Figure 11: Researchers by institutional sector in Turkey


Also, the number of full time equivalent R&D personnel per 10,000 total employments is 18.1 for the year 2003 and 18.3 for the year 2004 (Figure 12).

Figure 12: Number of full time equivalent R&D personnel per 10,000 total employments


As can be seen from Figure 11, 62% of the researchers in Turkey are from higher education as compared to around 40% in EU-25. The low number of researchers in the private sector in TR can be attributed to the low level of awareness for science and technology within the private sector. Parallel to this, the companies are not considering R&D and innovation activities as their major source of competitiveness.

Turkish universities, public research institutions and industry through their knowledge and research experience, take part in different research programs of the European Union. In 2003, Turkey joined the EU’s 6th Framework Program, by which the integration of TRA with ERA has been initiated. Turkey has obtained a participation rate of 15% within the total number of proposed projects which can be regarded as reasonable in a nearly 2 billion € project pool. Turkish R&D is not capable of participating efficiently and with mutual benefits in R&D co-operation structures and networks operated by the EU. The major factors that lead to this situation are deficiencies in communication within the EU research network, insufficient quantity of researchers, insufficiency of proper R&D infrastructure, and late participation of Turkey to the program.

The geographical distribution of the R&D project proposals is given in Map 4. As can be clearly seen from the map, there is strong geographical concentration in the field of R&D, the project proposals come from the large cities in the Western part of the country thanks to the relatively strong
cooperation among the universities, research institutions and industry, whereas the regions where the RCOP will be implemented have a small share in the total R&D project proposals. The main reasons for this low participation level are lack of infrastructure, insufficient number of researchers, research institutes and universities and low interest of SMEs in R&D and innovation.

Map 4: Distribution of R&D Project Proposals in the Scope of 6th FP by NUTS II Level

In Turkey, cooperation between universities and enterprises is generally low. Usually universities and other scientific institutions intensify their studies on theoretical subjects which are not necessarily in the priority areas of the needs of the industry. However sustainable research activities should be inevitably integrated to industrial applications. There exist some mechanisms to encourage both sides for collaboration.

The MoIT is one of the executers of these mechanisms through financing R&D, innovation and technological cooperation activities. The Law on Technology Development Zones promotes the use of high/advanced technologies and the development/production of technology or software in technology development zones, and the related R&D capabilities, through cooperation between universities, research institutions and the productive sector. Financial support is given for land, infrastructure and construction of management buildings. There are also both tax exemptions until 2014 and incentives for mobility of researchers in TDZs.

There are 22 TDZs in Turkey that were established mainly by the universities in order to help closing the gap between the research units and the productive sector. 4 of them are located in the regions which fall below 75% of average national GDP per capita (Table 35). These TDZs are not operational due to lack of physical infrastructure and financial constraints in acquiring adequate technological infrastructure.

Table 35: TDZs in 12 NUTS II Regions

<table>
<thead>
<tr>
<th>Technology Development Zones</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Erciyes University TDZ**</td>
<td>Kayseri</td>
</tr>
<tr>
<td>2 Trabzon TDZ**</td>
<td>Trabzon</td>
</tr>
<tr>
<td>3 Erzurum Ata TDZ**</td>
<td>Erzurum</td>
</tr>
<tr>
<td>4 Gaziantep TDZ**</td>
<td>Gaziantep</td>
</tr>
</tbody>
</table>

* Operational
** Located in 15 Growth Centres according to SCF

Source: MoIT
In total, there are approximately 3500 R&D personnel in TDZs. There are 21 firms which are established by academicians and 27 firms in which academicians are partners. 18 patents have been taken by the firms at TDZs in the last 4 years.

In order to increase the close cooperation between the research community and the business sector and to promote spin-offs and new technology based firms, one of the instruments developed by KOSGEB is “Technology Development Centres (TDCs)” and “Incubators Without Wall”. Through TDCs, additional to incubation service, SMEs’ projects on R&D, innovation and new product/production technology development are supported financially.

Currently, there are 18 TDCs located in universities’ campuses. The number of “Incubators without Wall” located in Industrial Zones is 8. The number of enterprises and employment supported in the TDCs and “Incubators Without Wall” is 900 and 5,125 respectively. In addition, there are also three private incubators established by Ericsson, Koç Holding and Siemens. Like TDZs, only 3 of TDCs are located in the 12 NUTS II regions and the number of the enterprises and employment supported in these TDCs is 110 and 1,600 respectively. (Table 36)

Table 36: TDCs in 12 NUTS II Regions

<table>
<thead>
<tr>
<th>Technology Development Centres</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Erciyes University TDC*</td>
<td>Kayseri</td>
</tr>
<tr>
<td>2 Karadeniz Teknik University TDC*</td>
<td>Trabzon</td>
</tr>
<tr>
<td>3 Gaziantep University TDC*</td>
<td>Gaziantep</td>
</tr>
</tbody>
</table>

* Located in 15 Growth Centres according to SCF
Source: KOSGEB

Another programme executed by the Ministry of Industry and Trade, in order to strengthen academia and business collaboration, is the SAN-TEZ. Through the programme, graduate studies are executed to solve a specific problem in industry by the transfer of the academic knowledge into high-added-value technological products. The commercialization of the academic knowledge and strengthening research oriented SMEs are supported therefore through the programme.

Besides, three programmes are executed by TÜBİTAK in order to strengthen the cooperation, “Supporting the Initiatives of Establishing Scientific and Technological Cooperation Networks and Platforms Program (İSBAP)”, “EUREKA R&D Network Support for the Industry Program”, and “Support Program For R&D Projects Market Platform”. TÜBİTAK also runs “Support for the Industry R&D Projects Program” to encourage research and technology development activities of the industry. This program covers small and medium size enterprises (SMEs) as well as large companies. TÜBİTAK also supports the initiation and promotion of R&D activities of SMEs through a new programme called “R&D Start-up Support Program for SMEs”. Additionally, TÜBİTAK launched the “Support for the Technology and Innovation Focused Enterprises Programme (TEKNOGİRİŞİM)” to foster entrepreneurship and innovation.

Another important implementing body to strengthen the cooperation between academia and the business sector is State Planning Organization (SPO) which provides guidelines for research, technology development and innovation. SPO also provides financial support for research projects as well as for research infrastructure in public universities.

One of the most important mechanisms is the Technology Development Foundation of Turkey (TTGV), which is a non-governmental and an independent non-profit organization (as an NGO) in the science and research sector, in order to support projects coming from the corporate sector. The Foundation supports, Technology Development Projects Funding, Technoparks and Technology Centres, Venture Capital Funds, Start-up Funds, Joint Technology Development Project Supports, Commercialization of R&D Activities Support, Risk Sharing Support. TTGV has provided support
amounting to 165 Million USD to 473 technology development projects resulting in a total R&D volume of 326 million USD.

As a conclusion, it can be said that the major problems of Turkey in the field of R&D and innovation are:

- Inadequate number of enterprises, institution/agencies/research centres and universities carrying out R&D, innovation and technology based activities.

- Low cooperation level between universities and enterprises. Usually universities and other scientific institutions intensify their studies on theoretical subjects and this situation makes industry far from those researches.

- Low participation level to the Community Programs such as 6th FP because of the lack of R&D infrastructure and quantity and quality of researchers and low interest of SMEs in R&D and innovation.

- The universities in the regions having a per capita income below 75% of Turkish national average have insufficient infrastructure which is necessary for a successful R&D and, also the universities, research centres and sophisticated laboratories which have the high capability of R&D, are located in the west part of the Turkey.

- Most of R&D infrastructure is established in universities and public research institutions, consequently most of R&D activities are performed by universities and public research institutions. There is not enough number of SMEs carrying high-technology based activities and the number of SMEs capable of involving in such high-tech projects is quite low, while the existing ones need strong infrastructure and other types of support in order to carry out such projects.

- Lack of human resources on R&D and Innovation.

2.1.4. Information Society

Sustainable growth is possible by increasing competitiveness based on increased productivity. Information and Communication Technologies (ICT) play a critical role to create increased productivity and to ensure its sustainability.

In this respect, according to the 9th Development Plan, diffusion of ICT is seen as one of the major factors in increasing competitiveness. In order to ensure an intensive usage of ICT by enterprises, institutions and citizens, improvement of ICT infrastructure, increasing the competitiveness within the electronic communication sector, provision of alternative infrastructure and services which ensure effective, rapid and secure access to information with reasonable costs and expansion of broadband communication infrastructure are foreseen in the 9th Development Plan.

Moreover, in the above-mentioned plan, in order to increase the competitiveness of the ICT sector, the business environment for Foreign Direct Investment (FDI) will be improved and with this way technological transfer will be ensured and technoparks will be specialised with a view to support regional and preferential industries in the fields of software and services.

On its way to an information society, Turkey plans to make use of the national documents such as Information Society Strategy (2006-2010). The implementation of the Strategy document, which is a road map to an information society and its Action Plan, will contribute to the development of an information society in Turkey. Pursuing the priorities of the strategy document will contribute to a better use of IT through development of an e-economy and on-line public administration.
As mentioned in the said Strategy document, information and communication technologies (ICT) have great potential in terms of employment and GDP generation. It is expected that this will contribute to increased productivity of work in manufacturing industries and services. This will bring new business opportunities, both on the domestic and international markets. ICT technologies are important as well for industrial R&D and innovation. Many auxiliary industries and services develop a close relationship with the development of information technologies (e.g. e-commerce, e-learning, etc.).

In Turkey, efforts to liberalize the electronic communications sector have gained momentum with the establishment of a Telecommunications Authority in 2000, and the sector has been opened to competition as of the beginning of 2004. Within the year 2005, 55% of Türk Telekom A.Ş. has been privatized by block sale. In the field of mobile communications, operators working under the revenue sharing model with Türk Telekom A.Ş. have started to operate under licensing regime in 1998. At present, 3 operators are functioning in this field and especially, after provision of licences a rapid development was recorded. In 2006, it is predicted that the market share of the telecommunication sector has reached 12.5 billion US $ whereas ICT sector has reached to 3.5 billion US $.

The ICT sector is composed of two sub-sectors, namely information technologies and telecommunications. The ratio of the telecommunications sector size to GDP is 3.3%, whereas for information technologies the same ratio is 0.8% (Figure-13). For the EU25 these ratios are 3.4%, 3%, for the EU15 3.3%, 3.1% respectively (Table 37 and 38).

**Figure 13: Share of ICT Expenditures in the GDP, 2003**

![Graph showing the share of ICT expenditures in the GDP for different countries.](image)

Source: OECD IT Outlook, 2004

**Table 37: ICT expenditure-telecommunication as a percentage of GDP**

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU (25 countries)</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>EU (15 countries)</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: Eurostat
Table 38: ICT expenditure-IT as a percentage of GDP

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU (25 countries)</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>EU (15 countries)</td>
<td>3.1</td>
<td>3.0</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Source: Eurostat

Figure 14: Ratio of Broadband Access Cost to Average Per Capital Income

Source: OECD Communications Outlook 2005

Since, there is no data about information society indicators at NUTS II level at TURKSTAT, in 2000, a “Survey on IT Usage and Penetration” was performed with close collaboration of Academic Consultants and staff of TUBİTAK Information Society and Electronics Institution, which is the most comprehensive survey on the basis of coverage. Some indicators to give an idea about differences among the regions of Turkey are shown at Table 39. Usage and penetration level of ICT in the regions covered by the RCOP is very low. The reason of this is insufficient infrastructure and competency.

