellectual property;
 - 9. systematic studying and introduction of the best international experience.

On the basis of the analysis of the countries it is possible to draw also a conclusion that the low level of development of separate institutes not always disturbs innovative development. Key value in this case have a choice of strategy of carrying out a state policy and, often, – successful combination of circumstances.

The analysis of historical prerequisites allows to reveal some regularities on the basis of which world experience of innovative development can be structured:

- the countries which have recently passed to a way of innovative development (China, Yu.Korey, Norway) which it is possible to borrow concrete measures for implementation of the accelerated transition to innovative economy;
- the countries which historical development logically approached to the innovative. It, generally developed countries. They are united by the following main prerequisites of successful innovative development:
 - free education (Germany)
 - social unity, uniformity (Denmark, Sweden)
 - high expenses on science (Germany, Denmark, Japan, Finland).

Also the analysis of a retrospective of innovative development allows to allocate comparative positions of a starting position of the countries which can be considered as the general for them factors of innovative development:

- availability of significant minerals (Germany, Norway),
- geographical position (Singapore, Netherlands, Great Britain),

• English (India, Singapore, Netherlands, Great Britain).

It is possible to carry the following to the factors interfering development of innovative systems, in particular:

- low share of business in research and development financing (France, Sweden, Netherlands, India);
- weak involvement of small business in innovative activity (France, Sweden, the Netherlands, Japan);
 - "brain drain" (France, Germany);
 - territorial disproportions in development (Germany, India, China, France, Norway);
 - fast aging of the population (countries of the European Union);
 - high expenses on military industrial complex (Sweden, Israel);
 - undeveloped markets of the venture capital (Denmark, Germany);
 - problems of commercialization of innovations (India, Germany, Brazil);
 - bureaucracy (India, Brazil, countries of Asia).

The analysis of separate measures of a state policy of various countries of the world, taking into account the specified shortcomings of innovative systems, allows to allocate some components of the state innovative policy which are, as a rule, used for development of national innovative system:

- creation of the special organizations and bodies responsible for definition and realization of innovative policy (almost all countries);
- active interaction with other countries regarding an exchange of technologies (almost all countries);
 - creation of innovative clusters (France, Germany);
- implementation of the main innovations in large multinational corporations (Sweden, France, the Netherlands, India, Japan);
 - providing free education (Germany, Norway);
 - use of "innovative vouchers" (Netherlands, Great Britain, Germany);
 - considerable direct budgetary financing of research and development in various forms.

Thus, studying of foreign experience shows that active participation of the state in development of innovative activity of small and medium-sized enterprises is the general practice in the countries which are achieving high rates of growth in the sphere of production of hi-tech, competitive production and

being world leaders of economy of knowledge. Programs of financial support of subjects of small and average business have a strategic importance in these countries.

Considerable experience of use of various instruments of support of innovative small and medium-sized enterprises is abroad saved up. It is implementation of national programs of support of own research and development of the companies, and also stimulation of cooperation of small business and the research organizations, application of preferential tax modes, including exceptions of the taxation of expenses for research and development and the equipment, release at early stages of existence of business from a profit tax or municipal taxes, the program of depreciation of the equipment.

The state stimulates venture activities by a way of granting guarantees for obligations of small and medium business, creation of venture partnership in the developed countries with funds and eases of legislative restrictions on venture activity.

Also, the role is played by the developed infrastructure of support of the young innovative companies. The role and extent of participation of the state in financing of infrastructure is various depending on the country that allows to estimate pluses and minuses of functioning of various models of support of infrastructure.

CHAPTER 3. ANALYSIS OF PRACTICAL EXPERIENCE OF THE RUSSIAN SMALL AND MEDIUM ENTERPRISES IN THE SPHERE OF USING INFORMATION INSTRUMENTS FOR PROMOTION TO INTERNATIONAL MARKETS

A special research has been organized and conducted under the framework of the present project in order to study and evaluate needs and demands of the Russian small and medium enterprises (further on – SMEs) in the sphere of development of an integrated information tool (resource) aimed at their stimulation and involvement in the world trade system and global supply and production chains. In total 300 SMEs took part in the research (*Annex 1*).

A special questionnaire was developed to deal with SMEs (*Annex 2*). The questionnaire was agreed with the main stakeholders including the RF Ministry for Economic Development.

The following main criteria were applied to select potential respondents under the research:

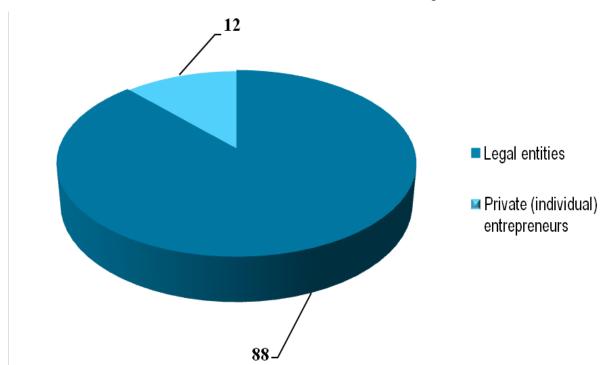
- affiliation of a respondent to small and medium enterprises including micro and small enterprises in accordance to the Federal Law #209 FZ dated July 27, 2009 "On development of small and medium entrepreneurship in the Russian Federation" and Decree of the RF Government #556 dated July 22, 2008 "On the limits of the sales revenue from goods and services for every category of small and medium entities";
- availability of export potential or innovative products as well as implementation of modernization projects / programmes;
- implementation of joint projects or interest for potential partnership with companies from the APEC economies;
- need to use information resources to enter international markets in particular the markets of the APEC economies.

88% of all the questioned SMEs are legal entities and 12% operate as private (individual) entrepreneurs (*Diagram 1*).

279 enterprises (93%) belong to the category of private Russian ownership where share of big enterprises, public and religious organizations, charity and other foundations is less than 25% of the authorized capital; 9 enterprises (3%) also belong to this category but the above mentioned share exceeds 25% of the authorized capital; 3 enterprises (1%) belong to the category of mixed Russian ownership (private and state) where the share of the state (the Russian Federation, the RF regions, the municipalities) is less than 25% of the authorized capital; 3 enterprises (1%) belong to same category but the above mentioned share exceeds 25% of the authorized capital.

Out of the whole number of respondents 3 enterprises (1%) belong to the category of joint private Russian and foreign ownership where the share of non-resident owners is less than 25% of the authorized capital and 3 enterprises (1%) belong to same category but the above mentioned share exceeds 25% of the authorized capital

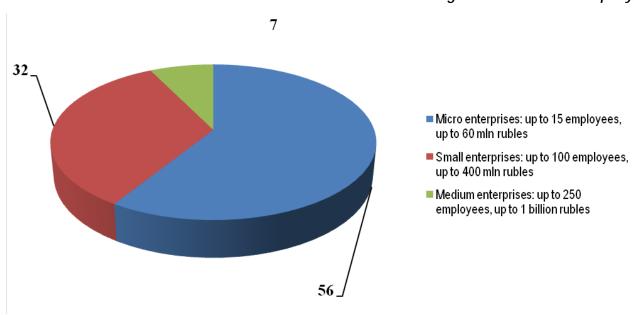
Diagram 1 - Form of ownership, %



n (number of respondents)= 300.

Micro-enterprises (with number of employees up to 15 people and sales revenue in the year of 2013 of up to 60 mln. rubles) constitute 56% of the total number of the respondents (168 companies), small enterprises (up to 100 employees, up to 400 mln. rubles) – 32% (111 companies), medium enterprises (up to 250 employees, up to 1 billion rubles) made 7% of the total number of the respondents (21 company) (*Diagram 2*).

Diagram 2 - Size of a company, %



n (number of respondents)= 300.

The overwhelming majority of the responded companies (78%) are Limited liabilities companies by their legal status, 14% are Joint stock companies of close type (*Diagram 3*), Joint stock companies of open type and private (individual) entrepreneurs make respectively 5% and 3%.

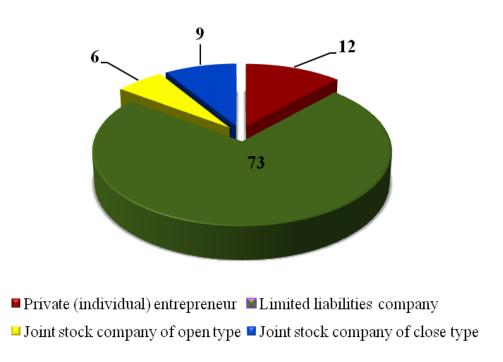


Diagram 3 - Legal status of a company, %

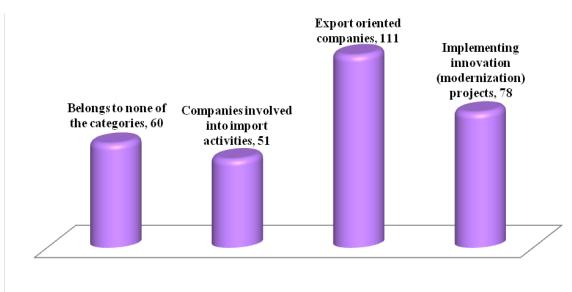
n (number of respondents)= 300.

Out of all the respondents 111 enterprises (37%) belong to export oriented group, 51 (17%) enterprise carry out import activities.

At the same time 78 SMEs (26%) declare having innovative potential – their representatives mentioned implementation of projects on development or promotion to the domestic and international markets of completely new products / services (*Diagram 4*), 60 enterprises (20%) are still working with existing products / services improving their quality and decreasing the price.

Thus, it is possible to conclude that all the respondents have competitive products and in perspective the number of export oriented SMEs ready to enter international markets and interested in getting the needed information and consulting will only grow on the basis of innovative ideas, technologies and know how available in the companies.

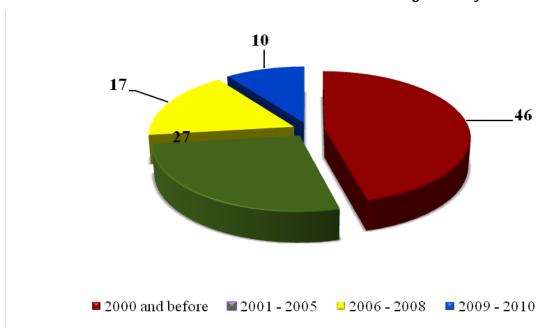
Diagram 4 – Links between innovations and international activities, number of companies



n (number of respondents)= 300.

While analyzing the existing operation period of the respondents, it is necessary to note that 46% of the questioned SMEs exist for more than 10 years (*Diagram 5*). At the same time, share of the companies that operate for less than 3 years is considerably small – such companies constitute only 10% from the total number.

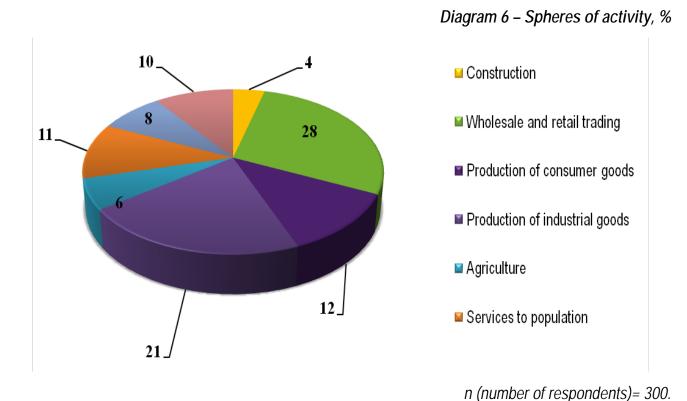
Diagram 5 - year of establishment, %



n (number of respondents)= 300.

Nearly all the questioned SMEs carry out several types of activity (*Diagram 6*).

The most typical is combination of production with wholesale and / or retail trading (28%), 33% are involved only in production sphere or combine production activity with other types of activities, 21% provide services including the ones in the sphere of production, services to the population, education sphere, public health. 8% and 4% respectively belong to such types of activity as transportation and communication spheres as well as construction works. Only 6% of the respondents operate in the sphere of agriculture.

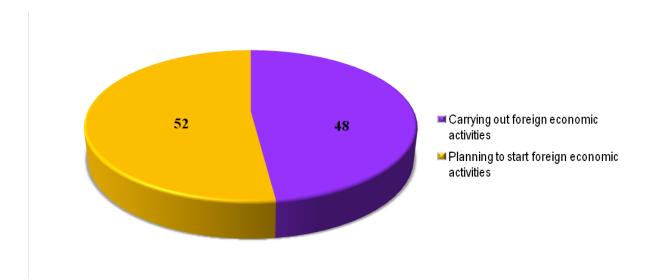


The biggest share belong to the companies operating in the sphere of production of industrial goods and consumer goods (21% and 12%).

Experience in the sphere of foreign economic activities

Out of 300 questionned small and medium companies while answering the question "You're your company carry our foreign economic activities?" 48% (144 respondents) gave a positive answer, 52% (156 respondents) are not sure in having the necessary resources and opportunities to enter international markets at present but plan to start such export – import activities in the nearest future (*Diagram 7*).

Diagram 7 – Evaluation of SME potential in the sphere of foreign economic activities, %



n (number of respondents)= 300.

At the same time out of 144 small and medium companies involved in the sphere of foreign economic activities only 25 respondents operate in this sphere for more than 10 years and 43 respondents operate in this sphere for less than 3 years, the number of companies that operate in this sphere during 1 year is equal to the number of companies that operate in this sphere in the period of up to 10 years (*Diagram* 8.)

Diagram 8 – period of time of involvement into foreign economic activities, number of respondents



n (number of respondents)= 300.

From geographical point of view the questioned SMEs cooperate with international partners from quite many countries of the world (48 countries). The majority of the respondents cooperate with partners from EU countries (95), CIS (88) and APEC (85).

The majority of enterprises cooperate with business partners from China – 73 out of the total number of respondents (*Table 2*).

It is necessary to underline that one and the same company usually cooperate with business partners from EU countries as well as APEC economies. At the same time there is a serious increase of interest on behalf of SMEs to cooperation with APEC economies.

Table 2 – Geography of foreign economic activities, number of enterprises*

Nº	Country	Number of enterprises
1	2	3
1	Austria	3
2	Azerbaijan	1
3	Armenia	3
4	Belgium	1
5	Great Britain	1
6	Hungary	1
7	Viet Nam	2
8	Germany	21
9	Greece	1
10	Georgia	1
11	Denmark	6
12	Egypt	1
13	Israel	1
	India	1
14	Iran	1
15	Spain	3
16	Italy	6
17	Kazahstan	33
18	Canada	4
19	Cyprus	3
20	Kirgiz Republic	1

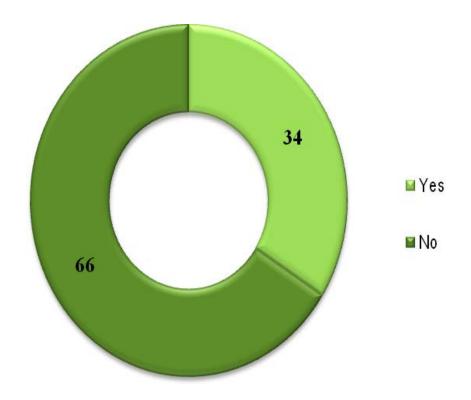
21	China	37
22	Latvia	6
23	Lithuania	15
24	Mongolia	1
25	Moldova	1
26	Myanmar	1
27	The Netherlands	1
28	Norway	3
29	United Arab Emirates	1
30	Poland	12
31	Belarus	24
32	Republic of Korea	11
33	Serbia	1
34	Slovakia	1
35	USA	9
36	Tajikistan	1
37	Turkey	9
38	Uzbekistan	6
39	Ukraine	18
40	The Philippines	5
41	Finalnd	4
42	France	3
43	Montenegro	1
44	The Chezh Republic	9
45	Chile	1
46	Sweden	1

47	Estonia	3
48	Japan	16

*n (number of respondents)= 144.

At the same time more than one third of the respondents - 34% (102 companies out of 300 respondents) carry out export activities (*Diagram 9*).

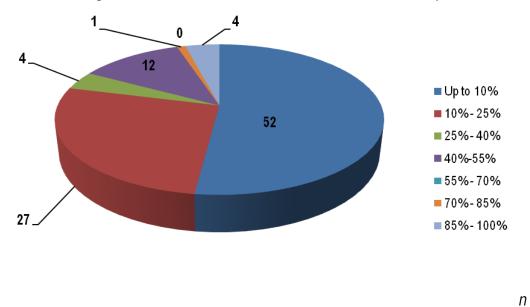
Diagram 9 - Export activities, %



n (number of respondents)= 300.

Out of 102 SMEs 4% (4 companies) carry out exclusively export activities and more than a half - 52% (53 companies) generate from export activities only 10% of their total sales revenue, 27% (28 companies) generate from export quarter of their sales revenue (*Diagramme 10*).

Diagram 10 - Sales revenue structure in relation to export activities, %



Geography of export is practically identical to foreign economic activities in general. The majority of companies supply their products to EU member countries (47 companies) and CIS countries (44 companies), 18 companies sell their products and goods on the markets of the APEC economies: out of them – 4 companies – to China, 3 companies – to Canada, 2 companies – to Republic of Korea and 2 companies – to USA (*Table 3*).

Table 3 – Geography of export activities, number of companies*

Nº	Country	Number of companies
1	2	3
1	Austria	1
2	Azerbaijan	1
3	Armenia	1
4	Germany	5
5	Greece	1
6	Georgia	1
7	Denmark	3
8	Iran	1
9	Spain	1
10	Italy	2

11	Kazahstan	17
12	Canada	3
13	Cyprus	1
14	Kirgiz Republic	1
15	China	9
16	Latvia	3
17	Lithuania	5
18	Norway	2
19	Poland	3
20	Belarus	12
21	Republic of Korea	2
22	Serbia	1
23	USA	2
24	Tajikistan	1
25	Turkey	2
26	Uzbekistan	2
27	Ukraine	9
28	Finalnd	2
29	France	1
30	Montenegro	1
31	The Chezh Republic	3
32	Chile	1
33	Sweden	2
34	Estonia	2
35	Japan	2

^{*}n (number of reposndents)=102.

Out of 198 questioned SMEs that answered "NO" to the question "Does your company carry out export activities?", 75% (148 companies) are sure that their companies / products have export potential (*Diagram 11*). At the same time 90% out of 148 questioned SMEs having export potential plan to start their export activities in the nearest 2 – 3 years.

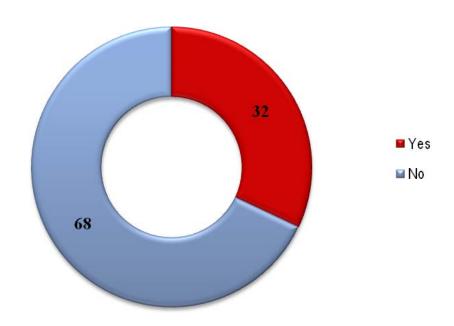
25 75 ■ Yes ■ No

Diagram 11 - Export potential of SMEs, %

n (number of respondents)= 300.

Out of the total number of respondents 96 companies (32%) carry out import activities (*Diagram 12*).

Diagram 12 - SMEs carrying out import activities, %



n (number of respondents)= 300.

The geography of import activities of the questioned SMEs is wider than export activities - 96 companies import goods and products from 37 countries of the world:

- EU member countries 67;
- CIS countries 16;
- APEC economies 70.

It is important to underline that while carrying out import activities SMEs prefer to cooperate with the APEC economies: China – 28 companies, the Republic of Korea – 9 and so on (*Table 4*).

Table 4 – Geography of import activities, number of enterprises*

Nº	Countries	Number of enterprises
1	2	3
1	Austria	2
2	Belgium	1
3	Great Britain	1
4	Hungary	1
5	Viet Nam	2
6	Germany	16
7	Denmark	3
8	Egypt	1
9	Israel	1
10	India	1
11	Spain	2
12	Italy	4
13	Kazahstan	16
14	China	28
15	Latvia	3
16	Lithuania	10
17	Moldova	1
18	Myanmar	1

19	The Netherlands	1
20	Norway	1
21	United Arab Emirates	1
22	Pakistan	1
23	Poland	9
24	Belarus	12
25	The Republic of Korea	9
26	Slovakia	1
27	USA	7
28	Turkey	7
29	Uzbekistan	4
30	Ukraine	9
31	The Philippines	5
32	Finaland	2
33	France	3
34	The Chezh Republic	6
35	Estonia	1
36	Japan	14

SMEs enumerate the following barriers and difficulties that prevent them from developing foreign economic activities (*Table 5*).

Table 5 – Main barriers and difficulties preventing the development of export activities*

Nº	Indicator	# of answers
1	2	3
1	Lack of information on the opportunities and requirements of international markets	45
2	Lack of information on potential partners	54

3	Non-conformity of the products / goods to the requirements of international markets	21
4	Absence of certification of products / goods in accordance to international standards	36
5	Lack of financial resources for export activities development	54
6	Lack of knowledge / qualification of the staff to carry out export activities	27
7	Old equipment and production technologies	20
8	Lack of opportunities for promotion of the products / goods to international markets (business missions, exhibitions, fairs, B2B meetings, etc.)	24
9	Unprotected intellectual property rights	13
10	Other	6

In accordance to the research results the majority of answers covers the following spheres:

- lack of information on the opportunities and requirements of international markets 45;
- lack of information on potential partners 54;
- lack of financial resources for export activities development 54.

The results of the research done among 300 Russian small and medium enterprises underline the necessity for the development of a special integrated information tool (resource) to stimulate involvement of small and medium enterprises into the world trade system and global supply and production chains.

Awareness of SMEs and degree of using information resources while implementing out foreign economic activities

Out of 300 respondents more than a half – 54% while answering the question "Evaluate your own level of awareness on various information resources (Russian, international) on stimulation of foreign economic activities?" noted that their level of awareness is of average character, 10% - answered "rather well informed", 27% and 8% of the respondents – "bad" and "very bad". Only 1% of the respondents is "well aware" of existing information resources (*Table 6*).

Table 6 – Awareness level on various information resources, number of respondents*

Nº	Indicator	# of answers
1	2	3
1	Very badly informed	8

2	Rather badly informed	27
2	More or less informed	Ε./
3	More or less informed	54
4	Rather well informed	10
5	Very well informed	1
	-	

^{*} n (number of respondents)= 300.

As the results out of the total number of questioned SMEs only 38% (114 companies) have ever used various information resources while entering international markets in order to search for international partners / information / market data.

62 38 ■ Yes ■ No

Diagram 13 – Level of usage of information resources by SMEs, %

n (number of respondents)= 300.

Among the most popular information resources used by SMEs the following ones were mentioned by the respondents (*Table 7*): Enterprise Europe Network, Foreign economic activities information portal and the Russian export catalogue.

Nº	Indicator	# of answers
1	2	3
1	Foreign economic activities from various countries of the world, http://globus-ved.ru/	4
2	Foreign economic activities information portal, http://www.ved.gov.ru/	79

3	STAR, http://www.servicestradeforum.org/	18
4	Enterprise Europe Network, http://een.ec.europa.eu/	151
5	Export Helpdesk, http://www.exporthelp.europa.eu/thdapp/index.htm	18
6	Helping U.S. Companies Export, http://export.gov/	11
7	Russian export catalogue, http://export.ved.gov.ru/	79
10	Team Canada Inc., http://www.gov.mb.ca/trade/export/links/ex_exsrce.html	9
11	International Enterprise Singapore, http://www.iesingapore.gov.sg/wps/portal	14
12	Alibaba.com, http://www.alibaba.com/	14
13	Austrade, http://www.austrade.gov.au/	12

The following data was received while analyzing the answers of 300 respondents given to the question "If you ever used any information resource while entering international markets to search for international partners / information / market data then what characteristics of such resources would you <u>like</u> most of all?" (*Table 8*).

Table 8 – Positive characteristics of information resources for SMEs, number of answers*

Nº	Indicator	# of answers
1	2	3
1	Possibility to get information on potential clients and information on the planned specialized fairs and exhibitions	84
2	Possibility to participate in the seminars regarding foreign economic activity development	6
3	Possibility to get consulting support on various aspects related to foreign economic activities development and implementation	12
4	Easy to use, easy to access information	56
5	Well presented information and regular update of information	64
6	Possibility to work with people not computers / programmes	6
7	International and inter-regional coverage	89
8	Client oriented employees	12

9	Free of charge resource	97
10	Possibility for passive search	6
11	Professional and competent employees	15
12	Protection of information on clients / users by the site / portal	6
13	Turn key support in solving various problems / tasks	6
14	Possibility to take part in virtual business missions	6

The majority of answers were given to the following positions:

- free of charge resource 97.
- international and inter-regional coverage **89**.
- possibility to get information on potential clients and information on the planned specialized fairs and exhibitions **84**.

The following data was received while analyzing the answers of 300 respondents given to the question "If you ever used any information resource while entering international markets to search for international partners / information / market data then what characteristics of such resources would you <u>not like</u> most of all?" (*Table 9*).

Table 9 – Negative characteristics of information resources for SMEs, number of answers*

Nº	Indicator	# of answers
1	2	3
1	Period of publication	46
2	Checking	46
3	No possibility to review profile	23
4	Poor awareness on how to work with such information resources	67
5	Too complicated structure of the information resource	21
6	No Russian or English version	51
7	Regular refernce to a "broker"	18
8	Difficulty in getting international response	64

9	Lack of information on potential clients	21
10	Too much of uselss information	48
11	Big number of "crooks"	21
12	Rare seminars on foreign economic activities	23
13	No support (for high tech start-ups) in the sphere of transfer to the place of B2B meetings with international partners	28

The main characteristics of an information resource for SMEs for the APEC economies that have to be taken into consideration while developing such an instrument:

- poor awareness on how to work with such information resources 67.
- difficulty in getting international response **64**.
- no Russian or English version 51.

The following data was received while analyzing the answers of 300 respondents given to the question "If you never used such information resources than what is the reason for that?" (*Table 10*).

Table 10 – Reasons for not using information resources by SMEs, number of answers*

Nº	Indicator	# of answers
1	2	3
1	Not aware of such information resources	99
2	No need	48
3	No trust	21
4	Difficult to search for information	81
5	Takes too much time	42
6	Do not want to give any information on myself / my company	3
7	Other	6

* n (number of respondents)= 300.

As one could see from the above table the majority of the respondents are not aware of such information resources (99 answers) or the existing information resources have too complex and difficult structure to search for the required information.

All this underlines the lack of proper level of information support provided to small and medium enterprises and leads to necessity to elaborate a new information instrument that is easy to use and that is oriented at achievement of practical results.

Table 11 – Characteristics of information resource on the APEC economies required by SMEs, number of answers*

Nº	Indicator	# of answers
1	2	3
1	General information on the requirements of international markets (legislation, certification, registration, customs, etc.)	54
2	General information (review) on the economic situation of foreign countries (main sectors, future prospects and forecasts, statistics, etc.)	24
3	Information on cooperation prooposals (export / import / distribution / joint production / investment / localization of production, etc.)	61
4	Information on tenders	39
5	Information on promotion events and activities (exhibitions, fairs, conferences, forums, etc.)	36
6	Information on enterprises (databases with contacts, sphere of activity, products description, etc.)	51
7	Regular information dissemination	32

^{*} n (number of respondents)= 300.

The following data was received while analyzing the answers of 300 respondents given to the question "While using such an information resource on the APEC economies you would like to ...?" (*Table 12*).

Table 12 – Characteristics of information resource on the APEC economies required by SMEs, number of answers*

Nº	Indicator	# of answers
1	2	3
1	Possibility to act myself (search for information, download my profile, search for various business proposals, etc.)	108
2	Possibility to use consulting services of the specialists related to such an infortmation resource	192

^{*} n (number of respondents)= 300.

As one could see from the above table many respondents consider important to have possibility to get consulting support from the specialists related to such an infortmation resource for SMEs on the APEC economies; at the same time they would like to have possibility to search for information, to download their business profiles to the database, to participate in on-line blogs, to search for business partners.

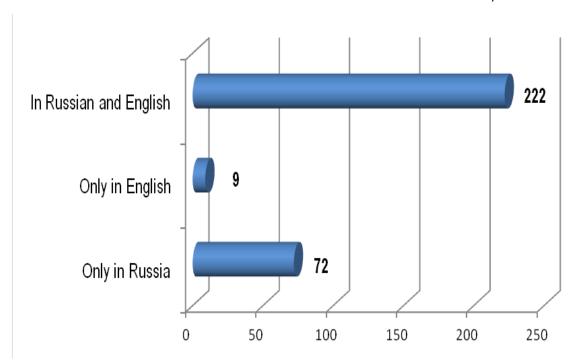
Table 13 – Characteristics of information resource on the APEC economies required by SMEs, number of answers*

Nº	Indicator	# of answers
1	Only in Russia	72
2	Only in English	9
3	In Russian and English languages	222

^{*} n (number of respondents)= 300.

While analyzing the answers regarding the language of such an information resource, one could see that the majority of the respondents (222 companies, 74%) prefer to have it in two languages – English and Russian (*Diagram 14*).

Diagram 14 – Language of the information resource for SMEs on the APEC economies, number of answers*



n (number of respondents)= 300.

