SiS FVG - SCIENTIFIC&INNOVATION SYSTEM OF THE FRIULI VENEZIA GIULIA REGION

1 March 2017

STEPHEN TAYLOR, Director, Marketing, Communication and Business Development

AREA Science Park
The Friuli Venezia Giulia Region: a favourable context

- At the heart of the enlarged Europe
- Important science and technology hub
- Large community of foreign scientists and students
- A network of public and private research centres (SiS FVG)
- Regional policies focused on internationalisation of human capital

A shared strategy to build synergies and to increase the international attractiveness of the region

Geographic area: 7,845 km²
Resident population: 1,218,450 (as of 30/6/2016)
Provinces: Gorizia, Pordenone, Trieste, Udine
GDP per capita: €29,292
The new Programme Agreement - A chronicle

- **2004, January the 27th:** signature of the Programme Agreement for the Coordination Network of the Research Institutions of the Friuli Venezia Giulia region by The Ministry of Foreign Affairs and International Cooperation (MAECI), the Ministry of Education, Universities and Research (MIUR) and the Autonomous Region of Friuli Venezia Giulia.

- **2016, August the 3rd:** signature of the Agreement for the enhancement of the Scientific & Innovation System of the Friuli Venezia Giulia region (**SiS FVG**) by MAECI, MIUR and the Autonomous Region of Friuli Venezia Giulia. The new Agreement replaces the previous one.
SiS FVG at a glance

**DURATION:** 5 years (it may be renewed with the consent of the parties)

**AUTHORITIES:** a Steering Committee, which presents annually to MAECI, MIUR and Autonomous Region of Friuli Venezia Giulia the operational objectives and the activities to be developed, and an Annual Assembly focused on the activities of research and scientific institutions involved on issues of regional interest

**STAKEHOLDERS:** 3 subscribers Bodies + 18 public research institutions, universities, international research organisations and Science and Technology Parks supervised by MAECI, MIUR and Autonomous Region of Friuli Venezia Giulia with registered or operational headquarters in Friuli Venezia Giulia region
1. Regione Autonoma Friuli Venezia Giulia
2. Ministero degli Affari Esteri e della Cooperazione Internazionale (MAECI)
3. Ministero dell’Istruzione, dell’Università e della Ricerca (MIUR)
4. AREA Science Park
5. Università degli Studi di Trieste
6. Università degli Studi di Udine
7. SISSA - Scuola Internazionale Superiore di Studi Avanzati
8. Elettra - Sincrotrone Trieste SCpA
9. Istituto Nazionale di Oceanografia e di Geofisica Sperimentale - OGS
10. CNR - Consiglio Nazionale delle Ricerche, sedi operative FVG
11. INAF-Osservatorio Astronomico di Trieste
12. INFN - Istituto Nazionale di Fisica Nucleare, Sezione di Trieste
13. Conservatorio Statale di Musica “Giuseppe Tartini” di Trieste
15. ICGEB - International Centre for Genetic Engineering and Biotechnology
16. The Abdus Salam International Centre for Theoretical Physics - ICTP
17. TWAS - The Academy of Sciences for the Developing World
18. IAP - InterAcademy Partnership
19. Polo Tecnologico di Pordenone
20. Consorzio Innova FVG
21. Friuli Innovazione Centro di Ricerca e di Trasferimento Tecnologico
S3 - AREAS OF SPECIALISATION AND PATHS OF DEVELOPMENT

1) AGRI-FOOD
Industrial design;
Innovative product storage systems;
Smart packaging;
Chemical analysis.

2) STRATEGIC PRODUCTION CHAINS
a) Metalworking chain
Technologies for the numerical modelling of processes and products;
Methods and technologies for integrated design;
Intelligent machines.

b) Home system chain
Technology related materials;
Methods and technologies for rapid design;
Technologies for energy efficiency of buildings;
Cloud Computing technologies.

3) MARITIME TECHNOLOGIES
Methodologies for the design and development of new products, processes and services;
Green technologies and energy efficiency;
Technology for safety.

4) SMART HEALTH
Biomedical, in vivo and in vitro diagnostics;
Medical informatics and bioinformatics;
Innovative therapy;
Ambient Assisted Living - AAL.