Table 39: Survey on IT Usage and Penetration

<table>
<thead>
<tr>
<th></th>
<th>Fixed telephone ownership (%)</th>
<th>Mobile telephone ownership (%)</th>
<th>Rate of Computer ownership of households (%)</th>
<th>Rate of TV Ownership (%)</th>
<th>Coded Channel subscription rate (%)</th>
<th>Cable TV subscription rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediterranean Region</td>
<td>11.9</td>
<td>42</td>
<td>7.30</td>
<td>97.5</td>
<td>1.50</td>
<td>7.00</td>
</tr>
<tr>
<td>Black Sea Region</td>
<td>8.6</td>
<td>53</td>
<td>13.60</td>
<td>97.6</td>
<td>7.59</td>
<td>10.00</td>
</tr>
<tr>
<td>Interior Anatolia Region</td>
<td>18.9</td>
<td>52</td>
<td>13.10</td>
<td>97.6</td>
<td>3.20</td>
<td>12.00</td>
</tr>
<tr>
<td>Marmara Region</td>
<td>32.3</td>
<td>61</td>
<td>16.80</td>
<td>97.3</td>
<td>6.70</td>
<td>16.00</td>
</tr>
<tr>
<td>Southeast Anatolia Region</td>
<td>7.3</td>
<td>36</td>
<td>9.10</td>
<td>94.8</td>
<td>1.30</td>
<td>6.00</td>
</tr>
<tr>
<td>Aegean Region</td>
<td>15.4</td>
<td>46</td>
<td>11.20</td>
<td>97.5</td>
<td>2.90</td>
<td>10.00</td>
</tr>
<tr>
<td>Eastern Anatolia Region</td>
<td>5.7</td>
<td>29</td>
<td>1.20</td>
<td>94.3</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The number of enterprises which has access to internet is accepted as an indicator for the usage of ICT at enterprises. It is striking that, especially for small enterprises, there is a considerable difference between the values of Turkey and the EU (Table 40).
Table 40: Ratio of Enterprises with Internet Access (%)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>All (10 employed persons or more)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU 25</td>
<td>n/a</td>
<td>89</td>
<td>91</td>
</tr>
<tr>
<td>EU 15</td>
<td>86</td>
<td>90</td>
<td>92</td>
</tr>
<tr>
<td>Euro Area</td>
<td>87</td>
<td>90</td>
<td>-</td>
</tr>
<tr>
<td>Turkey*</td>
<td>-</td>
<td>-</td>
<td>80.43</td>
</tr>
</tbody>
</table>

Small enterprises (10-49) employed persons

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 25</td>
<td>n/a</td>
<td>87</td>
<td>90</td>
</tr>
<tr>
<td>EU 15</td>
<td>84</td>
<td>88</td>
<td>91</td>
</tr>
<tr>
<td>Euro Area</td>
<td>85</td>
<td>89</td>
<td>-</td>
</tr>
<tr>
<td>Turkey*</td>
<td>-</td>
<td>-</td>
<td>77.97</td>
</tr>
</tbody>
</table>

Medium enterprises (50-249) employed persons

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 25</td>
<td>n/a</td>
<td>97</td>
<td>98</td>
</tr>
<tr>
<td>EU 15</td>
<td>95</td>
<td>97</td>
<td>98</td>
</tr>
<tr>
<td>Euro Area</td>
<td>96</td>
<td>97</td>
<td>-</td>
</tr>
<tr>
<td>Turkey*</td>
<td>-</td>
<td>-</td>
<td>92.29</td>
</tr>
</tbody>
</table>

Large Enterprises (250 employed persons or more)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 25</td>
<td>n/a</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>EU 15</td>
<td>99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Euro Area</td>
<td>99</td>
<td>99</td>
<td>-</td>
</tr>
<tr>
<td>Turkey*</td>
<td>-</td>
<td>-</td>
<td>99.22</td>
</tr>
</tbody>
</table>

Source: EUROSTAT
* Source: TURKSTAT (News Bulletin 07.06.2006/93, 2005 data)

Figure 15: Ratio of Enterprises with Computer and Web-site Ownership and Internet Access by Size in Turkey

Source: TURKSTAT (News Bulletin 07.06.2006/93, 2005 data)
Widespread usage of ICT by businesses in interactions and transactions with the public sector or while doing their own business will lead to the development of new and effective business processes, reduction of operational costs, increase in productivity and increase sales potential by benefitting from the opportunities of access to global markets through widespread usage of e-commerce (Table 41 and 42). In addition, intra-sectoral and inter-sectoral synergies will emerge via effective communication platforms between companies.

According to the Information Society Strategy, in Turkey, more than three-fifth of the SMEs have computer, more than 50% of them have access to internet and 20% of them have broadband access. Considering that the rate of Internet usage in businesses in the EU is around 90%, it becomes even more important to turn this awareness into action to increase usage of ICT in enterprises.

With the increasing awareness, SMEs learn how to use ICT in their daily work and integrate it to their production processes, therefore increasing productivity and keeping abreast with technological developments.

In Turkey, the rate of usage of modern business applications such as enterprise resource planning or customer relationship management by enterprises is around 3% at the most. It has been observed that the public institutions which provide electronic services to SMEs, in regard to their working area, provide services with different approaches. At present, electronic services to this sector are being executed separately and cannot be integrated.

When the quantity and quality of services provided by the Ministry of Industry and Trade are taken into consideration, the creation of new generation service provisions, updating of existent services according to needs of today and integration of existent systems in the form of common usage, are required.

Table 41: Ratio of Enterprises by Area of ICT Usage

<table>
<thead>
<tr>
<th>Main Indicator*</th>
<th>State of Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of e-trade sales to total turnover</td>
<td>% 0 - % 3</td>
</tr>
<tr>
<td>Ratio of enterprises using resource planning management</td>
<td>% 0 - % 3</td>
</tr>
<tr>
<td>Ratio of enterprises using supply chain management</td>
<td>% 0 - % 1</td>
</tr>
<tr>
<td>Ratio of enterprises using customer relations management</td>
<td>% 0 - % 0.5</td>
</tr>
</tbody>
</table>

Source: Turkey’s Information Society Strategy
* For Small, Medium and Large Sized Enterprises (10 and more employee)

Table 42: Percentage of enterprises’ total turnover from e-commerce

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 25</td>
<td>2.1</td>
<td>2.5</td>
</tr>
<tr>
<td>EU 15</td>
<td>2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Euro Area</td>
<td>2.1</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Source: EUROSTAT

In spite of many successful projects on public services, there are still shortcomings with regard to the basic public services with high benefit potential. 12 out of the 20 basic public services determined by the EU are being delivered at various levels via electronic channels in Turkey (Table 43). Turkey’s rate of development in the delivery of these 20 basic public services is 53% as of 2005. The 2004 average in the delivery of 20 basic public services is 72% for EU15, and 65% for EU25.

In order to fill the gap at the current situation and objectify the opportunities, it is seen that most of the public institutions have made an effort to enhance usage of technology in recent years. Particularly, the projects to create main structures such as citizenship number and e-signature have been completed and preparations to make a necessary leap forward have reached an important point. As far as services are concerned, it is seen that more difficult projects e.g. tax return form and customs declarations have been completed at uppermost level.
Table 43: Public Services Provided Electronically

<table>
<thead>
<tr>
<th>Public Services</th>
<th>Application in Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income taxes (Declaration, Notification of Assessment)</td>
<td>e-Tax Return application (Notification, Accrual, Payment)</td>
</tr>
<tr>
<td>Job search services by labour offices</td>
<td>Access to information (Job notification is provided but no interactive services)</td>
</tr>
<tr>
<td>Public procurement</td>
<td>Publication of call for tenders</td>
</tr>
<tr>
<td>Social contribution for employees</td>
<td>e-Declaration (Sending Declaration, Collection Information, Debt, Accrual, Online Payment)</td>
</tr>
<tr>
<td>VAT (Declaration, Notification)</td>
<td>e-Declaration (Notification, Accrual, Payment)</td>
</tr>
<tr>
<td>Registration of a new company</td>
<td></td>
</tr>
<tr>
<td>Submission of data to statistical offices</td>
<td></td>
</tr>
<tr>
<td>Customs declarations</td>
<td>Notifications can be made via BILGE-EDI system except for the documents requested by other public sector bodies</td>
</tr>
<tr>
<td>Environment-related permits (including reporting)</td>
<td>Some required documents can be downloaded</td>
</tr>
<tr>
<td>Portal for Investment Advisory services</td>
<td>Invest in Turkey Portal (Investment advisory service for foreign investors). It will be available online soon.</td>
</tr>
<tr>
<td>SME portal</td>
<td>KOBINET* by KOSGEB (Information services, advice and assistance services are provided for the business cooperation services of SMEs by intermediary organization, namely Information Providers)</td>
</tr>
</tbody>
</table>

In the light of above-mentioned issues, the main bottlenecks and shortcomings of Turkey in the field of information society with regard to SMEs can be summarized as follows:

- Usage of the ICT has not been supported sufficiently to increase the economic development and competitiveness of the SMEs.

- In order to contribute to the participation of the SMEs in the global markets, e-business and e-commerce practices have not been highly introduced to the enterprises and awareness in this field has not been developed.
2.1.5. Key Points of Socio-economic Analysis

The findings derived from the current socio-economic situation analysis are as follows:

- Macro-economic balances, which have significant effects on the development and the competitiveness of the industry, have been developed independently from the priorities of the industry.
- Investors do no possess sufficient information on target markets, investment areas and production selection to participate in the value chain due to the weakness in the information production in the public-private sector and in the communication mechanisms.
- Rival economies create competition pressure on the sectors which are the driving forces of the export and employment of Turkey and constitute the competitiveness advantage of the some regions.
- Imbalances in the spatial distribution of the manufacturing industry enterprises affect regional development disparities, it is necessary to support the factors which create the competitiveness in each region by mobilising their indigenous potential.
- Imported raw material demand of the production structure is increasing; technological progress and productivity increases based on the innovation have not been spread.
- Positive externality relationship does not represent a common structure in the integration of the main-supply industry, positive correlation has not been ensured between the production increases and the employment.
- Institutionalisation and cooperation networks have not been used at the level of firms in order to exploit economies of scale.
- There are deficiencies in the physical and social infrastructure which are the main instrument of the regional development and creation of the competitiveness.
- Productivity and the value added produced by the SMEs are low compared to the EU member countries, the number of SMEs providing qualified goods and services in compliance with the standards and using modern marketing tools is insufficient.
- There is insufficient infrastructure, personnel and capital in terms of the R&D, innovation and high tech usage of the public and the private sector.
- The usage of financial instruments among SMEs is very low and there is an urgent need for the development and strengthening of the financing instruments towards SMEs.
- SMEs, which can/cannot compete, have not been supported sufficiently taking into account their regions, sector and conditions, supports to the starts-up are insufficient.
- Clusters aiming at the development of cooperation networks among SMEs and between SMEs and large firms have not been broaden.
- Enterprises have difficulty in compliance with the environment, work safety, and hygiene rules of the EU.
- Usage of ICT can not be supported sufficiently to increase the economic development and competitiveness of the SMEs.
- In order to contribute to the participation of the SMEs to the global markets, e-business and e-commerce practices have not been highly introduced to the enterprises and awareness in this field has not been developed.
- Insufficient protection, enhancement and commercialisation of natural and historical heritage.
- Lack of adequate infrastructure for diversification and geographical expansion in tourism and economic benefits of tourism have not spread to all regions.
- Lack of effective promotion and marketing activities in the tourism sector.
- Tourism SMEs and facilities have difficulty in meeting the needs of their infrastructure.