Out of 300 questioned SMEs 93% (279 companies) are ready to download their profiles on the information resource on the APEC economies; at the same time only 12% (36 companies) are ready to pay for the usage of such an information resource on the APEC economies (*Diagrams 15,16*).

Diagram 15 – Readiness to register profiles on the information resource on the APEC

information resource on the APEC economies economies



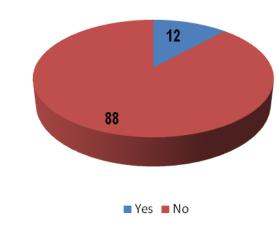


Diagram 16 – Readiness to pay for usage of the

THE MAIN OUTCOMES OF THE RESEARCH

- Out of 300 respondents more than a half 54% while answering the question "Evaluate your own level of awareness on various information resources (Russian, international) on stimulation of foreign economic activities?" noted that their level of awareness is of average character, 10% answered "rather well informed", 27% and 8% of the respondents "bad" and "very bad". Only 1% of the respondents is "well aware" of existing information resources.
- The majority of the respondents are not aware of such information resources (99 answers) or the existing information resources have too complex and difficult structure to search for the required information. All this underlines the lack of proper level of information support provided to small and medium enterprises and leads to necessity to elaborate a new information instrument that is easy to use and that is oriented at achievement of practical results.
- Only 38% (114 companies) have ever used various information resources while entering international markets in order to search for international partners / information / market data.
- Among the most popular information resources used by SMEs the following ones were mentioned by the respondents: Enterprise Europe Network, Foreign economic activities information portal and the Russian export catalogue.
- According to the opinion of the majority of SMEs an information resource on the APEC economies has to have the following characteristics: be free of charge, have inter-regional and international coverage and have the possibility to get information on potential clients and forthcoming specialized fairs and exhibitions. Also it is necessary to pay serious attention to such

- aspects as low awareness on how to work correctly with such information resources, difficulty in getting international response, no Russian or English version.
- Consulting support from the specialists related to information resource on the APEC economies should be combined with a possibility to search for information, download profile, participate in on-line blogs, search for international partners, etc.
- While analyzing the answers regarding the language of such an information resource, the majority of the respondents (222 companies, 74%) prefer to have it in two languages English and Russian.
 - Out of 300 questioned SMEs 93% (279 companies) are ready to download their profiles on the information resource on the APEC economies; at the same time only 12% (36 companies) are ready to pay for the usage of such an information resource on the APEC economies.

CHAPTER 4. ASSESSMENT OF THE SMALL AND MEDIUM ENTERPRISES ROLE IN GLOBAL PRODUCTION CHAINS

Characteristics of the APEC's Small and Medium Business Sector 1

Small and medium-sized enterprises (SMEs) are the backbone of business activities across the world, and together with large enterprises and multinationals they significantly contribute to the global economy.

According to a study by the International Finance Corporation (IFC) and McKinsey & Company (2010), there were around 365 million to 400 million SMEs in developing economies, of which 25 million to 30 million were formally categorized as micro enterprises (one to four employees), and 55 million to 70 million as SMEs (five or more employees).

The growth of SME business contributes to increased value creation, production, and profits. Given its agile and dynamic nature, SMEs can be a source of new business ideas and contribute to raising productivity and improving the economic structure, hence increasing the resilience and sustainability of economic development (European Investment Bank, 2011).

This policy brief offers a closer look at SMEs by first discussing some issues in defining SME and looking at how APEC members define SME. It then provides a snapshot of SMEs in the APEC region (by size; share to total enterprises, total employment and total exports; and economic contribution) and APEC's efforts in SME development. It concludes with some observations on areas that could advance APEC's work on SMEs.

Issues in Defining SME

The definitions of SME are very heterogeneous across economies. The IFC survey found the use of more than 60 definitions of SMEs in 75 economies. In general, four criteria have been used to define a SME – number of employees, annual sales (or revenue), assets, and capital (or investment). There are sector-specific criteria in most cases. A single criterion or a combination of several criteria could be used.

The meaning of the criteria may be interpreted differently among economies, and sometimes even within one economy due to different accounting terminologies and practices.

There is also a tendency for economies to revise their definitions from time to time because inflation and other factors might make the existing definitions less relevant.

As an example, SMEs in Korea are defined based on three criteria: number of employees, total capital, and total sales. These criteria vary across the six main sectors (Table 14).

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¹ Bernadine Zhang Yuhua SMEs in the APEC Region. // Police Brief. 2013. №8.

Table 14 – Korea's Definition of SME

EmployeesSales/RevenueCapital/InvestmentManufacturing <300≤ USD 8 millionMining, Construction, Transportation <300≤ USD 3 millionSelected Retail, ICT, Tourism, Entertainment <300≤ USD 30 millionSelected Extraction, Professional Services <200≤ USD 20 millionSelected Wholesale, Environmental Services <100≤ USD 10 millionOther Sectors <50≤ USD 5 million							
<300 ≤ USD 8 million Mining, Construction, Transportation <300 ≤ USD 3 million Selected Retail, ICT, Tourism, Entertainment <300 ≤ USD 30 million Selected Extraction, Professional Services <200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	Emplo	oyees	Sales/Revenue	Capital/Investment			
Mining, Construction, Transportation <300 ≤ USD 3 million Selected Retail, ICT, Tourism, Entertainment <300 ≤ USD 30 million Selected Extraction, Professional Services <200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	Manufacturing						
<300 ≤ USD 3 million Selected Retail, ICT, Tourism, Entertainment <300 ≤ USD 30 million Selected Extraction, Professional Services <200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	<300			≤ USD 8 million			
Selected Retail, ICT, Tourism, Entertainment <300 ≤ USD 30 million Selected Extraction, Professional Services <200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	Mining, Co	nstructi	on, Transportatior	า			
<300 ≤ USD 30 million Selected Extraction, Professional Services <200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	<300			≤ USD 3 million			
Selected Extraction, Professional Services <200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	Selected Re	etail, IC	T, Tourism, Entert	ainment			
<pre><200 ≤ USD 20 million Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors</pre>	<300		≤ USD 30 million				
Selected Wholesale, Environmental Services <100 ≤ USD 10 million Other Sectors	Selected Ex	ktractio	n, Professional Se	rvices			
<100 ≤ USD 10 million Other Sectors	<200		≤ USD 20 million				
Other Sectors	Selected W	/holesal	e, Environmental	Services			
	<100		≤ USD 10 million				
<50 ≤ USD 5 million	Other Sectors						
	<50		≤ USD 5 million				

Source: Korea SME Administration Agency.

At present, there is no single and globally accepted definition of SME. Various attempts by international institutions and practitioners to propose a common definition has so far come to a naught.

The IFC (2012) broadly defines SME as a registered business with less than 300 staff, and further categorizes it into a micro, small, or medium enterprise (Table 15). The United Nations Development Program (UNDP) defines SME simply with less than 200 employees (Gibson and van der Vaart, 2008). The most widely referred definition is that adopted by the European Union, where SMEs are defined as having less than 250 employees, with an annual turnover of no more than EUR 50 million or annual balance sheet of no more than EUR 43 million.

Table 15 – IFC's and EU's Definition of SME

Criteria	Micro Enterprise	Small Enterprise	Medium Enterprise				
International Finance Corporation							
Employees	<10	10<50	50<300				
Total Assets	<\$100,000	\$100,000<\$3 mn	\$3 mn < \$15 mn				
Total Annual Sales	<\$100 000	\$100,000<\$3 mn	\$3 mn < \$15 mn				
European Union (EU)							
Annual Work Unit	<10	<50	<250				
Annual Turnover	<€ 2 mn	<€ 10 mn	<€ 50 mn				
Annual balance sheet	<€2 mn	<€ 10 mn	<€ 43 mn				
Source: IFC (2012), European Commission (2005).							

Practitioners, Gibson and van der Vaart (2008), have proposed a less imperfect formula approach, which is to define SME based on annual sales of the company and features of the local economy. The rationale is easy to comprehend – as SMEs operate in very different context, such as

business culture, industry, rules and regulation, consumer base, and openness of the local economy, they should be defined differently.

However, operationalizing this definition will be extremely difficult. First, certain elements in the definition are hard to capture or quantify, such as business culture and openness of the local economy. Second, in most developing economies, the informal sector accounts for a huge portion of the economy but to obtain accurate information about it would be difficult since it is often not reflected in the official statistics.

It seems there is no ideal common approach in defining SME. Khrystyna (2011) has argued that to 'strive for a universal definition of SME might simply be a Procrustean Bed (an arbitrary standard to which exact conformity is forced)'. A good definition of SME should be stable enough as a reference for policy making in the context of the domestic economy, and yet could evolve over time to reflect the changing business background. It should ideally also capture various business relationships, promote innovation and cooperation, and most importantly ensure fairness in access to government grants and assistance.

APEC Members' Definitions of SME

In the APEC region, over the past three years, several economies have revised or modified their definitions of SME. China; Japan; Peru; Singapore; and the United States have simplified their criteria for defining SME, while Malaysia; Mexico; and Viet Nam have adjusted their criteria. As shown in Table 16, a majority of APEC members is using two or three criteria in defining SME; five economies are using only one criterion; and two other economies are using four criteria.

Nineteen out of 21 APEC economies are using the number of employees as a criterion, but the caps vary considerably from 20 employees in New Zealand to 1,000 employees in China². The criteria on sales/revenue, assets, and capital/investment are mainly expressed in the local currencies, thus making comparison among them extremely difficult.

For economies which adopt sector-specific definitions, some are using broader categories, such as Goods-producing and Services-based (in Canada's case) or Manufacturing and Non-manufacturing (in China's case) while others are using more detailed breakdown, such as the six main sectors in the case of Korea.

Given these differences in defining SMEs, comparing SME figures and/or compiling an aggregate number for SMEs in the APEC region would be problematic. APEC has a broad range of regional initiatives but due to these varying definitions, they consequently face problems when it comes to setting collective targets, monitoring progress, and evaluating results. It might hence be useful for APEC to arrive at a common definition for SME.

Not only would this serve as a basis for regional initiatives, it would allow the collection of more comparable and combinable data to monitor and evaluate these initiatives. Nonetheless, the individual

² As declared by New Zealand Ministry of Business, Innovation & Employment, small enterprises were not officially defined in New Zealand. However, in amendments to the Employment Relation Act, small enterprises were referred to as enterprises with no more than 20 employees.

economy could keep their respective definition of SME for references when making SME-related domestic policies.

Table 16 - Criteria used in APEC Members' Definitions of SME

	Number of Employees	Sales / Revenue	Assets	Capital / Investment	Sector
Australia	Χ				
Brunei Darussalam	Χ				
Canada	Χ	Χ			Χ
Chile	X	Χ			
China	X	X			
Hong Kong, China	Х				Х
Indonesia	Х	Х	Х		
Japan	X			X	X
Korea	Χ	Χ		Χ	Χ
Malaysia	Χ	Χ			
Mexico	X	X			X
New Zealand	X				
Papua New Guinea				X	
Peru		Χ			
Philippines	X		X		
Russia	Χ	X			
Singapore	X		Χ		Χ
Chinese Taipei	X	X		X	Χ
Thailand	X		X		Χ
United States	X	Х			Х
Viet Nam	X			X	Х

Source: PSU's compilation based on 'Data Sources'.

SMEs in the APEC Region

a) Total Enterprises and Total Employment

In the APEC region, based on latest data available, although the number of SMEs varied from 8,795 in Brunei Darussalam in 2009 to 56,534,592 in Indonesia in 2012, SMEs in general accounted for over 97% of the total enterprises in each economy³. SMEs accounted for over 99% of all enterprises in thirteen APEC economies; in Brunei Darussalam; Chile; and Hong Kong, China, the share was between 98% and 98.9%; and in Malaysia, Chinese Taipei, and Viet Nam, the proportion was in the range of 97% to 97.9%.

SMEs generally also create more jobs than large enterprises because they tend to be more labor-intensive operationally. A World Bank survey of 47,745 firms of various sizes around the globe revealed that firms with between five and 250 employees accounted for 67% of total formal employment, and during the period 2002- 2010, the SME sector contributed 85% of employment growth (Edinburgh Group, 2013).

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³ Data for Russia and Papua New Guinea were not available.

SMEs were found to employ more than half of the workforce in most APEC economies, but the proportions varied substantially. In Canada; Chile; Indonesia; Korea; and Thailand, SMEs accounted for over 80% of total employment, and in the other 11 APEC economies, SMEs accounted for 50% to 79% of total employment. SME employment was relatively lower in Hong Kong, China (47.3%); New Zealand (43.3%); and Russia (24.7%).

It is evident that SMEs in the APEC region are already playing an important role in economic activities and employment creation. Yet, this role might be understated (Figure 1).

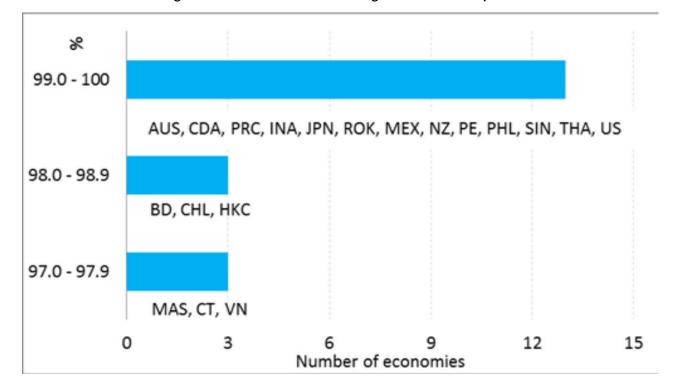


Figure 11 - SMEs as a Percentage of Total Enterprises in APEC Economies⁴

Source: PSU's compilation based on 'Data Sources'.

As noted by the IFC, in developing economies, SMEs in the informal sector4 often outnumber that in the formal sector⁵ many times over. As a result, the share of SMEs in total enterprises and total employment in these economies might be underestimated (IFC, 2010).

⁴ Data covered the private sector only and excluded the public sector. For some economies, the share of establishments rather than the share of enterprises was used. For Australia, non-employing establishments (those without an Income Tax Withholding obligation, including sole proprietorships and partnerships without employees) were considered as SMEs. For Brunei Darussalam, the year of the data on SME as a percentage of total enterprises was not clear. The data was from a 2011 report. For Chile, SMEs accounted for 80% of urban employment. For New Zealand, the statistics was based on enterprises with up to 49 employees. For Peru, the data on SME as a percentage of total enterprises was from 2010.

⁵ There is no internationally agreed definition on informal sector. The most widely adopted definition was defined by the ILO at the 15th International Conference of Labor Statisticians: informality refers to enterprises owned by individuals or households that are non-separate legal entities independent of their owners, and/or work that is outside the regulatory framework and not subject to labor legislation, social protection, taxes or employment benefits (OECD, 2008). The World Bank has summarized the informal sector into three major elements: labor, micro-firms, and firms. Informal labor refers to workers who would prefer a job with standard labor protections, but unable to get one; workers who has a microbusiness and avoid paying social protection taxes; and women who leave formal salaried jobs for household work. Informal micro-firms are micro-entrepreneurs with no intention of or potential for growing, and hence no intention of engaging the institutions of civil society; and micro-entrepreneurs get stuck in their expansion by excessively high barriers to registering with the government. Informal firms are firms and individuals avoiding taxation or other mandated regulations; and firms registering only part of their workers and part of their sales, or declaring only part of the salary of their workers (World Bank, 2007).

Although statistics on the size of SMEs in the informal sector in the APEC region are not available, a study by the International Labor Office (ILO) shows that this sector exists in China; Indonesia; Mexico; Peru; Philippines; Russia; Thailand; and Viet Nam (ILO, 2012).

Across the world, the informal sector remains large, widespread, and expanding. Most firms operating in this sector are micro enterprises, which employ up to five employees (Nelson and Bruijn, 2005). They also contribute substantially to job creation. As a share of non-agricultural employment, informal employment is high in South Asia at 82% and relatively lower in the Middle East and North Africa at 45%.

In the East Asia and Southeast Asia region, the share is 65% (WIEGO, 2013). In general, SMEs in the informal sector may not be favored by policy makers and implementers since they are out of the regulatory radar screen, but they do create employment and generate income; especially for developing economies, they contribute to pro-poor growth and poverty reduction (Figure 12).

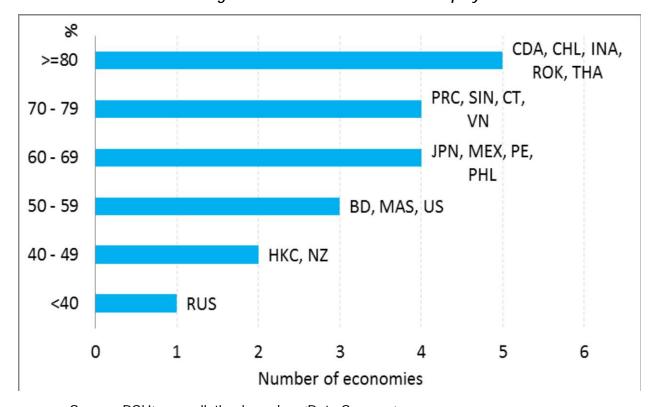


Figure 12 – SMEs' Share of Total Employment in APEC Economics⁶

Source: PSU's compilation based on 'Data Sources'.

Despite their positive contributions, concerns are often raised over the quality and safety of jobs in the informal sector. In such sector, jobs tend to be concentrated in the low value-added industries and workers are often underpaid.

Moreover, hazardous working environment and lack of work safety measures are common practices. It is thus important that APEC members recognize and understand the impact of the informal sector in their economies and the region.

⁶ For Canada, employment data only covered private employment. For Chile, only urban employment was included. For Peru, SME's share in total employment was employment by micro and small enterprises in total economically active population, and it did not cover medium enterprises.

b) Distribution of SMEs by Size

A breakdown of SMEs by the subcategories (small, medium or micro enterprise) in each economy shows that an overwhelming majority of SMEs was micro enterprises (Figure 13). In 15 APEC economies where detailed data was available, over 50% of SMEs were micro enterprises; and in 11 out of these 15 economies, over 75% of SMEs were micro enterprises.

As for small enterprises, the share varied significantly among the economies, ranging from 1% in Indonesia to 45% in Brunei Darussalam. Medium enterprises made up the smallest group of SMEs. In Indonesia; Mexico; Peru; Philippines; Russia; and Thailand, they accounted for less than 1% of total SMEs. In Australia; Malaysia; and Chile, medium enterprises constituted a relatively higher proportion of 2.8% to 3.9%.

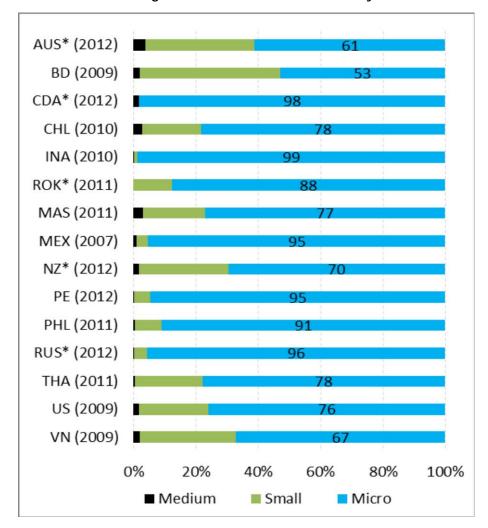


Figure 13 - Distribution of SMEs by Size in APEC Economies⁷

Source: PSU's compilation based on 'Data Sources'.

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⁷ For Australia and New Zealand, non-employing enterprises were shown as 'Micro', and micro and small enterprises (data was not separated) were shown as 'Small'. For Canada, data on micro and small enterprises was not separated, and was shown as 'Micro'. The data shown for Canada only covered the employer business. Firms of indeterminate size were not covered in the statistics. For Korea, data on small and medium enterprises was not separated, and was shown as 'Small'. For Russia, non-employing and micro enterprises were shown as 'Micro'.

c) Economic Contribution

The growth of SMEs has both direct and indirect linkages to GDP growth. Directly, the expansion of existing SMEs and setting up of new SMEs contribute to increased value added and output; and indirectly, SMEs tend to capture emerging market needs and create corresponding solutions.

Hence, a thriving SME sector will diversify and strengthen the resilience of the local economy. Research has also confirmed that SMEs are positively linked to growth in GDP per capita (IFC, 2010). Particularly for low-income economies, SMEs form the base for private sector-led growth, reduce marginalization, and nurture equality (IFC, 2010).

In the APEC region, the economic contribution of SMEs paints a heterogeneous picture. In China; Indonesia; Japan; Korea; and the United States, SMEs accounted for more than 50% of GDP. In other economies, the ratio was smaller but still quite significant. SMEs in Russia and Brunei Darussalam accounted for the lowest share of GDP at 21% and 22%, respectively (Figure 4).

In most cases, the statistics cited above did not capture SMEs in the informal sector. Had they been taken into account, SMEs' economic contribution would be even greater.

In a study conducted in early 2000s, the informal sector made up 47% of GDP in low-income economies, 30% in middle-income economies, and 13% in high-income economies (Ayyagari, Beck, and Kunt, 2003).

If SMEs in both the informal and formal sectors were combined, they would add up to 65% and 75% of GDP in economies at different income levels (IFC, 2010).

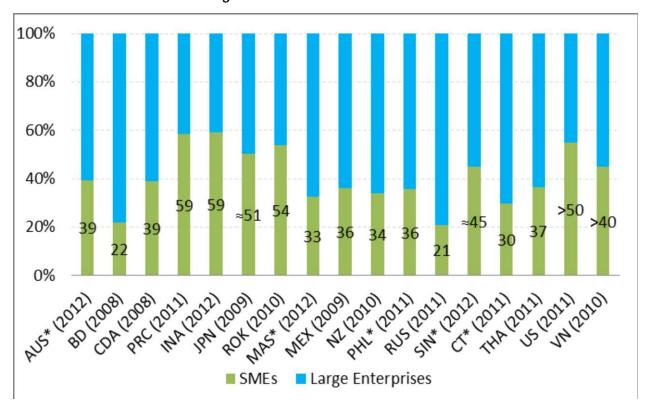


Figure 14 - Economic Contributions of SMEs in APEC Economies⁸

Source: PSU's compilation based on 'Data Sources'.

⁸ For Australia, the data was drawn from 'Industry Value Added'. For Malaysia, the data was preliminary. For Philippines and Singapore, the data used were 'Value Added'. For Chinese Taipei, the data was based on 'Total Annual Sales'.

Evidence has shown that firms keep to the informal sector due to high tax rates, high social security cost, injustice and asymmetries in taxation system (Ceyhun and Kerem, 2013). Compared to SMEs in the formal sector, those in the informal sector face more challenges such as access to finance where they mostly have to rely on personal rather than commercial means.

Research has also found informality to decrease with an increase in education and with time in business (Altay and Reza, 2013). If that is the case, APEC could give more emphasis to the role of education in economic development, provide preferential treatment on taxation and social security requirements to SMEs in the informal sector, and ensure fairness and equality in taxation systems.

An improved business environment may also encourage firms in the informal sector to turn to the formal sector. In this regard, the APEC Economic Committee has been carrying out a structural reform agenda over the years, which addresses behind-the-border barriers in conducting business in the APEC region.

Among its initiatives, the Ease of Doing Business Initiative aims to improve the business environment, and achieve an APEC-wide improvement of 25% by 2015 in the five areas of starting a business; dealing with permits; getting credit; trading across borders, and enforcing contracts.

d) Total Exports

SMEs that supply both domestic and overseas markets tend to hire more staff, generate more revenue, enjoy higher productivity, and build up a stronger technology capacity. Access to international markets will also improve resource utilization and exposure to advanced knowledge, technologies, and foreign best practices, and sharpen their competitive edge (OECD, 2008).

However, SMEs are generally less significant in terms of their contribution to direct exports. Based on most recent data available, only in China did SMEs' share in total exports exceed 50%. SMEs in Canada and Korea had a relatively high share in total exports at 41% and 35%, respectively. Thailand; the United States; and Viet Nam fell in the bracket of 21% to 30%.

The share of SMEs in total exports ranged from 15% to 19% in Japan; Indonesia; Singapore; Chinese Taipei; and Malaysia. And in Australia; Chile; and Peru, SMEs accounted for less than 10% of total exports (Figure 15).

Australia (2010/11) 5% Canada (2010) 41% Chile (2010) 7% 68% China (2011) Indonesia (2011) 16% Japan (2012) 15% Korea (2011) 35% Malaysia (2011) 19% Peru (2012) 4% Singapore (2009) 16% Chinese Taipei (2011) 16% Thailand (2011) 30% United States (2009) 22% Viet Nam (2010) 29%

Figure 15 - SMEs' Share of Total Exports in APEC Economies

Source: PSU's compilation based on 'Data Sources'.

Besides direct exports, SMEs also engage in activities of indirect export. As a small but increasing number of SMEs currently supply the global supply chains with intermediate goods and services, looking at direct exports alone might underestimate the SMEs' export capacity. However, data limitation makes it difficult to account for such indirect exports.

To be able to export directly, SMEs often need to overcome both internal and external barriers. Internal barriers are mainly related to the inability to capture, analyze, and utilize market information; lack of managerial, financial, and human-resource capacity to deal with exports; and lack of overseas marketing strategies, such as branding, distribution, pricing, and promotion.

External barriers are associated with going through export procedures, complying with rules and regulations, bearing market and exchange risk, and venturing into unfamiliar political-social-cultural environment (Leonidou, 2004).

APEC has recognized the importance of enhancing the participation of SMEs in export markets since the early 2000s. Workshops and programs have been carried out to addresses internal barriers through capacity building and access to technology and finance, and external barriers related to regulatory reform and legal framework. APEC should continue their work in this area, helping SMEs not only to export directly, but also to export indirectly through global supply chains.

APEC on SMEs

APEC has a long tradition of supporting SMEs in conducting business and strengthening their capacity and competiveness in international trade. Since 1994, the SME Ministerial Meeting has been held each year to address SME development issues. An Ad Hoc Policy Level Group on SMEs was set up in 1995 to work on SME-related initiatives, and in 2000, the group was formally established as the APEC SME Working Group.

APEC members have over the years been developing and implementing a wide range of SME-related initiatives and activities, either on an individual or a collaborative basis. As a result of almost 20 years of ceaseless efforts, the business environment where SMEs operate in has improved in the region; human capital has been further developed via training and education; and various SME networks, conferences, trade fairs and exhibitions have been put in place to stimulate interaction and cooperation among SMEs.

APEC has also spearheaded discussions on emerging issues that may impact SMEs, such as financial crisis management, consumer education and protection, global production chains, corporate social responsibility, business ethics, etc.

Currently, under the guidance of SME Working Group Strategic Plan for 2013-2016, APEC is focusing on three priority areas to foster the growth of SMEs in the region: building management capacity, entrepreneurship and innovation; financing; and business environment, market access and internationalization.

Small and Medium Enterprises Participation in Global Production Chains

Rising globalization and economic integration has enabled SMEs to increase their contributions to the region's development through greater participation in GPCs. In the APEC region, SMEs generally account for over 90 percent of all enterprises and employ over half of the workforce, pervading virtually all socio-economic activities across urban and peri-urban areas.

In recent years, reduction in trade barriers and transport costs, as well as the prevalence of Information and Communications Technology (ICT) has connected enterprises of various sizes into global value chains and production networks, leading to more fragmented and complex production processes. This also explains an increasing share of trade in intermediate goods. According to the calculation by Koopman and Wang (2012), the world average export value of intermediate goods has reached 48 percent of total gross exports.

The phenomenon is especially apparent in industries such as garment, agro-industry, furniture, automobile/ automotive, consumer electronics, telecommunications and ICT, as well as services. More

and more SMEs are engaged in activities that link up with multi-national corporations (MNCs), providing intermediate goods or services that are used to build the final products. MNCs hence have become the major players in coordinating and integrating activities of the entire production process, managing the global production chains.

A global production chain (GPC) refers to the linkages within or among a group of geographically dispersed firms in a particular global value chain (GVC) for producing specific products, such as particular types of computers, furniture and automobiles. GPCs are inseparable from global value chains (GVCs), which covers the full spectrum of value added activities required to bring a product from its conception, through design, sourcing raw materials and intermediate inputs, production, marketing, distribution, and support to final consumers. GVCs stretch longer than GPCs, since GPCs typically end at the point after the goods and services have been produced for the MNCs, and do not cover the activities beyond the production (Figure 16).

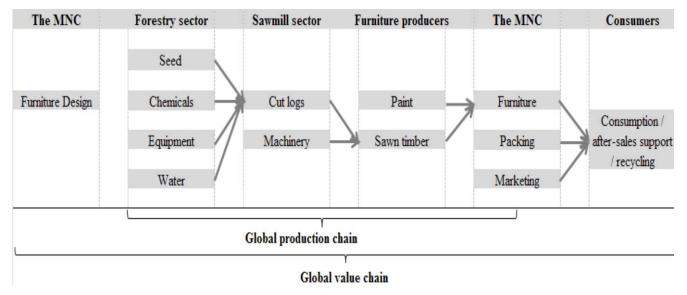


Figure 16 - GPC and GVC for Wood Furniture Products

Note: Elements in the chains are inputs into different stages of production or value creation.

Source: Raphael and Jeff, 2001.

