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DG-XIII-D
INNOVATION PROGRAMME

STRATEGIC INNOVATION PLAN OF THE CANARY ISLANDS PEINCA FINAL REPORT

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Contact person: **D. Elicio Rodríguez Reyes**
RITTS Project Manager
Regional Council of Trade and Industry
General Directorate of Industrial Planning and Promotion of the Canary Islands
Government.
Avda. de Anaga, 35
Edificio de Usos Múltiples, Planta 8ª
38001 Santa Cruz de Tenerife
Spain

Tel.: + 34 922475000
Fax: + 34 922272859
E-mail: erguez@cistia.es

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EXECUTIVE SUMMARY

The elaboration process of the *Strategic Innovation Plan of the Canary Islands (PEINCA)* has followed the basic principles established by the European Commission for the RIS/RITTS, that is to say: **regional consensus**, through the involvement of as wide a range as possible of actors in the Canary Innovation System, **orientation towards demand**, answering the actors needs; finally, **the orientation towards action**, so the PEINCA includes a group of five pilot projects that will be implemented initially, and another five sectorial projects. The project proposes the creation of:

- ◆ A **stable strategic framework** that allows the adoption of the regional, national and European initiatives that affects the technological development and innovation in the Canarian economy.
- ◆ An **initial plan of action for the period 2000-2006** that jointly by consensus among the economic, social and public actors of the Canary Islands permits an improvement in the potential for innovation in Canarian companies, and also SMEs, especially the small ones.
- ◆ A group of **programmes and actions** that take into account:
 - Both sectorial demands from business and general ones related to training, financing, etc.
 - The need for improving human resources and the regional infrastructures for supporting innovation.
- ◆ A **management and co-ordination structure** of the policies and actions of the Plan.

The activities carried out during the RITTS project can be summarised as follows:

Definition of the project: During this initial phase the general objectives of the project and the management units were established and the gathering of relevant information for the project was initiated.

Gathering and analysis of information: the activities developed through this phase are the following:

- ◆ The evaluation of other European experiences related to policies and actions directed to supporting innovation
- ◆ The gathering, checking and updating of the available information.
- ◆ The Identification and Evaluation of the infrastructures for support of innovation.

- ◆ The Identification and Evaluation of the demands for support of innovation from Canarian companies.
- ◆ The analysis of sectorial technological trends and the creative dialogue in a number of thematic working groups, based on innovation, research and technological development with experts from five especially relevant sectors for the regional economy.
- ◆ Local Panels for the discussion and dissemination of the actions that will be included in the Plan.
- ◆ The carrying out of a wide regional survey addressed to the companies in order to know their innovative profiles, their main demands and their opinion about PEINCA's objectives.
- ◆ Other activities of dissemination and promotion of PEINCA's objectives, and initiation of contacts with a group of national and international experts.

Definition of the regional innovation strategy: in this last phase the regional priorities resulting from the debate and validation of the results of Phase 1 were established, at the same time the strategic policies and main actions were proposed and the Regional Innovation Plan for the period 2000-2006 was drawn up, from the analysis of the situation of the Canarian Innovation System, especial was paid to:

- ◆ The critical factors that limit the development of innovation in Canarian companies.
- ◆ The adjustment between demand and supply of services for supporting innovation.
- ◆ The need for regional consensus to overcome the potential constraints.

The process initiated within the framework of the PEINCA initiative has achieved:

- ◆ **Regional consensus**, through the active participation of more than 500 people among businessmen, technicians, experts and managers from the Public companies and bodies that constitute the technological supply. This participation has been achieved through thematic working groups, business diagnosis, and meetings with some local actors, forums, debates, surveys, expert panels, etc.
- ◆ **The growing awareness** of Canarian society of the objectives of the Plan, beginning with the dissemination of the project both in newspapers and TV and Radio, as well as other means of publicity

and promotion that include a specific newsletter on the progress of the project, and through a website in the CISTIA information system, of the Instituto Tecnológico de Canarias.

- ◆ **Greater knowledge of the Canarian Innovation System**, achieved through the gathering and ordering of the available information, the identification and evaluation of the infrastructures for supporting innovation and the identification and evaluation of demands of business.
- ◆ **Direct knowledge and evaluation of other international experiences** related to regional policies and actions for supporting innovation, and also the holding of an international experts panel and another 9 events and international meetings of the network RIS/RITTS and the RITTS Tourism subgroup.
- ◆ The proposal of **five pilot experiences** related with: the improvement of the information system and support to companies through the use of the Information Technology and Communications; the carrying out of a Viability Plan and actions to implement in order to achieve an effective dissemination and marketing of the knowledge, services and abilities of the services of technological supply; the study and application of the necessary steps to facilitate the creation of new technological companies, finally, the viability plans for the development of new infrastructures related to the prototype and the furniture sector.
- ◆ The proposal of **five sectorial actions** of initial reference: Adjustment of the commercial structure of tourism to technological changes (Tourism); Canarian Community of Proximity Services (Telecommunications and Information Technologies); Cluster of Water and Renewable Energies (Renewable Energies, Water Management, and Energetic Saving); Network of officially approved laboratories for calibration and physical-chemical analysis (Industry); R&D for the selection, improvement and using of stocks (Agriculture, fishing and ranching).