In light of these findings, the analysis of the existing situation has identified intervention areas for supporting the manufacturing and tourism enterprises. The issues in the scope of the Regional Competitiveness Component have been assessed not only for whole Turkey but also for the 12 NUTS II Regions and 15 Growth Centres in accordance with the geographical and sectoral concentrations and eligibility criteria.
As provided for in the MIPD and SCF, assistance under the RCOP will concentrate on NUTS II Regions having a per capita income below 75% of Turkish average. Within these, the geographical concentration will be based on 15 Growth Centres which are selected among the 12 NUTS II Regions. In this regard, the socio-economic situation has been elaborated in the scope of the macro-economic background, demography, employment, foreign trade and enterprises for both the whole of Turkey and also for the 12 NUTS II Regions and 15 Growth Centres. In the same way, at the sectoral level the general picture of the manufacturing industry and tourism sector have been drawn and in thematic terms R&D, innovation and knowledge society have been discussed by taking into account the geographical, strategic and integrated approaches of national priorities, MIPD and SCF. In general terms, the contribution of the 12 NUTS II Regions and 15 Growth Centres to Turkey's economic indicators, and industrial development efforts have been discussed in this chapter. Furthermore, the sectoral and scale based similarities and bonds between production structures of those Regions and Growth Centres have been evaluated in the socio-economic analysis section.

Map 5: 15 Growth Centres and 12 NUTS Regions

As a result of those assessments, the set of medium-term needs and objectives of Turkey are as follows:

- Improving the Competitiveness of Turkey
- The establishment of networks and cooperation to provide positive externalities between relatively developed regions and less developed ones
- More efficient usage of local potentials in order to reduce the emigration pressure stemming from less developed regions over developed ones
- Reducing regional disparities among different development levels
- The establishment of infrastructure to ensure the transition from low added value production to medium and high production structure
- Improving existing capacity usage and productivity of the enterprises
- Development of infrastructure regarding R&D, innovation and technology usage and transformation activities
- Providing the maximum benefit from R&D, innovation and technology transformation activities and commercializing those projects
- Increasing the interest of SMEs in R&D, technology and innovation activities
- Establishment of networks and clusters among enterprises and institutions serving them
- Promotion of new investments and entrepreneurship activities so as to increase the work force participation rates
- Improvement of tourism promotion and marketing activities and strengthening of tourism infrastructure
- Facilitating the access to finance
- Using the potential for historical, cultural and eco-tourism so as to revitalise the economic and social potential of the regions

In addition, the set of medium-term needs and objectives considering regional, sectoral, thematic and geographical concentrations for the 12 NUTS II Regions including the 15 Growth Centres are as follows:

- Increasing the numbers of manufacturing and tourism enterprises in the region
- Promotion of employment generating activities
- Providing support services to start-ups through consultancy and seminar activities
- Improvement of necessary physical industrial infrastructure
- Providing information and consultancy services to the existing enterprises in the areas of management, organisation, exporting, marketing, quality management, standardisation, certification, productivity, branding etc.
- Establishment of clusters and networks among the enterprises and institutions serving them
- Establishment of infrastructure for the usage of R&D, innovation and technology transformation activities
- Promotion of networking activities among universities, institutions and enterprises
- Commercialisation of R&D and innovation projects conducted among universities, R&D institutions and enterprises
- Wide spreading of internet, websites and computer usage in business operations and transactions
- Promotion and supporting of new and existing financing instruments for enterprises, start-ups and Business Representative Organisations
- Strengthening the different potentials of regions so as to create cooperation among different NUTS II Levels and consequently ensuring the establishment of instruments for convergence of regions to each other.
- Ensuring the effective promotion and marketing activities in the tourism sectors
- Supporting the renewal and landscaping activities of the tourism attraction points
2.2. Strategic Priorities

The set of medium-term needs and objectives derived from the socio-economic and SWOT analysis forms the main intervention areas and strategies of the Regional Competitiveness Operational Programme.

In the process of determining strategic priorities, key points of socio-economic analysis have been identified and transformed into the SWOT analysis. Afterwards, the issues in the SWOT analysis have been categorised to clarify Asset Clusters from strengths and opportunities and Problem Clusters from weaknesses and threats.

As this categorisation can be seen from Figure 16 some of those assets of the 12 NUTS II Regions are export capacity, market diversification and proximity to developing global markets, young population as well as tourism potential and alternatives. These assets give rise to a strategy to maximise opportunities based on promotion and diversification of production, marketing and exporting activities of enterprises, increasing number of start-ups through spreading of entrepreneurial culture, supporting clustering activities among the enterprises and institutions, enhancing promotion and marketing activities of institutions and enterprises engaged in tourism, establishment of linkages between the activities of universities and enterprises particularly for R&D and innovation, increasing usage of ICT and e-commerce in business operations of enterprises.

As regards problems of the 12 NUTS II Regions the main categorisation is in the areas of physical infrastructure, utilisation of financial resources by SMEs and start-ups, weak clustering and networking, insufficient consultancy services to SMEs and start-ups, deficient R&D, innovation activities, insufficient infrastructure/renovation supports in the tourism sites, inadequate promotion, marketing and commercialisation activities in tourism, low level of ICT usage in business operations, unemployment and population growth rates. Similarly, these problems generate a strategy to minimise threats leaning on promotion and improvement of industry, R&D, innovation, ICT and tourism infrastructure in the Region, development and promotion of new and existing financing instruments, strengthening of skills and entrepreneurial capacities of enterprises through ensuring information and consultancy supports.

Strategies to maximise opportunities and to minimise threats based on strengths and weakness have been converted into objectives. As can be seen from Figure 16 the main problem, but at the same time the asset of the 12 NUTS II Regions is the young but unemployed population. The other key issue of the Region is the inadequate number of business stock to employ this human capital and a low level of added value produced from the existing ones. These facts of the Region have been developed into a Global Objective of Regional Competitiveness Operational Programme as 'Increasing Regional Competitiveness by Supporting Enterprises.'

Under this Global Objective, the specific objectives of the Regional Competitiveness Operational Programme, which have been developed in the light of issues emerging from socio-economic and SWOT analysis have come out as follows:

1-Enhancement of Physical and Financial Infrastructure
2-Increasing the Business Stock
3-Increasing Employment Creation Capacity of the Productive Sector
4-Enhancing Added Value of Production Base
These objectives targeting the NUTS II Regions having a per capita income below 75% of Turkish average and the 15 Growth Centres are in accordance with the eligibility criteria of the MIPD and the SCF. Although these objectives have been designed for a specific group of regions of Turkey, they are consistent with national policies and supports aiming at improving the overall competitiveness of Turkey in global markets.

The primary national strategy document is the 9th Development Plan (2007-2013) which draws a more general framework on policies and strategies and determines priorities including industry and enterprise related issues, and the Medium-term Programme (2007-2009). Increasing competitiveness is determined as one of the five development axis in the 9th Development Plan (2007-2013). In this context, ensuring the shift to high value-added production structure in industry is targeted as a main priority and related policies are specified.

The manufacturing industry is aimed to be the basic sector to drive economic growth, within an outward oriented structure. In the Plan, specific elements of the policy are increasing exports, promoting investments, raising technological capacity and R&D, increasing quality and productivity, increasing skilled labour force, enhancing SMEs and entrepreneurship, achieving sustainable development and strengthening competitiveness.

Besides, these objectives are coherent with ‘Industrial Policy for Turkey (Towards EU membership)’ document and the ‘SME Strategy and Action Plan’, which are in line with EU’s enterprise, industrial and SME policies and principles and The 9th Development Plan.

Likewise these objectives are in line with the strategies and objectives of the MIPD and SCF. (Table 44) As stated in the SCF, the priorities of Regional Competitiveness Operational Programme are as follows:

Priority 1: Improvement of Business Environment
Priority 2: Strengthening of Enterprise Capacity and Foster Entrepreneurship

The main aim is reaching the global and specific objectives through these priorities and measures illustrated in Figure 16. These priorities targeting chiefly manufacturing and tourism sectors enterprises, notably SMEs located in lagging behind regions of Turkey conceive assistance so as to create employment and to increase the number of enterprises and added value produced by them and finally to establish certain mechanisms to reduce regional disparities.

The priorities defined for implementation in less developed regions of Turkey aiming at reducing internal regional disparities are tools for providing positive contributions to the strengthening of external competitiveness of Turkey. As these tools are supported primarily by focusing on the 15 Growth Centres to create multiplying and driving positive effects on surrounding regions, the gaining of efficient results is more probably provided by expending their employment and business stock capacity. The driving effect of Growth Centres is expected to be result in the establishment of similar capacities and skills in the 12 NUTS II Regions by exploiting the experiences of Growth Centres. In the general picture, the employment of human capital and improvement of business skills of enterprises in the Region bring about an acceleration to increase the competitive level of the Region and to lessen regional disparities. Consequently, these targeting developments in the Region can be interpreted as the instruments to ensure the convergence of these regions with the developed ones and finally convergence of Turkey with the EU.

“Macro” Scale Intervention Axis

The objective of the first priority is to support the activities of notably public institutions in the 12 NUTS II Regions and particularly in the 15 Growth Centres to establish the necessary industrial, R&D, innovation, ICT and tourism infrastructure that is essential to provide appropriate ground to new investments.
In this way, well established infrastructure facilities for the local and foreign investors in the manufacturing sector, proper environment for R&D and innovation activities, promotion and marketing supports for tourism investments will be presented. The new financing models and promotion of existing ones will be ensured to the investors desiring to set up new businesses in the Region or to the enterprises intending to expanding their business or to the ones demanding to produce new products and processes. The measures under the first priority will be in line and will be implemented in coordination with the industry, tourism and competition policies and activities applied in other regions of Turkey.

“Micro” Scale Intervention Axis

As regard the second priority, it is directly related with the activities of enterprises and comprises the consultancy services to the enterprises in the areas of management and organisation, internalisation, quality and standardisation, marketing, exporting, setting up a business and entrepreneurship, access to finance, branding, patent, technology transfer and utilisation etc.

The second priority aims to develop enterprises which are export-oriented, keep track with the developments in global markets, intent to increase productivity and profit rates, are aware of the importance of creating brands and providing certain quality, utilise marketing techniques and information technologies in business operations.

The fundamental objectives of both priorities are to attract new investments to the Region, to increase the number of enterprises and start-ups, to escalate the employment rates, to reduce the emigration from the region, and finally to strengthen the competitiveness of the region and hence decrease the disparities.
Concentration Strategy of the RCOP

In the process of determining strategic priorities, key points of socio-economic analysis have been identified and transformed into the SWOT analysis. Afterwards, the issues in the SWOT analysis have been categorised to clarify the Asset Clusters from strengths and opportunities and the Problem Clusters from weaknesses and threats.

Within the context of its logical flow, the RCOP identifies a global objective and a set of specific objectives addressing the diagnosis derived from the socio-economic and the SWOT analysis. Accordingly, a set of priorities, measures and eligible actions in compliance with the “6th Development Plan”, “Industrial Policy Document for Turkey (Towards EU membership)”, “SME Strategy and Action Plan”, and EU policies on enterprises, industry and SMEs as well as the strategies and objectives defined in the MIPD and the SCF documents.

However, the volume of funds available under the RCOP is not sufficient to have a direct macro-economic impact on regional development. Thus, it is essential to ensure a strong sectoral and geographical concentration to achieve the highest impact in the areas of intervention.

The RCOP takes particular care therefore to ensure a strong selectivity on the interventions, sectors and regions to be supported in order to reinforce the efficient and effective use of funds through sustainable measures.

In this regard, the concentration strategy of the RCOP is based on three pillars namely: the "Competitiveness Map", the "Sectoral Concentration Tables" and "Growth Centre Classification" which set out the principles for identification of criteria to be used in the selection of projects.