2. Trends of GPCs

The origin of GPCs can be traced back to the early 1990s when production networks began to develop in ASEAN and East Asia (Hank and Fukunari, 2009). Consequently, regional trade has also evolved from export and import of final products to intermediate goods. These production networks were initially owned entirely by the MNCs, which was known as 'vertical integration'.

Over time, as technology advances and transportation and communication infrastructure improves, the vertical integration structure becomes fragmented, and GPCs emerge to take advantage of trade and investment liberalization to access natural resources, labor, technology and capital at a lower cost. Hence, GPCs strengthened the competitiveness of MNCs in both domestic and foreign markets. Through reorganization and relocation of the production process, GPCs enable task-related specialization and enhance business efficiency.

a. Different types of GVCs/ GPCs

Due to intensifying competition nationally and internationally, as well as improved supply chain connectivity to ship goods and services, MNCs have been constantly optimizing the GPCs and hence improving the GVCs. Given the nature and feature of different industries, GVCs evolve in different directions, so do the GPCs. Currently, three main types of GVCs/GPCs co-exist across different industries (Gereffi, 1999 and Abonyi, 2005).

The producer-driven chain is where manufacturing MNCs play a central role and is common in automobiles, ICT and semiconductor industry. The buyer-driven chain has international retailers and brands play the leading role and usually focus on consumer goods industries, such as apparel, footwear, agri-industry and consumer electronics. The multi-polar chain is less common, with multiple power centers but no overall dominant lead firm to shape the final product, such as computers and medical devices; in which intellectual property plays an important role.

b. Forces that transform GPCs

Two main forces drive the structural transformation of the GPCs. Externally, the GPCs are currently facing the increasing operating costs and congestion, especially in Asia - which dampens the profit margin of MNCs. Production costs have increased substantially along GPCs due to difficulties in securing labor, land and other factors of production. Particularly, labor-intensive and land-intensive production is under pressure due to ageing population (in several economies) and inflated property prices.

Differences in location advantages (such as factor prices) between developed economies and existing GPC-participating developing economies are narrowing and are forcing MNCs to seek other competitive niches, such as efficient transportation, customized services, and improved product quality, etc. MNCs have the option to explore business opportunities in the less developed economies, but they are also apprehensive about the set up cost and service link cost as well as business and policy environment in these economies.

Internally, especially after the 2008-09 global financial crises, GPCs are experiencing a consolidation process with a strengthened role for large suppliers. On the one hand, instead of sourcing products from a broad range of smaller suppliers, more and more MNCs now prefer to work with larger, more capable, and globally-oriented suppliers. On the other hand, some large retailers have bypassed the lead firms (MNCs) and began to source directly from large suppliers.

The evolution of GPCs has also shaped the business landscape for SMEs. Some SMEs still keep to their traditional practices and are constrained to serve the local markets. Increasingly, they are feeling the competitive pressure, and struggle to maintain their foothold.

At the same time, another group of SMEs have been aggressively seeking to participate in GPCs, to become suppliers of MNCs and to grow together with the expansion of MNCs. Although also experiencing various challenges along the process, they have emerged stronger and more competitive.

3. Impacts of SMEs' involvement in GPCs

SMEs' participation in GPCs yields substantial benefits. For MNCs, the benefits are evident since they are the ones that initiate and design the GPCs to gain better access to resources at lower costs.

The issues paper will specially focus on benefits to SMEs (micro level) and to the local economy (macro level). Correspondingly, the drawbacks of the SMEs' involvement in GPCs will also be discussed.

a. Benefits to SMEs

On a micro level, the benefits of participating in GPCs for SMEs are fourfold.

First, participating in GPCs enhances the technical capacity of SMEs. SMEs learn new production methods, management know-how and technology from MNCs, which help them to stay at the frontier of newly introduced products and processes. SME employers could also upgrade their skills through training and intra-industry transfer of talented workers, so that the product quality and service standards could meet the requirement of international markets.

These SMEs also have access to MNCs' technical staff and knowledge, which provides SMEs the opportunity of continuous learning and upgrading their production techniques. Building technical capacity is of vital importance to the sustainability of a business.

Second, being a supplier of MNCs or GPCs means increased demand for existing products and services of SMEs, and this leads to greater utilization of operation capacity and enhancement of production efficiency. It also allows SMEs to spread business risks across different markets, which is especially important during times of crisis.

Third, cooperating with firms upstream and downstream along GPCs will build the prestige and credibility of SMEs, making it easier to access finance, attract investors as well as human resources. Financial stability will also allow SMEs to invest in new facilities, research and development, as well as higher value-added new business, all of which could potentially expand the current business.

Fourth, GPCs provide SMEs a gradual and sustainable way to internationalize. Through GPCs, SMEs are engaged in indirect exporting activities. Through this indirect involvement, SMEs gain experience and exposure of international markets with minimized costs and risks, build up capacity to meet international standards and also to process international market information.

Once new niches for supplying products and services emerge, SMEs could take advantage of their own flexibility and position themselves quickly; if needed to further explore new business opportunities with different MNCs or within different GPCs altogether.

b. Benefits to the local economy

At the macro level, SMEs' participation in GPCs brings benefits to the local economy in four ways:

First, a stronger SME sector is positively linked with economic growth as it is considered as one of the characteristics of fast-growing economies. The size of the SME sector does appear to be associated with the growth of gross domestic product (GDP) per capita in the same direction in many economies (UNESCP, 2009). In addition, the so-called 'New Development Strategies' also claim that participation in international production/ distribution networks is the key to accelerating economic development in an era of globalization (Hank and Fukunari, 2009).

Second, SMEs' participation in GPCs brings along job opportunities in the local economy. SMEs in GPCs usually absorb the surplus labor from the traditional sectors, thus there is a clear recognition of

the importance of SMEs in job creation. Employment opportunity in GPCs is also a key dimension of the development process, particularly in the lagging economies of Asia and the Pacific.

Third, GPCs allow domestic SMEs to export together with the MNCs, which increases the export value and builds up foreign reserves for the local economy. Over time, if SMEs could move to higher value- added exports, they will contribute even further to the export and development of the domestic economy.

Fourth, it provides a means to transform the local economy and business. Some of the more innovative and dynamic SMEs can serve as catalysts in transforming low-income traditional economy to modern economy in various structural ways. Specialization in manufacturing or services for a particular market raises productivity and strengthens competitiveness of the economy where SMEs operate.

c. Drawbacks to SMEs' participation in GPCs

There are substantial gains from SME's participation in GPCs. However, all these benefits could only be realized on suitable premises, and participating in GPCs is not without its drawbacks. SMEs need to face up to the dominant position of MNCs, where the lead firm tends to impose their strategies and decisions on suppliers along the chain, which, at times, may contradict with the strategies and decisions of SMEs. Moreover, due to limited experience and capacity in managing technical know-how and inhouse patent, SMEs may lose protection of its own intellectual property to MNCs.

The most severe risk is the crisis transmission mechanism along GPCs. During economic crisis, MNCs will dramatically reduce or stop their purchases due to lack of demand in the crisis markets, and this will be aggravated when the reduced purchases pass on to lower- tier SMEs. Many SMEs may not be able to maintain sufficient capital to survive or have access to finance from banks, and face the risks of liquidation or bankruptcy.

Thus a crisis may lead to a domino effect, which could affect not only large enterprises as first-tier suppliers, but also SMEs as the second- or third-tier suppliers. While MNCs could very much survive due to their wider financial access, the disruption could bring more serious and permanent consequences to SMEs.

Indeed, some governments have introduced ad hoc measures to support domestic SMEs to overcome the negative consequences brought about by a crisis. For example, UNCTAD (2010) has noted how the Mexican Government initiated a public purchases program where at least 20 per cent of the total annual purchases of the Federal Government and its dependents will be bought from domestic SMEs. It also put in place a Productive Chains Program to prevent Mexican enterprises from being dropped from GVCs because of their financial weaknesses.

SMEs' participation in GPCs

1. Current situation

Currently, the level of SMEs' participation in the GPCs is considered to be generally low. It is difficult to get the exact figures to indicate the level of SMEs' participation within the existing GPCs. Nevertheless, a recent study by Wignaraja (2012) covering five Asian economies shows that SMEs are

minor players in production networks as only 22 percent of SMEs participate within the production networks. Large firms are the major players in these networks with a participation ratio of 72.1 percent (Table 21).

Table 21 - Role of SMEs and Large Firms in Production Networks

	All Economies	Malaysia	Thailand	Philippines	Indonesia	Viet Nam
Number of firms in PN	2203	646	619	352	206	380
PN firms as % of all firms	37.3	59.7	59.3	26.9	14.5	36.4
SMEs in PN as % of all SMEs	22	46.2	29.6	20.1	6.3	21.4
Large firms in PN as % of all large firms	72.1	82.4	91.1	51.1	52	64.6

Note: SME is defined as firms with 1 to 99 employees.

Source: Wignaraja (2012).

Another data from the World Bank's Enterprise Surveys provided more or less similar conclusion. The percentage of firms exporting directly or indirectly tends to be less, as the size of firms gets smaller (Table 22). Using sales figures, smaller-sized firms also tend to export less as compared to large firms.

Table 22 - Percentage of Firms Exporting Directly or Indirectly

Economy	Percent of firms exporting directly or indirectly (at least 1% of sales)	Economy	Percent of firms exporting directly or indirectly (at least 1% of sales)	
Chile (2010) - S	4.4	Indonesia (2009) - S	1.6	
Chile (2010) - M	12.4	Indonesia (2009) - M	14.2	
Chile (2010) - L	33.5	Indonesia (2009) - L	55.3	
Korea (2005) - S	7.4	Mexico (2010) - S	2.8	
Korea (2005) - M	33.3	Mexico (2010) - M	14.4	
Korea (2005) - L	52.9	Mexico (2010) - L	29.1	
Malaysia (2007) - S	30	Peru (2010) - S	3.8	
Malaysia (2007) - M	54.5	Peru (2010) - M	21.4	
Malaysia (2007) - L	82.7	Peru (2010) - L	46.5	
Philippines (2009) - S	5	Russia (2012) - S	9.1	
Philippines (2009) - M	16.5	Russia (2012) - M	14.6	
Philippines (2009) - L	29.8	Russia (2012) - L	23.6	
Thailand (2006) - S	40.7	Vietnam (2009) - S	5.1	
Thailand (2006) - M	58.3	Vietnam (2009) - M	23.2	
Thailand (2006) - L	89.5	Vietnam (2009) - L	53.3	

Note: Small firms (S): 5–49 employees; medium (M): 50–199 employees; large (L): above 200 employees. The indicators are computed using data from manufacturing firms only.

Source: The World Bank, Enterprise Surveys (http://www.enterprisesurveys.org).

a. Positions of SMEs within GPCs

Generally, SMEs participate in GPCs as subcontractors or peripheral suppliers although the level of participation varies among SMEs due to varied sophistication of their skills and technology. Mostly, SMEs are seen as second- or third-tier suppliers in GPCs.

Figure 17 below shows an abstraction of how SMEs are positioned within a manufacturing GPC3. The main role is played by a lead firm, usually the original manufacturer of the final product, that has extended responsibilities to manage the production procedures and set product standards along the chain. Large firms provide semi-final products as first-tier suppliers, and they are supported by other large firms and SMEs as second-tier suppliers.

The second-tier SMEs could then be supported by a web of other lower-tier SMEs. It would be easier to enter a GPC as a lower-tier supplier of parts and components, but these positions tend to be unstable as they can be easily replaced by other competing SMEs. Thus one challenge for SMEs in GPCs is to move up the tiers by increasing the value-added content of their activities.

Japanese machinery and automobile industries are good examples of this case. The lead of the GPCs typically consists of large MNCs, such as Sony, Panasonic, Honda, and Toyota. They are assemblers of electric appliances and automobiles, and manufacturers of complete products. The first tier is occupied by mostly large electric or automobile component factories; they source materials from second-tier medium to large firms. Further down the chain, micro, small and medium enterprises make up the lower tiers. A 2009 study noted that, for the Toyota production chain, more than 30,000 firms have indirect links with the lead firm Toyota, while Toyota itself only transacts directly with hundreds of them.

Lead firm(s) **End-tier suppliers** Third-tier suppliers Second-tier suppliers First-tier suppliers SME(s) SME(s) large firm(s) Large firm(s), Original manufacturer SME(s) perhaps MNCs (large firm, perhaps SME(s) SME(s) MNC) Large firm(s) SME(s) SME(s) SME(s) Raw material Component network Final product & (Semi-) Final product network Distribution network Global production chain

Figure 17 - SMEs' Role in GPCs

Source: UNIDO 2001.

b. Upgrading of SMEs along GPCs

GPCs are constantly evolving, and so does the position of SMEs along the chains. There are successful cases where a lower-tier SME enters a GPC as an end-tier supplier, takes advantage of new

opportunities offered by globalization, upgrades its products and production processes, expands the domestic market shares, and eventually becomes a higher-tier SME or even a large firm.

The Thai automobile industry is a good example (Figure 18). There are fourteen foreign joint ventures assemble cars that are ready for the markets; and they are supported by around 1,800 other firms, majority of which are SMEs. Some local SMEs (shown as Pure Thai) are able to compete with foreign ventures (shown as Foreign Majority), because of successful upgrading to meet international market standards. Among SMEs in the APEC region, there are always an elite few that make the leap 'from garage to great', such as Microsoft, Apple, Foxconn, HTC, etc.

A small but significant number of SMEs in Japan, Korea and Chinese Taipei have also expanded their operations abroad (Charles, 2010).

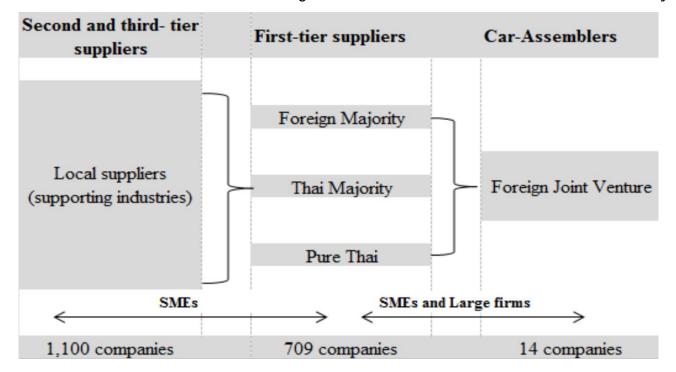


Figure 18 - Structure of GPC in Thai Automobile Industry

Source: Punyasavatsut, 2007.

c. Value added of SMEs in GPCs

Although SMEs make up the majority of participants in GPCs, the overall value contributed by SMEs is in fact small. To examine the value added by enterprises at different tiers will require a mapping of the value chain of the GPC, which can be very difficult due to sensitivity of firm-level financial information.

A recent study by UNCTAD on the Colombia automobile industry shows that the largest value-added originates from car assembly (performed by the automotive lead firm), which generates over 60 percent of total output value; while the overwhelmingly large number of SMEs, manufacturing all the components, only account for less than 40 percent of the total value (UNCTAD, 2010).

A study on the iPod value chain also confirmed that although the number of component suppliers providing low-value parts is quite large, the value added accredited to them is only a small share. In

addition, these component suppliers typically compete with close substitutes, which eliminates the potential for above-normal profits (Jason, Kenneth and Greg, 2008).

Across different industries, a major part of value added along the GPCs stems from innovation, design and branding, as well as the organization and management of the GPCs, and these activities are controlled by large enterprises or MNCs, leaving SMEs with a limited share of value added and thus limited capital to grow.

2. Barriers to SMEs' participation in GPCs

Although there are substantial benefits of SMEs' participation in GPCs, the process itself is not a smooth ride. UNCTAD (2009) noted that the competitive performance of Asia-Pacific SMEs has been constrained by a range of well-known and studied factors such as higher costs in purchasing inputs; lower scale and/or bargaining power; limited managerial capacity and skills; lower ability to obtain information on potential markets and buyers; limited capabilities to respond to market opportunities in terms of meeting demands for large volumes, standards and certification, and regularity of supply; and constraints in accessing factors and support services such as training and skill development, market intelligence, logistics, technology and financing. In the issues paper, discussion is focused on four key challenges: global standards, finance, human resources, and changing business practices.

a. Global standards

While meeting the standards of MNCs is the prerequisite to enter into and stay in the GPCs, these standards never stay static. Therefore adapting to the evolving standards poses a challenge for SMEs to maintain their position in the chain. Recent experience shows that the GPC standard systems are getting more complex.

Besides international agreed standards, there are industry specific standards, region specific standards, firm specific standards, as well as environmental and labor standards (UNESCAP, 2007). SMEs need to continuously enhance their technical knowledge and capabilities to meet these standards to gain a strong foothold in GPCs.

b. Finance

Lack of finance, as a barrier of SME development, occurs before and also after SMEs' entry into GPCs. Before becoming a supplier or an affiliate of an MNC, SMEs need to make potentially large upfront investments to get the production process ready and to meet strict standards. The up-front investments are also usually highly specific to the product requirements of MNCs and could put SMEs in a lock-in position to a particular international buyer, and a potentially disadvantaged negotiation position.

Once in the chain, due to power imbalance between MNCs and SMEs, SMEs need to accept many 'unfavorable' terms to stay in business, one of which is late payments. Late payments harm the cash flows within these small enterprises and increase the cost of operating capital. If managed poorly, the situation could get worse, and it could even cause the business to fail. Besides, SMEs have a limited range of financial resources and access compared to larger enterprises.

Given the nature of being small, banks tend to impose tighter lending conditions and stringent risk controls on SMEs, and limit SMEs' access to relatively sophisticated credit options, such as factoring. Investors, both foreign and domestic, also hesitate to invest in SMEs due to their limited capacity to ensure information transparency. In addition, financial illiteracy restricts SMEs' access to finance and compliance with existing finance facilities.

The World Bank's Enterprise Surveys data shows that access to finance is within the top three business environment constraints for firms. Other obstacles include labor regulations, inadequately educated workforce, practices of the informal sector, and tax rates. Comparing with the world average figure of 31.7 percent (which means 31.7 percent of firms surveyed around the world considered finance as a constraint on their businesses).

SMEs in some APEC economies face more severe constraints in gaining access to finance, especially for the category of 'small firms' (5-19 employees). Access to finance is less of a barrier for larger firms; most of the large-firm figures for APEC economies fall below the world average of 31.7 percent.

c. Human resources

On human resources, it has always been difficult for SMEs to attract, retain, and motivate high quality human capital. Compared to the organized and structured human resource strategy of MNCs, SMEs tend to face high staff turnover, low motivation among employees, and difficulties in building human capital.

There is a general concern about the career structures of SMEs, which have no guarantee on promotion and training, thus making attracting and retaining high caliber human resources very costly. Lack of qualified staff thus weakens SME's competitiveness and hinders their development.

d. Changing international business practices

Besides standards, trends in international business practices can significantly affect SMEs and potentially could alter their growth paths. Across a wide range of industries, anticipated delivery cycles are getting remarkably shorter, thus meeting tight deadlines becomes a test for SMEs to survive. In addition, more and more attention is drawn to business operations that reflect social and environmental objectives, such as corporate social responsibilities, where SMEs together with MNCs could play a bigger role in mutually beneficial partnership.

Especially in GPCs that supply advanced markets, SMEs increasingly struggle with the confusion between adopting these 'best practices' and maintaining a competitive advantage in costs, even though corporate social responsibility could yield significant benefits for SMEs in the long run

APEC's involvement in SME issues

Although enhancing SMEs' participation in GPCs as the next generation trade and investment issue is a recent initiative in APEC, APEC has long been involved in supporting SMEs to participate in

global trade through building and improving the doing business environment in the region and initiating policies to enhance the capacity of SMEs.

Within the framework of GPCs, a central challenge of integrating production involves shipping different elements among geographically distributed production sites. It will be really difficult, even impossible, for local enterprises to participate and remain competitive in the GPCs, if there are cumbersome trade procedures, unreasonable clearance charges, etc. APEC has over the years, made substantial efforts to create a favorable business environment.

On the ground, work has been done on reducing tariffs, dismantling non-tariff measures, streamlining trading procedures and establishing agreements to mutually recognize matching standards and certificates.

SME-related initiatives within APEC

APEC has set up a specific working group focusing on SMEs issues. In 1995, APEC established the SME Working Group (SMEWG) with the initial objective to assist SMEs to improve their competitiveness and to facilitate a more open trade and investment environment. The SMEWG works on fostering an enabling business environment for SMEs to grow and develop into export-ready (internationalized) firms, through the sharing of information on best practice initiatives and conducting capacity building activities.

In 2007, a joint OECD-APEC survey was carried out in the context of the study 'Removing Barriers to SME Access to International Markets'. The survey investigated the type and intensity of barriers in accessing international market perceived by SMEs.

The results indicated that numerous internal and external obstacles hindered the SMEs' participation in globalization process. The top five barriers were in obtaining reliable foreign representation; identifying foreign business opportunities; limited information to locate/ analyze markets; maintaining control over foreign middleman; and inability to contact potential overseas customers.

Particularly on facilitating SME's participation in GPCs, in 2011 a discussion paper on Enhancing Small and Medium-Sized Enterprises Participation in Global Production Chains (2011/SOM3/044) was circulated at the APEC Committee on Trade and Investment (CTI) for consideration. In the same year, the Initiatives to Address the Top Barriers SMEs Face in Trading in the Region (2011/MRT-SMEMM/002) provided important groundwork to further explore possible avenues to foster SME's involvement as supporting industries of GPCs.

The statement of the APEC Ministerial Meeting (AMM) in 2011 also indicated nine trade barriers which impeded SMEs' international trade, and that APEC members should make concrete actions to contribute to reducing those barriers (appendix V).

Additionally, The APEC STAR Database initiative (http://www.servicestradeforum.org) could also be useful to help SMEs to get more information about market access regulatory requirements across a range of services sectors as well as to take advantage of new export opportunities.

The SMEWG Strategic Plan for 2013-2016, endorsed by APEC Ministers in 2012, provides a roadmap to address critical issues and concerns pertaining to the growth of SMEs and micro enterprises (MEs) in the APEC region.

Three priority areas for action are: (1) building management capability, entrepreneurship and innovation; (2) financing; and (3) business environment, market access and internationalization. In order to build the entrepreneurship and innovative capability as well as to support the internationalization of SMEs, APEC decided to further strengthen their previous initiatives in facilitating the participation of SMEs in GPCs.

Currently, APEC has started a process of mapping the regional supply and value chains of specific industries, which could provide a clearer picture on how these chains are working and how to help SMEs to plug into these chains and networks, based on identified chain-related opportunities, priorities and constraints.

General Conclusions

SME have a leading role in economic growth and development as they represent a crucial source of employment and aviation. However, there are still major barriers for their sustained development and internalization. The main tasks, facing the APEC, are:

- to promote the creation of new business;
- to provide SME internationalization;
- facilitating SME access to finance;
- to develop integrated information tool to stimulate their involvement into the global trade system, global production and supply chains.

CHAPTER 5. REVIEW OF EXISTING INFORMATION SYSTEMS / TOOLS FOR SMALL AND MEDIUM ENTERPRISES IN THE SPHERE OF INTERNATIONALIZATION AND ACCESS TO INTERNATIONAL MARKETS

Role of the Informational Support for Small and Medium Enterprises

Economic relations are changing under the influence of objective laws of development. Modern society is informational in its essence. This gives business new opportunities and creates appropriate ideas. It can be argued that the optimal provision of information resources to enterprises is currently the basis for successful development of business and increase of its efficiency.

The aforesaid is especially relevant for small and medium-sized enterprises, as they felt most acutely the problems of formation of favorable competitive environment and the search of cost-effective ways to promote their products at the market of goods and services.

The existence of SMEs depends on how detailed, timely and properly they manage to track information about markets and goods they are working with. Such information can provide a strategic advantage over competitors. The situation becomes much more complicated while working in several markets in different regions. The amount of information and sources where it comes from can be enormous.

The owners of required information resources are often different structures of authorities, therefore, it is impossible to solve the problem without state support.

The experience of business development of the APEC economies clearly shows that alongside with the need for financial and property support of small business, provision of small and medium enterprises with the necessary information resources is becoming increasingly important for the entrepreneurship development and management of civilized business.

The solution of this problem is possible only in the presence of a complex system of creation and distribution of business and general economic information among the APEC economies. This system should be integrated with all existing elements of infrastructure for entrepreneurship support of the economies participating in APEC, as well as all information resources that are accessible.

The purpose of activity of the state bodies of APEC economies in this area must be to expand the access of entrepreneurs to information resources, including regional and international level, through the creation of a unified system of information support of small and medium business on the territory of APEC.

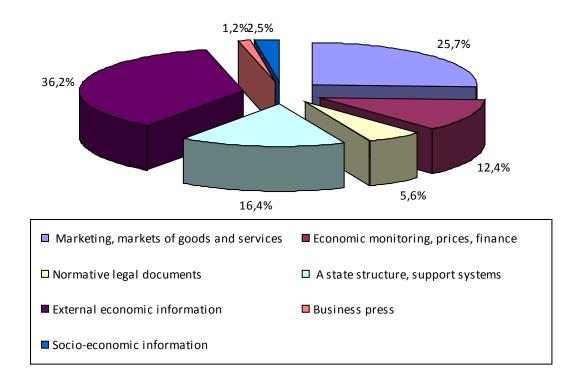
The information Needs of Small and Medium Enterprises

The analysis of the practice of development of the system of information support of small and medium businesses allows to structure data that is used in support of SMEs and that represents the greatest interest for entrepreneurs.

Based on the data of the research conducted by the experts of the Russian Agency, the greatest demand among small and medium-sized enterprises (300 companies) is related to the following types of information resources (*Diagram 17*).

Under the impact of the crisis SMEs information priorities of APEC economies have been shifted to the field of search for new partners in commercial activity, as well as marketing research of certain market segments, and not only within a specific region, but also beyond.

Diagram 17 – Priorities Structure of the Small and Medium Enterprises for Information Tools

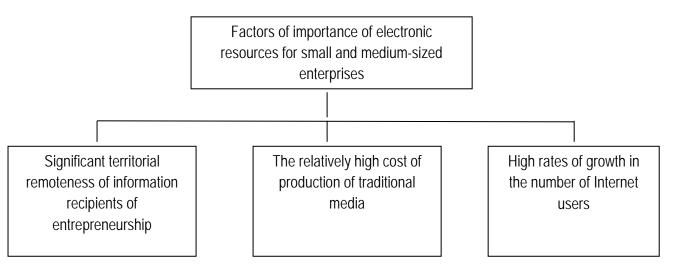


According to forecasts, information technology, implemented in computer networks, take the leading position and weaken the role of such traditional forms as television, radio and press, surpassing them on the following parameters:

- the number of channels to transmit information;
- the volume of the transferred information;
- independent time usage;
- costs;
- the number of potential customers.

The relevance of electronic information for APEC economies, particularly for developing ones, is also determined at the present time in the following way (*Figure 19*).

Figure 19 - Factors of importance of Information Systems for Small and Medium Enterprises



Such factors as significant increase of the volume of transmitted information, the necessity of a unified approach to searching and processing data, the growing requirements of their speed, necessitates the use of modern information technologies, including computer networks and electronic forms of information presentation.

To increase the efficiency of the existing system of information support of SMEs requires a clear definition of categories of its users and the further development of information resources, taking into account their interests.

Users of the Informational Support System for Small and Medium Enterprises

The analysis revealed the following target groups of users of information resources in the APEC economies (Figure 20).

The business community, Citizens interested in public-political parties, business cooperation or movements and individuals willing to be aware of the situation regarding small and interested in the development of small and medium business medium business Division of authorities, **Business support** who need information structures about SMEs Target groups of users Unions and of information resources Enterprises and associations of in the APEC economies organizations entrepreneurs Start-up businesses and The existing small and companies that want to medium companies, develop their own individual business entrepreneurs Trade and economic Specialized informational, marketing and consulting missions, trade representations of foreign centres countries and trade offices abroad

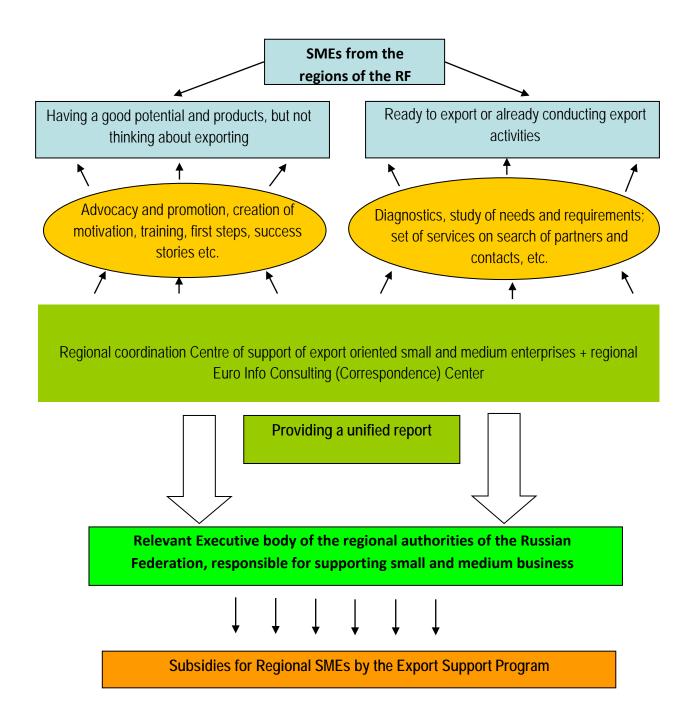
Figure 20 - Target Groups of Information Resources Users

Characteristics of the Existing Informational Support System for Small and Medium Enterprises

Analysis of the system of information support of small and medium enterprises existing on the territory of the APEC economies shows that in the result of the activities of organizations of SME infrastructure support entities of the work are established and operate a national network and systems providing for the basic needs of entrepreneurs in the information.