In order to achieve planned objectives, it will be necessary to increase the regional, national and European funds for supporting the innovation and the Structural and Cohesion Funds in order to carry out a better development of the public policies on innovation and increase sustainable job creation.

1. PROJECT IMPLEMENTATION PERIOD

1.1. START DATE ACCORDING TO COMMUNITY FUNDING NOTIFICATION

The Regional Council of Trade and Industry of the Regional Government of the Canary Islands received the EC's approval letter, and the official signing of the project between the Commission and Regional Government of the Canary Islands took place in Brussels on the 19th December 1996.

1.2. ACTUAL START DATE

On the 9th September 1997, the European Commission approved the **Additional Disposition** that explained the role of the Instituto Tecnológico de Canarias in the development of the PEINCA initiative.

Once signed this **annex nºI** to the Contract with the Commission in which the role of the Instituto Tecnológico de Canarias, S.A. is explained as contractor II, and also the figure of the PEINCA's Management Unit is recognised.

Since the signing of this additional disposition to the contract, the steps for contracting the selected consultants were started in order to achieve the planned activities in the work programme of phase 1.

Finally, the contractors defined the programme of activities of the project and the planned tasks of the work programme were initiated in December 1997.

1.3. PROJECT COMPLETION DATE

Once the contract between the DG XIII of the European Commission and the Regional Government of the Canary Islands was signed in December 1996, it was settled that the project should be carried out during 1997 and 1998.

Afterwards, and due to the need for more time in order to elaborate and draw up a better and more efficient Plan, the **second annex** was signed on the 28th October 1998 in which the Plan deadline was extended until June 1999.

2. PROJECT OBJECTIVES

The preparation process of the Strategic Innovation Plan of the Canary Islands has followed the basic principles set up by the European Commission for the RIS/RITTS projects:

- ◆ The **first objective** dealt with the idea of achieving the **participation and awareness** of a wide range of social actors related to innovation (Local Authorities, Business Associations, Chambers of Commerce, Technological Centres, Universities, etc.). Their co-operation has been obtained in giving definition to the Regional Innovation Strategic Plan, but not in a passive way but also actively supplying new ideas as well as in the search for valid interlocutors to facilitate the tasks of analysis and implantation of RITTS.
- ◆ The **second objective** has been the **identification of the needs and potentials** of the companies, particularly the SMEs, in a wide sense and not only related to the technological field, but also analysing the abilities and needs for advanced management of the organisations, for financing, for competitive vocational training, marketing and communication, strategic planning, of production, etc.
- ◆ The **third objective** has been to analyse **the infrastructures for supporting innovation and technological development**, how these interact with the demands of the companies, both directly and through consultants and technological intermediaries and making comparisons with regions of other countries.

3. PARTNERSHIP AND MANAGEMENT

3.1. PROJECT DEVELOPMENT

The tools used to ensure participation of various stakeholders have been:

Meetings of the Steering Committee: During 1997-1999 the Steering Committee held five meetings in which the information produced by the project itself was discussed. The Management Committee has met twelve times. The Management Unit and the General Directorate of Industrial Planning and Promotion of the Canary Islands held about 50 management meetings.

Also, some meetings have been held in order to integrate the different plans existing in the region related to R&D and innovation, such as the PCID, the PETELCAN and the PK-415 project of the Centre of High Technology in Image Analysis (CATAI).

Finally, meetings between the DG XIIIth, the General Directorate of Industrial Planning and Promotion of the Canary Islands and the Instituto Tecnológico de Canarias, the Plan Secretary and the Consultants that have developed the project (SOCINTEC, EDEI, Universidad Politécnica de Madrid e INNOVA), have been held.

Project Dissemination: The activities of the PEINCA project have been disseminated in newspapers, TV and radio: 28 articles, 2 TV programs and 3 management reports.

Various materials that provide information and promotion of the project, such as leaflets, 9 newsletters, files with additional information on the project and posters to announce the different events.

During the first six-month period of 1998, in which the activities related to the work programme of the PEINCA project were started, the first three-information newsletters were edited. A mailing to about 200 people have been sent, including centres related to R&D and Innovation in the Canary Islands, Steering Committee, Project Managers of RIS/RITTS projects and other persons related to the RIS/RITTS network, such as national and European consultants and civil servants of the European Commission. At the same time these newsletters are sent by e-mail to those who have requested it. During November and December 1998, 2 newsletters were published, and four during 1999, specifying in all of them the activities carried out and the results.

On the 8th January 1998, the PEINCA website was published (<http://www.cistia.es/peinca>), and has been updated periodically when the newsletters of the project were published. Information on the Project has been sent from the page to all those persons who make use of the consultation service the page includes.

Also a list of e-mails and FTP areas that covers all the actors involved in the project directly has been implemented: Steering Committee, Consultants, Management Committee and experts involved in the thematic working groups and the international expert panels.

Working groups: Two series of working groups were held (during July 1998 and February 1999) on innovation in five sectors considered relevant for the Canary Islands, analysing and justifying their selection previously.