In addition to these three pillars, the RCOP attaches extensive importance to inter-regional cooperation and identifies two principles to prioritize this issue in the project selection level, the interaction of growth centres with their hinterland and the interaction of the target regions with the rest of the country particularly on R&D, innovation and networking issues.

For all the measures under the RCOP, the call for project proposals will be non-restrictive and open to all regions in the target area. However, during the project selection phase, projects will be prioritized according to the detailed project selection criteria based on the concentration strategy of the RCOP.

Competitiveness Map and Concentration Strategy for Interventions

The strategy for the concentration of interventions under the RCOP has been derived from the Competitiveness Map of Turkey which was developed as an outcome of a common econometric model.

This econometric model uses 42 different indicators (economic, demographic, social, employment, tourism and other socio-economic indicators) in NUTS II level and identifies a competitiveness index for each NUTS II region by weighing each indicator with a certain coefficient according to its relative impact on the competitiveness concept. As a result, a map which demonstrates different level of regions with different competitiveness has been formed.

The map, showing each NUTS II region with a colour from lighter to darker which represents the competitiveness level from the lower index value to higher, is used to identify five different areas consisting of NUTS II regions with similar competitiveness levels. (See Map 6)

Different maps, comparing NUTS II regions in terms of specific indicators individually like number of manufacturing enterprises or number of projects submitted to 6th FWP and group of indicators like financial or tourism indicators, have also been developed and analysed together with the
competitiveness map in order to get an idea about the potentials and needs of regions as well as the eligible interventions to be supported in those regions.

Map 6: Competitiveness Map of Turkey

Taking into account the competitiveness index and map, and the indicators regarding the “Leading Industry Sectors in Provinces” (See Annex 4 / Tables 53-54 “The Sectoral Concentration in Manufacturing Industry in the 12 NUTS II regions and 15 Growth Centres) and income per capita (Figure 1) for each NUTS II region, it can be stated that the target regions of the RCOP is lagging behind from rest of the country in terms of industrialisation. Besides, there is a huge dependency of the industrial enterprises on agricultural and raw material products in the target regions. (See Annex 4 / Tables 53-54)

When the structural unemployment, low employment generation capacity, low level of skilled labour force, low level of export, high dependency on imported inputs, insufficient usage of R&D, innovation and technology, insufficient utilisation of financial resources, production patterns and created added value of the target regions are taken into account together, it is clear that the region has lagged behind the rest of the country in terms of regional development and competitiveness and is subjected to the inter sectoral destructive competition.

Input costs are still high in production costs with strong predominance of low added value product segments.

Even though the high dependency on the agricultural industrialisation has a high potential in job creation, difficulties in capital formation still persist. Furthermore, the share of low technology products both in total manufacturing industry production and in exports is still very high.

At the same time, technologic improvements/upgrading in the production process cause unemployment in the target regions.
Concentration Strategy for Interventions

In order to establish the concentration strategy for the interventions of the RCOP, the competitiveness map has been modified to show solely the target regions which consists of the NUTS II Regions having a per capita income below 75% of Turkish average and three groups of regions having similar competitiveness level have been identified. (See Map 7)

Map 7: The Group of Target regions in terms of Intervention

These three groups of NUTS II regions have been classified according to their level of competitiveness, from the lower competitiveness index value to the higher, in order to identify specific measures and interventions eligible for each group of regions.

Within this framework the RCOP initially re-defined the target regions as,

- **Low Competitiveness (red)**
  - TR-A1
  - TR-A2
  - TR-B2
  - TR-C2
  - TR-C3

- **Medium Competitiveness (green)**
  - TR-B1
  - TR-82
  - TR-83
  - TR-90

- **High Competitiveness (blue)**
  - TR-C1
  - TR-63
  - TR-72

This re-definition forms the basis for the concentration of certain measures of the RCOP in certain areas.

Even though the development levels (current situation and potential) of the regions are not homogeneous, classifying similar needs for different regions by using the above mentioned
methodology will lead to implement the measures in a similar way in the regions which have similar problems.

Within this framework, the interventions of the Competitiveness Map, which cover “basic infrastructure, entrepreneurship and start-up, consultancy and financial supports, inter-regional and inter-institutional partnership activities”, will be intensively used in the low competitiveness regions. Nonetheless, in order to increase the business stock, tourism activities shall be used as an alternative method in the regions which do not have meaningful potential in terms of industry especially in manufacturing.

Besides, the interventions of the Competitiveness Map which aim to increase “the capacity of the business representative organisations and inter relations among these organisations” will be supported in order to meet the needs of the region. The establishment and improvement of networks among the NUTS II regions or provinces in the low competitiveness regions such as common production or marketing processes will be supported.

Interventions which cover institutionalisation of enterprises, consultancy services on business and product improvement, interregional and regional partnership which help sectoral transformation will be intensively used. The activities regarding inter-sectoral partnership having potential for development will be supported if they do not have a destructive competition character. According to the tourism potential of the regions, tourism activities may be supported in the rest of the NUTS II regions in the low competitiveness regions.

In the high competitiveness regions, the measures aiming to increase added value and to cope with international competition will be intensively used. The consultancy activities on increasing the productivity, export capacity and basic infrastructure which will serve these kinds of measures will also be supported.

The approach which is developed for the first programming period (2007-2009) may be reformulated in future programmes, taking into consideration sectoral and regional needs. One of the major aims of the intervention strategy is to support the regions by using different measure for different periods in a complementary manner.

From this point of view, it is foreseen that a mixture (combination) of the different measures shall be used in a common region in order to improve the sectors and to increase the capacity of the enterprises to cope with the market conditions and sectoral transformation as well.

Besides, it will not be the right approach to put aside projects which are not in the intervention sector or eligible region for the measures concerned, but have utmost importance in achieving the targets set out in the RCOP.

The regional and measure basis intervention strategy of the RCOP is set out in the below mentioned matrix. (See Table 46) Contributions of the sectoral, regional and local stakeholders have been also taken into account and reflected in regional and measure basis intervention strategy of the RCOP. (See Annex 2) With the development of this strategy, geographical concentration of the RCOP’s measures has been ensured. According to this strategy, all the measures of the RCOP can not be implemented in all regions. In the geographical and sectoral strategy development process, the socio-economic analysis of the Programme was also taken into consideration.

In order to provide sectoral concentration, by using the NACE code system (not in sub sectoral definition) the target sectors are listed in terms of NUTS II and province level in the tables mentioned hereunder.

Therefore, the measures which are eligible for the related region will be intensively used by keeping in view the sectoral intensity for each NUTS II region and provinces including Growth Centres.
The Concentration Strategy with its justifications is detailed further in Annex 5 - Table 55.

Strategy for Sectoral Concentration

The below mentioned Tables are prepared with the grouping approach of the intervention strategy. The Table on Prioritized Sectors in the Target regions (See Table 47) covers the NUTS II regions which are grouped in the low, medium and high competitiveness regions.

Strategy for Regional Concentration

Another critical issue on geographical concentration is to allocate the 70-80% of the resources through the 15 Growth Centres (K.Maras, Samsun, Kastamonu, Malatya, Elaziğ, Trabzon, Kayseri, Sivas, G.Antep, Diyarbakır, Ş.Urfa, Erzurum, Batman, Van, and Kars) as mentioned in detail in the SCF document.

Inter-Regional Concentration Strategy

In order to ensure close inter-regional cooperation within the target regions and between the target regions and rest of the country, the RCOP has developed an Inter-regional Concentration Strategy based on two different principles. These are given below:

- Interaction of Growth Centres' with their hinterland
- Interaction of the target regions with the rest of the country particularly on R&D, innovation and networking issues.

These principles will be prioritized during the project selection phase.

As stated in the MIPD, while the RCOP measures will be mainly implemented in the 12 NUTS II regions giving particular importance to the 15 Growth Centres, this concentration shall not preclude the implementation of measures supporting national policies and institutions or projects which have a regional dimension and which contribute to enhance the competitiveness of the less developed regions. Therefore, each region in the 12 NUTS II regions as well as the rest of the country will be eligible under Measure 2.2.

Within this framework, during the project selection phase, priority will be given to integrated regional development projects aiming to improve co-operation, networking and clustering between the target regions and relatively developed regions of the country, especially in the fields of R&D, innovation and technology usage under the RCOP measures “Improvement of R&D, Innovation, Technology and ICT Environment and Infrastructure”, “Providing Basic Information and Consultancy Support for Enterprises”, “Strengthening of Cooperation in Industry Corporate Sector”.
Note: This table should be analysed by considering both horizontal and vertical axes.

Table 6: Performance Classification of the REGOP on Intervention and Decision. The measures of the REGOP's performance are as follows:

<table>
<thead>
<tr>
<th>Performance Classification</th>
<th>Measures</th>
</tr>
</thead>
</table>

NUTS II Regions:

Table 47: Prioritised Sectors in the Target regions

<table>
<thead>
<tr>
<th>Province</th>
<th>NUTS II</th>
<th>SECTORS – LOW COMPETITIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-A1</td>
<td></td>
<td><strong>1st Prioritized Sector</strong></td>
</tr>
<tr>
<td>Erzincan</td>
<td>Manufacture of food products and beverages</td>
<td>Manufacture of wood and wood products</td>
</tr>
<tr>
<td>Bayburt</td>
<td>Manufacture of plastics</td>
<td>Manufacture of food products and beverages</td>
</tr>
</tbody>
</table>

| TR-A2    |         | **1st Prioritized Sector**    | **2nd Prioritized Sector** | **3rd Prioritized Sector** | **4th Prioritized Sector** | **Other** | **Non-prioritized Sector** |
| Ağrı     | Manufacture of food products and beverages | Manufacture of wood and wood products | -- | -- | -- | -- |
| Kars     | Manufacture of other non-metallic mineral products | Manufacture of food products and beverages | Manufacture of wood and wood products | -- | -- | -- |
| Iğdır    | Manufacture of food products and beverages | Mining and quarrying | Manufacture of wood and wood products | -- | -- | -- |
| Ardahan  | Manufacture of food products and beverages | Manufacture of wood and wood products | -- | -- | -- | -- |

| TR-B2    |         | **1st Prioritized Sector**    | **2nd Prioritized Sector** | **3rd Prioritized Sector** | **4th Prioritized Sector** | **Other** | **Non-prioritized Sector** |
| Van      | Manufacture of food products and beverages | Manufacture of wood and wood products | Manufacture of other non-metallic mineral products | -- | -- | -- |
| Muş      | Manufacture of food products and beverages | Manufacture of leather and leather products | Manufacture of wood and wood products | -- | -- | -- |
| Bitlis   | Manufacture of food products and beverages | Mining and quarrying | -- | -- | -- | -- |
| Hakkari  | Manufacture of food products and beverages | Manufacture of wood and wood products | Manufacture of basic metals and fabricated metal products | -- | -- | -- |

| TR-C2    |         | **1st Prioritized Sector**    | **2nd Prioritized Sector** | **3rd Prioritized Sector** | **4th Prioritized Sector** | **Other** | **Non-prioritized Sector** |
| Diyarbakır | Manufacture of food products and beverages | Manufacture of textile and wearing apparel | Mining and quarrying | Manufacture of other non-metallic mineral products | Manufacture of chemicals and chemical products | Manufacture of machinery | |
| Şırnak   | Manufacture of food products and beverages | Manufacture of textile and wearing apparel | Manufacture of basic metals and fabricated metal products | Growing of vegetables, nuts | -- | -- | |

