

## **CRDC - ICT**

### **MISSION**

The Regional ICT Centre – CeRICT SCaRL – is an organisation able to access and direct the principal results of scientific research towards practical projects carried out in collaboration with businesses and such as to give effective answers to the needs of the ICT sector at both national and international level.

CeRICT is an important reference point for the public institutions in the area of specialised consultancy aimed at defining strategies and the Information Systems to support them, monitoring their realisation and evaluating their implementation.

To date, it has already distinguished itself as a reference point for a number of local public bodies and as a partner for operators in the ICT sector who require highly specialised consultancy support.

CeRICT is the natural development of the Regional Centre for Expertise in ICT Technologies, a network of experts which has operated since 2002 in the field of Information and Communications Technology.

Moreover, its mission concerns the technology transfer of the scientific results obtained in the ICT field and facilitating the creation of new productive units through spin-offs or establishing new businesses.

### **GOALS**

CeRICT's mission embraces the following objectives:

- ◆ To create research and development activities on the basis of their industrial interest and accompanied by technology transfer of the results;
- ◆ To contribute to the structural concentration of strategic research through co-operation between research institutes and public and private partners;
- ◆ To promote direct involvement of businesses in the process of actuation and planning of innovation;
- ◆ To promote the creation of knowledge-based businesses;
- ◆ To bring about the conditions for the creation of advantageous conditions for businesses both within and without the Campania Region to invest in emerging high-tech sectors;
- ◆ To integrate pre-competitive research activities with the aim of constituting an incubation reservoir for the systematic development of research potential;
- ◆ To promote the start-up of spin-off businesses from research ideas;
- ◆ To meet the demand for technological consultancy arising from the production system;
- ◆ To carry on highly specialised training activities;
- ◆ To promote and stimulate technology transfer of the results.

## ACTIVITIES

The CeRICT's activities effectively support the company's three Business Lines, which are:

1) **Institutional consultancy through evaluation, monitoring, control and specific consultancy activities**, in order to encourage the match between supply and demand of ICT research, for the institutional technical-scientific participants, for the definition of vertical and selective policies of innovation and the increase of the ICT productive field, for the aggregation and integration of ICT SMEs.

2) **Constitution of Regional ICT District**, whose role is the management of initiatives related to the ICT District, from the point of view of increasing the industrial section as well as the evolution of the companies and entities located nearby.

3) **Development of the ICT productive section**, with the mission not only of identifying the intervention policies regarding Large, Small and Medium companies, but also of creating stable and growing synergies between these same entities:

- **Actions for Large companies (LC)**, aimed at attracting Large Companies to the regional territory, developing strategic activities and developing activities which will help the enhancement of these companies (ex. Start-up or development of Innovation activities based on market request, transfer technology activities, research projects in partnership with research structures and researchers affiliated with the CeRICT);

- **Actions for Small and Medium Enterprises (SME)**, aimed at becoming a point of reference for SME groupings in specific instances (ex. market requirements, technological requirements), for the consolidation, on the regional territory, of clusterization processes with strategic importance, for the potential agglomeration of economies and the increase of profits derived from the process of territorial concentration of the production activities;

- **Joint actions for LC and SMEs**, aimed at the evaluation of potential and diffusion of innovation activities through a joint participation in projects with public contributions.

## STRUCTURE

CeRICT possesses a series of technical and scientific skills of the highest level, covering all sectors of Information and Telecommunications technology, thanks to the contribution of more than 200 professors, research workers and technicians.

CeRICT's structure optimises the advantages deriving from the specialisation of its divisional structure, shown in the upper part of the organisation diagram, to those deriving from the structured area of technological expertise.

This particular organisational structure of CeRICT SCaRL allows it to draw directly or indirectly on specialised scientific knowledge not only in the ICT sector but also, transversely, in other sectors already or potentially connected to it.

CeRICT is structured in such a way as to guarantee all requirements involved in the basic sectors of technological research, with more than 220 staff between research workers and specialised technicians.

CeRICT has an organisational structure which safeguards its industrial partners as to its ability to plan, monitor and deliver respecting expected timings, costs and quality levels, thanks too to an ISO 9001 quality system certificate.

## **PROJECTS/PRODUCTS**

CeRICT has developed and realized numerous projects related to all the thematic areas of the ICT sector.

The areas of interest and competence in the IT sector are :

- Design and evaluation of reliable distribution systems operating in the security sector;
- Design and development of applications in a distribution environment;
- Agent-based systems;
- Development of applications in domotic environment;
- Protocols of telecontrol;
- Design, realization and specialization of measuring distribution systems;
- Design and realization of virtual reality systems, applied to specific themes;
- Design of platforms for the treatment of multimedia information, with specific emphasis on e-learning applications ;
- Knowledge Management;
- Design and implementation of web platforms for the management of distributed databases;
- Data sharing of scientific and clinical results in the medical research sector;
- Design and development of web applications;
- Advance technologies of web security;
- Multi-agent systems for the design of pro-active systems.

The areas of interest and competence in the TLC sector are :

- Communication and marketing tools;
- Design of mobile network applications;
- Characterization of innovative services for the web and mobile terminals;
- Networks for innovative multi-media services;
- Design of services for mobile networks that are interoperable with fixed networks;
- Platform software for the configuration of network apparatuses: reliability and quality;
- Data transmission applications on mobile networks;
- Technologies for the planning and design of infrastructures for wide band networks (geographic type);
- Centralized and network firewall systems;
- Design of adaptable interfaces and virtual reality interfaces;
- Design and development of security infrastructures based on digital signature;
- Design of optical TLC systems;
- Design, realization and characterization of components and opto-electronic systems;
- Measuring instruments for TLC systems;
- Development and analysis of electronic circuits for telecommunications;
- Innovative technologies for systems and wireless wide band networks: transmission and security;
- Biological effects of the electromagnetic fields to the frequencies used in the mobile TLC systems.

### **Contacts:**

Piazza Sedile del Campo "Palazzo Genovese"  
84100 Salerno Italy  
Phone: Tel. +39 0824-305550/34  
Fax: +39 0824-50552  
info@cerict.it