The selected sectors were:

1. Tourism
2. Agriculture, Livestock and Fishing
3. Renewable Energies, Water Management and Energy Saving.
4. Telecommunications and Information Technology.
5. Industry

Local Expert Panels: The objective of these panels was to contrast and disseminate the results of the previous stages of the Project among a wide range of persons responsible for the different administrative levels existing in the Canary Islands (local, island and regional), responsible for bodies and businessmen.

Other events: We have also participated in another 9 events and meetings related to innovation, with the RIS/RITTS network and the Tourist subgroup.

3.2. MANAGEMENT STRUCTURE

3.2.1. DEFINITION AND ORGANISATION OF THE PROJECT

Chairmanship of the Plan:

The Secretary of the Department of Trade and Industry took on the Chairmanship of the Plan, as representative of the Regional Council of Trade and Industry of the Canary Islands the organisation responsible to the European Commission for the development of the RITTS PEINCA project.

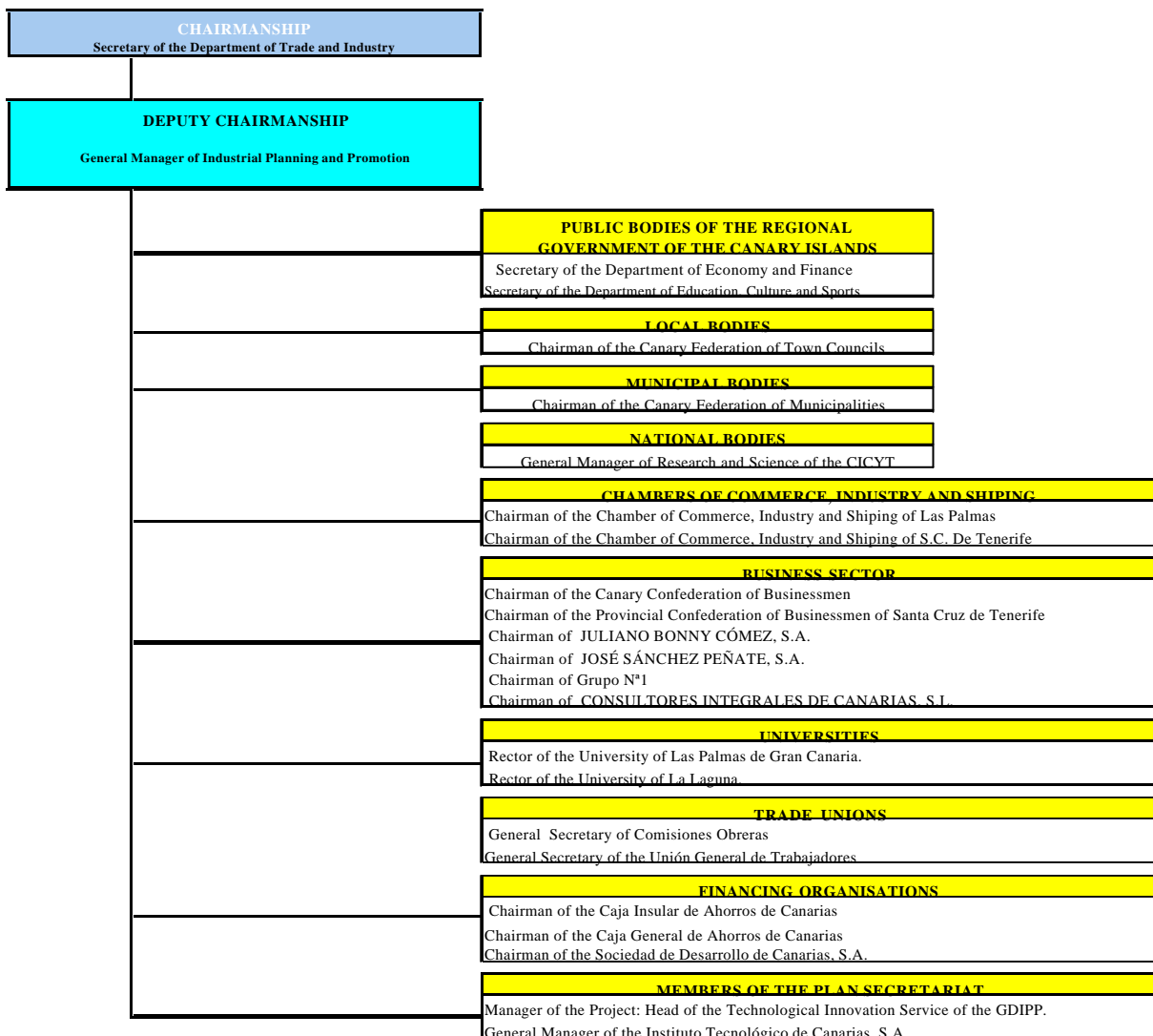
Management Committee

The **General Manager of Industrial Planning** was the Chairman of the Management Committee, the organ in charge of checking the Plan Secretariat's work, acting as interface between this and the Chairmanship of the Plan.

This Committee has also been responsible for compliance with the principles established by the Chairmanship of the Plan. The main objective of the Management Committee made up of the representatives of the General Directorates of Industrial Planning and Promotion, of Universities and Research, of Planning, Budget and Public Cost, and the Instituto Tecnológico de Canarias, has been to guarantee PEINCA's success in the Canary Islands.