<p>| TR-C3    |         | <strong>1st Prioritized Sector</strong>    | <strong>2nd Prioritized Sector</strong> | <strong>3rd Prioritized Sector</strong> | <strong>4th Prioritized Sector</strong> | <strong>Other</strong> | <strong>Non-prioritized Sector</strong> |
| Mardin   | Manufacture of other non-metallic mineral products | Manufacture of food products and beverages | Manufacture of basic metals and fabricated metal | -- | -- | -- |
| Batman   | Manufacture of food products and beverages | Manufacture of other non-metallic mineral products | Mining and quarrying | Manufacture of chemicals and chemical products | Manufacture wearing apparel | -- | |
| Şanlıurfa | Manufacture of food products and beverages | Mining and quarrying | Manufacture of other non-metallic mineral products | -- | -- | -- |
| Siirt    | Manufacture of other non-metallic mineral products | Manufacture of food products and beverages | Manufacture wearing apparel | -- | -- | -- |</p>
<table>
<thead>
<tr>
<th>NUTS II</th>
<th>Provinces</th>
<th>SECTORS – MEDIUM COMPETITIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st Prioritized Sector</td>
</tr>
<tr>
<td>TR-B1</td>
<td>Malatya</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td></td>
<td>Elazığ</td>
<td>Manufacture of food products and beverages</td>
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<tr>
<td></td>
<td>Bingöl</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td></td>
<td>Tunceli</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td>TR-82</td>
<td>Kastamonu</td>
<td>Manufacture of wood and wood products</td>
</tr>
<tr>
<td></td>
<td>Çankırı</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td></td>
<td>Sinop</td>
<td>Manufacture of other non-metallic mineral products</td>
</tr>
<tr>
<td>TR-83</td>
<td>Samsun</td>
<td>Manufacture of food products and beverages</td>
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<tr>
<td></td>
<td>Tokat</td>
<td>Manufacture of food products and beverages</td>
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<tr>
<td></td>
<td>Corum</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td></td>
<td>Amasya</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td>TR-90</td>
<td>Trabzon</td>
<td>Manufacture of food products and beverages</td>
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<tr>
<td></td>
<td>Ordu</td>
<td>Manufacture of food products and beverages</td>
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<tr>
<td></td>
<td>Giresun</td>
<td>Manufacture of food products and beverages</td>
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<td></td>
<td>Rize</td>
<td>Manufacture of food products and beverages</td>
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<td></td>
<td>Artvin</td>
<td>Manufacture of food products and beverages</td>
</tr>
<tr>
<td></td>
<td>Gümüşhane</td>
<td>Manufacture of food products and beverages</td>
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<tr>
<td>Province</td>
<td>Industry</td>
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<td>--------------</td>
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<tr>
<td>Gaziantep</td>
<td>Manufacture of textiles and textile products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of food products and beverages</td>
<td></td>
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<tr>
<td>Adiyaman</td>
<td>Manufacture of food products and beverages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of rubber and plastic products</td>
<td></td>
</tr>
<tr>
<td>Kilis</td>
<td>Manufacture of textiles and wearing appeals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of fabricated metal products</td>
<td></td>
</tr>
<tr>
<td>TR-C1</td>
<td>Mining and quarrying</td>
<td></td>
</tr>
<tr>
<td>Hatay</td>
<td>Manufacture of food products and beverages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of basic metals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of wood and wood products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of basic metals and fabricated metal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of rubber and plastic products</td>
<td></td>
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<tr>
<td>TR-63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.Marâş</td>
<td>Manufacture of textiles and wearing appeals</td>
<td></td>
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<tr>
<td></td>
<td>Manufacture of food products and beverages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of fabricated metal products</td>
<td></td>
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<tr>
<td>Osmanîye</td>
<td>Manufacture of food products and beverages</td>
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<td>Manufacture of textiles and textile products</td>
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<td></td>
<td>Manufacture of wood and wood products</td>
<td></td>
</tr>
<tr>
<td>TR-72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kayseri</td>
<td>Manufacture of Furniture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of textiles and textile products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of machinery and equipment n.e.c.</td>
<td></td>
</tr>
<tr>
<td>Sivas</td>
<td>Manufacture of other non-metallic mineral products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mining and quarrying</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of food products and beverages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of machinery and equipment n.e.c.</td>
<td></td>
</tr>
<tr>
<td>Yozgat</td>
<td>Manufacture of food products and beverages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of other non-metallic mineral products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of textiles and textile products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacture of basic metals and fabricated metal</td>
<td></td>
</tr>
</tbody>
</table>

* The provinces shown in bold marks are Growth Centres.
3. Programme Strategy

In this chapter the priorities and measures of the Operational Programme for Regional Competitiveness are analyzed in detail in terms of aim, specific objectives, rationale, description, targeting, measures and delivery of the priority, eligible actions and selection criteria. The term "target regions" which is used in this chapter corresponds to the 12 NUTS II regions including the 15 Growth Centres which are mentioned in the previous chapters.

3.1 Priority Axes and Measures

<table>
<thead>
<tr>
<th>Priority 1: Improvement of Business Environment</th>
</tr>
</thead>
</table>

Aim

The purpose of this priority will be to create a better business environment, to increase the number of new enterprises, enhance the productivity and the competitiveness of the existing enterprises and contribute to the overall rate of employment, by improving physical infrastructure and creating a supportive environment for SMEs in the target regions.

Specific Objectives

The specific objectives of this priority are:

- Enhancement and modernization of business infrastructure for enterprises to conduct business activities in a better and convenient environment.

- Improving the conditions of enterprises in terms of access to financial instruments by establishing and/or supporting convenient financing mechanisms.

- Promoting R&D, Innovation and usage of technology, including ICT and transfer of knowledge, through infrastructure.

- Diversification and enhancement of tourism activities by means of supply and demand side interventions, like revitalising, landscaping and promotion/marketing activities.

Rationale

Recalling from the study carried out in the previous chapter analyzing the socio-economical indicators, the current situation is briefly defined as: the non-agricultural employment rate and the business stock in the target regions are insufficient, except some special cases, and the existing enterprises are operating with low added value and low technology base.

The diagnosis, reached as an outcome of the socio-economical analysis and the SWOT analysis, indicates a quantitative and qualitative insufficiency in the physical and industrial infrastructure, low utilization of technology and innovation in the management and production processes, low cooperation, clustering and networking within and among the regions, low tourism activities, when compared with the real potential, and inadequacy (and even market failure in some cases) in accessing the financial instruments and consultancy services.

And finally, the intervention strategy of the Operational Programme, designed in line with the outputs of the socio-economic analysis including the SWOT and the strategic priorities, sets out two axis of priorities. This strategic configuration classifies the interventions under these two priorities according to the type of intervention rather than their themes or sectors. Thus, both of the priorities include all the target themes and sectors, however, this priority focuses on the business environment itself in a macro scale, while the second priority deals with the enterprises individually.
In line with that strategic configuration and rationale, this priority consists of four measures on business environment and addresses the problems identified in the diagnosis on the target themes and sectors of the OP. It is intended to provide a synergy among the priorities by means of macro scale interventions of this priority and the micro scale interventions of the second priority.

**Description**

This priority will focus on the SMEs, particularly those operating in the manufacturing industry and tourism sector in the target regions, to enhance the business environment by establishing a state of the art industrial infrastructure, promoting R&D, innovation, usage of technology including ICT and transfer of knowledge, supporting clusters, networking and cooperation activities between different NUTS II levels and supporting various financial mechanisms, commercialization of tourism attraction areas and promotion/marketing activities in tourism sector.

Within the aim of improvement of business environment with macro scale interventions, the eligible interventions under this priority will be,

- Establishment of supportive industrial infrastructure, such as business and enterprise development centres, a broad variety of shared utility facilities for SMEs, one stop shops, information and consultancy offices, training facilities, ICT infrastructure and equipment as well as logistic centres, etc.

- Establishment and/or supporting micro-loan funds, credit guarantee funds and equity finance mechanisms, such as venture capital funds, including seed capital and start-up capital.

- Establishment and/or supporting structures operating on the base of high technology, R&D and innovation, like Technology Development Zones (TDZs) and Technology Development Centres (TDCs) and other special supportive structures like Technology Incubators without Wall (DTI), Incubation Centres, Technology Transfer Centres, Excellence Centres, Innovation Relay Centres, etc., as well as supporting the cooperation mechanisms like clusters of excellence and networks of R&D, innovation and technology.

- Establishment and development of basic tourism infrastructure, through revitalising, landscaping and commercialization of selected areas having potential for tourist attraction in terms of natural and historical values, eco-tourism, health and sports activities, etc., as well as supporting promotion and marketing activities. Competitiveness-oriented infrastructure activities having direct impact on the tourism attraction of the region and having a substantial effect to increase the tourist arrivals will also be supported.

The flowchart for the activities of this priority is illustrated below.
Priority 1: Improvement of Business Environment

Measure 1.1: Development of Industrial Infrastructure
- Establishment, improvement and refurbishment of social, technical, production, storage and ICT facilities, and purchase of machinery, equipment, for common use of SMEs.
- Establishment, improvement and refurbishment of one stop shops, information and consultancy offices, etc.
- Establishment, improvement and refurbishment of business and enterprise development centres like ISGEMs.
- Establishment of logistic centres for common commercial use in convenient locations like inside or nearby the industrial sites, nearby the airports, harbours, main transport axis.

Measure 1.2: Creation and Development of Financing Instruments
- Establishment (where necessary) and/or contribution of capital to credit guarantee funds, micro-loan funds and equity finance mechanisms like venture capital funds including the seed and startup capital and other forms of financial instruments.
- Where necessary, promotion of financing mechanisms through all possible publicity instruments and awareness raising campaigns as a component of the project in order to facilitate access to the funds supported.
- Where appropriate, as a complement, the projects under this measure will include advisory services to the beneficiaries, publicity and networking.

Measure 1.3: Improvement of R&D, Innovation, Technology and ICT Environment and Infrastructure
- Establishment, improvement and modernization (including refurbishment and ICT infrastructure) of various R&D, technology and innovation infrastructure.
- Supporting the cooperation between public and non-profit institutions regarding the cooperation on R&D, technology transfer and ICT usage through research and development and education of common structures.
- Establishment and modernization of common social, technical and production facilities in various R&D, technology and innovation structures.
- Establishment of common service facilities in various R&D, technology and innovation structures.
- Assistance in the organization of various congresses and conferences, exhibitions, fairs, etc.

Measure 1.4: Improvement of Tourism Infrastructure, Promotion and Marketing Activities
- Improvement of tourism attraction areas through revitalization and landscaping and other relevant infrastructure investments.
- Establishment and refurbishment of tourism information facilities and centres.
- Support for tourist promotion and marketing activities of public authorities and non-profit organizations.
- Support for organization of local tourist events like festivals, exhibitions, fairs, etc.
- Support for organization of national and international seminars, congress, etc. and participation to the national and international fairs.

Regional Competitiveness Operational Programme (2007-2009)
Targeting

This priority is targeted at SMEs operating particularly in the,

- Manufacturing industry and
- Tourism sector

located in the 12 NUTS II regions having a GDP per capita (PPP) below 75% of the national average and particularly in the 15 Growth Centres.

Joint projects and networking activities implemented outside the target regions which support the competitiveness of the target regions will also be eligible within the scope of this priority.

The concentration strategy for interventions, sectors and regions described in the Chapter on Strategic Priorities will be utilized as a strategic base for establishing selection criteria.

Measures

Measures under this priority are,

1. Development of Industrial Infrastructure

The aim of the measure is to improve the business environment by upgrading the quality of existing business sites to intensify their use and to bring their supply more in line with demand.


The aim of this measure is to improve the conditions of enterprises in the lagging behind regions suffering from insufficient access to finance by establishing and/or supporting adequate financing mechanisms.

3. Improvement of R&D, Innovation, Technology and ICT Environment and Infrastructure

The purpose of this measure is to promote R&D, Innovation, and usage of technology and transfer of knowledge, to improve productivity and build a dynamic knowledge based economy.