In most APEC economies, the system of support of small and medium enterprises is organized more or less in the same way. As an example, Figure 21 represents scheme for the principle of operation of such system in Russia.

Figure 21 – Support System of Small and Medium Enterprises in Russia



At the same time, the current system does not fully implement a comprehensive integrated approach to the development of information resources and organization of information support of entrepreneurs.

The system of information support of SMEs in APEC economies is mainly formed in the course of implementation of programs of development and support of small and medium-sized enterprises.

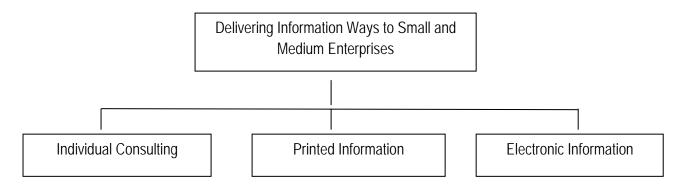
The decision on questions of information support of small and medium business of the APEC economies, as a rule, is carried out in the following directions:

- gathering and analyzing information on the status of SMEs during development and implementation of programs and projects of small and medium businesses;
- informing entrepreneurs about developed and submitted regulatory projects and administrative documents by public authorities and, as well as informing on the results of rulemaking;
- infrastructure development of SMEs in the direction of increasing the efficiency of information and consulting services, training and retraining;
- publication of the information according to the downloaded order.

It should be noted that the development of each of the above-mentioned areas depends directly on the availability of adequate resources for implementation of separate elements of the program.

Information support systems of SMEs in APEC economies use different methods to bring the necessary information to subjects of small and average business. Typically, these include (Figure 22):

Figure 22 - Delivering Information Ways to Small and Medium Enterprises



Individual Consulting

Specialized consultancy support to new entrepreneurs, service support of SMEs (counselling, information services, and training) is a traditional mechanism for enterprise development in most countries of the world.

However, it should be noted that with the development of Internet, and improving access to information resources of Internet the role of personal consulting is reduced. Invariably there remains a high interest among small and medium-sized enterprises of APEC economies towards consulting and information support of entrepreneurs in methodology development and implementation of business projects, legal aspects and issues of creation of the enterprises in the territory of a particular state, region.

An important condition for the development of this direction is provision of free of charge consulting and information services. In this regard, the planned information resource for SMEs in APEC economies must meet all these requirements.

Printed Information

Traditionally the most developed and available means of information support for business is the printed matter.

It should be noted that the mass print runs and wider distribution of printed editions including the free of charge ones is undoubtedly a positive factor and it plays a positive role in the information support of SMEs.

State bodies, public organizations and associations, development institutes in some APEC economies are actively using the print media as a tool of information support of small and medium-sized enterprises. In periodicals it became rather traditional to have special sections devoted to legal consulting of SMEs and the rights of consumers, information about goods and services, as well as sections for the official information.

Through the mass media the APEC economies are in constant dialogue with small and mediumsized businesses on the most important issues.

Electronic Information

New information technologies rapidly developing in the world, including Internet have identified a new, extremely important in the present economic conditions, the type of storage and data – the electronic one.

APEC economies have already accumulated practical experience of creation and functioning of electronic means of information support of small business.

To accelerate information exchange with users of information resources organizations of an infrastructure of support of small business they actively use the opportunities of new information technologies.

In recent years, the governments of APEC economies in cooperation with business associations are actively working on creation of special services dedicated to the issues of information support of SMEs.

Such servers provide information about the existing system of support of small and medium business, programs, projects of development and SMEs support, various information for entrepreneurs, online calendar of events, "hot line" and other information.

Analysis of the results of the work done on creation of electronic media in the APEC economies leads to the conclusion that sustainable system of information support of SMEs on the basis of modern electronic systems and technologies is the necessary condition for the further development of entrepreneurship in the Asia-Pacific region.

It is necessary to provide the appropriate level of SMEs information support and information exchange, including the development of perspective plans, projects and programs, formation of positive public opinion about entrepreneurship.

There is a need to form a comprehensive operational information support both for current and potential subjects of small and medium business that includes all APEC economies, organizations of remote access to information resources, the organization of the interactive system of business support.

While creating such kind of information system it should be taken into account that the role of information in the world is rapidly growing. In the information economy information is one of the basic resources used by organizations.

Modern computer technologies allow to generate huge amounts of information. The problem is not the lack of information in general, but lack of exact information that requires a specific consumer - SMEs and exactly in the form in which it is needed. Unfortunately, the costs of gathering and processing all available data tend to grow without any limits. The rapid development of Internet quickly increases the amount of available information.

Thus, it becomes more and more urgent to optimize information flows. Decisions about the relative importance of gathering particular types of information and the expected costs for it are often made simply by intuition. Often the real costs are significantly higher than the planned ones. The whole process goes by trial and error method.

Analysis of the Existing Informational Systems / Tools for Small and Medium Enterprises in APEC

It is possible to divide the whole spectrum of information resources available in the APEC economies into several groups depending on the resource stakeholder:

- state resources;
- resources by the credit organizations;
- resources by the SME service providers;
- public organizations;
- social networks (blogs, forums);
- other information resources.

It is necessary to single out the following information resources applied in the APEC economies at present:

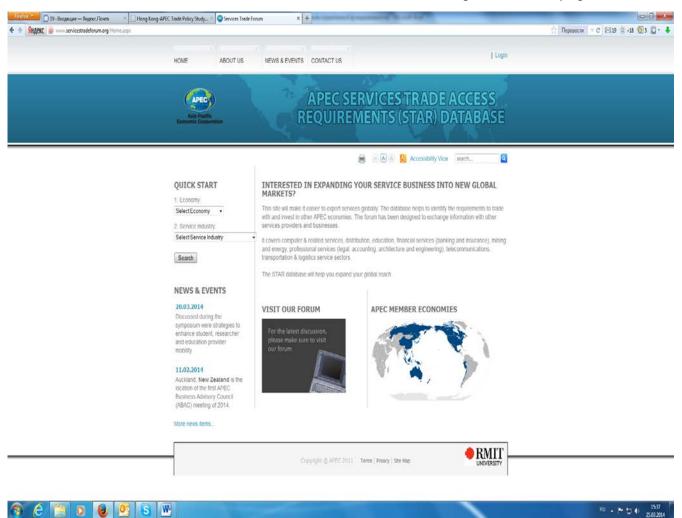
- the Australian Service Trade Access Requirements database - «STAR».

Table 23 - Brief Characteristics of «STAR»

Name	STAR (Services Trade Access Requirements)
Web-page	http://www.servicestradeforum.org
Economy/ region	APEC, Australia
Year of establishment	2010
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information

SMEs' spheres of activities	Financial Services, Mining and Energy Services, Professional Services, Telecommunications, Transport and Logistics, Education Services, Distribution Services, Computer and Related Technology Services.
Representatives offices / global network	21 APEC economies: Australia; Brunei; Viet Nam; Hong Kong, China; Indonesia; Canada; China; Chinese Taipei; Malaysia; Mexico; New Zealand; Papua – New Guinea; Peru; Republic of Korea; Russia; Singapore; USA; Thailand; the Philippines; Chile; Japan

Figure 23 - Web-page of «STAR»



- «Team Canada Inc.»

Table 24 - Brief Characteristics of «Team Canada Inc.»

Name	Team Canada Inc.
Web-page	http://www.gov.mb.ca/trade/export/links/ex_exsrce.html
Country / region	Canada

Year of establishment	2001
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
	Interactive instruments for support of export-oriented SMEs
SMEs' spheres of activities	- Financial Services, Other Consumer Products & Services, Consulting, Engineering.
	- Alternative Energy Sources, Environmental Industries & Services, and Safety & Security, Hydroelectricity, Petroleum.
	- Building Products, Packaging, Furniture, Architectural, Construction, and Project Management.
	- Farm & Fish Products, Processed/Packaged Food, Products, Health Biotech, Health and Wellness.
	- Agri-Business.
	- Cultural/New Media, Aerospace, Agriculture Biotech.
	- Agribusiness and Technology, Defense and Industrial Benefits, Component Manufacturing, Transportation Equipment.
Representatives offices / global network	No

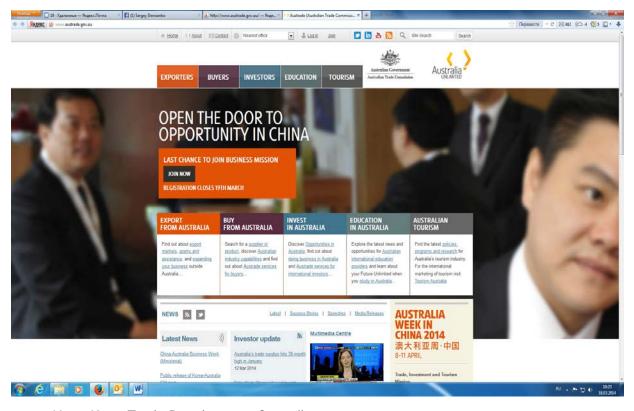
Figure 24 - Web-page «Team Canada Inc.»



Table 25 - Brief Characteristics of «Austrade»

Name	Australian Trade Commission (Austrade)
Web-page	http://www.austrade.gov.au/
Country / region	Australia
Year of establishment	1985
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
SMEs' spheres of activities	Agribusiness and food, Digital technologies, Major infrastructure, Medical science and technologies, Materials science and technologies, Resources and energy, Tourism infrastructure.
Representatives offices / global network	Argentina; Bangladesh; Brazil; Brunei; Canada; Chile; China; Columbia; the Czech Republic; Fiji; France; Germany; Ghana; Hong Kong, China; India; Indonesia; Israel; Italy; Japan; Kenya; Republic of Korea; Kuwait; Malaysia; Mauritius; Mexico; Mongolia; Morocco; Myanmar; New Zealand; Pakistan; Papua New Guinea; Peru; the Philippines; Poland; Russia; Saudi Arabia; Singapore; South Africa; Spain; Sri-Lanka; Sweden; Chinese Taipei; Thailand; Turkey; UAE; Great Britain; USA; Viet Nam

Figure 25 - Web-page of «Austrade»



- «Hong Kong Trade Development Council»

Table 26 - Brief Characteristics of «Hong Kong Trade Development Council»

Name	Hong Kong Trade Development Council
Web-page	http://www.hktdc.com/en-buyer/
Economy/ region	Hong Kong, China
Year of establishment	1966
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
	Interactive instruments for support of export oriented SMEs
SMEs' spheres of activities	Accounting Service, Advertising, Marketing & Public Relations Service, Design & Brand Strategy, Information Technology Service, Legal Service, Logistics & Transport, Quality Inspection & Testing, Technology, R&D, Auto Parts & Accessories, Baby Products, Electronics & Electricals, Food & Beverages, Garments & Textiles, Gifts & Houseware, Health & Beauty, Leather Goods & Footwear, Timepieces, Jewellery & Optical Goods, Toys & Sporting Goods.
Representatives offices / global network	Thailand, China, Viet Nam, Indonesia, Malaysia, India, Japan, Republic of Korea, Chinese Taipei, Australia, Spain, Hungary, Germany, Turkey, Great Britain, Italy, Russia, France, the Czech Republic, Sweden, Poland, UAE, South Africa, USA, Canada, Mexico, Chile, Brazil

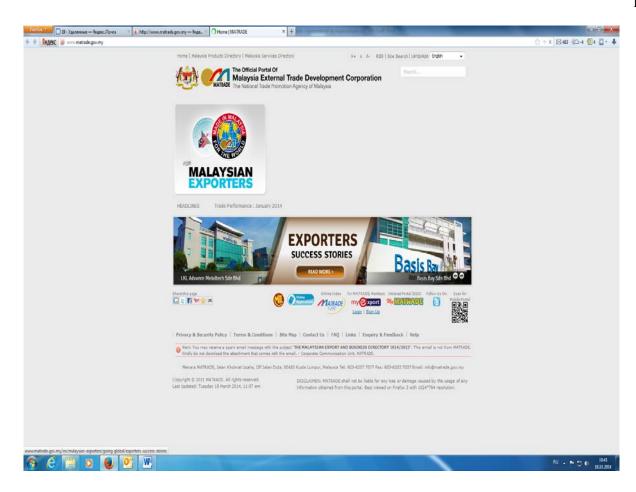
Figure 26 - Web-page of Hong Kong Trade Development Council



Table 27 – Brief Characteristics of «MATRADE Malaysia»

Name	MATRADE Malaysia
Web-page	http://www.matrade.gov.my
Country / region	Malaysia
Year of establishment	1992
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
	Interactive instruments for support of export oriented SMEs
SMEs' spheres of activities	 Products: agricultural produce, apparel, garments & accessories, automotive, parts & components, beverages, building & construction materials & hardware, chemicals, minerals & alloys, computer hardware, computer software, consumer & industrial electrical & electronic prod, defence product and equipment, electrical & electronic parts and components, fashion accessories & textiles, footwear, furniture, gift, souvenir & jewellery, gloves, household products, machinery & equipment, medical products, packaging & containers, palm oil products, pharmaceutical, toiletries & cosmetics, plastic products, prepared food, rubber products, stationery, telecommunication, textiles, yarns & other related materials, toys and sports equipment, transport equipment & parts, wood products. Services: architectural services, business services, construction and related services, distribution and logistics services, education services, engineering services, entertainment, environment protection services, financial services, franchise, health services, information & communication technology, legal and accounting services, oil and gas, other professional & technical services, printing & publishing services, support services.
Representatives offices / global network	Egypt, Kenya, South Africa, Australia, Uzbekistan, China, Japan, Republic of Korea, Chinese Taipei, France, Germany, Hungary, Italy, the Netherlands, Poland, Russia, Great Britain, Ukraine, Turkey, Brazil, Chile, Mexico, Argentina, Canada, USA, India, Cambodia, Indonesia, the Philippines, Thailand, Viet Nam, Myanmar, Saudi Arabia, UAE, Qatar

Figure 27 - Web-page of «MATRADE Malaysia»



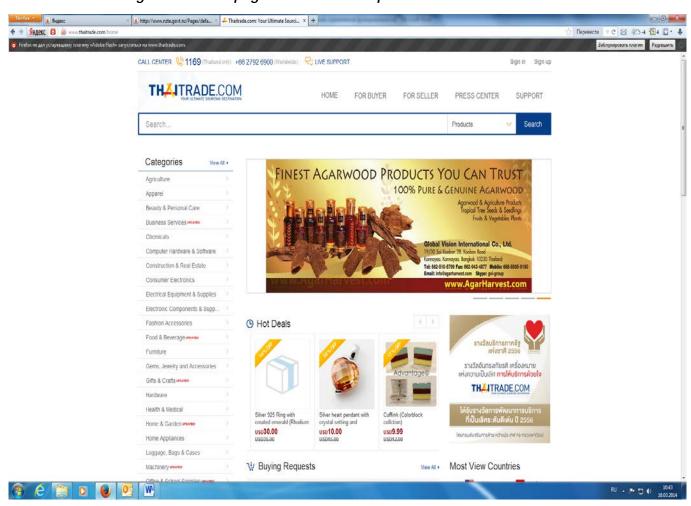
- «Thailand Department of International Trade Promotion»

Table 28 – Brief Characteristics of «Thailand Department of International Trade Promotion»

Name	Thailand Department of International Trade Promotion (DITP)
Web-page	http://www.thaitrade.com/home
Country / region	Thailand
Year of establishment	2002
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
SMEs' spheres of	Agriculture, Apparel, Automobiles & Motorcycles, Beauty & Personal Care,
activities	Business Services, Chemicals, Computer Hardware & Software,
	Construction & Real Estate, Consumer Electronics, Electrical Equipment &
	Supplies, Electronic Components & Supplies, Energy, Environment, Excess
	Inventory, Fashion Accessories, Food & Beverage, Furniture, Gems, Jewelry
	and Accessories, General Industrial Equipment, Gifts & Crafts, Hardware,
	Health & Medical, Home & Garden, Home Appliances, Lights & Lighting,
	Luggage, Bags & Cases, Machinery, Measurement & Analysis Instruments,
	Mechanical Parts & Fabrication Services, Minerals & Metallurgy, OTOP,

	Office & School Supplies, Organic Products, PM Award, Packaging & Printing, Rubber & Plastics, Security & Protection, Service Equipment, Service Trade, Shoes & Accessories, Sports & Entertainment, Telecommunications, Textiles & Leather Products, Thai Select, Thailand Trust Mark (TTM), Tools, Toys & Hobbies, Transportation
Representatives offices / global network	Niger; Ghana; Egypt; Kenya; South Africa; Viet Nam; Indonesia; Malaysia; the Philippines; Cambodia; Singapore; Laos; Myanmar; China; Hong Kong, China; Japan; Republic of Korea; Chinese Taipei; Hungary; Russia; the Czech Republic; Poland; UAE; Turkey; Saudi Arabia; Teheran; Israel; USA; Mexico; Canada; Australia; Argentina; Chile; Brazil; Bangladesh; India; Denmark; Germany; the Netherlands; Great Britain; Italy; Spain; France; Austria

Figure 28 - Web-page of «Thailand Department of International Trade Promotion»



- «New Zealand Trade and Enterprise»

Table 29 - Brief Characteristics of «New Zealand Trade and Enterprise»

Name	New Zealand Trade and Enterprise

Web-page	http://www.nzte.govt.nz/Pages/default.aspx
Country / region	New Zealand
Year of establishment	2003
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
	Interactive instruments for support of export oriented SMEs
SMEs' spheres of activities	Clean technology, Education, ICT, Wine, Agribusiness, Services, Food and Beverage, High Value Manufacturing, Natural products, Biotechnology, Creative, film and TV, Health, Aviation
Representatives offices / global network	Australia, New Zealand, Turkey, Germany, Great Britain, Spain, Italy, France, UAE, Thailand, Viet Nam, Indonesia, Malaysia, the Philippines, Republic of Korea, Singapore, Japan, China, Argentina, Chile, Brazil, USA, Mexico, Canada

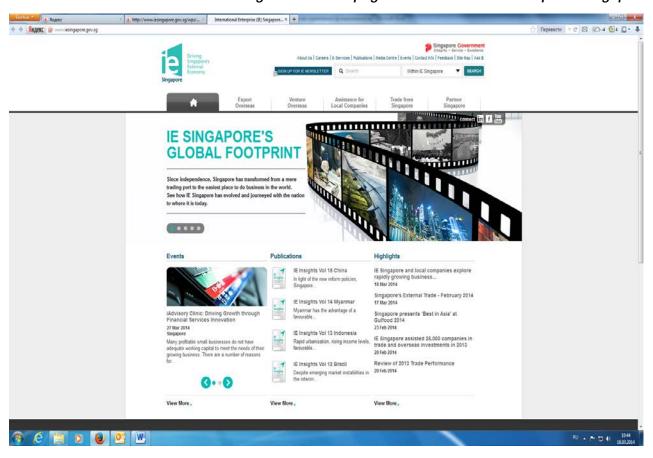
Figure 29 - Web-page of «New Zealand Trade and Enterprise»



Table 30 - Brief Characteristics of «International Enterprise Singapore»

Name	International Enterprise Singapore
Web-page	http://www.iesingapore.gov.sg/wps/portal
Country / region	Singapore
Year of establishment	2002
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
	Interactive instruments for support of export oriented SMEs
SMEs' spheres of activities	Aerospace, Consumer Electronics, Media, Medical Technology, Energy, Tourism Infrastructure, Education, Food Products, Aviation, Land Transportation, Logistics, Oil & Gas: Downstream, Oil & Gas: Upstream, Ports & Port Services
Representatives offices / global network	Australia, Brazil, China, Germany, Ghana, India, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, Myanmar, the Philippines, Qatar, Russia, Saudi Arabia, Singapore, South Africa, Chinese Taipei, Thailand, Turkey, UAE, Great Britain, USA, Viet Nam

Figure 30 - Web-page of «International Enterprise Singapore»



- «Helping U.S. Companies Export»

Table 31 – Brief Characteristics of «Helping U.S. Companies Export»

Name	Helping U.S. Companies Export	
Web-page	http://export.gov/	
Country / region	USA	
Year of establishment	1974	
Participation conditions	Free of charge on line resource	
Interaction with SMEs	Consulting, support, information	
	Interactive instruments for support of export oriented SMEs	
SMEs' spheres of activities	Aerospace & Defense, Health Technologies, Agribusiness, Industrial Equipment & Supplies, Architecture & Engineering, Information & Communication, Automotive & Ground Transportation, Manufacturing Industries, Construction, Building, & Heavy Equipment, Marine Technology, Consumer Goods & Home Furnishings, Publishing, Media, & Entertainment, Education, Security & Safety, Energy, Services, Environmental Technologies, Textiles, Apparel & Sporting Goods, Finance, Travel and Tourism, Food Processing & Packaging, Used & Reconditioned Equipment, Franchising	
Representatives offices / global network	Algeria; Argentina; Australia; Austria; Belgium; Brazil; Bulgaria; Canada; Chile; China; Columbia; Costa Rica; Croatia; Czech Republic; Denmark; Dominican; Ecuador; Egypt; Salvador; EU; Finland; France; Germany; Ghana; Greece; Guatemala; Honduras; Hong Kong, China; Hungary; India; Indonesia; Iraq; Ireland; Israel; Italy; Japan; Jordan; Kazakhstan; Kenya; Kuwait; Lebanon; Libya; Malaysia; Mexico; Morocco; the Netherlands; New Zealand; Niger; Norway; Pakistan; Panama; Peru; the Philippines; Poland; Portugal; Qatar; Romania; Russia; Saudi Arabia; Serbia; Singapore; Slovak Republic; South Africa; Republic of Korea; Spain; Sweden; Chinese Taipei; Thailand; Sweden; Turkey; Ukraine; UAE; Uruguay; Great Britain; Viet Nam; Israel	

Figure 31 - Web-page of «Helping U.S. Companies Export»

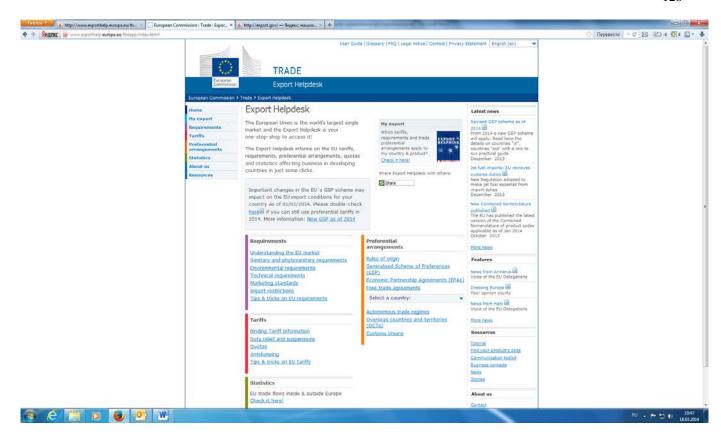


- «Export Helpdesk

Table 32 - Brief Characteristics of «Export Helpdesk»

Name	Export Helpdesk
Web-page	http://www.exporthelp.europa.eu/thdapp/index.htm
Country / region	European Union
Year of establishment	2003
Participation conditions	Free of charge on line resource
Interaction with SMEs	Consulting, support, information
SMEs' spheres of activities	Provision of information on any sphere of activity
Representatives offices / global network	EU member countries

Figure 32 - Web-page of «Export Helpdesk»



- «Enterprise Europe Network»

Table 33 - Brief Characteristics of «Enterprise Europe Network»

Name	Enterprise Europe Network	
Web-page	http://een.ec.europa.eu/	
Country / region	EC	
Year of establishment	2008	
Participation conditions	Free of charge on line resource	
Interaction with SMEs	Consulting, support, information	
	Interactive instruments for support of export oriented SMEs	
SMEs' spheres of	of Provision of information on any sphere of activity	
activities		
Representatives offices		
/ global network	Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal,	
	Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom;	
	Non EU members - Albania, Armenia, Bosnia and Herzegovina, Brazil,	
	Canada, Chile, China, Egypt, Iceland, India, Israel, Japan, Macedonia,	
	Mexico, Moldova, Montenegro, Morocco, Norway, Russia, Serbia, the Republic of Korea, Switzerland, Tunisia, Turkey, Ukraine, USA	
	Tropublic of Norda, Switzerland, Turnola, Turnoy, Oktaine, Ook	

- See more at: http://een.ec.europa.eu/about/branches#sthash.g9kLNP4v.dpuf



Figure 33 - Web-page of «Enteprise Europe Network»

- «Russian Information portal on foreign economic activities»

Table 34 - Brief Characteristics of «Information portal on foreign economic activities»

Name	Information portal on foreign economic activities	
Web-page	http://www.ved.gov.ru/	
Country / region	Russia	
Year of establishment	2011	
Participation conditions	Free of charge on line resource	
Interaction with SMEs	Consulting, support, information	
	Interactive instruments for support of export oriented SMEs	
SMEs' spheres of activities	Provision of information on any sphere of activity	
activities		
Representatives offices	51 countries of the world	
/ global network		

Figure 34 - Web-page of «Information portal on foreign economic activities»

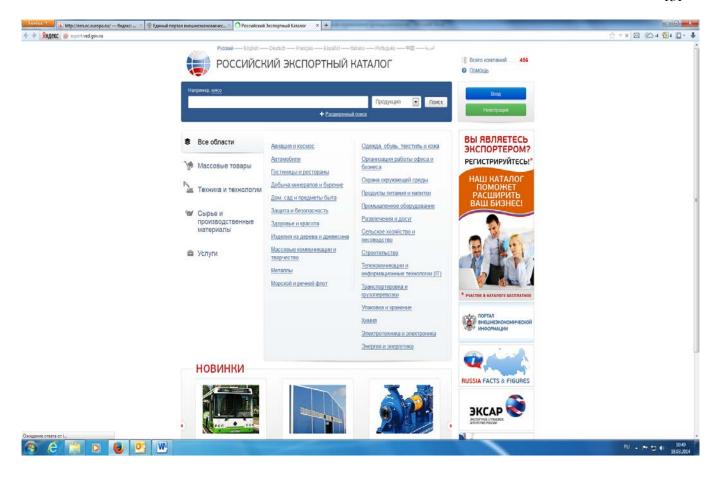


- «Russian Export Catalogue»

Table 35 - Brief Characteristics of «Russian Export Catalogue»

Name	Russian Export Catalogue	
Web-page	http://export.gov.ru/	
Country / region	Russia	
Year of establishment	2012	
Participation conditions	Free of charge on line resource	
Interaction with SMEs	Consulting, support, information	
SMEs' spheres of activities	Aeronautics and space, automotive, hotels and restaurants, minery, house, garden and home appliances, security, health and beauty, wood and wood products, mass media, metal, sea and river fleet, clothes, shoes, textile and leather, office and business organization, environment protection, food products and beverages, industrial equipment, entertainment, agriculture and forestry, construction, telecommunication and IT, transportation, packaging, chemistry, electrotecnics and electronic, energy	
Representatives offices / global network	51 countries of the world	

Figure 35 - Web-page of «Russian Export Catalogue»



The majority of the above enumerated resources cover information on the national level and have the relevant databases but with that they have no links / relations with offers and requests of SMEs from other countries. This is exactly the niche that the proposed Resource could occupy in order to organize good communication and interaction among SMEs from various countries of the world.

In order to be able to cope with such an amount of information and to build an effective and efficient system, it is necessary to apply for proper projects and initiatives from the other countries – for example, the Australian project – "Australian Service Trade Access Requirements database".

Table 36 – Analysis of Information Systems SMEs in the field of Internationalization and Access to International Markets for the APEC SMEs

Name	Description	Service
STAR	Asia-Pacific Economic Cooperation (APEC) has funded the development of a new website, the STAR database, to make it easier for service providers to: - identify the requirements to trade with and invest in other APEC economies; - exchange information with other service providers and businesses through an online forum. The STAR Database is a business-friendly, on-line tool to help services providers from APEC economies take advantage of new export opportunities. By gathering information on services market access into a single, easily accessible knowledge bank, the STAR database will increase business awareness of the regulatory requirements to trade. The STAR Database is an Australian initiative, co-sponsored by Chile, Japan, New Zealand, Mexico, Peru, the Philippines and the United States. APEC is the pre-eminent economic forum in the Asia Pacific region. Its primary purpose is to boost economic growth and prosperity in the region through trade and investment liberalisation, business facilitation and economic and technical assistance.	- make it easy to search for information on services market access and regulatory requirements by economy and sector - present information in a simple, business-friendly form incorporate regular updates of information and verification of data - provide links to relevant contacts, organisations and agencies and other material - facilitate networking and the exchange information with other services providers - provide information on news and events relevant to services developments in the APEC region
Export	The European Union is the world's largest single market and the	This resource provides detailed information on the import requirements

Helpdesk	Export Helpdesk is the one-stop-shop to access it.	for any product:
	The Export Helpdesk informs on the EU tariffs, requirements, preferential arrangements, quotas and statistics affecting business in developing countries in just some clicks.	-Specific requirements (e.g. plant health, public health, labelling, etc.) regarding the product to enter EU markets and the necessary contacts.
		- Internal taxes (VAT and excise duties) applicable in the 28 EU Member States.
		- Relevant laws, national authorities, border inspection posts, statistics.
Russian Export Catalogue	The objective is to provide Russian exporters of products and services with a simple, fast and easy to use way to set international contacts and to help them sell their products all over the world. Russian Export Catalog is created by Ministry of Economic Development of Russian Federation in order to support export of goods and services from Russia, in accordance with approved resolution of Government of Russian Federation (№ 1128-p, 29.06.2012).	 Support in making international contacts for exporters including SMEs. Expansion to new geographic markets. Representation of SMEs interests all over the world through the RF Trade Representatives network. This is a promotion instrument for SMEs that opens new markets and niches for them.
Information portal for foreign economic activities	Special service providing exporters and export oriented SMEs with full range of information needed to enter international markets	Provides information on: - Export support system in Russia. - Tariffs and customs policy in Russia. - Common Economic Environment and existing opportunities for promotion to international markets. - Various tenders organized in Russia and possibilities for participation of SMEs.