Steering Committee

The Steering Committee has been the organ of social consensus as it is a body of contact and representation of a wide range of regional authorities of the Public Administration, universities, public bodies involved in research and technology transfer, financing organisations, trade unions, etc.



The Steering Committee was established on the 18th of April 1997 in Santa Cruz de Tenerife where the objectives to achieve and the topics considered relevant for the plan achievement were explained. The Steering Committee has met on five occasions from its establishment through the project duration.

Project Secretariat

The Project Secretariat has been the intermediate organ between the Management Committee and the Management Unit, made up of:

- *The Project Manager*: Head of the Service of Technological Innovation of the General Directorate of Industrial Planning and Promotion of the Canary Islands Government.
- *The General Manager* of the Instituto Tecnológico de Canarias, S.A.
- *The Project Managers* of the external consultants.

Management Unit

The management unit is made up of the Managers and Technical Staff of the Instituto Tecnológico de Canarias, S.A., and is in charge of the achievement of the planned tasks for the PEINCA elaboration through the operational management of the project, co-ordinating and managing the consultants, organising the thematic working groups, logistics, etc.

Group of External Consultants and Experts

Group of External Consultants: The consultants' panel has lent its support and experience to the Management Unit in all the tasks that have been carried out in the project, and it has been made up by the following four consultants:

NATIONAL CONSULTANTS

- ◆ **SOCINTEC**, a consultancy firm located in Bilbao and Madrid with a wide experience in industrial and technological planning and in the elaboration of regional innovation strategies in several European regions. The following tasks have been entrusted to SOCINTEC:
 - Project definition and planning.
 - Elaboration of the regional innovation plan (PEINCA).
 - Identification and assessment of the demand for innovation support.
 - Stage 2 seminar and international reference panel.
 - Discussion panels and surveys.

- Report stage 1 and final report.

- ◆ **Universidad Politécnica de Madrid**, using its wide experience in the field of technology analysis and management:
 - Gathering, review and updating of information.
 - Identification and assessment of the innovation support infrastructures.
 - Additional Services of Consultancy.

REGIONAL CONSULTANT

- ◆ **EDEI Consultores, S.A.**, a local consultancy firm with wide experience in regional and economical planning and analysis, as well as consultancy for companies:
 - Identification and assessment of the innovation support infrastructures.
 - Thematic working groups.
 - Collaboration in promotion, diffusion and complementary activities.
 - Sectorial description of the regional Economy and surveying companies.

INTERNATIONAL CONSULTANT:

- ◆ **INNOVA**, an Italian consultancy firm with wide experience in technology transfer mechanisms, international technology marketing and innovation policies formulation:
 - Evaluation of regional innovation plans in order to determine strategies and actions potentially transferable to Canary Islands.
 - Analysis of trends in five priority sectors: Mature Industry, Information and Telecommunication Technology, Tourism, Renewable Energy and Agriculture.
 - Follow-up of the international experts panels.

International Panel of Experts. An International Workshop during the final phase of the project has been organised in order to check the first draft defined for the Regional Innovation Strategy and to learn from other national and international experiences.

3.2.2. DIFFICULTIES ENCOUNTERED DURING PROJECT IMPLEMENTATION.

Generally speaking, there has been a good level of effectiveness among all the participants in the creation and drawing up of the Plan, it has received some comments from different external collaborators in which the good work carried out was praised and suggestions were made on the need to investigate or analyse specific issues regarding innovative actions that should be achieved. All these comments have permitted to check that there is a greater awareness by the different economic and social actors involved towards innovation.

Furthermore, and due to the scarce orientation towards innovation of the Canarian business sector, occasionally it has found some problems in getting together different Public Bodies, Local Authorities or businessmen to participate in the different meetings, and also the difficulties encountered when the information of the different bodies was gathered, this was considered useful and necessary in the different tasks of the project.

4. ACTIVITIES

4.1. MAJOR MILESTONES

The need of agreeing an efficient co-ordination in all the policies, actions and incentives related to innovation in the Canary Islands and starting a wide regional strategy on innovation support, has been discussed among the main organisations, Public Bodies and actors involved in innovation policies during the elaboration of the PEINCA project and in the different meetings held.

At the same time, the methodology used in the Plan and the results achieved have been disseminated, trying to sensitise and make aware the main economic and social agents of the Canary Islands of the importance of innovation for regional development and improvement of the competitiveness of our companies in order to reach the levels of development of the main countries of the European Community.

So, one of the main milestones achieved with the development of the PEINCA project has been to set up the basis for continued study and analysis of the need to create more efficient policies addressed to the modernisation and innovation of

the business and productive profile of the Canary Islands, setting up a strategy that gives priority to the rational use of innovation in Canarian SMEs.