5) CULTURE, CREATIVITY AND TOURISM
Technologies for the conservation and enhancement of goods and products;
Geomatics and image processing;
Social platforms and sharing.
SiS FVG - A multidisciplinary network

**SOCIO-HUMANISTIC AREA:**
Social Sciences, Economics, Statistics and Human Sciences. Studies and research on social and economic development of border areas; cooperation projects with a focus on Central and South-Eastern Europe

**SCIENTIFIC & TECHNOLOGICAL AREA:**
Natural Sciences, Chemistry, Physics; Maths, Engineering, Nanotechnology and Geosciences. Research in Astronomy and Astrophysics; scientific activities for the knowledge of the Earth and its natural resources; research on Green Economy and Blue Growth; advanced studies on innovative materials; international cooperation activities and transfer of knowledge for the benefit of developing countries

**LIFE SCIENCES AREA:**
Biotechnology; Cognitive Sciences and Medical and Surgical Sciences. R&D activities in the field of Genomics, Bioinformatics, Molecular Oncology and Immunology; studies on Neurobiology, Diagnostics and Innovative Therapies
SiS FVG - Management and Implementation

- **Regional Authority responsible for Research (Education, Training and Research Area):** regional structure in charge of the management of the Agreement

- **AREA Science Park (Park Development and Research Coordination Office):** supports the implementation of the SiS FVG activities.

AREA Science Park drafts an annual operational plan of activities, in compliance with the Steering Committee's indications. The Plan is then approved by the Regional Authority, MAECI and MIUR.
SiS FVG - Aims and Objectives

Enhancing the SiS FVG, in particular:

1. Foster the coordination of scientific activities through the creation of a "scientific network of excellence";
2. Foster the best link between the scientific system and the economic and territorial bodies through the rationalisation of the regional structures operating in Innovation and Technology Transfer;
3. Foster the improvement of the national and international visibility of the regional Scientific System through the development of services for Internationalisation in favour of the whole community of the regional researchers;
4. Foster the technical and scientific dissemination and spread of the knowledge on Innovation.
SiS FVG - Activities

• Strengthening of integrated research infrastructures and development of joint research projects;

• Consolidation of partnerships and international cooperation initiatives for the benefit of the System;

• Strengthening of services for Internationalisation provided by the Welcome Office Friuli Venezia Giulia Office – welcoming, training and cultural exchange among scientists, researchers and students;

• Carrying out studies and monitoring patterns on flows of incoming and outgoing international researchers and students;

• Events, workshops and periodic dissemination of information for the general public and the scientific and business communities.
AREA SCIENCE PARK: A DRIVER OF PUBLIC/PRIVATE PARTNERSHIPS

RESOURCES TO CREATE KNOWLEDGE  KNOWLEDGE TO DRIVE DEVELOPMENT

PUBLIC LEVER  AREA SCIENCE PARK  PRIVATE LEVER

PULL  GO TO MARKET MODEL  PUSH

PUSH  PULL
EVOLUTION STRATEGY: 4 LINES OF ACTIVITY

- Campus
- Business Creation
- Innovation
- High Technology
Since 1978 the leading Italian science and technology park. Public Research Body, under the control of MIUR.

Hosts 87 High-Tech R&D Centers, helping them to grow. 79 private companies, 8 public research bodies.

> 9 m€/year from competitive projects.

3 campuses for R&D activities.

122 direct staff
2,600 employed in the 3 campuses.
BUSINESS CREATION

CREATION AND DEVELOPMENT OF HIGH TECH START-UPS THANKS TO THE CERTIFIED INCUBATOR INNOVATION FACTORY

1600 project ideas evaluated

47 start-ups supported

16 startups created:

AMPED Srl
MODEFINANCE Srl
G&LIFE Spa
SBS Srl
BILIMETRIX Srl
SERVERNET Srl
GENIUSCHOICE Srl
BY Srl
FOREVER IDENTITY Inc.
THE JONATHAN PROJECT Srl
UELCOM Srl
INNERTOURS Srl
SOLETHEN Srl
WAWAY Srl
CERVELLOTIK Srl
CLICCA ENERGIA Srl

Consolidated methodology tried and tested in the field (grant for equity)

4,5 M€ from Venture capital providers (Invitalia Ventures SGR, Unicredit, Intesa San Paolo etc.) and industrial Partner
Open Innovation System FVG: on behalf of the regional government coordinates the regions science parks to supply innovation services to industry and researchers.

Exports formats nationally (Basilicata, Calabria) and internationally (Balkans).

Euro projects: 3 Horizon 2020 financed, 4 InterReg programs in evaluation stage.

Advanced Training for multiple target groups (youth, innovators, businesses, research organizations etc.): 5000 training hours/year.