The main intervention areas under this measure are: development of adequate infrastructure for R&D, creation of a supportive environment for innovation, promotion of technology transfer and provision of support for business to use new technologies, and commercialization of research, particularly through the development of stronger links between business and Universities, R&D Centres and among the regions.

4. Improvement of Tourism Infrastructure, Promotion and Marketing Activities.

This measure aims to develop the competitiveness and employment and decrease regional disparities through tourism diversification activities, revitalisation and landscaping of tourism attraction areas for commercial use, and support for promotion and marketing activities.

Delivery of the Priority

The measures under this priority will be implemented through calls for proposals and/or procurement contracts. As described in Article 158 of IPA Implementing Regulation, projects submitted by national public bodies and project proposals submitted following a call for proposals will be assessed or selected in accordance with the below mentioned admission and selection principles.
Strategic Criteria for Selection

- Intervention Strategy - Projects will be assessed and graded in accordance with the concentration strategy and limitations for interventions as described in Table 46 of the Chapter on Strategic Priorities.

- Sectoral Strategy - Projects will be assessed and graded in accordance with the concentration strategy for industrial sectors as described in Table 47 of the Chapter on Strategic Priorities.

- Regional Strategy - Projects will be assessed and graded in accordance with the regional concentration strategy as described under the heading Regional Concentration Strategy of the Chapter on Strategic Priorities.

- Inter-Regional Cooperation Strategy - Projects will be assessed and graded in accordance with the Inter-Regional Cooperation Strategy as described under the heading Inter-Regional Cooperation Strategy of the Chapter on Strategic Priorities.

Other Criteria for Selection

- Project maturity and readiness level.

- Projects and applications from the Growth Centres will be given priority in order to achieve the strategic target set out in the SCF to allocate 70-80% of the total budget of OP Regional Competitiveness for Growth Centres.

- Actions on networking activities and joint actions between the target regions and rest of the country and operations taking place outside the target regions will also be financed provided that the target regions, particularly Growth Centres are the main direct beneficiaries from these actions and operations.

Measure specific criteria for selection are given under each measure.

Targets and Indicators

The indicators for this priority are the sum of the indicators identified for the measures under this priority.
EU Support: 103,748,000 (euro) (2007-2009)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Base Line</th>
<th>Target</th>
<th>Definition and assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outputs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Area of shared facilities established or supported</td>
<td>75,000 m² (the area of technical and social facilities in 32 OIZs, 166 SSIEs and also the area of 10 IGEMs and 7 ISGEMs in the target regions)</td>
<td>10,000 m² (additional)</td>
<td>Shared facilities like labs, workshops, packaging facilities, machinery, training/education facilities, logistic facilities, etc.</td>
</tr>
<tr>
<td>2-Number of service facilities established or supported</td>
<td>6 (incubators in the target regions of the RCOP)</td>
<td>10 (additional) (Incubators, one-stop shop, etc.)</td>
<td>Service facilities like one stop shops, information offices, business and enterprise development centres.</td>
</tr>
<tr>
<td>3-Amount of credit guarantee supplied for enterprises</td>
<td>63.842 Million EUR, awarded from credit guarantee fund</td>
<td>30 Million EUR. (additional)</td>
<td>Base line data is from Credit Guarantee Fund Operating and Research J.S.C. (KGF)</td>
</tr>
<tr>
<td>4-Amount of micro-loans supplied for enterprises</td>
<td>2.9 Million EUR.</td>
<td>5 Million EUR. (additional)</td>
<td>Data is collected from the statistics of Provinces which have allocated micro-credit schemes</td>
</tr>
<tr>
<td>5- The number of R&amp;D and innovation related business sites rehabilitated or supported</td>
<td>4 TDZs,</td>
<td>2</td>
<td>Technology Development Zones (TDZs) are established by the assistance of MoIT</td>
</tr>
<tr>
<td>6- Number of R&amp;D related service facilities rehabilitated or supported</td>
<td>3 TDCs</td>
<td>2</td>
<td>Technology Development Centres (TDCs) by the assistance of KOSGEB</td>
</tr>
<tr>
<td>7-Number of enterprises involved in assisted R&amp;D projects</td>
<td>-</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>8-Number of joint projects realized by R&amp;D institutions and enterprises</td>
<td>-</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>9-Number of tourism sites enhanced through renovation, rehabilitation or restoration</td>
<td>0</td>
<td>3</td>
<td>Tourism attraction points/areas, excluding historical and archaeological sites</td>
</tr>
</tbody>
</table>

| Results                                                                    |                                                                            |                               |                                                                                           |
|----------------------------------------------------------------------------|                                                                            |                               |                                                                                           |
| 1-Number of artisans and SMEs benefiting from shared facilities established or supported | 16,600 artisans and 3500 SMEs taking benefit from common facilities of OIZs and SSIEs, and ISGEMs in the target regions | 300 artisans and 400 SMEs (additional) | Base line data is from the General Directorate for OIZs and SSIEs in MoIT. |

Regional Competitiveness Operational Programme (2007-2009)
<table>
<thead>
<tr>
<th><strong>2- Number of SMEs benefiting from service facilities established or supported</strong></th>
<th>350</th>
<th>400 (additional)</th>
<th>As a base line, 175 out of 350 are only located in existing ISGEMs. There are also laboratories and regional industry development centres for common usage of SMEs in the target regions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3- Number of new enterprises established inside industrial sites which are supported</strong></td>
<td>0</td>
<td>300 (additional)</td>
<td>Approximately 30 new enterprises located in each existing ISGEMs/incubation centres</td>
</tr>
<tr>
<td><strong>4-Number of the employment generated in OIZs, SSIEs, ISGEMs and incubators supported by IPA.</strong></td>
<td>0</td>
<td>1000</td>
<td>The employment in existing 6 ISGEMs is 645.</td>
</tr>
<tr>
<td><strong>5-Number of new enterprises setting up a business via new financial instruments</strong></td>
<td>57 new SMEs set up a business thanks to the credit guarantee fund in the target regions of the RCOP</td>
<td>60 new SMEs (additional)</td>
<td>The breakdown of Credit Guarantee for Start-ups constitutes 22% in total amount, the rest for the existing firms.</td>
</tr>
<tr>
<td><strong>6-Amount of credit guarantee allocated for investments</strong></td>
<td>13.267 Million EUR.</td>
<td>8 Million EUR. (additional)</td>
<td>The breakdown of credit guarantee for the investments is 43% in total amount</td>
</tr>
<tr>
<td><strong>7- Number of R&amp;D and innovation related new enterprises established inside business sites supported.</strong></td>
<td>0</td>
<td>70</td>
<td>-</td>
</tr>
<tr>
<td><strong>8-Number of patent applications resulted from assisted projects</strong></td>
<td>-</td>
<td>10</td>
<td>The data can be followed from the statistics of Turkish patent Institute</td>
</tr>
<tr>
<td><strong>9-Number of tourists visited the tourism attraction points enhanced</strong></td>
<td>2,233,673</td>
<td>1000 (additional per tourism attraction points enhanced)</td>
<td>Base line is the number of arrivals in Qualified Establishments Licensed by the Municipalities in the target regions</td>
</tr>
<tr>
<td><strong>10-Number of new tourism enterprises established in the region supported</strong></td>
<td>0</td>
<td>10 per tourism sites enhanced</td>
<td>Number of tourism SMEs established in the city or cities as a result of increased touristic attraction through supporting touristic aspects in those city or cities.</td>
</tr>
</tbody>
</table>
Measure 1.1: Development of Industrial Infrastructure

The aim of the measure is to create a more favourable investment environment for SMEs by upgrading the quality of existing business sites, bringing their supply more in line with demand and supporting the establishment of Common Facilities for SMEs in convenient locations.

Specific Objectives

The specific objectives of this measure are,

- To enhance the industrial infrastructure for enterprises to conduct business activities in a better environment, through establishment of common utility social, technical, production, storage and ICT facilities,

- To increase occupancy ratio inside the business sites, through attracting the enterprises to benefit from the enhanced synergy and the comparative advantage of common use of advanced infrastructure and high quality services inside the business sites,

- To contribute to the establishment of start-ups and increase the competitiveness of existing enterprises, through establishment of business and enterprise development centres as well as one stop shops, information and consultancy offices.

Rationale

This measure, which is one of the most significant intervention tools of the OP in terms of expected impacts and budget, tackles with the improvement of industrial infrastructure which contributes to facilitate establishment, development and expansion of new and existing business.

In the previous chapters it was mentioned that macro level figures of the manufacturing industry are at a very low level when compared with those of the developed countries. Although Turkey has natural resources and raw materials for certain industrial sectors, the value added produced from these resources is not sufficient and this situation is one of the reasons of the low competitiveness level of Turkey compared to the EU Member States.

As mentioned in the socio-economic analysis, Organized Industrial Zones (OIZs) and Small Scale Industrial Estates (SSIEs) have presented a proper environment for industrial development through their common infrastructure and waste water treatment facilities. There are 12 completed and 14 on going OIZs and 41 completed and 4 on going SSIEs, 9 IGEs and 6 ISGEs in Growth Centres.

Additionally, substantial evidence is given in the socio-economic analysis on the fact that there are enough numbers of completed and on going OIZs and SSIEs which present proper mutual infrastructure facilities for SMEs' investments in the 12 NUTS II Regions and in 15 Growth Centres. The main problem in those regions for on going OIZ and SSIE projects is the completion of the infrastructure construction and reaching the optimum occupancy rates of these zones by attracting the interest of investors and creating new entrepreneurs. Otherwise, those zones and estates would be idle and the transferred scarce public resources to build these zones can not be exploited to the fullest. The promotion of new investments and entrepreneurship in the 12 NUTS II Regions and in 15 Growth Centres is important to take advantage of these investments in the OIZs and SSIEs, by increasing their occupancy rates.

As a result of this diagnosis coming from the socio economic analysis, in order to create a more favourable investment environment for SMEs and to increase the added value produced and business stock as well in the target regions, the RCOP will focus on upgrading the quality of existing business sites, bringing their supply more in line with demand and supporting the establishment of business and enterprise development centres, logistic centres and common utility facilities in various locations.
Such an approach will on one hand enhance the efficient and effective utilisation of the existing infrastructure and on the other hand prevents the risk of financing investments with IPA which are already being or that would otherwise be financed with national funds.

**Description**

This measure will be a supply side measure for upgrading the industrial infrastructure to provide an advanced environment and high quality services for the enterprises to invest and operate.

The area of intervention for this measure will be to enhance “supportive infrastructure” inside or outside industrial sites, including soft actions where necessary, rather than supporting the establishment of new industrial estates like OIZs and SSIEs.

The main purpose of the industrial infrastructure is to provide better quality services and support mechanisms in order to attract entrepreneurs to invest inside the industrial zones and increase the occupancy ratios.

In this regard the main interventions of this measure will include the establishment of “supportive infrastructure” like business and enterprise development centres, a broad variety of shared utility facilities for SMEs, one stop shops, information and consultancy offices, training facilities, ICT infrastructure and equipment as well as the logistic centres, etc.

The support under this measure will consist of investments on infrastructure and equipment like establishment, improvement and refurbishment of buildings and purchase of laboratory devices, machinery, ICT and office equipment etc. However, in order to increase the impact of the intervention, advisory/consultancy services and publicity activities related with the implementation of project itself will also be eligible to a certain proportion of the budgets of projects.

Establishment of shared social, technical, production and storage facilities directly relevant to the environment of SMEs on a wide range of areas like common production, processing, packaging or training workshops including machinery, shared warehouses, design centres, common utility laboratories or test equipment regarding the products or production processes, common social facilities, training and internet access points, etc., shared ICT usage possibilities including software and equipment regarding the production processes will also be financed under this measure.