4.2. ANALYSIS AND STUDIES

4.2.1. ANALYSIS OF TECHNOLOGY SUPPLY

The activity developed in this analysis can be summarised into three vectors that have been used for the study of the technological supply profile:

- ◆ **Identification of the technological options.** This vector has tried to identify a group of elements that are of strategic interest when the validity of the technological supply is evaluated.
- ◆ **Evaluation of the factors that influence the process of technology transfer.** This vector has tried to analyse those factors which have proved successful in several processes of technology transfer to the business profile at European level, and at the same time understand its use in the context of the Canarian region.
- ◆ **Evaluation of the use of financial support devices.** This vector tried to analyse those levels of use that the organisations generating knowledge have made of the several public devices designed for supporting research and technological development, as first stages of the technological innovation process.

The group of factors mentioned above has been analysed, taking especially into account their influence on the technology transfer process having recourse to the so-called 'best practices' according to studies carried out at European level and financed by the European Commission. This reference to real facts is an attempt to achieve conclusions that were valid in the Canarian region according to their own differences related to organisations and abilities.

4.2.2. GENERAL ANALYSIS OF INNOVATION IN THE CANARY ISLANDS

This general analysis consisted of:

- ◆ A short description of the region is economy taking into account the technological and innovation aspects of the Canary Islands, generally.
- ◆ The selection of a group of economic sectors in which innovation and technological development should have a higher impact on their competitiveness and the regional economy.

- ◆ The analysis of the competitive situation of each one of these sectors.

4.2.3. ANALYSIS OF THE REQUESTS FOR SUPPORT

The objective of this work has been to know the innovation demands of Canarian companies. The information gathered has been structured according to the following:

1. Profile of the innovative activity of Canarian companies.
2. Factors for promotion and external constraints to innovation.
3. Profile of the innovation needs in Canarian Companies.
4. Knowledge level and opinion on the supply of services supporting innovation.
5. Opinion on the intended PEINCA objectives

Therefore, aspects such as the technological areas from which the demand arises, the type of actions by Public Bodies which are of most interest to companies or the factors that affect collaboration among companies and organisations of technological supply have been analysed.

4.2.4. ASSESSMENT OF REGIONAL STRATEGIES AND ACTIONS IN OTHER EUROPEAN REGIONS

The comparative analysis of a group of regional strategies and actions for innovation carried out in other European regions has brought together information of reference for the implementation of supporting actions on innovation in the Canary Islands. These experiences have been selected, among other carried out in Europe, because of certain similarities with the Canarian context. Although being aware that this does not guarantee direct applicability in the Canary Islands, they have been selected in order to add some elements (technological, evident success, local environment...) from which some practical ideas can be concluded in order to develop an innovation strategy in the Canary Islands.

The information gathered has been structured as follows:

1. *Methodology of selection*: showing how the selection of the regions was achieved, strategies and actions and opinions taken into account for this purpose.
2. *Macroeconomic Analysis*: the Canary Islands and other island European regions: it is a comparative analysis among the 9 European regions selected and the Canary Islands based on the main macroeconomic indicators.
3. *Strategies*: they show the 3 regional strategies selected for development and the increase in local innovation in the same number of European Regions.

4. *Actions*: a list of 16 actions carried out in 7 European countries to foster regional innovation and the improvement of the technological level.
5. *Suggestions*. They display some potential lines of action for the development of a regional strategy on innovation in the Canary Islands drawn from the analysis of international information gathered.

4.2.5. STUDIES OF MARKET AND TECHNOLOGY TRENDS IN THE FIVE SELECTED SECTORS

Once had been identified the above 5 economic sectors with an important potential for innovation, this task tried to gather, for each sector, information on the technological trends and market at global level.

Such information will be useful for the writing of sectorial measures during the preparation of the regional innovation strategy. The information related to each sector has been structured in different ways, going into sectorial aspects of higher relevance for each sector (technological, market, etc.). Also, a methodological framework of maximum contents has been created for the 5 reports that include world-wide market trends, world-wide technological trends, situation and trends of the sector at regional level, international comparison and strategic recommendations for action through pilot actions.

4.2.6. GATHERING, UPDATING AND ANALYSIS OF INFORMATION

In order to make efficient the process implicit in the development of this task, and taking into account their relevance for the project development as the gathered information constitutes a basic input, a documentary database has been designed and the functional criteria have been defined that are going to regulate its operating capacity throughout the project. The methodology used was:

- ◆ Study of the structure of the information.
- ◆ Analysis of the data management
- ◆ Gathering of information
- ◆ Dissemination of information
- ◆ Updating of information

The documentary database of the project is structured into 11 alphanumerical fields that completely describe the information filed. Apart from the bibliographical

data of the documents of interest, the database has 2 specific fields that supply information of special relevance: summaries and keywords.

4.2.7. DEVELOPMENT OF THE REGIONAL STRATEGIC INNOVATION PLAN OF THE CANARY ISLANDS

Based on all the previous analyses, the Strategic Innovation Plan of the Canary Islands (PEINCA) makes a strategic reflection on the reality of the Canary Innovation System and sets a calendar of actions for the 2000-2006 period. The plan has been structured according to the following main clusters:

- ◆ Framework and Objectives of the Strategic Innovation Plan of the Canary Islands.
- ◆ Diagnosis of the Canary Innovation System
- ◆ Critical aspects for the development of competitiveness in Canarian companies through innovation.
- ◆ Scope, strategic lines and specific objectives.
- ◆ Programmes and actions.
- ◆ Devices
- ◆ Structure and Management
- ◆ Financing of the Plan as annex and others, including the actors involved in the process, the description of the Canary Innovation System, specific demands of the companies, etc.