		- Contact data on the Russian production companies, exporters and importers;
		- Countries and regions including legal requirements, state regulation of foreign economic activity; access to markets, trade barriers.
		- Support to innovative projects.
		- Current and planned business missions.
		- Analytics on innovations.
		- Global trading rules.
		- Current situation and forecasts for the Russian and global economic situation, key markets of the world.
Enterprise	The Enterprise Europe Network is a key instrument in the EU's	Services:
Europe Network	strategy to boost growth and jobs. Bringing together close to 600 business support organisations from more than 50 countries,	- Technology Transfer.
Network	helps small companies the unparalleled business opportunities in	- Access to Finance.
	the EU Single Market.	- Advice on EU Law and Standards.
		- Intellectual Property Rights (IPRs).
		- Speak up on EU Law.
		- Research Funding.
		- Going International.
Team Canada	ExportSource.ca is Team Canada Inc's (TCI's) online resource	TCI's wide range of tools are designed to:
Inc.	for export information.	- Help companies become export-ready/
	Team Canada Inc. is:	- Expand their export potential or break into new markets.

- a network of more than 21 federal government departments and agencies working with provinces and territories and other partners to help Canadian businesses succeed in world markets.
- is a Canadian company's first stop en route to the information, skills, counselling, market entry support, financing and in-market assistance they need to make export venture a success.

Access to individual tools:

- Canadian entrepreneurs can find the best sources of export services with the help of the Roadmap to Exporting available in print, on CD-Rom or online.
- The popular Step-by-Step Guide to Exporting will walk them through the exporting process.
- Or Canadian entrepreneurs can prepare their own export plan with the Interactive Export Planner

Austrade

The Australian Trade Commission (Austrade) is the Australian Government's trade and investment development agency, operating as a statutory agency within the Foreign Affairs and Trade portfolio. Austrade assists Australian businesses contribute to national prosperity by succeeding in trade and investment, internationally, and promoting and supporting productive foreign investment into Australia.

The Australian Trade Commission contributes to Australia's economic prosperity by helping Australian businesses, education institutions, tourism operators, governments and citizens as they:

- develop international markets;
- win productive foreign direct investment;
- promote international education;
- strengthen Australia's tourism industry;
- seek consular and passport services.

- Help Australian companies to grow their business in international markets, including through administration of the Export Market Development Grants (EMDG) scheme and the TradeStart program.
- Provide coordinated government assistance to attract and facilitate productive foreign direct investment (FDI) into Australia.
- Promote the Australian education sector in international markets and assist Australian education providers with market information.
- Provide advice to the Australian Government on its trade, tourism and investment policy agenda.
- Develop policy, manage programs and provide research to strengthen Australia's tourism industry and to grow Australia's tourism market share.
- Deliver Australian consular, passport and other government services in designated overseas locations.
- Manage the Building Brand Australia program to enhance awareness

Austrade achieves this by generating market information and insight, promoting Australian capabilities, developing policy, making connections through an extensive global network of contacts, leveraging the badge of government offshore and providing quality advice and services.

Austrade aims to create value for our business sector, and do it in a way that represents a good investment for the taxpayer. And we seek to do all this in a way that meets or exceeds all appropriate standards of ethical behaviour.

The role is to advance Australia's international trade, investment, education and tourism interests by providing information, advice and services.

of contemporary Australian skills and capability and enrich Australia's global reputation.

Hong Kong Trade Development Council

As a statutory body, mission is to create opportunities for Hong Kong, China companies, especially small and medium-sized enterprises (SMEs), by promoting trade in goods and services worldwide. The HKTDC's offices in more than 40 major centres around the world are your global business eyes, ears and matchmakers.

Through this international network, HKTDC identifies market opportunities, organize promotional activities, cultivate business contacts and offer fresh market intelligence.

The HKTDC's offices are the first port of call for countless businesses from other economies looking for Hong Kong, China suppliers, buyers or partners.

With the help of their global network of more than 40 offices, Hong Kong Trade Development Council (HKTDC) explores markets for Hong Kong, China SMEs and connect them with business partners around the world, while offering a variety of business-enabling services. Through a spectrum of activities, the HKTDC promotes Hong Kong, China as Asia's global business platform, reinforcing its reputation as Asia's premier services hub. The HKTDC also provides a comprehensive array of trade-support seminars and other information channels to enhance Hong Kong, China SMEs' capabilities.

HKTDC helps to:

- Find Right Partners.
- Market Products and Services.

		- Provide Information and Solutions.
International Enterprise Singapore	International Enterprise (IE) Singapore is the government agency driving Singapore's external economy.	IE spearheads the overseas growth of Singapore-based companies and promote international trade. The vision is a thriving business hub in Singapore with Globally Competitive Companies (GCCs) and leading
<i>Gingaporo</i>	Trade has always been the backbone of Singapore's economy. In addition to promoting export of goods and services, IE Singapore also attracts global commodities traders to establish their global or Asian home base in Singapore. Today, Singapore is a thriving trading hub with a complete ecosystem for the energy, agri-commodities and metals & minerals trading clusters. The global network of overseas centres in over 35 locations provides the necessary connections in many developed and emerging markets.	international traders. GCCs are a critical growth engine for the next phase of Singapore's development. GCCs compete on the global stage against the very best in their industries. They contribute to Singapore's economic resilience, develop Singaporeans into global business leaders and strengthen the Singapore brand. Through the Global Company Partnership and Market Readiness Assistance, they work with Singapore-based companies in their various stages of growth towards being globally competitive.
Helping U.S. Companies Export	Export.gov brings together resources from across the U.S. Government to assist American businesses in planning their international sales strategies and succeed in today's global marketplace. Export.gov was created to provide better customer service for businesses interacting with the Federal Government. The U.S. Department of Commerce's International Trade Administration manages Export.gov as a collaborative effort with the 19 Federal Agencies that offer export assistance programs and services.	From market research and trade leads from the U.S. Department of Commerce's Commercial Service to export finance information from Export-Import Bank and the Small Business Administration to agricultural export assistance from USDA, Export.gov helps American exporters navigate the international sales process and avoid pitfalls such as non-payment and intellectual property misappropriation.
New Zealand	New Zealand Trade & Enterprise (NZTE) is New Zealand's	NZTE's programs and services are designed to support businesses to

Trade and Enterprise

international business development agency. The role is to help SME grow bigger, better, faster in international markets.

NZTE's strategy supports the Government's Business Growth Agenda which creates conditions that encourage successful businesses to grow globally.

NZTE's customers are New Zealand's internationalising businesses. It works with approximately 1500 - 2000 businesses at any one time & focus intensively on an active portfolio of 500 that have the scale and ambition to succeed internationally.

NZTE has 10 offices in New Zealand & staff in 36 locations around the world. We work in partnership with New Zealand businesses, helping to build strategic alliances & develop commercial relationships. We connect them with opportunities & contacts in international markets, share our knowledge, experience & networks to help businesses develop capability & scale.

grow and succeed internationally and are focused primarily on refining strategy, improving performance, building global networks, and inmarket support for business development.

It aligns the service with different stages of a business lifecycle - from starting and growing a business, through to exporting and operating internationally - and help address the scale and distance issues faced by New Zealand exporters.

Thailand Department of International Trade Promotion

Thaitrade.com is an official Thailand B2B E-Marketplace established by Department of International Trade Promotion (DITP), Ministry of Commerce (MOC) Thailand, The Royal Thai Government. The main purpose of thaitrade.com is to enhance trade opportunity of Thai exporter under the idea of pooling most of Thai export products in one e-marketplace and to be the most effective way for our trade partners from over the world to find the required products from Thailand.

Vision: To be one of Asia's leading trade promotion organizations.

- Develop and promote environmentally-friendly products and services as well as support value creation of export products and services.
- Develop new trade channels as well as establish networks with trade partners to complement business operations.
- Increase the competitiveness of Thai entrepreneurs in the international trade arena, especially SMEs and OTOP.
- Promote production cost reductions as well as build and expand trade logistics networks.
- Publicize the image of Thailand as a high-quality product producer.

Mission:

- To expand markets for Thai products and services.
- To promote value creation of Thai products and services.
- Increase the competitiveness of Thai entrepreneurs.

Strategic Plan: Promote exports of products and services with a pro-active approach.

- Continuously develop organization's personnel and trade information system.
- Promote and increase the competitiveness of Thai entrepreneurs in manufacturing products that meet the international standards as well as expanding production base overseas. Promote production cost reductions as well as build and expand trade logistics networks.
- Promote and increase the competitiveness of Thai entrepreneurs in manufacturing products that meet the international standards as well as expanding production base overseas.

MATRADE Malaysia

MATRADE's mission to promote Malaysia's export has enabled many local companies to carve new frontiers in global markets. Today as we continue to put the spotlight on capable Malaysian companies on the international stage, we are helping make the phrase 'Made-In-Malaysia' synonymous with excellence, reliability and trustworthiness.

Vision: Positioning Malaysia As A Globally Competitive Trading Nation.

Mission: Promoting Malaysia's Enterprises To The World.

MATRADE's mission is to develop and promote Malaysia's export to the world and its functions are:

- To promote, assist and develop Malaysia's external trade with particular emphasis on the export of manufactured and semi-manufactured products and, on a selective basis, imports;
- To formulate and implement a national export marketing

- To raise the profile of Malaysian exporters in foreign markets;
- To disseminate timely and relevant information and market intelligence to help Malaysian companies gain a competitive edge in foreign markets;
- To introduce Malaysian companies to foreign importers seeking Malaysian suppliers; and
- To undertake activities to promote the export of Malaysian goods and services in overseas markets.

strategy to promote the export of manufactured and semimanufactured products;

- To undertake commercial intelligence and market research and create a comprehensive database of information for the improvement and development of trade;
- To organise training programmes to improve the international marketing skills of the Malaysian exporters;
- To enhance and protect Malaysia's international trade interests abroad;
- To represent Malaysia in any international forum in respect of any matter relating to trade;
- To develop, promote, facilitate and assist in service areas related to trade;
- To advise the Government on matters affecting or in any way connected with trade and to act as the agent of the Government or for any person, body or organization on such matters.

MATRADE is also actively involved in assisting foreign companies to source for suppliers of Malaysian products and services, and is represented worldwide at 40 locations in major commercial cities. In Malaysia, MATRADE has five local branches in Penang, Terengganu, Johor, Sabah, and Sarawak.

CHAPTER 6. THE ADVANTAGES AND DISADVANTAGES OF USING INFORMATION SYSTEMS /
TOOLS FOR SMALL AND MEDIUM ENTERPRISES IN THE FIELD OF INTERNATIONALIZATION
AND ACCESS TO INTERNATIONAL MARKETS: THE EXPERIENCE OF THE EUROPEAN UNION

General Tendencies of Small and Medium Business Internationalization in the European Union

The current wave of globalisation, characterised by sharp reductions in trade barriers and in transport, communication and information costs, has opened vast opportunities.

EU has 21 million SMEs (<250 persons) that constitute more than 99% of all EU enterprises. They produce about 60% of the Union's total economic added value and generate 90 million jobs.

Yet for many small and medium-sized enterprises (SMEs), national frontiers still represent a significant barrier to expanding their business and they still depend largely, or solely, on their domestic markets.

Current estimates indicate that only 25% of EU SMEs export directly outside national markets, about 13% of all SMEs export beyond the EU and only 3 % of SMEs have subsidiaries, branches or joint ventures abroad (*Diagram 18*).

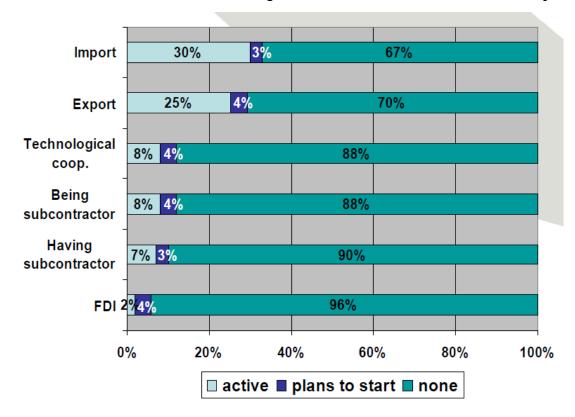


Diagram 18 - Internationalization Activities by EU SMEs

Source: Presentation by Mr. Marshall Hsia, Business Cooperation and Support SMEs and Entrepreneurship Directorate "Support for the internationalisation of European SMEs: study on opportunities in international markets" made on June 27, 2011 in Brussels.

Even more worryingly, internationalisation is still not even considered by a substantial percentage of European SMEs despite the fact that SMEs are already exposed to strong international competition even within their own internal markets.

Studies have already demonstrated the direct link between internationalisation and the increased performance of SMEs. Pro-active internationalisation reinforces growth, enhances competitiveness and supports the long-term sustainability of the company.

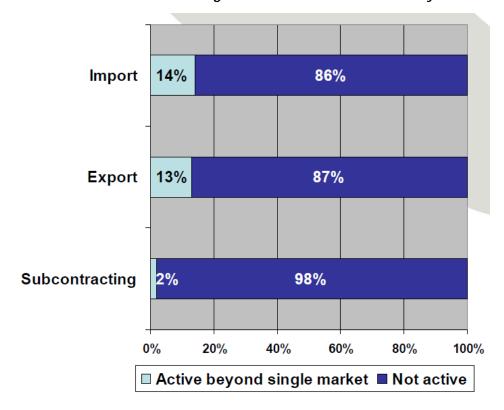


Diagram 19 -Internationalization beyond the Single Market

Source: Presentation by Mr. Marshall Hsia, Business Cooperation and Support SMEs and Entrepreneurship Directorate "Support for the internationalisation of European SMEs: study on opportunities in international markets" made on June 27, 2011 in Brussels.

Despite its advantages, going abroad is still a big step for most small companies. They simply do not have the resources and the contacts which could alert them to suitable business opportunities, potential partners and openings in foreign markets. In addition, the financial investment needed to launch into the international arena can be a significant barrier to many SMEs.

Also the dynamic character of barriers means that difficulties will evolve with the degree of internationalisation of the company.

In order to overcome this, numerous support programmes have been developed by national and regional governments to support the internationalisation of SMEs. The First Trade Promotion Agency was created in Finland in 1919 and, for many years, government support programmes focused exclusively on promoting exports using instruments such as export finance credits, trade missions, joint trade exhibitions, etc.

The character and content of these export support measures have experienced an evolution with the new challenges and new demanding environments but still these programmes represent over 70 % of SME internationalisation support measures worldwide. For these programmes it is estimated that $1 \in \text{of}$ support produces a $40 \in \text{return}$ in terms of increased exports which proves their high value in terms of return for investment.

This brings to the fore the fact that internationalisation is not only exporting. For instance, cross-border cooperation, participation in profitable networks, search for competitive inputs or new technologies are important elements in the modern SME drive into internationalisation. Also internationalized SMEs combine different mutually supporting approaches in their international strategy.

Many companies, particularly the smallest ones and those at the early stage of internationalisation, lack the resources and expertise to identify foreign business opportunities, potential partners, foreign business practices, export procedures, import regulations, standards and product specifications, laws and regulations, marketing requirements, etc.

In order to increase the number of internationalised SMEs, it is essential to provide easier access to this kind of information so that the company can minimise the relatively high initial costs and risks of going international. The availability of this relevant information is essential for the decision-making process of SMEs as it allows them to plan an internationalisation strategy.

This underlines the fact that individualised support to SMEs is the most effective support to internationalising SMEs. This means the company is analysed in its entirety and an individual plan is prepared using a range of support measures that sometimes go even beyond internationalisation.

This is the case of Austria's 'Go international' programme of the Austrian Federal Economic Chamber and the Austrian government, where, in addition to individualised support, the perspective is the internationalization of an economy as a whole (holistic approach) which implies taking into account other areas such as social corporate responsibility or innovation.

In the case of the Irish organisation 'Enterprise Ireland', support mechanisms are designed to take account of all the companies' needs, in order to better position them for internationalisation.

Studies have already found strong links between innovation and internationalisation: they both share a positive and causal effect in competitiveness. Some countries such as Norway are already implementing integrated policy measures, offering programmes that combine innovation and internationalization as the mix of instruments that allows companies to increase their value creation and their competitiveness.

These types of programmes have the additional advantages of addressing those companies for which the main driver to internationalisation is better access to innovation, high technology or know-how.

Among other programmes, projects and mechanisms that operate in EU in the sphere of support to internationalization process of SME it is possible to indicate several (some of them have stopped their activities already, some are still operational):

• Finland - the KiVi project aims to join public, semi-public and private organisations in creating platforms where information and contacts for these services are provided.

The KiVi project is coordinated by the Confederation of Finnish Industries EK and Employment and the Economic Development Centres (TE-Centres) in cooperation with chambers of commerce and the

Federation of Finnish Enterprises. All national and a number of local organisations promoting internationalisation are partners in the project.

The project provides a concept and platform for organising events where information concerning internationalization services and instruments is distributed. Nationally the project is coordinated by an Internet-based platform where all upcoming events are listed, and the programmes and presentations after the event are published.

- Czech Republic BusinessInfo.cz (www.businessinfo.cz) is an official Internet portal for business
 and export. It is a one-stop-shop window that integrates information from state administration
 bodies, agencies and non-governmental associations and chambers, and covers a whole range of
 information from an 'easy read' and use to quite complex electronic forms.
- Germany German Chambers of Commerce Abroad (AHK). The AHK-network offers information services and consultation for SMEs concerning external markets worldwide. It has 120 offices operating in 80 countries of the world.

They are mostly independent institutions which earn a major share of their income through the services they provide. The services of these institutions include information on import and export regulations, customs duties, investment conditions abroad, currency regulations, market opportunities and marketing strategies for German companies.

They advise firms *in situ* and help them establish international business contacts. Basic information is free of charge but detailed analysis and specific individual consulting have to be paid for. In addition, they are the first port of call and a key intermediary for firms in the host country wishing to do business in Germany.

 Norway - Regional training programme is aimed at increasing the competitiveness of SMEs by encouraging and supporting export and internationalisation.

The programme is based on a concept developed for SMEs who have the potential and capabilities to increase their global competitiveness through innovation and internationalisation. It is a business development programme where companies participate in a development process over 12 to 14 months. The companies are granted financial support from Innovation Norway to a business development project.

Finland - Globaali evaluation and development programme for SMEs. The objective of Globaali
internationalisation programme is to help Finnish SMEs succeed in international competition with
as little risk as possible by producing a development plan for the enterprise.

Globaali is a nationwide evaluation and development programme to assess the preparedness of SMEs for internationalisation. It is a financially supported specialist service. The programme is individualised on an enterprise and/or product and is country-specific.

In general, on the national level within EU there are about 100 of various projects, programmes and mechanisms that operate in different spheres of support to those SMEs that intend to enter international markets, find business partners and opportunities.

Also there are some programmes and mechanisms that operate on the EU level and that could be reached by any SME interested in successful internationalization of its business.

The Enterprise Europe Network

The Enterprise Europe Network (Figure 29) was created and is steered by the European Commission's Directorate-General for Enterprise and Industry. It was launched in February 2008 through liaison of the former Euro Info Centre (EIC) and Innovation Relay Centre (IRC) Networks, established in 1987 and 1995 respectively.

The European Commission's Brussels-based Executive Agency for Small and Medium Enterprises – EASME - (up to December 31, 2013 it was named Executive Agency for Competitiveness and Innovation (EACI)) is responsible for managing the Network on a daily basis.

This includes contract management and evaluation as well as training, information, communication and IT support that is implemented under the COSME programme and the Horizon 2020 programme.

During the period of 2007 – 2013 the Enterprise Europe Network got of €320 million under the Entrepreneurship and Innovation Programme (EIP) within the Competitiveness and Innovation Framework Programme (CIP).

For the period 2014 – 2020 the Enterprise Europe Network is going to be allocated €336 million under the EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (SMEs) – COSME - running with a planned total budget of €2.3bn. Additional financing for the sphere of innovations is going to be provided by Horizon 2020 programme.

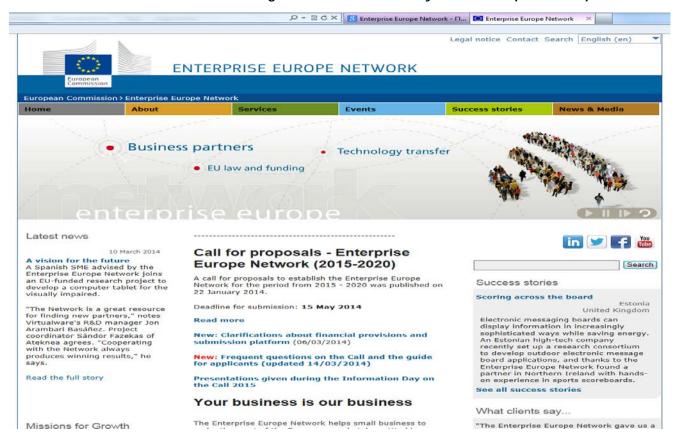


Figure 36 - Information System «Enterprise Europe Network»

Established under the Programme for the Competitiveness of Enterprises and small and medium sized enterprises (COSME) (2014 - 2020), the Enterprise Europe Network is an important instrument of the

European Commission to support the competitiveness and growth of small and medium-sized enterprises (SME).

COSME in general as well as the Enterprise Europe Network in particular are part of the wider policy framework designed to foster growth, employment and competitiveness in the Single Market. It fully supports the aims of the Europe 2020 strategy, which recognises the crucial role of SMEs in delivering a high level of employment, social cohesion and the transition to a low carbon, resource and energy efficient economy and social cohesion.

In this context, and against the background of the "Small Business Act for Europe", which sets the EU policy framework for strengthening SMEs, the Enterprise Europe Network contributes to an SME support system in Member States and their regions that provides high quality services to the satisfaction of client companies.

To this end, the Network will provide value-added business support services that help SMEs do business in the Single Market and that are designed to improve the competitiveness of European SMEs. These services are described in and will be supported by the COSME programme. At the same time, the Network can help achieve SME-related objectives of other EU programmes like Horizon 2020 and is encouraged to contribute to the development of a stronger SME support system in the regions of the European Union – creating synergies, where relevant, with the European Structural and Investment Funds (ESIF) or the European Social Funds. In case other Union programmes decide to make use of the Network and provide the required additional resources, Network partners may be invited to propose separate work programmes for the required activities. The Network will be notified of the rules and procedures applying in such cases.

The Enterprise Europe Network is a key instrument in the EU's strategy to boost growth and jobs. Bringing together close to 600 business support organisations with more than 3,000 experienced staff from 54 countries, the Network helps small companies seize the unparalleled business opportunities in the EU Single Market.

In order to become a member of the Enterprise Europe Network any interested organization being a legal entity in accordance to the national requirements shall go through a tender procedure organized by the European Commission through the Executive Agency for Small and Medium-sized Enterprises – EASME.

In the year of 2014 such a tender (for the countries – members of EU and those countries that are eligible for participation in COSME) was announced in January with a detailed timetable of activities: deadline for submitting proposals is May 15, 2014 and information to applicants on the results is going to be announced in September 2014.

The EU funding for applicants may vary from 40% to 60% of the total eligible costs. For third countries (not members of EU; cannot participate directly in COSME) no financing is foreseen by EU and thus all the costs and expenses related to implementation of the Enterprise Europe Network activities in such countries have to be covered by the applicants themselves.

Information on the tender announced in January 2014 is presented here: http://een.ec.europa.eu/about/tendersandcalls.

Individual organizations as well as consortia with not more than 15 members may participate in the tender procedure. The main criteria for selection is related to ability and capacity of the applicants to provide efficiently and effectively all the services foreseen by the Enterprise Europe Network (Figure 37).

P → B C X S Enterprise Europe network - П... About Search Find your local contact point Our mission Contact points Contact the Enterprise Europe Network contact point closest to you by Sector Groups selecting your country from the lists. Supporting organisations **EU** countries Non-EU countries Calls Get in touch Austria Albania, Republic of Tenders and calls Belgium Armenia Bulgaria M Bosnia and Herzegovina Croatia Brazil, Federative Republic of enterprise Cyprus Canada europe Czech Republic Chile network E Denmark China Estonia **Egypt** ness Support on Your Doorstep **E** Finland Iceland India, Republic of Trance Germany Israel Greece Japan Hungary Macedonia, The former Yugoslav Republic of Ireland Mexico Italy Moldova Latvia Montenegro 📥 Lithuania Morocco, Kingdom of Luxembourg Morway Malta Russia Netherlands Serbia Poland South Korea Portugal Switzerland Romania Tunisia Slovakia Turkey Slovenia Ukraine Spain USA **Sweden** M United Kingdom

Figure 37 – Global Network «Enterprise Europe Network»

All members of the Enterprise Europe Network shall carry out the following six types of activity ("standard activities"):

- 1. Advice, support and information activities;
- 2. Cross-border partnering activities for business cooperation, technology transfer and innovation;
- 3. SME feedback activities;
- 4. Specific activities in the context of innovation support (Horizon 2020);
- 5. Promotion of Network services and communication activities;

6. Network building and reinforcing the Network.

These six types of activities are mandatory: every member of the Network shall guarantee that the full range of activities is provided in the region covered by its activities (Figure 38).

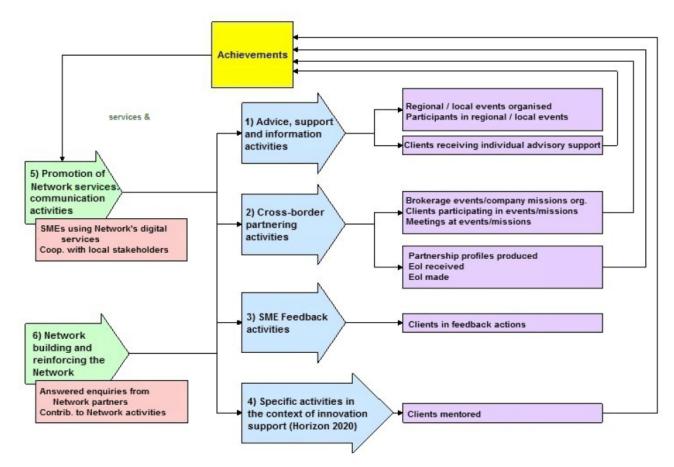


Figure 38 - Activities of the Network with expected outputs / outcomes

Although the requirements of the target audience vary from region to region, it is important for the overall coherence of the Network that all consortia maintain a similar balance of activities and services that may look like this:

- 1. Advice, support and information activities (at least 20%);
- 2. Cross-border partnering activities for business cooperation, technology transfer and innovation (at least 25%);
- 3. SME feedback activities (between 3% and 5%);
- 4. (in accordance to the separately pre-determined budget);
- 5. Promotion of the Network's services and communication activities (between 10% and 20%);
- 6. Network building and reinforcing the Network (between 10% and 20%).

The Enterprise Europe Network member organisations include chambers of commerce and industry, technology centres, research institutes and development agencies. Most of them have been supporting local businesses for a long time. They know their clients' strengths and needs - and they know Europe.

As members of the Enterprise Europe Network they are linked up through powerful databases, sharing their knowledge and sourcing technologies and business partners across all Network countries. But they are also closely linked with the European Commission, which enables them to keep abreast of EU policies and to feed small companies' views on them back to Brussels.

During the period of 2014 – 2020 the Enterprise Europe Network is expected to contribute to an increase of the EU GDP of €1.1 billion per year and to create or safeguard 30,000 jobs per year.

The Enterprise Europe Network is expected to assist 39,000 companies with partnership agreements, resulting in € 200 million additional turnover for assisted companies per year, helping to launch 900 new business products, services or processes per year.