Coordinates the activities of 47 Research Centers // manages services for incoming and outgoing international mobility of researchers.
HIGH TECHNOLOGY

VALORIZATION OF PUBLIC TECHNOLOGY RESEARCH FACILITIES FOR INDUSTRIAL R&D

Majority Shareholder of **Elettra Sincrotrone**, international center specialized in the generation of high quality light sources – synchrotron and free electron laser – for applications in material science, biotechnology etc.

400 employees, **32 beam lines**

5,000 hours light/year, >1000 users from 50+ countries

Manages **OPEN LAB**: large scale research infrastructure for industry integrated with the laboratories of the Basovizza Campus

Serves manufacturing industry to develop new products and process with **advanced technologies and innovative materials**
Scientific and academic centres of the Friuli Venezia Giulia region

University of Trieste - University of Udine - SISSA
Music Conservatory “G. Tartini” - Music Conservatory “J. Tomadini”
Science and Technology Parks (STPs) research infrastructures: nodes for international scientific cooperation

Elettra 2.4 GeV 3rd generation Synchrotron Radiation Facility

FERMI 1.5 GeV seeded Free Electron Laser Facility
The International community in Friuli Venezia Giulia region

In 2015, 14.073 international students, research collaborators, researchers and teaching staff (employed, enrolled or in incoming mobility, including for short periods of time) chose one of the scientific institutions in Friuli Venezia Giulia region.

In particular:

3.189 students
10.884 research collaborators, researchers and teaching staff

Source: "Mobility of Knowledge 2016 - Survey"
Implementation of European Priorities at regional level

Intersectoral (public-private)

Enhancement of Research and of the scientific potential in the region of Friuli Venezia Giulia for industrial and social purposes

Internationalisation of human capital

Strengthening the role of international research centres of the Friuli Venezia Giulia region

Science and Society (communicating Science)

Scientific dissemination
Enhancing talented human capital

Training paths on EU funding, international mobility opportunities and career development, job recruiting events

Helpdesk on EU funding and opportunities

International mobility programmes

One-stop-shop for tailored advice on relocation
Welcome Office Friuli Venezia Giulia

www.welcomeoffice.fvg.it

Information and tailored assistance to international students and researchers before and during their stay in Friuli Venezia Giulia

The new website is online since December 2016
Incoming services: before and upon arrival in Friuli Venezia Giulia region

International and incoming students and researchers
To get updated information before leaving and support upon arrival

Local Authorities
To strengthen the collaboration among them and the regional Scientific System

Universities and Research Centres
To improve their incoming services and optimise time and resources
Integrated customised pre-arrival information and on-site assistance to students and researchers

**Updated information on:**
- Entry and residence procedures
- Health insurance
- National taxation and social security system
- Living and social life
- Funding opportunities, events, workshops

**Tailored assistance on:**
- Accommodation
- Entry and Residence procedures
- Health insurance
- Daily life aspects
- Family reunion
- Administrative formalities
TALENTS FVG Strategy

An internationalisation strategy to attract foreign researchers and students on the regional territory

Aims:
- strengthen the qualified human resources potential;
- foster job creation and employability of graduates and PhD;
- support the development of long-term cooperation between regional enterprises and scientific institutions with foreign research centres.

Activities:
- implementation of international mobility projects;
- management of integrated incoming services (EURAXESS Esc and Welcome Office Friuli Venezia Giulia);
- Involvement of the regional scientific system in worldwide networking programmes and initiatives (e.g., EURAXESS network and "Science Without Borders" mobility programme).

Current programme: TALENTS³ Project
TALENTS FVG Strategy: some figures

- 4 international mobility programmes realised

- Financial support: AREA Science Park, European Commission (COFUND), Friuli Venezia Giulia Autonomous Region, ESF - European Social Fund

- Incoming and outgoing mobility scheme

- 37 fellowships
  (22 incoming e 15 outgoing)

- 21 male researchers vs 16 female researchers

- Increasing Non-EU incoming researchers
  (from Africa, North America, Australia, India and China)
Thankyou for
the attention!

SiS FVG contacts
E-mail: sisfvg@areasciencepark.it
Phone: 040 375 5263 - 5309
THANK YOU!

Padriciano, 99
34149 Trieste - Italy
Tel. +39 040 3755111

www.areasciencepark.it

www.facebook.com/areasciencepark
twitter.com/AREASciencePark
www.linkedin.com/company/area-science-park