4.3. STRATEGY DEVELOPMENT

The different steps and activities used to draw up the strategy are described in the following sections.

4.3.1. IDENTIFICATION AND EVALUATION OF INFRASTRUCTURES FOR SUPPORTING INNOVATION.

The number of organisations generating knowledge identified in the Canary Islands was 100. In the 2 Canarian universities (Las Palmas de Gran Canaria y La Laguna) 34 technological departments have been counted which have been analysed individually, because they constitute structures that are capable of autonomously generating and transferring knowledge to the business sector. The answers received were 64.

In the survey the organisations generating technological knowledge were asked to supply specific information related to the technological areas and sectors of economic activity in which they carry out their activity, as well as the available equipment to offer technological services.

4.3.2. IDENTIFICATION AND EVALUATION OF THE DEMAND FOR SUPPORTING INNOVATION

The consultation to the companies finished with the tabulation and analysis of:

- ◆ 40 technological audits performed in the referenced sectors
- ◆ 693 questionnaires of the mentioned sectors apart from the ones related to trade, transports and building were sent but just 156 questionnaires were received.

4.3.3. SECTORAL WORKING GROUPS

Two series of thematic working groups on innovation were held during July 1998 and February 1999 in the Canary Islands of the following sectors:

- ◆ Tourism
- ◆ Telecommunications and Information Technologies
- ◆ Renewable Energies, Water Management and Energy Saving.
- ◆ Agriculture, fishing and livestock.
- ◆ Industry

The objective of the thematic working group was to discuss among the different actors of the innovation system of the Canary Islands the present situation of these sectors and to gather suggestions on possible actions that should encourage the sectorial innovation related to the strategy that could be carried out by the Public Authorities in order to support and enhance the innovative activity in the Canary Islands. The information compiled in the thematic working groups can be structured in two sections:

1. Demands, innovation needs and sectorial recommendations: main demands for improvement, grouped according to great lines of work at regional level.

- ◆ Prospecting and technological vigilance.
- ◆ Technological Marketing and internationalisation.

- ◆ Improvement of the univertarian-research centres-companies interface.
- ◆ Innovation Financing
- ◆ Training and availability of highly-skilled human capital
- ◆ Innovation Protection
- ◆ Public policies for supporting innovation, etc.

2. **Global assessment of a set of devices for supporting innovation:** specific indications of the sectors included in the sample.

43 managers and experts from the sectors involved participated in the 10 thematic working groups.

4.3.4. LOCAL PANELS

The different local panels were held in:

- ◆ El Hierro (8th March 1999)
- ◆ La Palma (9th March 1999)
- ◆ Lanzarote (10th March 1999)
- ◆ Fuerteventura (10th March 1999)
- ◆ Gran Canaria (11th March 1999)
- ◆ La Gomera (12th March 1999)

More than 40 persons were involved in these discussion panels mainly, decision-makers from Public Bodies of all the Canary Islands, who contributed suggestions on the need to develop or improve different economic and social areas of the Canary Islands, in order to increase the competitive ability of the companies.

The objectives of the PEINCA initiative and the local problems were discussed with the decision-makers from the different administrative bodies existing in the islands (local, insular, regional), public bodies and businessmen.

4.3.5. FORUMS OF INNOVATION

Start up Seminar

The Institutional Presentation and the Start up Seminar of the **PEINCA** project was held on the **7th November 1997**, and was addressed to promote the initial consensus of the global definition of the project, as well as the gathering of experiences of the groups selected by the experts.

The Start up Seminar of the PEINCA, was organised by the Council of Trade of Industry of the Regional Government of the Canary Islands together with the Instituto Tecnológico de Canarias, S.A., the participation of the different members of the Steering Committee, representatives of the European Commission, a group of consultants and national and European experts.

To this first seminar were called all the representative sectors of the Canary Islands and the decision-makers of the rest of **European RIS/RITTS projects**. The main objectives were:

- The public presentation of the RITTS ISLAS CANARIAS project.
- To show a general vision of the project.
- To increase and consolidate the consensus among the main Canarian actors in order to develop and start up a wide regional strategy for supporting innovation in the Canary Islands.

To organise the presence of national and European experts involved in the management of other regional innovation projects or with experience in regional and technological issues, in order to reach an exchanging of experiences.

Seminar of the Stage 2

On the 16th March the last seminar of the project was held in the head-office of the Caja General de Ahorros de Canarias, in which a summary of the activities carried out in the stage 1 was presented to all the participants, the critical aspects detected, as well as the conclusions gathered from the diagnose of situation achieved to the Canarian Innovation System.

At the same time, all the experts dealt with a set of strategic lines that should be established in a regional strategy of innovation to set up in the Canary Islands. These strategic lines were discussed and reached jointly before taking place the final seminar of the project.

4.3.6. WORKSHOP OF EXPERTS

The Workshop of experts consisted of two different parts:

Panel of experts: Experts panel met internally on 15th March 1999 with the project Management Unit members and with a group of consultants. The aim of this meeting was to exchange points of view, from their personal experience in a number of aspects of interest in order to define the Regional Innovation Strategy of the Canary Islands.