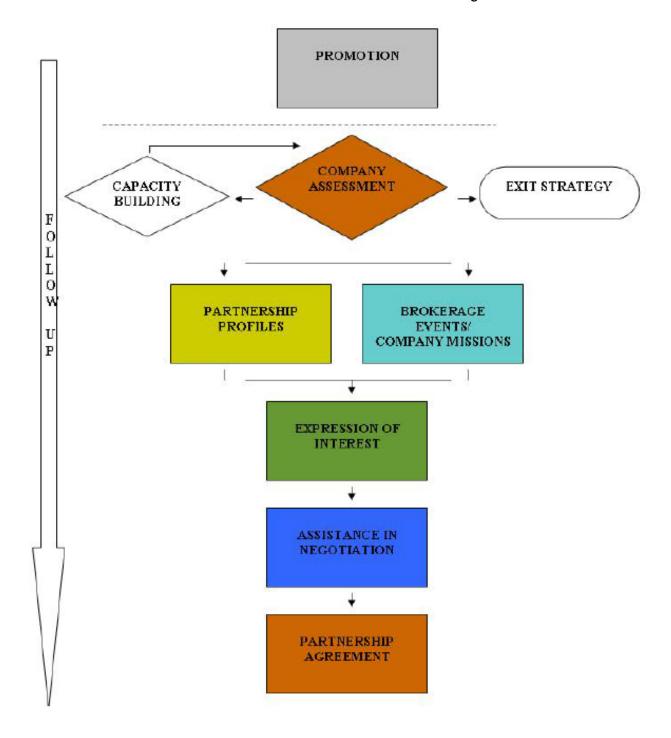
Access to finance will be easier for entrepreneurs, in particular those willing to launch cross-border activities, resulting in an expected increase of €3.5 billion in additional lending and/or investment for European enterprises per year.

Helping small companies make the most of the business opportunities in the European Union is the Enterprise Europe Network's mission.

The Network experts can help SMEs find international business partners, source new technologies and receive EU funding or finance. And they can advise on issues so diverse as intellectual property, going international, or EU law and standards.

Providing partnering services to SMEs represents a significant part of the Network's activities. However, developing a partnership agreement (PA) – from the very first meeting with a company through to the final decision – requires a lot of effort in terms of time, skills and follow-up. A partnership agreement can embrace a variety of Network services such as technological cooperation, commercial cooperation and collaborative research (Figure 39).

Figure 39- A route to success



The following "Ten Keys for Success" should guide Network partners as they carry out their tasks. These principles should play a major role in reaching successful transnational partnership agreements.

- Know your clients and your Network partners
- Know and respect the procedures of the partnership process
- Work only with committed clients and partners
- Be committed towards your clients and the other partners

- Always think about the deal you want to happen: think about quality of partnership profiles, not quantity
- Disseminate the partnership profiles
- Follow up: communicate by keeping all parties informed and be responsive
- Be professional by getting training and continuously improving your work
- Read the guidelines provided by EACI
- Respect the rules of the Code of Conduct

The Network's primary target audience are small and medium sized enterprises. All SMEs shall be entitled to turn to the Network for assistance, regardless of their size, sector or business cycle. General services of the Network, such as, for example, awareness raising and simple automated information services, including innovative services based on social media, must be aimed at all SMEs.

For more tailor-made services, the Network should primarily target companies with a high potential for internationalisation and / or innovation. Given the aim and nature of the Network, it is expected that the majority of SME clients for the Network's deeper support services will be SMEs with high ambitions and a potential to grow, to innovate, to engage in business and technology partnering activities and to exploit new opportunities in the Single Market and beyond.

Network partners may also tailor certain specialised activities to sectors that are particularly important in their region, or to companies with a particularly high potential. While SMEs remain the primary target audience for the Network, some services might be directed at other organisations. These include:

- Clusters and cluster organisations. Substantial synergies and efficiency gains can be achieved for certain Network services by working with clusters;
- Public and private providers of support services to SMEs;
- Public authorities and public enterprises (for example by strengthening their capacities for innovation- and SME-friendly public procurement), provided the activities are designed to benefit SMEs:
- Research institutes or higher education institutions (only for activities designed to make knowledge, skills and technologies available to SMEs);
- Sectoral business associations or other organisations that are part of the SME support infrastructure (e.g. for the organisation of seminars, workshops, information days and trainings).

Services of the Enterprise Europe Network

Technology transfer

If SME need a certain technology or innovation to complete business or a business application for a certain technology, the Network can help. Using Europe's largest database of cutting-edge technologies, containing more than 23,000 profiles, the Network brings together research and commercial applications. The database is updated with new profiles on a weekly basis.

Access to finance

Getting finance can be a big challenge for entrepreneurs and small businesses. SMEs usually know little about who offers venture capital or loans in their region, their country or in Europe. The Enterprise Europe Network experts can help a company to get the finance it needs to grow. They can help evaluate a company's financial situation and source the right support: venture capital and loans; public financial aid; tax credits. Venture capital and loans are important for a company's seed, start-up and growth phases. The experts will put company's business plan to the acid test to make sure it can satisfy the most demanding investors. Then they will train the company to present it and put entrepreneurs in touch with investors, business angels, venture capital firms and banks. Funding from investors can be topped up with aid from regional, national or EU authorities. Business needs to talk to the experts about how they can access public funds and grants for research and development, innovation, investment, consulting services, employment, training or exporting. Tax credits are another way to finance a company.

Advice on EU law and standards

In case SMEs need information about how EU laws and regulations could affect their business, the Enterprise Europe Network's experts can help them find their way through the legal maze and make it easier to sell their product or service in another EU country.

The experts can keep SMEs informed about what's new in EU legislation, alert them to tender opportunities and provide training. The experts can tell SMEs about European policies and programmes relevant to their business – and how they can make them work for them.

The Network can connect SMEs to up-to-date, targeted information on European Directives, Regulations and standards, public sector tenders, business and funding opportunities. The experts also provide specialist market information for companies that are exporting or preparing to import.

In three years, the Network's experts have answered close to 375 000 questions on EU topics.

Intellectual Property Rights (IPRs)

If a company is interested in commercialising a new idea, product, service or process, then the Enterprise Europe Network will help it work out how to protect and make the most of the firm's ideas and technologies. The Network can also put SMEs in touch with the right organisations and IP experts.

Speak up on EU law

In case any EU SME is facing problems doing business in another EU country or finds it difficult to comply with EU law, then it can tell what it thinks to help the European Commission improve legislation for SME business.

The European Commission wants feedback on what impact its legislative proposals and initiatives are having on small businesses. It's ready to listen to the problems SMEs face doing business at home or across Europe.

When drafting proposed laws affecting businesses, the Commission also consults small businesses to make sure it cuts red tape and helps them to make the most of opportunities in the European Union. It has designed a number of consultation tools to listen to SMEs views.

The Enterprise Europe Network will connect SMEs to these tools. It will get the message across, using all the feedback channels available – from commenting on planned legislation and taking part in test panels to proposing alternative solutions.

Research funding

Taking part in an EU-funded research project is a great way to boost a company's competitiveness. The Enterprise Europe Network helps SMEs get there. The experts will help SMEs identify their needs and potential and connect them with the right partners for successful projects.

The Network does not fund any projects itself, but it'll help SMEs to tap into the right programmes. First of all an SME needs a convincing idea and a good team. At the Enterprise Europe Network, the experts can: assess the technology to identify its potential, needs and funding opportunities; help SMEs to formulate project ideas; find the right partners; increase proposal-writing and project management skills; help to reach cooperation agreements.

Going international

When SMEs expand their business to another country, they need competent and trustworthy partners. The Enterprise Europe Network helps to find them. The existing business database contains thousands of company profiles and SMEs can meet potential business partners in person at various matchmaking events.

With hundreds of new company profiles (*Annex 3*) added every week, the Network's business cooperation database is one of the world's largest. When a company gets in touch with the Network, the experts enter its cooperation offer or request into the database.

The company will then receive updates on companies interested in the same kind of cross-border business.

The Network also organises matchmaking events across Europe where SMEs can meet potential business partners in person. Matchmaking events often take place at international fairs, which helps keep travel and accommodation costs down.

How to contact the Enterprise Europe Network

Any SME that plans to use various services offered by the Enterprise Europe Network have to contact the offices that are located in their country. The list of the Network's members with national contact points is provided here: http://een.ec.europa.eu/about/branches (Figure 40, 41).

Legal notice | Contact | Search English (en) ENTERPRISE EUROPE NETWORK n > Enterprise Europe Network > About > Find your local contact point **Events** Success stories About Search Find your local contact point in Netherlands Our mission Contact points Sector Groups City **Branches** Supporting Den Haag organisations Nieuwegein Calls Get in touch More points of contacts Tenders and calls Check out if there are more points of contacts in other countries that may interest you. Back enterprise europe network iness Support on Your Doorster Version: MERLIN v1.6.1 (EENWS_9706). Last update: 21/03/2014

Figure 40- How to contact the Enterprise Europe Network

ENTERPRISE EUROPE NETWORK n > Enterprise Europe Network > About > Find your local contact point About Find your local contact point Search in Den Haag, Netherlands Our mission Contact points Contact points in this city: Sector Groups Supporting organisations Calls ▼Agentschap NL Get in touch Agentschap NL Tenders and calls Contact this Network branch via its national website: http://www.enterpriseeuropenetwork.nl enterprise Addresses in this city: europe Juliana van Stolberglaan 3 network 2595 CA Den Haag Netherlands ess Support on Your Doorstep Prinses Beatrixlaan 2 2595 CA Den Haag Netherlands 31 88 602 80 60 Email: eenl@agentschapnl.nl Organisation's Website: http://www.agentschapnl.nl/een

Figure 41 – How to contact the Enterprise Europe Network

Sector Groups

Experts in 17 key sectors from all across the Enterprise Europe Network have teamed up to provide SMEs with customised support.

Check out if there are more points of contacts in Netherlands that may

While Sector Groups have an average size of 31 members, the size of individual SGs varies from 10 to 70 members. Monitored by EASME and chaired by an elected staff member of a Network partner involved in the group, typical SG services include:

Brokerage events at large international events;

More points of contacts

interest you.

- Targeted company missions;
- Providing qualified feedback to European policy makers and stakeholders;
- Organising international events such as conferences, info-days or technology workshops;
- Helping SMEs access Horizon 2020, the EU's research and innovation framework programme;

- Supporting innovation and internationalisation activities of clusters;
- Company catalogues, cluster maps, newsletters and other publications.

The Network's Sector Groups can also advise companies on how to find partners to apply for EU-funded joint research projects.

The following Sector Groups are available:

- Aeronautics and Space;
- Agrofood;
- Automotive, Transport and Logistics;
- BioChemTech;
- Creative industries;
- Environment:
- Healthcare:
- ICT Industry and Services;
- Intelligent Energy;
- Maritime Industry and Services;
- Materials:
- Nano- and Microtechnologies;
- Services and Retail;
- Sustainable Construction;
- Textile & Fashion;
- Tourism and Cultural Heritage;
- Woman Entrepreneurship.

The Sector Groups often form the link between the Enterprise Europe Network and other European actors and projects, including European Technology Platforms, Europe INNOVA projects and Business Innovation Centres (BICs) as well as research-driven clusters and National Contact Points of the European Commission's Innovation Programmes.

European Union Small and Medium Business Support Centres abroad

Apart from the Enterprise Europe Network that covers 54 countries of the world with the experts supporting EU enterprises as well as from other countries to find a suitable potential business partner and start fruitful cooperation as well as to solve all the questions related to business internationalization, there are special EU SME Support Centres operating in definite countries, for example:

IPR SME Helpdesk in China;

- ASEAN IPR SME Helpdesk in Thailand;
- European Business and Technology Centre in India;
- EU Centre for Support to European SMEs in China;
- European ASEAN Business Centre in Thailand;
- EU Japan Centre for Industrial Cooperation in Japan.

In addition there are some other cooperation mechanisms applied by EU to promote SMEs onto the international markets like:

- EU Gateway and Executive Training Programmes in Japan and the Republic of Korea;
- Bilateral SME Dialogues China, Russia, etc.;
- Plurilateral cooperation like Euro Mediterranean industrial cooperation, Eastern Partnership.

The <u>China IPR SME Helpdesk</u> (http://www.china-iprhelpdesk.eu) supports European Union small and medium sized enterprises (SMEs) to both protect and enforce their Intellectual Property Rights (IPR) in or relating to China, through the provision of free information and services.

These take the form of jargon-free, first-line, confidential advice on intellectual property and related issues, plus training, materials and online resources.

The China IPR SME Helpdesk project is funded by the European Commission's Directorate-General for Enterprise and Industry under the Competitiveness and Innovation Framework Programme (CIP) and builds on the achievements of a pilot project carried out in 2008 - 10. The current project runs from December 2010 – December 2013, and comprises a total budget of EUR 3,000,000 over the three year period.

The Helpdesk's free services for European SMEs include:

Helpdesk Enquiry Service – Confidential Advice

Individual SMEs and SME intermediaries can submit IPR enquiries directly to the Helpdesk via phone, email or in person, getting access to a panel of experts to receive free and confidential first-line advice.

Training

The Helpdesk arranges training on China IPR protection and enforcement in Europe and China, tailored to the needs of SMEs:

- General IPR issues, including IP registration and establishing an IP protection strategy.
- Practical business challenges such as choosing a Chinese business partner, attending a trade fair, licensing.
- Helpdesk IPR Clinics offering SMEs free 20 minute one-on-one consultations with an IP expert are available at many training events.

 Train-the-trainer resources for SME service providers and intermediary bodies to improve the awareness of intermediary representatives about the scope and tools offered by the China IPR SME Helpdesk.

Materials

Industry and business-focused guides and training materials address China IPR issues by:

- IP topic, including patents, trademarks, copyrights, licensing, dealing with counterfeiting.
- Business focus, including IP as a business asset, technology transfer, finding the right lawyer.
- Industry, including textiles, medical devices, ceramics.

Online Services

The multi-lingual online portal provides easy access for all EU SMEs to Helpdesk information and services, including Helpdesk guides, E-learning modules, event information, and live webinars.

ASEAN IPR SME Helpdesk in Thailand (http://www.asean-iprhelpdesk.eu)

The ASEAN IPR SME Helpdesk supports European Union (EU) small and medium sized enterprises (SMEs) to both protect and enforce their Intellectual Property (IP) rights in or relating to ASEAN, through the provision of free information and services.

These take the form of jargon-free, first-line, confidential advice on intellectual property and related issues, plus training, materials and online resources.

The ASEAN IPR SME Helpdesk project is co-funded by the European Commission's Directorate-General for Enterprise and Industry under the Competitiveness and Innovation Framework Programme (CIP). The current project runs from January 2013 – August 2014, and comprises a total budget of EUR 1.2 million over the twenty month period.

The Helpdesk's free services for European SMEs include:

Helpdesk Enquiry Service – Confidential Advice

Individual SMEs and SME intermediaries can submit IP enquiries directly to the Helpdesk via phone, email or in person, getting access to a panel of experts to receive free and confidential first-line advice.

Training

The Helpdesk arranges training on ASEAN IP protection and enforcement in Europe and ASEAN, tailored to the needs of SMEs, including:

- General IP issues, including IP registration and establishing an IP protection strategy.
- Practical business challenges such as choosing an ASEAN business partner, attending a trade fair, licensing.
- Helpdesk IP Clinics offering SMEs free 20 minute one-on-one consultations with an IP expert are available at most training events.

• Train-the-trainer resources for SME service providers and intermediary bodies (Trade Associations, SME Networks etc.) to improve the awareness of intermediary representatives about the scope and tools offered by the Helpdesk for the benefit of intermediary members.

Materials

Industry and business-focused guides and training materials address ASEAN IP issues by:

- IP topic, including patents, trademarks, copyrights, licensing, dealing with counterfeiting.
- Business focus, including IP as a business asset, technology transfer, finding the right lawyer.
- Industry, including textiles, medical devices, ceramics.

Online Services

The multi-lingual online portal provides easy access for all EU SMEs to Helpdesk information and services, including Helpdesk guides, E-learning modules, videos, podcasts, event information, and live webinars.

European Business and Technology Centre in India (http://www.ebtc.eu)

EBTC is a programme co-funded by the European Union and implemented by EUROCHAMBRES, the Association of European Chambers of Commerce and Industry. A key role is played by 16 European partners combining business organisations, academic and research institutes from all over the EU, all of them with a successful track record in their respective field.

Against this background, EBTC has been established as a point of reference for European companies and researchers wanting to enter the Indian market, with focus on climate change technologies.

Activities are organised in key sectors: Biotechnology, Energy, Environment, and Transport. For each of those sectors, top level research institutes have joined forces with leading business and universities in a knowledge triangle that will benefit European business, science and technology.

EBTC operates as an intelligence hub and in synergy with existing service providers from EU member states and Indian counterparts. EBTC is part of the European Union's Global Europe strategy and the Small Business Act, which try to enhance Europe's competitiveness in a globalised market. EBTC therefore benefits from financial support from the European Commission, through its Delegation in New Delhi.

The following services are offered:

- Advice on technology transfer matters related to securing, developing, and marketing intellectual property in India
- Assistance in dealing with the legal, regulatory and bureaucratic procedures in India
- Promoting the transfer of clean technologies
- Identifying and facilitating relationships with businesses, research partners, suppliers and customers

- Access to leading-edge market intelligence
- Assessment of market potential and feasibility studies
- Providing information on sources of finance
- Facilitating trade fair and conference participations
- Project development support

EU Centre for Support to European SMEs in China (http://www.eusmecentre.org.cn)

The EU SME Centre is a Support Service Provider for European Small and Medium-sized Enterprises (SMEs) facilitating market access in China. The Centre provides free of charge, practical information, advice and business tools to better equip SMEs to develop their business and tackle challenges faced in the Chinese market.

Boasting a strong team of in-house market access advisors and specialists, the Centre provides relevant, hands-on support services to EU SMEs wishing to export to or invest in China, covering the areas of Business Development, Standards and Conformity, Legal issues, Human Resources and Training. Moreover, the Centre acts as a platform facilitating coordination amongst Member State services and directs SMEs to other specialised European public and private sector service providers.

The Centre's team of experts provide free practical advice and support services to assist SMEs' business development needs, empowering them with the real knowledge and tools required to facilitate market access and increase competitiveness in the Chinese market.

The range of free services cover:

- Business Development provision of market information, business development and marketing advice
- Legal legal information, 'ask the expert' initial consultations and practical manuals
- Standards standards and conformity requirements when exporting to China, search tool for standard databases and guidelines on conformity assessment
- HR and Training industry and horizontal training programme, database on available training courses, advice on HR issues
- Access to a service providers directory and information databases
- Hot-desking free, temporary office space in the EU SME Centre to explore local business opportunities
- Any other practical, hands-on support services to EU SMEs wishing to export to or invest in China

European ASEAN Business Centre in Thailand (http://www.eabc-thailand.eu)

The European ASEAN Business Centre (EABC) is a European Trade Organisation situated in Bangkok Thailand with an objective to contribute to the improvement of trade and investment for European companies in Thailand and to increase European Trade and Investment in Thailand.

EABC has launched the first business position paper, containing work derived from nine EABC Working Groups. The guiding principle behind the recommendations coming from the EABC's Working Groups is 'Strengthening European – Thai economic relations for a more competitive Thailand'

The Centre's mission is to interact as the voice of European business in Thailand towards development of a favourable business climate to improve investment and market opportunities of European companies in Thailand and to promote Thailand and ASEAN as high-potential trade and investment markets for European businesses.

EU – Japan Centre for Industrial Cooperation in Japan (http://www.eu-japan.eu)

Established in 1987, the EU-Japan Centre for Industrial Cooperation is a unique venture between the European Commission and the Japanese Government. It is a non-profit organisation aimed at promoting all forms of industrial, trade and investment cooperation between the EU and Japan and at improving EU and Japanese companies' competitiveness and cooperation by facilitating exchanges of experience and know-how between EU and Japanese businesses.

The EU-Japan Centre for Industrial Cooperation has become an effective bridge between European and Japanese business people and developed a valuable policy analysis capacity on industrial and other public policies having an impact on business in the EU and Japan.

The mission of the EU-Japan Centre for Industrial Cooperation is:

- to promote all forms of industrial, trade and investment cooperation between Japan and the EU;
- to strengthen the technological capabilities and the competitiveness of the European and Japanese industrial systems.

Services offered by the EU-Japan Centre

The EU-Japan Centre for Industrial Cooperation follows the priorities fixed by the Directorate General of Enterprise and Industry of the European Commission and the Japanese Ministry of Economy, Trade & Industry (METI).

It manages policy-related and business support activities such as managerial training courses, cluster missions, information seminars, researches, student placement programmes, a business forum, an info & help desk, as well as various other services all designed to help bring European and Japanese businesses together.

Main activities managed by the EU-Japan Centre are:

Policy analysis;

- Training schemes for EU executives;
- Training schemes for students;
- R&R Innovation;
- Other services.

<u>EU Gateway and Executive Training Programmes in Japan and the Republic of Korea</u> (http://www.euetp.eu)

The Executive Training Programme has been in operation in Japan for more than 30 years. Convinced by its success, the European Commission expanded the programme to also include Korea in 2002.

To date, more than 1000 European executives from over 20 different sectors have completed the programme and now hold prominent leadership positions in EU companies in Japan and Korea. The programme has been instrumental in building trade and investment between the EU and two of the strongest Asian markets.

The European Commission helps European executives by:

- Funding the entire training course of 45 weeks run by internationally recognized universities
- Providing a scholarship of 26,400€ for Japan (2,200€ a month) and 24,000€ for Korea (2,000€ a month) for each ETP participant

Japan and Korea are leading world economic powers and important partners for the EU. Japan is the 6th largest EU trade partner and Korea is the 9th. These highly attractive and thriving markets offer vast business opportunities for European companies.

Japan and Korea's societal and business cultures are very different to European cultures which can mean that doing business in Japan and Korea is often challenging for European executives. For this reason, the European Commission launched the Executive Training Programme which is designed to help EU companies to understand the specifics of Japan and Korea's economies, language and business cultures.

The Executive Training Programme is an intensive professional development training course which provides participants with pertinent knowledge of two of the strongest world economies and an in-depth understanding of the way in which business is carried out in East Asia. This programme broadens the horizons of EU corporations and enhances their business prospects in the Japanese and Korean markets.

Export support mechanisms to EU

Apart from the instruments and mechanisms applied on EU level to stimulate internationalization of SMEs and to promote their activities onto external markets, special attention is also paid to stimulation of export to EU from other countries. This is done in order to improve competitiveness of EU SMEs and to saturate the EU markets with innovative goods, products and services.

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One of the main instruments in this sphere is the Export Helpdesk located in the Internet at the following address: http://exporthelp.europa.eu (Figure 42).

User Guide | Glossary | FAQ | Legal notice | Contact | Privacy Statement | English (en) |

TRADE

European Commission > Trade > Export Helpdesk > My export

My export

Find my product code

Figure 42 – Information System «Enterprise Europe Network»

The EU is committed to helping developing countries tie their economies more firmly to global trade flows. In practical terms, it does this through its preferential trade arrangements.

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Although it is possible for exporters in developing countries to export to the EU without quota restrictions or duty payments, some specific technical requirements remain.

To understand how the EU trade system is organised, the procedures to follow and the documents to fill in, it is necessary to check the following sections:

EU product classification system;

Enter a product code

■ Select a country of origin

Select a destination country

Select a simulation date (DD/MM/YYYY)

(10 digits)

31/03/2014

- EU import procedures;
- Documents for customs clearance;
- EU Customs Union;
- Value Added Tax (VAT);
- Excise duties.

My export

Requirements

Preferential

Statistics

About us

Resources

Before reaching Europe, all the products / goods / services must meet the EU requirements to protect human and animal health, the environment and consumers rights.

The main requirements can be classified in the following sectors:

sanitary and phytosanitary requirements;

- environmental requirements;
- technical requirements;
- marketing standards;
- import restrictions.

The Export Helpdesk informs on the EU tariffs, requirements, preferential arrangements, quotas and statistics affecting business in developing countries in just some clicks.

It is possible to get this information by entering the specific code of the product in the My export search form on the home page. If a company does not know its product's code, it can browse the Harmonised System or search with keywords in the search form.

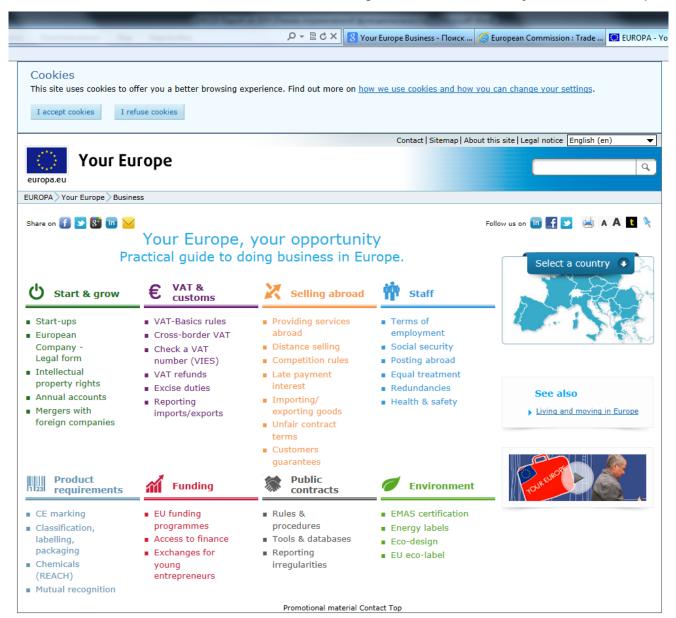
This search will give detailed information on the import requirements for specific product:

- specific requirements (e.g. plant health, public health, labelling, etc.);
- internal taxes (VAT and excise duties) applicable in the destination country;
- relevant laws, national authorities, border inspection posts.

The information is based on EU law. Where there is no EU law applicable to specific product, national law in the importing country will apply. In that case, the search result will say "no specific requirement". For further details it would be necessary to contact the authorities of the destination country.

Additional information for those who would like to start business in EU could be found on **Your Europe** site in Business section: http://europa.eu/youreurope/business/index_en.htm (Figure 43).

Figure 43 - Information System «Your Europe»



More detailed information on taxation and customs is introduced on the **European Commission's Taxation and Customs Union Directorate-General** web-site:

http://ec.europa.eu/taxation_customs/index_en.htm

The site contains background notes on tax and customs policy initiatives as well as the latest speeches and press releases. It also hosts tax and customs consultations. It is possible to find explanations about how to calculate customs duties, customs procedures or customs controls. The online databases attract more than 13 million hits per month.

Figure 44 – Web-site « European Commission's Taxation and Customs Union Directorate-General»



General Conclusions

Internationalisation has become the condition for SMEs to survive in today's greatly competitive environment. It is fundamental for Europe to increase the capacity and effective internationalisation of SMEs, which is well below its full potential. In addition to enhancing the awareness of SMEs of the need to internationalise, European national and regional institutions must facilitate easier and more widespread access to support programmes and access to relevant and usable information.

It is difficult to separate internationalisation from the context in which it is a natural element: competitiveness and growth. This calls for a more integrative "holistic" approach in all the areas related to supporting the internationalisation of SMEs: in the development of policies, programmes and in the delivery of support. It will also require policies to upgrade the human resource base of the economy. Addressing this through education and training policies will require a growing focus on life-long learning.

Policies to support internationalisation should start by considering the drivers and the barriers for SME internationalisation. A long term policy outlook should consider policies based on the main driver to internationalisation: positive attitudes toward entrepreneurship and international activities, which calls for interventions in the educational system.

More immediate support should be based on supporting SMEs in the areas of reported need: lack of managerial resources and skills for internationalisation, lack of sufficient financial resources and availability of usable information.

Government support for the internationalisation of SMEs remains vital. SMEs are likely to benefit disproportionately from the pro-competitive effects of internationalisation and government support produce a high level of "additionality": an important number of SMEs wouldn't have internationalised without the Government support.

Countries are not competitive, companies are. As it has been shown internationalisation cannot be separated from a company's competitive position. And each company will have its own set of individual variables and barriers for competitiveness.

Consequently, the most effective way to guarantee a successful long term internationalisation is to provide individualised support for each company, beyond supporting the merely "international" part of the company.

Successful support will have to be based on building capabilities inside the SME where access to training and consulting should play a central role. This will require scoring, filtering and analysing companies prior to providing any support and adapting the mix of (usually) standardised support programmes to create a company specific support plan.

All key stakeholders must be involved in the development of policies and programmes: regional and national bodies, internationalisation agencies, business representatives and banks. This is conducive to developing support that is required by the SMEs, avoid overlapping of programmes and maximise allocation of resources.

Development of policies is probably better co-ordinated at national level. But for maximum results implementation must be at local or regional level.

In order to enhance competitiveness and growth, programmes must support internationalisation, not only exports. The main internationalisation programmes must permit the participation of the widest number of SMEs possible.

Programmes must be demand driven and adaptable. They must incorporate feedback from SMEs in order to evolve as SME needs shift.

Also, internal issues such as lack of sufficient and sufficiently trained human resources to tackle internationalisation and the need for direct support in finance for internationalisation have to be addressed. All this will have to consider the heterogeneity of SMEs, which will require an individualised approach to each company. Quite often various support programmes combine a whole set of activities aimed at full support of the internationalisation process of small and medium-sized enterprises such as:

- 1. Raising awareness
- 2. High value information
- 3. Human resources' development programmes
- 4. Supporting the financial needs of internationalisation
- 5. Promotion of networks
- 6. Supporting the internationalisation of services
- 7. Using internationalisation to enhance competitiveness
- 8. Individualised support
- 9. Border zones and cross-border cooperation

It is necessary to note that on the EU level various instruments and mechanisms are applied to stimulate export activities of SMEs onto the external markets but at the same time there are some instruments that support promotion of internationally produced goods, products and services onto in EU internal markets through provision of the required information (Figure 45).