This intervention may be implemented through larger projects financing the establishment of integrated centres consisting of a convenient combination of the above mentioned facilities and equipment inside the industrial sites or in the locations where SMEs are relatively condensed.

Such an intervention will, on one hand, allow SMEs to benefit from the synergies produced by the shared utilization of local infrastructure/services and develop a cooperation culture and, on the other hand, contribute to facilitate establishment, development and expansion of new and existing business.

Establishment of business and enterprise development centres (like IGEMs and ISGEMs) integrated with support facilities for SMEs will be financed as well under this measure for increasing the business stock and added value produced by SMEs and supporting start-ups.

Establishment of one stop shops, basic information support and consultancy centres inside the industrial sites or in the locations where SMEs are relatively condensed will be another intervention under this measure.

Establishment of logistic centres for common commercial use in convenient locations like inside or nearby industrial sites, nearby airports, harbours, main transport axis, etc. will also be supported under this measure.
Establishment of training and education facilities in order to provide necessary trainings on the development of entrepreneurial knowledge and skills for SMEs will be supported in coordination and close cooperation with the HRD OP through a Technical Committee which has been established with the participation of the Operating Structures of both OPs.

 Eligible Actions

This measure will include the following indicative activities,

- Establishment, improvement and refurbishment of social, technical, production, storage and ICT facilities, and purchase of machinery, equipment, for common use of SMEs.

- Establishment, improvement and refurbishment of one stop shops, information and consultancy offices, etc.

- Establishment, improvement and refurbishment of business and enterprise development centres like ISGEMs,

- Establishment of logistic centres for common commercial use in convenient locations like inside or nearby industrial sites, nearby airports, harbours, main transport axis,

 Admission Criteria

Projects will be analyzed in terms of the nature of the interventions, project maturity and readiness, eligibility of actions, eligibility of the region, budgetary limitations, eligibility of applicant or beneficiaries, etc. as defined in the relevant parts of the RCOP and ineligible projects will be eliminated prior to the qualification and grading process which will be carried out in accordance with the selection principles.

The project proposals which pass the admission process successfully will be graded in accordance with the below mentioned selection principles,

 Strategic Criteria for Selection

The Strategic Criteria for Selection indicated for the priority will be applied.

 Other Criteria for Selection

In addition to the criteria for selection indicated for the priority, the following measure specific criteria will be applied for the prioritization of the project proposals:

- Project maturity and readiness

- Projects supporting the facilities intended to be used commonly by a wider range of beneficiary enterprises.

- Projects enhancing the occupancy ratio inside the industrial sites, particularly the establishment of common technical and social facilities inside the industrial sites.

- Projects contributing to the overall employment capacity

- Projects supporting the innovative and high technology sectors.
- Projects contributing to the overall synergy with other measures, particularly the establishment of common technical and social facilities encouraging the creation of clusters and networks as described in measure 2.2.

- Projects with environmental sustainability namely contributing to energy efficiency and use of renewable energy.

- Projects supporting women and young entrepreneurs, disadvantaged persons and start-ups.

- Involvement of TOBB, TESK, sectoral foundations and associations, regional chambers of industry and commerce, craftsmen and artisans.

- The administrative and technical capacity of the beneficiary to achieve the targets and the risks faced by project.

- Projects seeking complementarity and synergy with the other Community Programmes namely 7th FWP and CIP.

**Final Beneficiaries**

Public institutions/agencies, business and enterprise development institutions/centres managing authorities of OIZs and SSIEs, national and regional chambers of industry and commerce, unions, foundations and associations.
## Monitoring Indicators

**Total Public Expenditure**: 34,582,668 (euro) (2007-2009)  
**EU Funding**: 25,937,000 (euro) (2007-2009)  
**Maximum Intervention Rate**: 75%

<table>
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<td><strong>Outputs</strong></td>
<td>1-Area of shared facilities established or supported</td>
<td>75,000 m² (the area of technical and social facilities in 32 OIZs, 166 SSIEs and also the area of 10 IGEMs and 7 ISGEMs in the target regions)</td>
<td>10,000 m² (additional)</td>
</tr>
<tr>
<td></td>
<td>2-Number of service facilities established or supported</td>
<td>6 (ISGEMs in the target regions of the RCOP)</td>
<td>10 (additional) (Incubator, one-stop shop, etc.)</td>
</tr>
</tbody>
</table>

| **Results** | 1-Number of artisans and SMEs benefiting from shared facilities established or supported | -16,600 artisans and 3500 SMEs taking benefit from common facilities of OIZs and SSIEs, and ISGEMs in the target regions | 300 artisans and 400 SMEs (additional) | Base line data is from the General Directorate for OIZs and SSIEs in MoIT. |
| | 2-Number of SMEs benefiting from service facilities established or supported | 350 | 400 (additional) | As a base line, 175 out of 350 are only located in existing ISGEMs. There are also laboratories and regional industry development centres for common usage of SMEs in the target regions |
| | 3- Number of new enterprises established inside industrial sites which are supported | 0 | 300 (additional) | Approximately 30 new enterprises located in each existing ISGEMs/incubation centres |
| | 4-Number of the employment generated in OIZs, SSIEs, ISGEMs and incubators that supported by IPA. | 0 | 1000 | The employment in existing 6 ISGEMs is 645. |
Measure 1.2: Creation and Development of Financing Instruments

The aim of this measure is to improve the conditions of enterprises in the lagging behind regions suffering from insufficient access to financial instruments and inadequate financing resources by establishing and/or supporting adequate financing mechanisms.

Specific Objectives

The specific objectives of this measure are:

- To enhance the financial environment in the target regions through supporting credit guarantee funds, micro-loan funds and equity finance mechanisms like venture capital funds including seed and start-up capital and other forms of financial instruments serving the enterprises.

- To support the enterprises’ business development projects and level of investment through increasing their access to financial resources.

- To modernize the production infrastructure of enterprises through increased utilization of financial mechanisms.

Rationale

The results from the field survey on “Small Enterprises Finance in Turkey”, conducted by Banakadecie International in March 2005, highlights the supply and demand side obstacles in SME finance as described in Chapter 2.1.2 on SMEs. The survey is very relevant in terms of its target group, region and theme, thus the outputs of the survey are extensively used in the relevant parts of the RCOP.

The study identifies the obstacles in accessing finance as follows: the collateral requirement by the commercial banks is clearly the most striking barrier (an overwhelming 83 percent of the enterprises quoted this obstacle either as the first, second and third rank), interest rates are the second major obstacle (mentioned by 54 percent of the enterprises, the general view was that interest rates were too high), and bureaucratic and cumbersome procedures on the side of commercial banks (mentioned as third major obstacle by 26 percent of the respondents).

As described in chapter 2 in the SMEs part and in the SWOT analysis, SMEs have difficulties in providing the required guarantee or collateral because of their size, capital, organizational structure and low levels of production. They prefer credit schemes applying low interest rates, requesting more simple procedures and enough guarantees for credits. Naturally, this situation leads to a low level of bank credit utilization rates of SMEs. According to these figures, the amount of credits received by SMEs in 2000 was 6% while this figure has reached 24% in 2006 thanks to the adjustments in the regulations and SME definition made in the last 6 years. Considering the high costs and tough conditions of obtaining credit, as well as insufficient banking offer for small and medium-sized enterprises, especially micro-enterprises, financial support for development of credit guarantee funds and loan funds as well as equity finance and venture capital are of a major importance.

Limited access to institutional finance and technical assistance make it difficult for SMEs to improve their operations. The existing incentive systems appear to be biased in favour of large-scale industries and administrative complexities make it difficult for smaller firms to take advantage of such benefits.

It is also difficult to increase fixed capital investments due to moderate earnings, and since SMEs possess small proprietary capitals, foreign sources are not easily accessible for them to obtain credit. Even when they succeed in accessing external finance, interest rates are so high that they annul the advantages of borrowing money.
Due to limited reserves of personal savings, inadequacy of the capital market and lack of venture companies in the target regions, it is very difficult for SMEs to find investment capitals. Most of SMEs work in risky areas with abundant competition. As a result, profitability is low, thus SMEs operate with low stock turnover ratios. This increases their demand for operating capital, in other words, for short term funds. Another reason is that they generally have to provide credit to customers.

Due to the above reasons, SMEs are in need of short and long term credit. However there are main factors that restrict utilization of credit, such as collateral requirements and high cost.

In Turkey, banks tend to lend money not only on the basis of feasibility studies or work plans of the start up companies but they also ask to secure the return of the credit by guaranty. Because start up companies usually do not have resources to give those guaranties this constitutes a major obstacle to business development.

On the other hand, since banks favour commercial credit, there is limited credit available for fixed capital investments by SMEs. In addition commercial banks are reluctant to give loans to SMEs since they find them risky and the majority of SMEs are not strong enough to meet the mortgage claims of credit lending banks.

Another problem concerns securities. Since most of the SMEs do not maintain regular financial records, commercial banks are not eager to provide them with guarantee letters in which case the enterprises have to make cash deposits to secure transactions.

**Description**

The aim of this measure is to improve the conditions of enterprises in the lagging behind regions facing insufficient access to finance and inadequate financial instruments, through the establishment of and/or support to existing micro-loan funds, credit guarantee funds and equity finance mechanisms, including venture capital funds, seed capital and start-up capital.

Financial resources allocated to these funds will be available for small and medium-sized enterprises, particularly those operating in the manufacturing industry and tourism sectors in the target regions, which have difficulties in accessing financial resources with affordable conditions. Thus, the regional, sectoral and intervention strategy of the RCOP as explained in the Chapter on Strategic Priorities will also be taken into account by the funds supported under this measure while selecting the SMEs to be supported.

As explained in the intervention strategy in the Chapter on Strategic Priorities, the financial instruments supported under this measure will operate in the whole target regions.

Also in order to increase the effectiveness of the financial instruments introduced, particularly credit guarantee and micro-loan mechanisms, and to encourage enterprises to use these tools, appropriate precautions will be sought while designing the financial projects.

In order to increase the impact of this intervention, where necessary, advisory/consultancy services and publicity activities related with the implementation of project itself will also be eligible to a certain proportion of the budgets of the projects.

**Eligible Actions**

This measure will include the following indicative activities:

- Carrying out a needs assessment study to identify the mechanisms best suited to the needs of the enterprises in the target regions.
- Establishment (where necessary) and/or contribution of capital to credit guarantee funds, micro-loan funds and equity finance mechanisms like venture capital funds including seed and start-up capital and other forms of financial instruments.

- Where necessary, promotion of financing mechanisms through publicity instruments and awareness raising campaigns as a component of the project in order to facilitate access to the funds supported.

- Where appropriate, the projects under this measure will include advisory services to the beneficiaries, publicity and networking.

**Admission Criteria**

Projects will be analyzed in terms of interventions, project maturity and readiness eligibility of actions, eligibility of region, budgetary limitations, eligibility of applicant or beneficiaries, etc. as defined in the relevant parts of the RCOP and ineligible projects will be eliminated prior to the qualification and grading process which will be carried out in accordance with the selection principles.

- Contribution of IPA to the financing instruments will be allocated to SMEs established in the 12 NUTS II Regions, particularly the ones in the Growth Centres.

The project proposals which pass the admission process successfully will be graded in accordance with the below mentioned selection principles.

**Strategic Criteria for Selection**

*The Strategic Criteria for Selection indicated for the priority will be applied.*

**Other Criteria for Selection**

In addition to the criteria for selection indicated for the priority, the following measure specific criteria will be applied for the prioritization of the project proposals:

- Project maturity and readiness

- Supporting the existing market-oriented funds where they pursue objectives compatible with the objectives of the RCOP

- Where necessary, establishing new market oriented funds to pursue the objectives of the RCOP

- Existence of adequate administrative and technical capacity of the beneficiary to implement the project.