Participation in the Seminar of the Stage 2: After taking place the Seminar of the Stage 2 on the 16th March 1999, the participants of the Expert Panels explained the conclusions of the previous meetings, all of them were agreed in the fact that the Strategic Innovation Plan of the Canary Islands should propose concrete actions in order to solve those deficiencies detected and diagnosed in the Canarian Innovation System.

4.4. PILOT ACTIONS

A set of pilot actions of wide visibility and great impact has been proposed for imminent implementation. The following actions have been considered of special interest by reason of their originality as demonstration:

- ◆ Supporting dissemination and marketing of the Technological Centres and University Research Departments.
- ◆ Feasibility, design of Plans and private/mixed financing and encouraging new innovative and technological business ventures.
- ◆ Information and support system for business innovation through network systems and Internet.
- ◆ Feasibility Plan and draft of the project for inclusion in the Structural Funds for the development of a Centre of Prototypes.
- ◆ Feasibility Plan and draft of the project for its inclusion in the Structural Funds for the development of a Technological Centre of Furniture.

Also five sectorial actions of initial reference have been proposed:

- ◆ Adaptation of the tourist commercial structure to technological changes (Tourism);

- ◆ Canarian Community of Proximity Services (Telecommunication and Information Technologies);
- ◆ Cluster of the Water and Renewable Energies (Renewable Energies, Water Management and Energy Saving);
- ◆ Network of officially approved laboratories of calibration and physical-chemical analysis (Industry);
- ◆ R&D for the selection, improvement and using of stock (Agriculture, fishing and livestock).

4.5. RIS/RITTS INTER-REGIONAL NETWORKING

Since the beginning of the project, boards in charge of PEINCA management became aware of the importance of carrying out a complete benchmarking exercise against other regions' strategies and processes for the success of the project. For that reason, relevant representatives of the Management Unit have attended several meetings and seminars related both with management issues and with the impact and development process of other RITTS/RIS experiences in Europe.

In particular, the seminars attended are listed below:

- Lyon 17-18 February 1997, "RIS/RITTS Managers"
- Brussels, 29-30 May 1997, "Workshop on SME's needs analysis"
- Germany, 7-8 July 1997, The first meeting of "Tourism" Sub-group.
- Bari, 4 Jun 1998, meeting of "Tourism" Sub-group.
- Brussels, 22-23 June 1998, "Plenary Meeting RIS/RITTS"
- Iceland, October 1998, meeting of "Tourism" Sub-group.
- Valladolid, 21 April 1999, Observatory of Innovation, IBERIA NW project.
- Tecnova, 12-14 May 1999, Prospectiva tecnológica.
- Madrid 28 Jun 1999 "Reunión con representantes proyectos RIS/RITTS (COFIR) AM RITTS 111"

5. STRATEGY AND ACTION PLAN

5.1. STRATEGY

A group of critical aspects for the development of the innovation activities was achieved in the Canarian companies from the diagnosis of the Canary Innovation System that can be divided into four sections:

1. The technological profile of the companies is –generally speaking- a low intensity technological profile with substantial limitations for accepting the risks of innovation.
2. Limited awareness and trust in the services of technological supply.
3. Limited capacity for setting up new innovative business.
4. Lack of co-ordination among the Regional Authorities for building up common objectives on innovation support (actions, financing, etc.).

Eight objectives were identified from these weaknesses of the Canarian Innovation System that the Innovation Strategic Plan of the Canary Islands (PEINCA) will have to fulfil:

Objective 1: Improvement of the financing support to the innovative ventures.

Objective 2: Strengthening of the mediation devices.

Objective 3: Actions for the development of technological resources.

Objective 4: Main support to a group of strategic sectors.

Objective 5: Promotion the setting up of technological new business.

Objective 6: Fostering the new business culture and the innovative spirit.

Objective 7: Encouraging new technological investors.

Objective 8: Co-ordination between the policies and public resources supporting innovation.