SMEs European Commission Brussels Forum of EU Local business Local business stakeholders support support National coordination **EU27** Target market EU SME Centre Coordination of business support **EU** Delegation Existing (Economic diplomacy) Specialised EU national support services agencies Relays of Local Existing EU sup-Enterprise agencies port agencies Europe Network Local business partners Local business partners Government in target markets Customers in target countries

Figure 45 – Coordination of internationalization support for SMEs in EU

CHAPTER 7. PROPOSALS ON DEVELOPMENT OF INFORMATION SYSTEMS TO INVOLVE THE APEC SMALL AND MEDIUM ENTERPRISES IN THE FIELD OF INTERNATIONALIZATION AND ACCESS TO INTERNATIONAL MARKETS

Objectives for the Development of Information System for Small and Medium Enterprises from APEC economies

Analysis of the existing in the APEC economies information systems for SMEs shows that there are some operating networks and systems that are able to satisfy the needs and demands of entrepreneurs in various kinds of information. At the same time the existing systems do not apply the consistent integrated approach to the development of information resources and information provision system for entrepreneurs.

The results of the researches and studies conducted by project experts in the sphere of information needs and demands of SMEs from the APEC economies have defined a serious demand for considerable expansion of the spectrum of information resources accessible for SMEs. Apart from that the necessity to form positive public opinion stimulating development of SMEs underlines the need for implementation of various promotion and popularization activities. Also one has to consider the growing needs of SMEs for information support of their inter-regional and international promotion.

Thus, information support of entrepreneurship has to consider various opportunities to achieve the following objectives (Figure 46).

optimization of the existing information provision infrastructure and establishment on its basis of a common information environment for SMEs

expansion of the opportunities for application of modern information technologies in the sphere of business

active usage of the opportunities provided by business information networks and mass-media

Figure 46 – Objectives for information support for SMEs from the APEC economies

The above mentioned objectives could be reached upon the following conditions:

- competence and good knowledge of information resources holders in the sphere of SME support and development;
- involvement into the everyday activities of an information provision system of all SME support infrastructure organizations and effective and efficient usage of their capacity;
 - capacity development of existing information provision system infrastructure organizations;

- active administrative and resource support;
- development of effective and efficient cooperation / interaction among all organizations / institutions operating in the sphere of information provision and support market;
 - effective and efficient of the opportunities provided by the new information technologies.

All those objectives could be reached only through organization and implementation of a special mass popularization and SME promotion public campaign. Taking into consideration specific spheres of activities of various information systems as well as their social – economic and public value, the popularization and promotion campaign has to be carried out in cooperation with mass-media.

Organization of the Information Support System for SMEs from the APEC economies

In the APEC economies the information provision system is usually operating on the basis of the existing SME support infrastructure organizations that includes the state, public and commercial institutions and structures as well as various institutions acting in the sphere of business cooperation development.

The research shows that in the majority of the economies, the main element of such information provision systems is combined with the state portal / site for SME support and development that brings together various information resources existing within this or that economy as well as resources of different public and commercial structures.

At the same time the main principle of such information provision systems at present is development of a common information environment for SMEs through the improvement of separate elements and establishment of their effective and efficient interaction process.

The existing experience however shows that if any information provision system for SME has as the main objective development of software and telecommunication resources then their achievement could lead only to the format and the way for information provision.

In the APEC economies it is necessary to concentrate all the efforts on creation of new information provision resources for SMEs and to stimulate good access to the existing ones. The main principle for the development of the existing information provision systems should be based on the possibility to secure feedback from SMEs that use such resources.

Such an approach will allow not only to disseminate various pieces of information required by SMEs but through their feedback to set new priorities and to further develop the existing information resources. As the result various sets of information resources will be set up – from simple information databases to the information resources with social and economic data on this or that country or regions of the world.

At the same time, the general information potential of such systems and resources will be considerably increased by the users through the feedback mechanism.

With such information centres available in every APEC economy it would be possible not only to support SMEs in their internationalization strive but also to demonstrate to the public various social

effects, such as positive increase of the population employment rate, gradual development of economies, increase of the taxable base.

The results of the research done to evaluate the background for creation of information provision system for the SMEs from the APEC economies shows that establishment of a common and well operating information provision system on the basis of the modern information and communication technologies and know how will stimulate the further development of SME sector in this region of the world.

With that it is necessary to take into consideration the need to secure high level of information support for SMEs and good interaction of all the stakeholders involved in development of information environment including promotion of various plans, projects and programmes.

While developing such information provision systems in the APEC economies one has to consider the growing role of access to information all over the world. This is one of the main assets for all the SMEs operating within the knowledge and information economies.

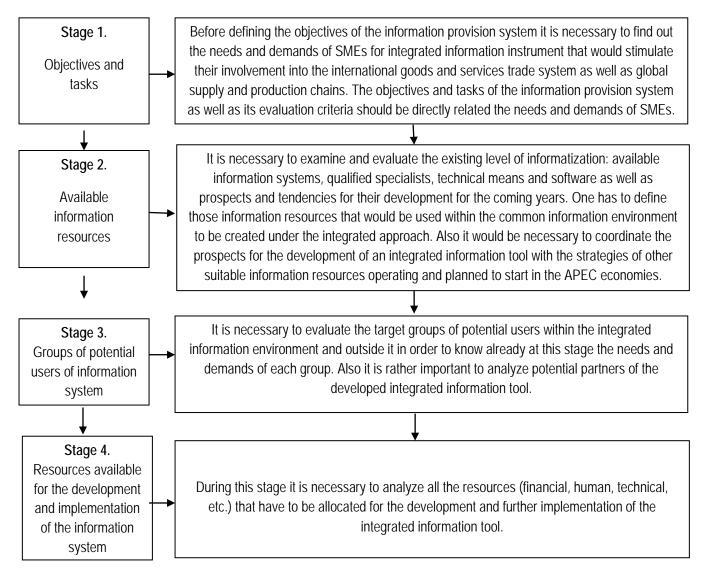
Of course, information on various aspects is more than enough but quite often business lacks information it needs right now and in the form suitable for it. Unfortunately, it is rather expensive and time consuming to get good quality and trustworthy information in the Internet where one could easily get lost with too many different web-sites.

The research of the SMEs information needs and demands shows that small and medium companies would like to have good access to reliable and easy to use information resources.

One serious existing challenge that could be solved by application of such a new information system is lack of information that could be used by SMEs from the APEC economies to make analysis of those spheres that are of interest for SMEs (mostly of the markets and products, sectors and spheres where SMEs operate).

With application of such an information provision system that could be implemented for SMEs of the APEC economies the following issues have to be solved while supporting SMEs (Figure 47).

Figure 47 – Stages for the development of information provision system for SME of the APEC economies



It would be good to have the development plans done for several years ahead.

The expected outcomes of the work done will be presented with a Concept for the development of an integrated information tool for SMEs that would stimulate their international cooperation and also with a detailed action plan for its development.

It is supposed that such an Integrated information tool (Resource) would become a network of various national institutions / organizations operating in the member economies of APEC and supporting SMEs in export and internationalization spheres.

National governments will have to select and appoint one organization that would be the main operator of the network in this or that economies and that would work directly with SMEs ready for and interested in internationalization of their business. Such national operators will be responsible for correctness and actuality of all the data and information on export and import as well as for answers to be given to SMEs and other national governments / operators of the network. The network will operate

on the basis of the unique set of standards and requirements applicable to each and every operator and will offer the same package of services in all the APEC economies.

The core of such a Resource will be constituted by a specially designed database that would include first of all proved and correct information on competitive SMEs with good products and services that are interested in internationalization of their business.

To be able to use the Resource, any SME will have to fill-in a special format (*Annex* 4) and to get registered in the database. Apart from direct search for potential partners in the database, the registered SME will be able to place its inquiry for search of information, contacts or partners with national operators.

Apart from that such database should also have special sections devoted to national legislation systems, customs procedures and logistics, national and regional trade fairs and exhibitions, infrastructure organizations, access to finance, regional initiatives and programmes, etc. – that is to all kinds of information that could be of help for potential exporters.

For those economies that include the Resource in their national SME support and development programmes and allocate the necessary budget for its functioning, it would become a good source of benchmarking on the experience and achievements of other economies.

It is rather important to define what services are going to be free of charge for SMEs (the costs covered by the national SME support and development programmes) and for what services they will have to pay (to cover the running costs of the operators).

The governments and SMEs from the APEC economies are direct beneficiaries of the integrated information tool because they will get an easy to use modern Resource aimed at involvement of SMEs into the world trade system as well as global supply and production chains and support of export to new markets and internationalization.

The state bodies of the APEC economies responsible for SME support and development on the national levels will have to regularly update all the information on their legislation in force and customs and tariffs systems explaining whether they correspond to those applied by the other APEC economies.

They will also have direct access to the best practices in the sphere of SME support and development that would allow to set and effective and efficient support system on the regional level and stimulate integration of SMEs into the world trade and global supply and production chains.

CHAPTER 8. CONCEPT FOR THE DEVELOPMENT OF THE INTEGRATED INFORMATION SYSTEM TO STIMULATE INVOLVEMENT OF THE ASIA-PACIFIC REGION SMES INTO THE GLOBAL TRADE SYSTEM, GLOBAL PRODUCTION AND SUPPLY CHAINS

Background

Information in modern economy is important as economic resource and as an article of merchandize that meets human needs. Special direction of information use in economic activities is support of the effective functioning of organizations using quality handling of information and knowledge. Lack of necessary information, as well as excess of unnecessary, disorients any business activities.

The need to make optimal marketing decisions in conditions of tough competition obliges any business - and especially small and medium - to have huge amounts of marketing information. Specificity of modern life in the global markets requires the subjects of economic relations to analyze deeply all processes taking place in domestic and foreign market to find the right niches for their products, to ensure efficient use of resources and quality satisfaction of customer requirements.

Such information - especially if it is actual and reliable - allows any small SME:

- to reduce financial risks:
- to gain competitive advantages;
- to monitor the marketing environment;
- to find new markets and niches for their products;
- to coordinate the strategy;
- to evaluate the effectiveness of activities:
- to promote effectively the products and find business partners.

The effectiveness of any organization in terms of market relations is inseparably linked with information. Information in the company's marketing system is crucial, as any marketing activity is based on an understanding of the specific situation on the market of products / services. The lack of necessary marketing information, the use of inaccurate or irrelevant data can cause serious economic miscalculations. The purpose of using marketing information is to reduce uncertainty in making managerial decisions.

To survive in the competitive activity small and medium business requires large volumes of marketing information. Therefore the market of information services must respond flexibly to the changes in demand and preferences of SMEs, and the government should by all means assist the business to have always access to actual, reliable information:

- about enterprises of various industries and their products in the interested countries;
- about sales volumes of these goods / products, supply and demand trends;
- about the possibilities of entering the interregional and international markets;
- about trade and customs regulations;
- about the requirements of the market and technical standards;
- about the possibilities of enterprise foundation in other countries;
- about the possibilities of investments attraction, etc.

For the development of their businesses, SMEs should receive all needed information from one reliable source ("one window", etc.) - different countries have different approaches, however, their experience may be useful for the development and use of one common information tool that will be used by the APEC economies seeking to support SMEs and to promote them to the world markets. Of course, much has been done by APEC in the sphere of internationalization of SMEs and this experience was explored and used within the framework of the present project for the development of the concept of an integrated information tool for SMEs in APEC economies.

The present project aims to develop an integrated and unified resource of information to promote international cooperation and integration of SMEs based on a combination of analytical and organizational activities and on the proposal of the action plan for its effective implementation in SMEs in APEC economies.

The project corresponds to the objectives declared by the APEC Working Group on Small and Medium Enterprises for the promotion of free and open trade and investment and the development of economic and technical cooperation for achieving sustainable growth and equitable development, and promotion of the trade and investment in the Asia-Pacific region.

The final concept contains information on the existing experience / best practices within the APEC economies in the sphere of support of SMEs internationalization process; it provides several alternatives for the development and implementation of the integrated information tool including its content, operational mechanism, SMEs involvement and participation opportunities, potential funding options and mechanisms; it describes main interested partners and stakeholders, development prospects, etc.

The present project was created by the initiative and support of the APEC Secretariat and Ministry of Economic Development of the Russian Federation.

Goals and Objectives

Integrated Information System of APEC economies (IIS APEC) is a supranational mechanism of formation of a single information space of APEC economies for SMEs.

The common goal is increase of the number of competitive SMEs of APEC economies involved in the process of internationalization of its business, contributing to the development of APEC economies.

The main goal of IIS APEC creation is cooperation on a mutually beneficial basis of the national information space of APEC economies at the expense of optimization and improvement of the efficiency of existing information resources of APEC economies on basis of their integration into a single information space, taking into consideration their interests in the development of cooperation in the agreed areas of stimulating the involvement of SMEs of the Asia-Pacific region in international trade in goods and services, global production chains.

IIS APEC should provide SMEs for information and consulting services in the field of foreign trade. Thereby, the available information should report about the situation inside the economy in support and stimulation of foreign trade activities of SMEs, as well as about the situation in other economies they are interested in:

- Information about national system of support of foreign economic activities within a particular economy:
 - about the activities of public authorities in the field of regulation of foreign economic activities;

- about measures and instruments, mechanisms and opportunities for government support in the field of foreign trade;
- about activities and programs of relevant development institutions;
- about the range of activities (conferences and forums, B2B meetings, exhibitions and fairs, business missions, etc.);
- about proposals from SMEs in foreign trade (supply and demand, search of partners, etc.);
- etc.:
- information about other economies that are within the scope of IIS APEC activity:
 - about socioeconomic situation of the member economy as a whole and about the state of various sectors of the economy;
 - about rules and regulations of economic activity as a whole, business registration, creation of joint ventures, etc.;
 - about regulation of foreign economic activities and technical requirements for foreign products;
 - about tenders, exhibitions / fairs and other events that make possible for SMEs to present themselves, and to find potential business partners;
 - about proposals from small and medium business in the field of foreign economic activities (supply and demand, partner searching, etc.);
 - etc.

At the same time information provided by IIS APEC can be open – that means to contain general information in the field of foreign trade, and closed – that means to be available to SMEs only after registration (e.g. search for potential foreign business partners, review of proposals from international partners etc.).

Consulting support should target on decision of particular requests / tasks of SMEs in search of any information, contacts of potential business partners, filling profiles, etc., including the collection and analysis of export proposals, claims and tenders received from domestic enterprises and foreign partners in IIS APEC.

Creating of IIS APEC will contribute to the following key objectives (*Figure 48*):

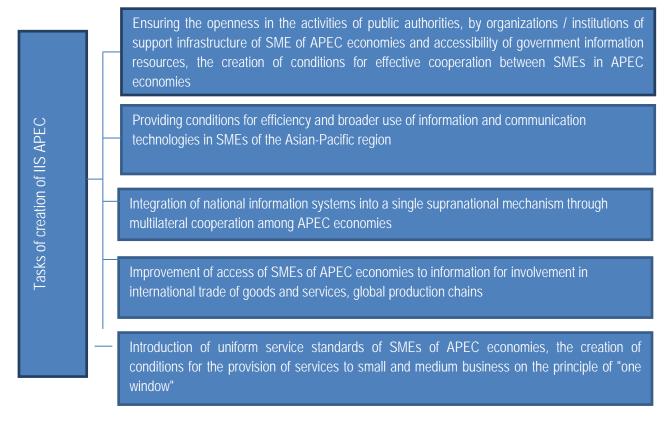


Figure 48 – Creation Tasks of the IIS APEC

Target group: public authorities, organizations / support infrastructure of SMEs in APEC economies, subjects of SMEs, national and international organizations that support the internationalization of SMEs and access to new markets.

The basic package of services for SMEs in APEC economies should be provided on a gratuitous basis.

Basic Principles of Development

The appearance of transnational economic structures, information and telecommunication systems globally indicate the transition to the information orientation of the development of economy and society.

This is precisely why the solution to the problems of information interaction should precede by the time each step in establishing cooperation in a particular area – it is necessary to monitor the information needs of SMEs of APEC economies and to suggest effective decisions for their satisfaction.

Formation of a unified information space of SMEs in APEC economies will allow better coordination of their activity to create favorable conditions for foreign trade, pursue a coordinated policy on various issues related to the implementation of foreign economic activities, access to foreign markets, the search for a foreign partner, the implementation of various forms of internationalization of SMEs of APEC economies during the interaction of their economies.

In the area of formation of information space there are rules that are both common to APEC economies and specific to each economy. The reason for these specific characteristics is that not all the items of information space are at the same time on one and the same stage. The process of

development of APEC economies is linear and the occurrence rate of each of these states into the information space can be different.

Accordingly the concept provides:

- the stages of formation and development of an integrated information space of APEC economies;
- organizational and technical base for the cooperation of the participating economies (national partners) in the information sphere;
- guidelines for the development of an integrated information system and the formation of an information space of the Asia-Pacific region;
 - general architecture of an integrated information system;
 - model of the created integrated information system;
 - target audience: participants, operators, users;
 - the structure of the database.

The present concept focuses on:

- improvement of the efficiency of information interaction of APEC economies on the agreed spheres of stimulating the involvement of SMEs of the Asia-Pacific region in international trade of goods and services, global production chains;
 - protection of intellectual property;
 - protection of the national interests of SMEs in APEC economies.

The concept is a part of the cooperation among APEC economies in the sphere of information and telecommunication, and will be realized through national programs of informatization and target programs for interstate cooperation in agreed areas of custom activity.

Development of the concept of IIS APEC is based on the following principles (*Figure 49*).

The mentioned principles take the issues of IIS APEC creating and activity of development of the information space to the priority tasks of interstate level, which should be constantly controlled by the heads of state structures governing the SME sector in APEC economies.

Observance of state sovereign rights of APEC economies on independent formation of the information space

Observance of fundamental principles of international documents and agreements and contracts between APEC economies

Mutual benefit of interstate relations with regard to a single information space for SMEs in APEC economies

Improved access of SMEs in APEC economies to information of involvement in international trade of goods and services, global production chains

Introduction of common standards for servicing SMEs in APEC economies, creation of conditions for the provision of services to small and medium business on the principle of "one window"

Ensuring an adequate level of information security by each of APEC economies

Economic expediency of participation of each of APEC economies in the implementation of measures for the development of an integrated information system and the formation of common information space in the Asian-Pacific region

Conservation, development and effective use of the existing information infrastructure of APEC economies in stimulating the involvement of SMEs in international trade of goods and services, global production chains

Observance of international law and consideration of national interests by development and coordination of approaches to cooperation of APEC economies in the development and implementation of IIS

Implementation of mutually beneficial science and technology policy ensuring the effective interaction of information systems of APEC economies

Use of various attracted funds along with state funding sources

Acceptance of equality of SMEs in APEC economies in the right to receive and extend information

Mutual interest in expanding opportunities to establish permanent and operational channels of interstate communication, exchange and extend of information in the Asian-Pacific region in the sphere of SME

Figure 49 - Basic Principles of the IIS APEC Development

General Technical Requirements

IIS APEC is to support a set of functions to enable the submission of the documents in electronic format through a single entity in order to fulfill all regulatory requirements related to the implementation of foreign economic activity, the search for a foreign partner, access to foreign markets. The participants of foreign trade relations provide information only once in a single form, filling the approved profile form, involved agencies and organizations will receive a copy in electronic format. This provides update of stored information: the database always holds the last copy of the document.

IIS APEC is to meet the following general requirements:

- Ensure the completeness of the database. Database (public) is to include: all normative
 documents concerning foreign trade procedures, acting requirements of all relevant government
 authorities of APEC economies, contact data of state authorities, organizations and institutions of
 support of SMEs in APEC economies and their employees, practical examples, guidelines for
 processing documents, information about the companies by industry and others.
- 2. Reliability and data security. Data storage reliability should be provided in view of physical and information security. IIS APEC should provide both external security (resistance to attacks of any kind) as well as internal (threats associated with misuse or theft of confidential information). It is also necessary to ensure the reliability of data storage and backup system.
- 3. Ease of use and access to IIS APEC. To provide the options for access to the service for all customer groups. Access procedure in any of the options should be simple and clear.
- 4. The ability to make changes according to varying requirements. It must be a technical capacity to make changes to the work of IIS APEC sufficient to maintain its effectiveness in the event of change of procedures, requirements, etc. IIS APEC will allow effective extension of functions, particularly the addition of new interfaces and opportunities.
- 5. The ability of reporting. The most important property of IIS APEC should be its ability to provide quickly the necessary management information. IIS APEC should be able to make several reports by pressing a button. The list and the format of reports will be determined during the development of IIS APEC and agreed with the relevant agencies and departments and other involved authorities of APEC economies.

General System Requirements

The key requirements for the system are:

- openness compatibility IIS APEC with all current standards and protocols, support for Internet technology, and the ability to increase the functionality due to the interaction of both own technologies of participants of the creatable system, as well as with software of independent provider and best practices of users;
- integrability of the information environment in which the corresponding complex of heterogeneous resources and services is presented to the user in consistent and integrated way through a single interface;
- universality information environment must cover distant and distributed, independently accompanied sources and services of various formats and forms, should provide a search operation of information resources and localization of their location, request of resources and their delivery;
- transparency information environment should be transparent to the user, maintain possibilities of public access and the personification of the interface, should be supported by user profiles

(fixing individual configurations of the user interface), information about the user's access rights, the rights of use of resources;

- reliability ensuring the sustainability of access, load balancing, as well as data security and control of access to them to meet the requirements of copyright law, the terms of data provision, control of payment of the materials used, the responsibility for the contents, dissemination of false information, privacy compromise, etc.
 - dynamism providing with efficient information based on dynamic content updates;
- scalability as a key requirement in view of investment saving to support the growth in the number of portals, resources, services, the volume of data, traffic, etc.;
- portability the ability to run on different hardware platforms, operating systems, database servers;
 - adaptability the ability to customize on the developed system for any organization;
- actuality, reliability, authenticity, fullness of information is provided with profile authorities and departments in each APEC economy.

General Technical Requirements

The developed system must meet the following requirements:

- to ensure the building of common information space between different information systems of APEC economies in the sphere of SMEs;
- to use the experience of foreign construction both of integrated information systems of this kind, particularly Enterprise Europe Network, and of national systems, e.g. Austrade, Hong Kong Trade Development Council, NATRADE, Thailand Department of International Trade Promotion, New Zealand Trade and Enterprise, International Enterprise Singapore, etc.
- information in the IIS APEC should be presented in English to provide free access of all interested SMEs but at the same time it is necessary to create a possibility to distribute different information .

Requirements for Hardware and Software Tools

Hardware and software systems should be established on the basis of the world's leading technology in the field of telecommunications and automation of control and meet the following basic requirements:

- to support access to system resources via Internet, including using a secure protocol HTTPS;
- to use a unified open standard of metainformation representation;
- to use a unified system of classification and coding;
- to have a built-in tools of online analytical data processing;
- to operate in heterogeneous environments and on different hardware platforms;
- to ensure interaction and compatibility with a variety of software products already used by developers and users of resources;
- to ensure high reliability and error stability;

• to maintain the ability of upgrade in operational process.

Requirements for the Provision of Metadata

Organization of the information space as a set of information resources requires their unique identification and ensure of efficient navigation. As a tool for the identification of such information resources open standards should apply. Currently the most promising standard is DublinCore (DC), as it can be applied practically to all types of electronic documents and is available to the interpretation both a machine as well as a man, and, furthermore, is international.

On the first stage of the presentation of information resources it is advisable to limit to their aggregative description in DC (database, supply catalog, etc.). On the following stages there is a possibility of more detailed description right up to the description of each document.

Information about the resources provided by the parties, it is appropriate to provide in the form of a set of fields DublinCore (DC) and system extensions to it (classifications and codes).

In this environment the structure and data composition is not strictly regulated as in the catalog, there are no relationship between data elements, and there is a possibility of pre-identification of a resource in the form of a specific set of data.

Easiness of creation, easy indexing, the ability of additional charts for a more detailed search, interoperability are the arguments in favor of using DublinCore.

Metadata exchange is reduced to sending RDF / XML-files, i.e. can be fully automated

In order to maintain compatibility with the simplest description of the 15 elements DublinCore and, at the same time, to increase the detailing and complexity of the document description in different organizations, it is necessary to use additional classifications and references for the basic elements.

Universal and industry directories and classifiers allow adapting the system to the peculiarities of the particular organization, to make its "delicate" adjustment without breaking the traditions and technologies of information handling and creation of information resources adopted by these organizations.

Specification Requirements Rational Unified Process

The specifications Rational Unified Process (RUP) in the classification of the requirements for information systems use model FURPS+ which means the following set of requirements:

- Functionality
- Usability
- Reliability
- Performance
- Supportability.

The symbol "+" expands FURPS-model by adding to it:

- particular limitations of the project,
- implementation requirements,
- interface requirements,
- physical requirements to the system / software and computers.

Furthermore in the RUP specifications there are also such categories of the requirements as:

- requirements indicating a need for conformity with certain legal and regulatory acts;
- licensing requirements,
- requirements for documentation.

CHAPTER 9. COMPLEX SYSTEM MANAGEMENT OF THE SMES INVOLVEMENT INTO THE GLOBAL TRADE SYSTEM, GLOBAL PRODUCTION AND SUPPLY CHAINS

General Architecture

Integrated Information System of APEC economies should be a holistic technological and software environment of interaction of all participants in its target group on the basis of common principles and public generally accepted international standards.

Implementation of this project will allow to create an integrated information system, which links national, branch-wise and regional information resources, and provides within the framework of common standards with the collection, storage, processing, search and presentation of information in the interests of all interested parties of APEC economies.

The world economy is developing rapidly - within the framework of the transnational corporations of high-tech industries, based on knowledge of the latest achievements of science and technology, of advanced technologies and systems of production organization, the situation on the markets, etc. The basis of this development is information and communication technologies and standards.

The leading trend in the global informatization is associated with the formation of the information society, both in the global and regional scale. The United States launched a program for the creation of the National Information Infrastructure, as well as initiated the creation of a global information infrastructure.

EU countries developed and approved the structure of the all-European information space and the appropriate information infrastructure, as well as national programs. In the Asia-Pacific region a project of creation of the Asia-Pacific Information Infrastructure to bring together the national infrastructure in the economies of the region was initiated.

General principles and goals of building a global information society are determined by Okinawa Charter signed by the Heads of Governments in July 2000. Particularly it is stated there that "the essence of economic and social transformation stimulated by information and telecommunications technology is in its ability to assist people and communities in usage of knowledge and ideas", and that "the achievement of these goals and decision of appearing problems will require effective national and international strategies".

The main purpose of an integrated information system of APEC economies is (Figure 50).

The system should provide the following tasks:

 informing individuals and juristic persons about services and events in the field of foreign trade in the Asia-Pacific region, about the export opportunities of producers of export products of SMEs in APEC economies and relevant characteristics of such products through thematic information window (Figure 4):

Objectives of IIS APEC Optimization and Informing of SMEs of Executing the Ensuring effective improvement of the functions of service APEC economies information support efficiency of existing provision in terms of interested in obtaining and coordination of information the agreed areas for the information on the development of resources of APEC SMEs of foreign trade, subject of foreign administrative the internationalization economies on the decisions in the trade, the of business, engaging basis of their internationalization of implementation of integration into a in international trade business, involvement foreign trade by common information of goods and services, SMEs of APEC in international trade of global production goods and services, economies chains global production chains

Figure 50 - Main Purpose of the IIS APEC

- Window "Database on SMEs" business, scientific and technical cooperation, technology transfer;
- Window "Information about the member economy in the field of foreign trade" - regulation of foreign trade, protection of intellectual property, goods and services markets;
- Window "Interaction with big business" business localization, subcontracting, supply chains;
- Window "Investment attraction" financial instruments, investment cooperation and investment projects.
- within the above windows IIS APEC provides operational information support to exporters in APEC economies and other subjects of foreign trade, including legal matters of implementation of such an activity;
- system provides its users with the tools of access to operational information, means of its analysis and storage for later use;
- ensure the provision of general and operational information to participants of foreign trade:

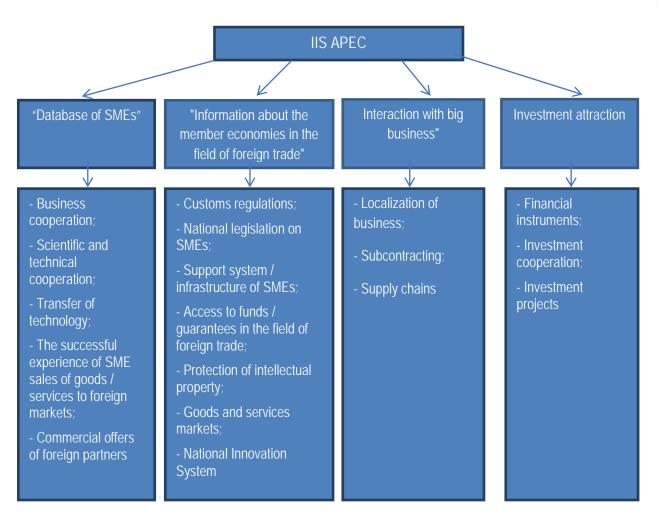


Figure 51 - Structure and Content of the IIS APEC Windows

- on state regulation of foreign trade;
- protection of intellectual property;
- conditions for registration and operation of the business;
- about activity in the special economic zones;
- aspects of customs regulations;
- about the system of support institutions / SME infrastructure, including in foreign trade;
- about the possibilities of attracting investments, the availability of funds / guarantees for SMEs in the field of foreign trade;
- publication of information and analytical materials on doing business in foreign markets, information about tenders and commercial offers of foreign partners, etc.;
- recommendations, practical advice and success stories promoting products and services of SMEs in APEC economies to international markets:
- the system has administrative instruments of content management, sufficient to support the transfer of functions to the external management system, while maintaining complete control over the performance of the system by authorized employees of the APEC Secretariat:

- the system has built-in mechanisms to maintain smooth operation, and provides the conditions for the most rapid elimination of potential problems, including a redundant subsystems for emergency replacement of defective critical components;
- the core system is a single database of foreign trade a set of information and analysis on foreign trade activities, including:
 - plain text information resources;
 - complex information structures, such as directories, equipped with sophisticated tools of search and selection of a point of information. The central database must accumulate all available information on foreign trade for SMEs in APEC economies.