- Involvement of TOBB, TESK, sectoral foundations and associations, regional chambers of industry and commerce, craftsmen and artisans.

- Projects seeking complementarity and synergy with the other Community Programmes

- Projects supporting women and young entrepreneurs, disadvantaged persons and start-ups.

**Final Beneficiaries**

Credit guarantee funds, micro-loan funds and equity finance funds like venture capital funds, seed capital funds and start-up capital funds.
## Monitoring Indicators

**Total Public Expenditure**: 48,415,734 (euro) (2007-2009)

**EU Funding**: 36,311,800 (euro) (2007-2009)

**Maximum Intervention Rate**: 75%

### Outputs

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Base Line</th>
<th>Target</th>
<th>Definition and assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Amount of credit guarantee supplied for enterprises</td>
<td>63,842 Million EUR. awarded from credit guarantee fund</td>
<td>30 Million EUR. (additional)</td>
<td>Base line data is from Credit Guarantee Fund Operating and Research J.S.C. (KGF)</td>
</tr>
<tr>
<td>2-Amount of micro-loans supplied for enterprises</td>
<td>2.9 Million EUR. (additional)</td>
<td>5 Million EUR. (additional)</td>
<td>Data is collected from the statistics of Provinces which has allocated micro-credit schemes</td>
</tr>
</tbody>
</table>

### Results

1-Number of new enterprises setting up a business via new financial instruments

<table>
<thead>
<tr>
<th>Indicators</th>
<th>57 new SMEs set up a business thanks to the credit guarantee fund</th>
<th>60 new SMEs (additional) (start-ups will have priority in allocation of the fund)</th>
<th>Credit Guarantee for Start-ups constitutes 22%, the rest for the existing firms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of new enterprises set up via new financial instruments</td>
<td>Around 1000 people awarded by the micro-credits in the target regions of the RCOP</td>
<td>500 (additional)</td>
<td></td>
</tr>
</tbody>
</table>

2-Amount of credit guarantee allocated for the investments

<table>
<thead>
<tr>
<th>Indicators</th>
<th>13.267 Million EUR. (additional)</th>
<th>8 Million EUR. (additional)</th>
<th>The rate of credit guarantee for the investments is 43%</th>
</tr>
</thead>
</table>
Measure 1.3: Improvement of R&D, Innovation, Technology and ICT Environment and Infrastructure

The purpose of this measure is to promote R&D, Innovation and usage of technology and transfer of knowledge to improve productivity and built a dynamic knowledge based economy.

Developing convenient infrastructure for R&D, creating a supportive environment for innovation, promoting technology transfer and creating incentives for business to use new technologies and the commercialization of research particularly by developing stronger links between business and Universities, R&D Centres, etc. in the target regions are the principal issues focused under this measure.

Specific Objectives

The specific objectives of the measure are,

- To contribute the commercial-oriented R&D activities of public and non-profit making organizations and increase the utilization of shared R&D, Innovation and Technology Infrastructure providing advanced environment and high quality services to enterprises,

- To promote the collaboration on R&D and innovation, transfer of technology through establishment, development and operation of corporate networks and clusters among the public sector, universities, R&D Centres and enterprises and connecting them to international networks.

- To contribute to the creation of new R&D jobs and products for commercial purposes, increase investments of enterprises on R&D, innovation, technology and knowledge.

- To improve the capacity of enterprises to utilize R&D results, innovation and technology commercially for products, processes and services.

Rationale

One of the most effective tools to enhance business competitiveness and its sustainability is to support R&D, innovation and technology due to their multiplication effect on the added value produced. Developing a convenient infrastructure for R&D, creating a supportive environment for innovation, promoting technology transfer, and commercialization of research particularly by developing stronger links between Universities, R&D Centres and Business, and transfer of these capacities into the lagging behind regions are the crucial areas to be focused on by policymakers in countries engaged in technology-related development.

Establishment of a knowledge-driven and competitive business environment based on R&D, innovation and technology through enhancing the physical infrastructure and cooperation activities like networking/clustering and supporting technology based innovative enterprises aimed in that measure will lead to a higher stream of revenue, productivity and profitability of enterprises and thus contribute to increase competitiveness, employment creation, new technology generation, improvement in living standards and long-term economic growth.

As described in chapter 2 in the research and innovation part and in the SWOT analysis, the capacity of private and public sector for R&D, innovation and technology based activities is relatively low and the number of enterprises, public and private institutions/agencies/research centres/universities etc. carrying high-tech activities is insufficient in the target regions. Most of the R&D activities are performed by universities and public research institutions.
Inadequate infrastructure and low number of enterprises engaged in R&D activities lead to low participation of SMEs in Community Programmes such as 7th FP. On this account, supporting the establishment of R&D and innovation infrastructure is of the utmost importance to provide complementarity among different Community Programmes implemented in Turkey.

Similarly, cooperation between universities and enterprises are low and usually university and other scientific institutions intensify their studies on theoretical subjects rather than commercially applicable ones. Correspondingly, commercialization of research studies and joint projects are not supported properly to obtain maximum profits. Another problem is that in the target regions there are not enough R&D, innovation and technology infrastructure, human capital and enterprises using technology. The enterprises in the target regions are very much depended on classic production methods.

Therefore, establishment of networks and cooperation between the western regions where relatively developed infrastructure exists and the target regions so as to transfer existing experiences, knowledge and capacity to the lagging behind regions is of the utmost importance. Certain R&D and innovation projects supported outside the target regions, which contribute to building networks between different capacities and potentials of different regions to the benefit of the target regions should be supported.

**Description**

The interventions within the context of this measure will mainly focus on the industrial sites operating on the base of high technology, R&D and innovation like Technology Development Zones (TDZs) and Technology Development Centres (TDCs) and other special supportive structures established inside or outside of those sites like Technology Incubators without Wall (DTI), Incubation Centres, Technology Transfer Centres, Excellence Centres, Innovation Relay Centres, etc.

Broadening, improving and rehabilitation of the infrastructure in these sites and supportive structures and enhancing the quality of the services supplied through infrastructure and refurbishment investments will be supported.

Establishment and modernization of technical facilities (like labs, workshops, etc.) not only inside these sites but also in other possible locations (like Universities, etc.) will also be supported.

Support for cooperation mechanisms like clusters of excellence and networks of R&D, innovation and technology among businesses and between businesses and public research/higher education institutions in regional, national and international level will be eligible within the scope of this measure.

Infrastructure and refurbishment investments and activities supporting cooperation mechanisms, clusters and networks and other possible interventions will be applied outside the target regions provided that the activity is a cooperation, networking or joint project supporting the competitive position of the target regions.

Support under this measure will consist mainly of investments in infrastructure and equipment like establishment, improvement and refurbishment of buildings and purchase of laboratory devices, machinery, ICT and office equipment and networks etc. However, in order to increase the impact of the intervention, advisory/consultancy services and publicity activities related with the implementation of the project itself will also be eligible to a certain proportion of the project budget.

Establishment, improvement and refurbishment of training and education facilities in order to provide necessary trainings on the development of entrepreneurial knowledge and skills like innovation, technology and R&D for SMEs will be supported in coordination and close cooperation with HRD OP through a Technical Committee which has been established with the participation of the Operating Structures of both OPs.
Eligible Actions

This measure will include the following indicative activities:

- Establishment, improvement and modernization (including refurbishment and ICT infrastructure) of R&D, technology and innovation facilities like Technology Development Centres (TDC), Technology Development Zones (TDZ), technology incubators without wall (DTI), incubation centres, technology transfer centres, excellence centres, etc.

- Supporting activities of public and non-profit making institutions regarding commercial-oriented R&D as well as collaboration on technology transfer, R&D and ICT usage through establishment (including infrastructure, refurbishment), development and operation of corporate networks and technology platforms among public sector, universities, R&D Centres and enterprises and connecting them to international networks.

- Establishment and modernization of social, technical and production facilities like labs, workshops, machinery, training/education facilities, etc. in Technology Development Zones and Technology Development Centres, Universities and in other possible locations.

- Establishment of one stop shops, information, consultancy, patent offices and other possible common service facilities in Technology Development Zones, Technology Development Centres, Universities, and other possible locations.

- Operations and investments outside the target regions provided that the activity is a networking or joint project supporting the competitive position of the target regions.

Admission Criteria

Projects will be analyzed in terms of interventions, project maturity and readiness, eligibility of actions, eligibility of the region, budgetary limitations, eligibility of the applicants or beneficiaries, etc. as defined in the relevant parts of RCOP. Ineligible projects will be eliminated prior to the qualification and grading process which will be carried out in accordance with the selection principles.

The project proposals which passes the admission process successfully will be graded in accordance with the below mentioned selection principles,

Strategic Criteria for Selection

The Strategic Criteria for Selection indicated for the priority will be applied

Other Criteria for Selection

In addition to the criteria for selection indicated for the priority, the following measure specific criteria will be applied for the prioritization of the project proposals:

- Project maturity and readiness,

- Projects supporting facilities intended to be used commonly by a wider range of beneficiary enterprises

- Projects enhancing the occupancy ratio inside sites like TDZs and TDCs, particularly the establishment of common technical, social and production facilities inside the sites

- Projects having high commercialization potential and joint projects between private sector, universities and public institutions for R&D, innovation and technology transfer
- Projects with environmental sustainability namely contributing to energy efficiency and use of renewable energy

- Projects supporting women and young entrepreneurs, disadvantaged persons and start-ups.

- Involvement of TOBB, TESK, TUBITAK, TTGV, universities, public research institutions, foundations and associations for R&D, innovation and technology, regional chambers of industry and commerce, craftsmen and artisans.

- Administrative and technical capacity of the beneficiary to achieve the targets and the risks faced by the project.

- Projects seeking complementarity and synergy with other Community Programmes like 7th FWP and CIP

**Final Beneficiaries**

Public institutions/agencies, managing authorities of Technology Development Centres and Technology Development Zones, universities, scientific institutes and research centres, national and regional chambers of industry and commerce, sector associations, foundations.

**Monitoring Indicators**

<table>
<thead>
<tr>
<th>Total Public Expenditure</th>
<th>34,582,668 (euro) (2007-2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Funding</td>
<td>25,937,000 (euro) (2007-2009)</td>
</tr>
<tr>
<td>Maximum Intervention Rate</td>
<td>75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Base Line</th>
<th>Target</th>
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<tbody>
<tr>
<td><strong>Outputs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- Number of R&amp;D and innovation related business sites rehabilitated or supported</td>
<td>4 TDzs,</td>
<td>2</td>
<td>Technology Development Zones (TDzs) are established by the assistance of Moff</td>
</tr>
<tr>
<td>2- Number of R&amp;D related service facilities rehabilitated or supported</td>
<td>3 TDCs</td>
<td>2</td>
<td>Technology Development Centres (TDCs) by the assistance of KOSGEB</td>
</tr>
<tr>
<td>3- Number of Enterprises involved in assisted projects</td>
<td>-</td>
<td>60</td>
<td>Data can be detected from the project reports</td>
</tr>
<tr>
<td>4- Number of joint projects realized by R&amp;D institutions and enterprises</td>
<td>-</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- Number of R&amp;D and innovation related new enterprises established inside business sites supported.</td>
<td>0</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>2- Number of patent applications resulted from assisted projects</td>
<td>-</td>
<td>10</td>
<td>The data can be followed from the statistics of Turkish patent Institute</td>
</tr>
</tbody>
</table>