5.2. ACTION PLAN

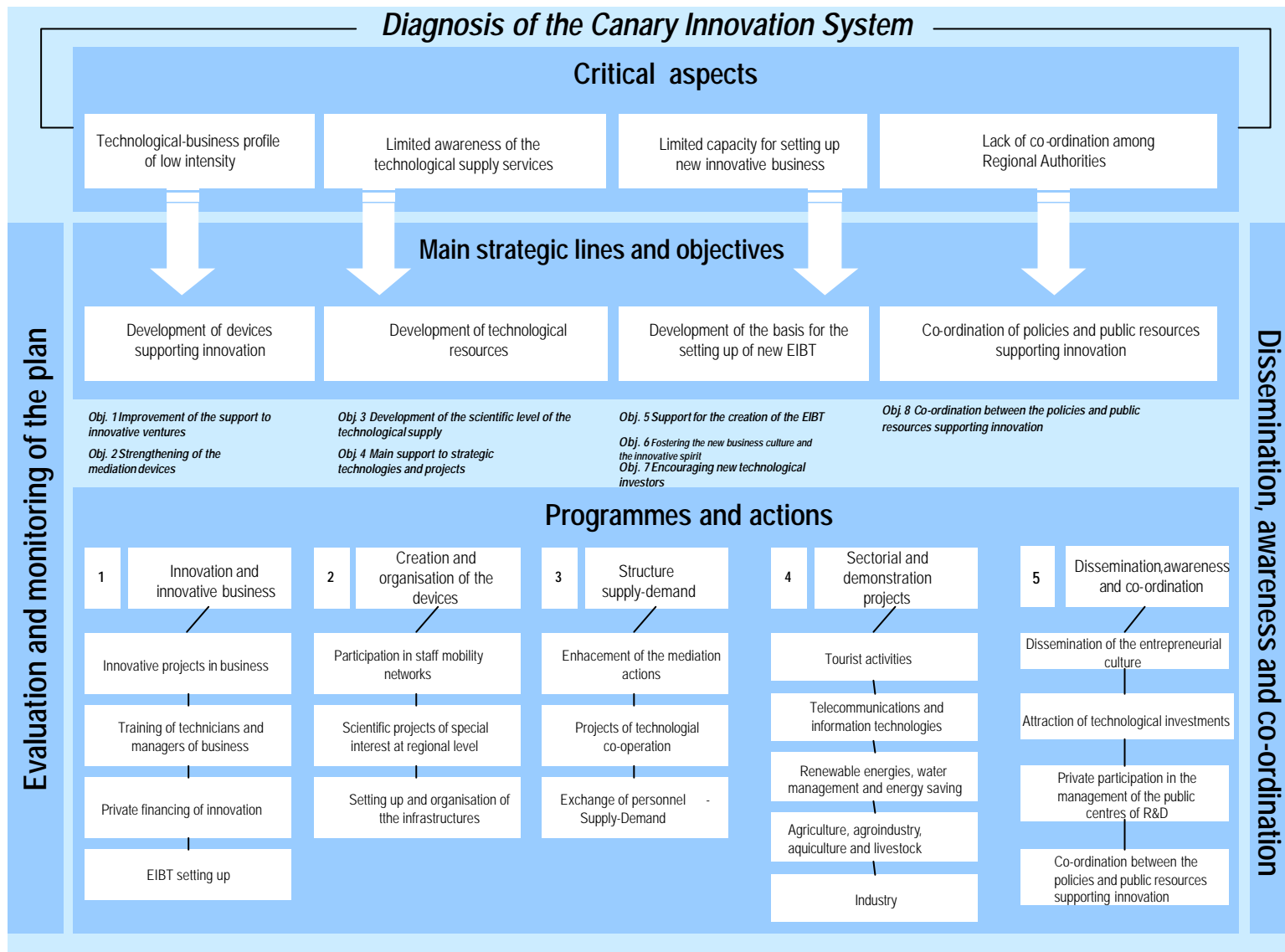
The action plan has 19 specific actions to cover the 8 main objectives of the PEINCA project. The 19 actions have been structured in five programmes:

- ◆ **1st Programme: Innovation and innovative firms.** Actions supporting innovation in the firms and setting up of innovative firms.
- ◆ **2nd Programme: Creation and organisation of the resources.** Enhancement actions of the technological supply with a strategic character for the Canary Islands.
- ◆ **3rd Programme: Structure supply-demand.** Actions to dynamise of the interface between the business sector and the supply of services supporting innovation.
- ◆ **4th Programme: sectorial and demonstration projects.** Sectorial actions and pilot projects that allow to be improved the competitiveness of the Canarian companies.
- ◆ **5th Programme: Dissemination, awareness and co-ordination.** Actions of general awareness and co-ordination and management of the policies and devices supporting innovation.

The description of the actions will be achieved according to the following structure:

- ◆ Name of the action
- ◆ Present situation: short description of the reason for including the action of the Plan and the situation of the Canary Islands in relation to the topic of the action.
- ◆ Scope: types of bodies to which the action is addressed to and delimitation of its content.
- ◆ Devices: devices that will be used for carrying out the action.
- ◆ Work programme and Length: Description of the tasks to be performed from the action manager's point of view.
- ◆ Monitoring indicators: parameters used as a measure of the efficiency and the level of fulfilment of the action.

The process carried out for the development of the Plan is as follows:



5.3. MONITORING AND EVALUATION

The PEINCA initiative tries to carry out an evaluation and monitoring system taking into account the following aspects:

- ◆ The gathering of information and the individual and constant monitoring defined for each action of the Plan, or *monitoring indicators*. When each one of the actions starts, the monitoring indicators will define the specific objective.
- ◆ The periodical analysis of the deviations from the established objectives for the indicators of the Annex 5. Solutions for the detected deviations will be proposed.
- ◆ The continuous dissemination of the objectives, results and characteristics of the Plan to the Actors of the Canarian Innovation System.
- ◆ The establishment of dynamic, clear and independent communication channels within the management structure of the Plan. The management organisation of the plan will also be responsible for the evaluation, monitoring and checking. In order to carry out such actions, it will have internal and external devices carried out to guarantee the quality and objectivity of the activities. Their conclusions and checking propositions will be addressed to the steering committee of the Plan that will decide the possibility of calling together respective consultative forums.