Project Stages

Creation and maintenance of IIS APEC is a complex organizational, technical and technological task. Its realization affects many aspects of practice in the field of scientific and technical information, and their implementation provides a sufficiently long period. Therefore, the realization of the main goal is split into several series to achieve the goals implemented in the independent stages, which specifies the practicability of a phased development of the system.

At the first stage the prerequisites for the realization of activities on the theme are formed. The main goal is to audit the current state of information systems of APEC economies (resources, relationships, technology, market, etc.), the choice of the best options for further work organization.

At the second stage there will be carried out a full-scale test of decisions made, consistent startup of the finished development of IIS APEC by the example of the selected economies (involved on the voluntary / consensus basis) for the purpose of pre-testing of the system, the analysis of practical results.

At the final stage there will be the plantation into the operation of full scope of the project decisions, taking into consideration changes that were made after preliminary approbation in all APEC economies.

For solving the main tasks for the formation of IIS APEC it is supposed to carry out the following organizational and technical steps (*Figure 52*).

8. Create complex of search programs, monitoring, inventory and analysis of national information systems with a high degree of integration with IIS APEC 7. Create architecture of information storage providing simplicity and comfort of sharing and management 6. Develop a modern design of portal, adapted as much as possible to search for information, and to exchange of information between the central portal and other information resources of APEC economies. This design should provide maximum easiness of new resources inclusion and user's friendly interface. 5. Develop an architecture of the universal portal of IIS APEC best suited to the structure and content that are necessary for the realization of the goals and objectives of the project, as well as the needs of SMEs in APEC. 4. Develop the principles of operation, the architecture and software for IIS APEC typical node, providing the metadata collection, distributed search and control of access rights and intellectual property. 3. Develop a management of intellectual property rights. 2. Develop organizational and technological principles, as well as software of support of unified directories of IIS APEC. Develop metainformation standards, providing a unified view of meta-information in the entire IIS APEC.

Figure 52 - Organizational and Technical Algorithm of the IIS APEC Creation

The solution to these problems must come from the requirements of decentralization of responsibility for information support. Each of integrable centers (national information systems) must be supported by its organizational structure, which has departmental responsibility for maintaining corresponding thematic collection of information - tracking its actualization and authenticity.

Participants, operator of IIS APEC

The main participants of IIS APEC should be:

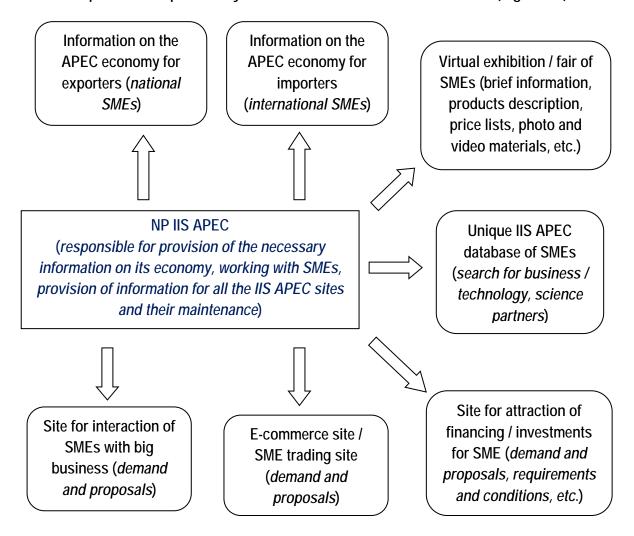
- profile structures of APEC economies, coordinating the activities of national information systems (national partner, which is determined at the national level on a competitive basis or on the basis of the decision of the national executive authority responsible for the field of entrepreneurship in the APEC economy);
 - SMEs of APEC economies:
 - support institutions / SME infrastructure on the territory of the APEC economies;

- international and national organizations that regulate the processes of internationalization and foreign trade.

Operator of IIS APEC is an organization to be selected by the APEC Secretariat for the implementation and coordination of the main objectives and tasks of the system, monitoring and control, marketing project IIS APEC.

National Operator is an organization to be selected on the national level by the responsible federal body to carry out and implement all the necessary IIS APEC functions.

Sphere of responsibility of a National Partner of the IIS APEC (Figure 53):



Management Structure

Sharing IIS APEC must be carried out in accordance with interstate and interdepartmental decisions and agreements of APEC economies.

For goal achievement it is necessary to create a mutually beneficial environment for SMEs of APEC economies and foreign entrepreneurs by access to the resource.

Realization of the decisions on the formation of an integrated information space of the APEC economies is based on the package of existing and developing international agreements that provide the organization and legal control of relations in the sphere of information and informatization.

The task of creating of interstate information systems as an integral part of the information in the Community is decided by the relevant intergovernmental and industry authorities. They work guided by decisions adopted at the international level, including this Concept.

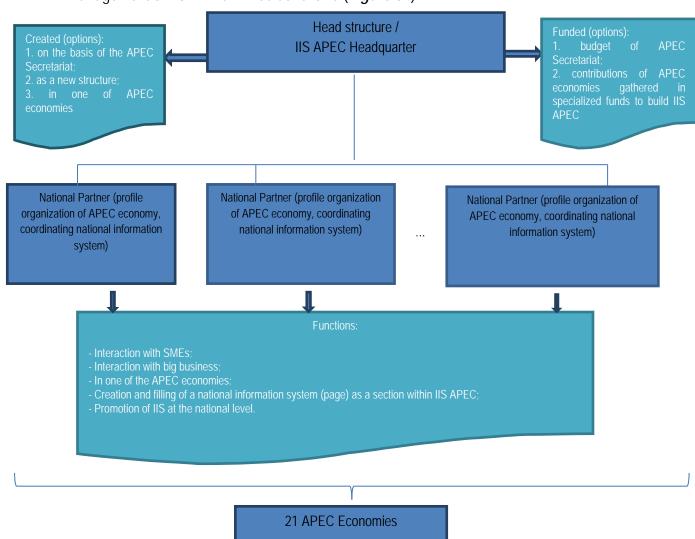
APEC economies and APEC Secretariat should carry out activities for the development of national information systems and IIS, as well as provide the advantageous environment for the implementation of information processes in those cases when it is important from the point of view of their interests, creates new opportunities for information exchange to promote cooperation according to intergovernmental agreements and international standards.

APEC economies create economic, institutional and legal conditions for the establishment of mechanisms of international cooperation in the field of an integrated information system and a unified information space of APEC.

One of the major problems of development of the information space of the APEC economies is to ensure each of them with its own information security and protection of its information sovereignty as well as the protection and preservation of APEC information resources.

A practical solution of ensuring national security information, bringing to responsibility for a threat or violation of information security in each of the APEC economies is carried out in accordance with their national law, international law and relevant intergovernmental agreements.

Management of IIS APEC will be as follows (Figure 54).



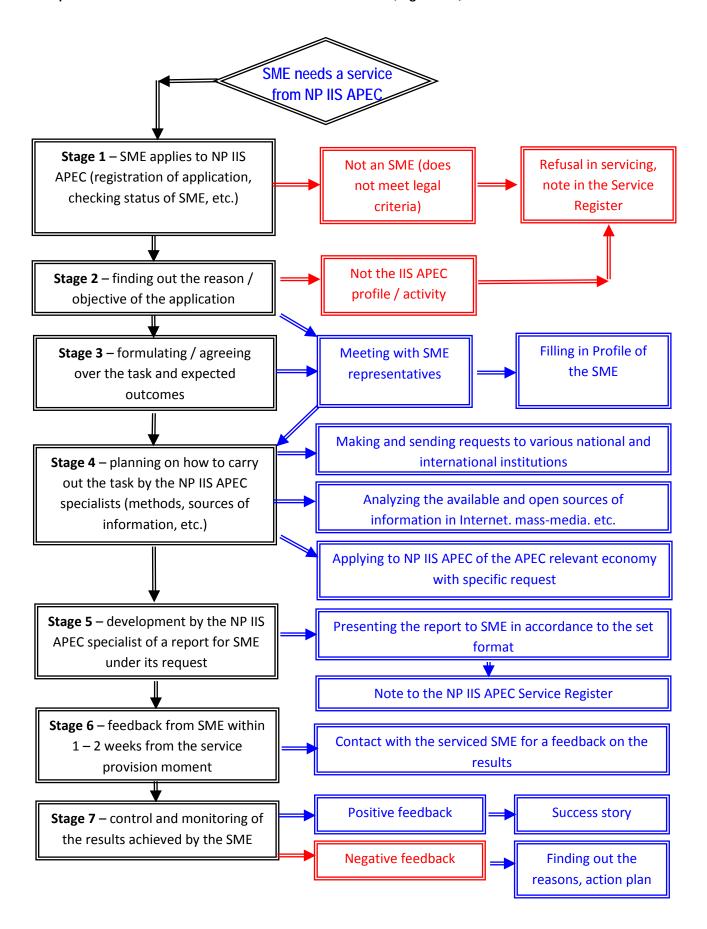
Thus, under the framework of IIS APEC it is necessary to create a unique database with profiles of those small and medium enterprises that have applied to the National Partner of the IIS APEC in order to get various information (information, analytical data, brief reports and overviews, etc.) and consulting (search for potential business / technological / scientific partners, subcontracting, investments attraction, etc.) services.

SME profiles should contain information in English on the company (name, address, location, contact person, web-site, e-mail, main sphere of activity, main products, etc.) as well as detailed description of its needs or proposal (search for a partner / technology, products sale, search for new products, etc.). Profiles might have as attachments product specification, price lists, certificates, etc.

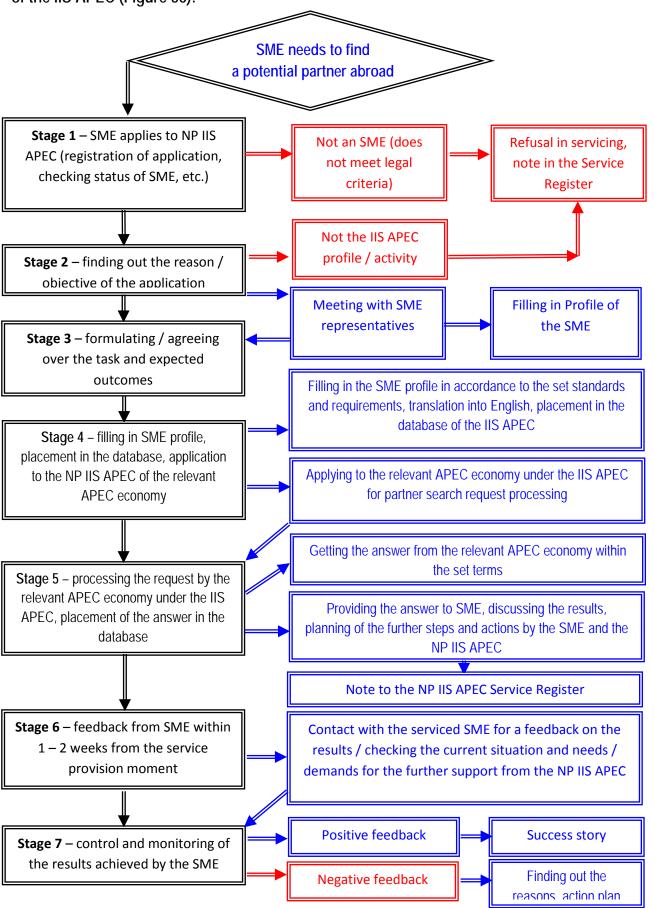
It means that SME could apply to IIS APEC for information or consulting support. The whole service provision process should be carried out in accordance to special standards set by the IIS APEC and implemented within a certain period of time.

Also it is necessary to carry out on a regular basis special monitoring of SME (feedback opinion) that received this or that service from the National Partner of the IIS APEC.

The step by step interaction process (flowchart) for provision of information services for SMEs by the specialists of the National Partner of the IIS APEC (Figure 55):



The step by step interaction process (flowchart) for provision of partner search (business, technological, scientific cooperation) services for SMEs by the specialists of the National Partner of the IIS APEC (Figure 56):



Development Prospects

The next stage of development after the effective start of the project IIS APEC, as logical and natural essential will be the integration of both the international projects of its kind in the projects for a certain period, as well as the involvement of the economies interested in the stimulation of national SMEs to enter the markets of APEC economies and use of opportunities for the expansion of SMEs' support tools.

Expected Social and Economic Effect

Financing of the Project

To achieve the objectives of forming an integrated information space APEC it is required substantial amounts of funding.

Possible funding sources can be:

- The budget of the APEC Secretariat;
- Contributions of APEC economies in case of joining any of economies to the IIS APEC.

Preliminary Realization Date and Estimated Cost

The practice of economies in the realization of similar projects for the formation of an integrated information systems shows different cost.

Preliminary estimate of the cost for building IIS APEC is 500.000 US dollars.

Preliminary period of IIS APEC realization: 2016 – 2020 years.

During the preparation of technical and economic ground of IIS APEC the specified time and cost will be refined and detailed.

Social and Economic Effect

The realization of the project on the creation and implementation of IIS APEC will provide socioeconomic effect on the level of APEC, separately taken APEC economy and SMEs, as well as the world economy in whole.

Benefits for APEC

Increasing the number of competitive SMEs involved in the internationalization process, promoting the development of APEC economies in whole. The formation of integrated information network will strengthen the role and importance as a market for the APEC economies in the world economy and APEC as a regional integration group in the SMEs sector.

Benefits for the National Economy

IIS APEC realization, aimed at involvement of more SMEs to foreign trade through the formation of a unified information space of the APEC economies, will increase the efficiency of governmental bodies and specialized agencies supervising the projects of SMEs support, to extend the format of support tools and increase the foreign trade turnover of the economy in whole.

Benefits for SMEs in APEC

The main advantage for business is that IIS APEC provides a participant of foreign trade with a unified channel for the receipt of all necessary information and documentation on the realization of foreign trade operations, the search for a foreign partner, opportunity to participate in the processes of internationalization and supply chains, which generally lead to reduce costs of participants of foreign trade relations.

CHAPTER 10. RESULTS OF THE SURVEY OF ON APEC ECONOMIES

Small and medium-sized enterprises play the key economic role in all APEC economies, especially in creating employment opportunities.

SMEs account for 90% of all enterprises and attract from 32% to 84% of employees from each APEC economy.

There is still no common definition for small and medium-sized enterprises in the world and in APEC. The criteria often used to define SMEs, include such indicators as the number of employees (*Table 37*), the value of capital and assets, productivity and turnover.

Table 37 - SME Headcount-based Definitions
(Number of employees should be fewer than)

Australia	100 (manufacturing) / 20 (services)	
Bangladesh	100	
Canada	500 (manufacturing) / 50 (services)	
China	100	
Indonesia	100	
Japan	100 (manufacturing) / 50 (services)	
Korea R	300 (manufacturing) / 20 (services)	
Lao PDR	100	
Malaysia	150 (manufacturing) / 50 (services)	
New Zealand	20	
Pakistan	250	
Philippines	200	
Russia	250	
USA	500	
Viet Nam	300	

For example, in accordance with the definition used in the European Union, medium-sized enterprises often have from 50 to 249 persons and a maximum turnover of 50 million euros, while small enterprises have from 10 to 49 employees with a maximum turnover of 10 million euros.

The APEC economies more than once confirmed their interest in the development of small and medium business, because such enterprises are an important element of economic development and achievement of the Bogor goals.

Despite the fact that in the APEC region the share of small and medium-sized enterprises accounts for about 90% of all enterprises and employ 60% of the total employable population, they generate only about 30% of export production (*Table 38*).

Table 2 - The Role of SMEs

	SMEs' Share of Jobs	SMEs' Share of GDP
Australia	50%	23%
China	70%	60%
India	25%	22%
Japan	72%	56%
Philippines	66%	32%
Korea R	76%	46%
New Zealand	59%	35%
Russia	13%	10%
United States	52%	48%
Viet Nam	74%	24%

The APEC economies cover 57% of the global GDP, 49% of the global trade, more than 40% of FDI and about 40% of the global population – that is why SME play a very important role in every economy.

SME share in export differs from economy to economy (based on the data provided by the APEC Secretariat, presentation "SME Internationalization – Different Aspects and Related Issues, September 3, 2014, 39th SME Working Group Meeting, Nanjing, China"):

Table 39 – SME share in national export

	Australia (2010 / 2011) Viet Nam (2010)	5%
2 \	ligt Nam (2010)	
- '	VICE INAIII (2010)	9%
3 I	ndonesia (2011)	16%
4 (Canada (2010)	41%
5 (China (2011)	68%
6 (Chinese Taipei (2011)	16%
7 F	Republic of Korea (2011)	35%
8 1	Malaysia (2011)	19%
9 (Chile (2010)	7%
10 F	Peru (2012)	4%
11 F	Russia (2012)	1,5%
12	Singapore (2009)	16%

13	USA (2009)	22%
14	Thailand (2011)	30%
15	Japan (2012)	15%

Every APEC economy applies different methods and instruments to gather and analyze various relevant data, thus it is necessary to have unique standards to collect and process data / information based on the same approach. At the same time, frequency of such researches also depends on this or that APEC economy internal decision. Also it is necessary to have unique set of indicators to measure the level of development and input of national SME in the sphere of export.

Information on the current situation on the Russian SME sector and its export potential is presented in *Annex 5* to the present Report.

As part of the present project in coordination with Ministry of Economic Development of Russia it was developed a special questionnaire (*Annex* 6) in Russian and English for questioning representatives of APEC economies to study the level and degree of development of export activities of SMEs.

The structure of the questionnaire includes questions related to the general state of the sector of SMEs activity in the field of exports, export geography, the availability of relevant information resources, the respondents' opinions regarding the IIS APEC.

This questionnaire with the assistance of Ministry of Economic Development of Russia in July 2014 was sent to all APEC economies.

Questionnaires were filled in by representatives of state institutions responsible for the support and development of small and medium business in their economies or representatives of organizations and institutions involved in research in the field of economics. Data are presented for the period 2012 - 2013.

With regard to the respondents, the sector of small and medium business plays a major role in the development of the national economy, its share in the production of the national GDP is from 30% (New Zealand) to 43% (Hong Kong, China), and the number of people employed in the sector – from 12.4% (Peru) to 80.96% (Thailand) from the total number of employed people in the economy.

The main activity of SMEs is the production of consumer goods, retail and wholesale trade, hotels and restaurants (service sector), agriculture, hunting and forestry, fish farming and fishing. In addition with regard to the respondents, small and medium business also provides financial and other services and in addition is involved in mining.

Also the representatives of small business are involved in the field of import and export trade. At the same time export activities are engaged by from 4,2% (Peru) to 25.5% of the total number of SMEs, import - by 14.1% (Peru) to 30.9% (Thailand). Unfortunately accurate statistical information in many APEC economies do not exist and the respondents cited their expert estimates based on the results of various studies.

From the point of view of the export geography of SMEs (information provided by the Chinese Taipei) deliveries are carried out mainly to China - 28.8%, North America - 18.4%, Europe - 14.1%, ASEAN - - 13.5%, Japan - 10.5%. From the point of view of the representative of Peru, export geography of national

SMEs is distributed as follows: the USA - 22.5%, Venezuela - 20.3%, Spain - 5.1%, Ecuador - 4.4%, the Netherlands - 4.3%, Chile - 4.2%, China - 4%.

The respondents think that they are sufficiently aware of the existence of various national information resources, contributing to stimulation of export activities of SMEs in their economies and their involvement to the sphere of foreign trade. At the same time, the following resources were named:

- ITRI Commercialization and Industry Service Center, Chinese Taipei;
- Taiwan External Trade Development Council;
- Taiwan Electrical and Electronic Manufacturers' Association;
- Taipei Computer Association;
- The Hong Kong Trade Development Council (HKTDC);
- The Hong Kong Export Credit Insurance Corporation;
- The Trade and Industry Department of the HKC Government operates the SME Export
 Marketing Fund, providing funding support to SMEs for their participation in eligible export
 promotion activities such as exhibitions, trade missions, placing advertisements on trade
 publications and eligible trade websites;
- New Zealand Trade and Enterprise;
- Department of International Trade Promotion, Ministry of Commerce, Thailand;
- Foreign Trade Department, Thailand;
- International Institute for Trade and Development, Thailand.

Despite the existence of national information resources aimed at supporting and promoting SMEs in international markets, however, the respondents believe it is necessary to develop and create a unified integrated information resource. Such a resource can contain among others the following information:

- about requirements of the foreign market (legislation, certification, registration, customs, etc.);
- about general information (review) about the foreign economies (the main industry, prospects, statistics, etc.);
- about proposals for cooperation (import / export / distribution / coproduction / investment / localization of production, etc.);
- about tenders;
- about arrangements for the promotion (exhibitions, conferences, forums, etc.);
- about enterprises (database with contacts, sphere of activity, product descriptions, etc.).

CONCLUSIONS / LESSONS LEARNED

During the implementation of the present project "Research and assessment of prospects for development of an integrated information tool to stimulate involvement of SMEs of the Asia-Pacific region into the global trade system, global production and supply chains" (Project №: SSME 05 / 2013A) in the period from 25 November 2013 to 28 February 2015 the project team of experts and consultants set by the Russian Agency for Support of Small and Medium Business carried out the following:

- development of instructions to the qualifying requirements for consultants / experts / specialists engaged to perform the work under the APEC project;
- selection and identification of consultants / experts / specialists appropriate to the required scope of work and the developed requirements;
- formation and approval of the Action Plan with the team of selected consultants / experts / specialists;
- development of technical specifications for the "Study to Assess the Existing International Experience Related to the Development and Implementation of Integrated Information Systems / Tools for SMEs in the Field of Internationalization and Access to International Markets, Including Analysis of the Prospects for the Development of Online Information Systems";
- development of technical specifications for the analysis of "Study of the needs and requirements of Russian SMEs in the creation of an integrated information tool to stimulate their participation in international trade of goods and services, and global production and supply chains";
- implementation of study and preparation of the report "Analysis and evaluation of existing international experience in the development and implementation of complex information systems / tools for SMEs in the field of internationalization and access to international markets, including analysis of prospects for the development of online information systems". Study results: there is a number of information resources at the national level that provide different types of information and provide consulting support to SMEs in the implementation of the export business, the internationalization of the global production and supply chains (STAR Services Trade Access Requirements, Team Canada Inc., Austrade, Hong Kong Trade Development Council, MATRADE Malaysia, Thailand Department of International Trade Promotion, New Zealand Trade and Enterprise, International Enterprise Singapore, Helping US Companies Export, Russian export catalog, etc.). This experience can also be used to develop an information system that operates at the international level the level of APEC economies;
- implementation of study and preparation of the report "Study of the needs and requirements of Russian SMEs in the creation of an integrated information tool to promote their participation in international trade of goods and services, and global production and supply chains". Study results: While analyzing 300 SMEs from 30 regions of Russia it was revealed the need to develop an integrated information chain in APEC economies. As an example of such an integrated information system can be System of Enterprise Europe Network there is no analog in the world;
- Organization of working meetings with key interested stakeholders (representatives of the Ministry of Economic Development of Russia, the Ministry of the Russian Federation for the Development of the Far East, the Russian Agency for the Insurance of Export Credit and Investment "EXIAR", NP "Institutes of the development of small and medium business," embassies of APEC economies in Russia, Group of

Companies "Vnesheconombank", MSP Bank, State Specialized Russian Export-Import Bank, regional centers of export support, etc.), during which the achieved results and developed concepts were presented and discussed;

- preparation of a common intermediate report containing Report 1 and Report 2;
- preparation of the Final Report;
- development of the Concept of an integrated information system for SMEs from APEC economies;
- formation of an Action Plan for implementation of the Project to build an integrated information system of APEC:
- development of the Project Matrix to build an integrated information system of APEC;
- preparation of Technical specification for the development of an integrated information system APEC.

Based on the results of the research done it is necessary to note the following:

- internationalization and integration of SMEs into the world trade system and global supply and production chains is a considerable part of SME development process in all the APEC economies. The more information, consulting support and other assistance is provided for SMEs, the higher are their chances for success;
- provision of information support to SMEs is done at the moment by the state bodies, SME support infrastructure organizations through development of various information provision systems, official websites and portals for information support to SMEs as well as special telecommunication systems for SMEs;
- information systems and official sites for information support of SMEs in the APEC economies as well as telecommunication systems are set in order to provide SMEs with the following information:
- 1) on implementation of state support programmes for SME development, regional and municipal programmes for SME development;
- 2) on the number of SMEs operating in this or that economy and on their classification in accordance to spheres of economic activity;
- 3) on the figures on employment and number of jobs created by the sector with classification according to their types of economic activities;
- 4) on the goods, products and services produced by the SME sector with classification according to their types of economic activities;
 - 5) on financial and economic situation of the SME sector in general;
 - 6) on SME support organizations, their services and access conditions;
- 7) on various tenders that might be of interest for SMEs including those aimed at provision of support for SMEs;
- 8) on various events aimed at internationalization of SMEs including fairs and exhibitions, forums and conferences, business missions and brokerage events, etc.;
 - 9) on measures and steps to take while searching for international partners;

- 10) on any other information (economic, legal, statistics, production, technical, marketing, etc.) that is required by any SME wishing to enter international markets.
- information resources of the APEC economies provide same kind of information for national SMEs on partners search, access to international markets, market studies, export import activities;
- at the same time, needs and demands of SMEs of the APEC economies in the sphere of internationalization are not fully satisfied because there is no common information resource that offers complete package of information and provides individual consulting support to SMEs;
- the proposed project is aimed at finding opportunities for economic development and integration of SMEs of the APEC economies into the world trade system and global supply and production chains;
- the main accent will be done on the development of the Resource concept that would stimulate SMEs promotion to new markets and would ease their integration into the world trade system and global supply and production chains;
- SMEs would be able to get through this Resource various information on business development and potential partners within the APEC economies. Also they would get a possibility to exchange their best practices, transfer ideas and technologies, improve general level of competitiveness.
- as the results SMEs access to new markets will lead to increase of their turnover and profit margin, improvement and development of their production process, creation of new jobs and increase of tax payments;
- conclusions from analytical research as well as the developed proposals regarding the Resource as well as an Action plan will constitute a good basis for the further discussion and decision on the launch of such an integrated information tool (Resource);
- last but not least such a Resource will stimulate and intensify the economic cooperation of SMEs of the APEC economies, their successful integration into the world trade system and global supply and production chains.

Based on the practical experience obtained during the implementation process of the present Project, it is possible to enumerate the following lessons learned:

- small and medium enterprises from the APEC economies are interested in internationalization of their business; however, while doing this by themselves they come across various barriers and difficulties that slow down the process in general => there is a serious need for state support with clear cut instruments and mechanisms;
- SME needs in the sphere of internationalization are of different character (information, consulting, training, marketing, promotion, access to finance, etc.) => there is a serious need for the relevant infrastructure that would provide a package of services (free of charge as well as on the fee basis);
- support for SME in the sphere of internationalization should be of systematic and consistent approach and well-coordinated character => national operator is needed to organize and to implement the whole process, to control and monitor it;
- national operators in the APEC economies should work in accordance to a set of standards, rules and procedures => need for coordinating and monitoring body (head office);

the whole system for support of SME internationalization process should work in two directions helping national companies to enter foreign markets as well as assisting international companies to find partners on the national markets => this system should become part of national strategies for SME support in the APEC economies as well as the main priority of the APEC strategy for SME support and development in general.

Formation of a unified information space of SMEs in APEC will allow better coordinate their activities, to create favorable conditions for the operation of foreign trade, to pursue a coordinated policy on various issues related to the implementation of foreign trade, access to foreign markets, the search for a foreign partner, the implementation of various forms of internationalization of SMEs APEC during the integration group interaction with the outside world.

The implementation of the project will allow to APEC economies to increase the number of competitive SMEs involved in the internationalization process, promoting the development of economy in the Asia-Pacific region in whole. The formation of integrated information network will strengthen the role and importance as a market for the APEC economies in the world economy as well as APEC in whole as economic community.

ANNEXES