

## PERSONAL INFORMATION

### Giacomo Martirano



 Viale della Concordia 79, 87040, Mendicino (CS), Italy

 (+39) 349 4433577

 [g.martirano@epsilon-italia.it](mailto:g.martirano@epsilon-italia.it)

Sex Male | Date of birth 12/10/1964 | Nationality Italian

## WORK EXPERIENCE SUMMARY

M.Sc. in Electronic Engineer, 20 years of experience in Geomatics sector.

Since 1997 cofounder and CTO of Epsilon Italia, an independent SME active in the Geomatics sector.

Responsible for many international geomatics-related projects funded by European Institutions (European Commission, European Environmental Agency), as well as for many projects implementing SDIs at national, regional and local level funded by Public Authorities.

Actively involved in INSPIRE implementation, ranging from data harmonization to network service deployment, validation and testing, data model extensions, as well as in INSPIRE training actions, organisational consultancy and other capacity building activities.

Since 2012 vice-chair of GEN/TC 287 and since 2014 co-chair of OGC CITE SC (OGC Compliance and Interoperability Testing and Evaluation Program Subcommittee).

Since 2015 part-time intramuros external consultant at DG JRC (Directorate General Joint Research Centre) of the European Commission, where he is coordinating the Energy Pilot, funded under the ELISE (European Location Interoperability Solutions for e-Government) Action of ISA<sup>2</sup> Programme (Interoperability solutions for public administrations, businesses and citizens).

## WORK EXPERIENCE DETAILED

January 2015 - ongoing

### 1. External Senior Consultant

DG – JRC (Directorate General Joint Research Centre), European Commission  
Ispra (Italy)

Member of the team assigned to the former EULF (European Union Location Framework) Action of the ISA (Interoperable Solution for Public Administrations) Programme and the current ELISE (European Location Interoperability Solutions for e-Government) Action of ISA<sup>2</sup> Programme (Interoperability solutions for public administrations, businesses and citizens), funded by DG DIGIT, Directorate-General for Informatics of the European Commission. Within EULF/ELISE, among other duties, he is coordinator of the pilot project “Energy and Location”, focusing on the use of INSPIRE to support the implementation of EU policies related to Energy Performance of Buildings and Energy Efficiency. In particular, he is actively involved in processes dealing with discovery, extraction, processing, harmonisation and validation of datasets related to energy in buildings.

Effective number of months worked on the project: 22

December 2013 – March 2014

### 2. External Senior Consultant

DG – JRC (Directorate General Joint Research Centre), European Commission  
Ispra (Italy)

Member of the team of 7 experts, coordinated by KU Leuven (BE), responsible for a qualitative and quantitative assessment of the level of implementation of the INSPIRE Directive in the EU Member States.

Effective number of months worked on the project: 2

1997 – on going **CTO, INSPIRE and SDI senior expert**

Epsilon Italia, Italy ([www.epsilon-italia.it](http://www.epsilon-italia.it))

Geomatics, Research and Development for Environment

Most relevant projects and customers:

### 3. European Environment Agency (EEA)

Specific contract related to operating, maintaining, and developing the Copernicus Operational Data Access platform, CORDA. under the Framework Contract No EEA/IDM/RO/17/007

Dates:	June 2018 – on going
	Effective number of months worked on the project: 0,1
Business domain:	Environment, Geomatics
Roles and responsibilities:	Supervisor of the activities performed by Epsilon Italia in the frame of the Specific Contract, related to INSPIRE data discovery, processing and harmonization.
Technologies:	INSPIRE Geoportal, INSPIRE Thematic Viewer, Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork, PostGIS, SQL
Methodologies / standards:	INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

### 4. GISIG -- GEOGRAPHICAL INFORMATION SYSTEMS INTERNATIONAL GROUP

GEOiren

Dates:	July 2017 – on-going
	Effective number of months worked on the project: 1,5
Business domain:	Environment, Geomatics
Roles and responsibilities:	Supervisor of the consultancy and technical assistance activities provided by Epsilon Italia to the IREN group (one of the main Multi-utilities Italian companies) for the editing of technical documentation and specifications of new target data models and the related harmonisation of the source data concerning the utility networks (Water, Sewer, Electricity, Gas, Thermal) and the transport network..
Technologies:	Enterprise Architect, HALE studio, PostGIS, SQL, QGIS, groovy script
Methodologies / standards:	Editing and optimization of the target data models, harmonisation of source databases according to the developed target data models.

### 5. MITA - Malta Information Technology Agency, Gattard House, National Road, Blata I-Bajda HMR 9010 Malta

T017/17 "EC INSPIRE DIRECTIVE DATA CONFORMANCE AND DATA HARMONISATION SERVICES

Dates:	September 2017 – on going
	Effective number of months worked on the project: 2
Business domain:	Environment, Geomatics
Roles and responsibilities:	Technical responsible for the 4-years Framework Contract which provides technical assistance to the Maltese Government for the implementation of the INSPIRE Directive: provision of INSPIRE conformant GI data through INSPIRE web services and validation of INSPIRE data and services.
Technologies:	Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork, PostGIS, SQL
Methodologies / standards:	INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

### 6. European Environment Agency (EEA)

'INSPIRE data harmonisation and related services' specific contract implementing the Framework Service Contract No EEA/IDM/15/014-lot2

Dates: April 2016 – on going  
Effective number of months worked on the project: 4,5

Business domain: Environment, Geomatics

Roles and responsibilities: Supervisor of the activities performed by Epsilon Italia in the frame of the Specific Contract, related to INSPIRE data transformation, validation and publication.

Technologies: Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork, PostGIS, SQL

Methodologies / standards: INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

#### 7. ERA – Environment and Resource Authority of Malta, Hexagon House, Spencer Hill, Marsa MRS 14441, Malta

Dates: April 2016  
Effective number of months worked on the project: 0,5

Business domain: Environment, Geomatics

Roles and responsibilities: Technical responsible for the contract “Provision of INSPIRE compliant data conversion services for the LIFE+MIGRATE project (LIFE11/NAT/MT/1070)”

Technologies: Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork

Methodologies / standards: INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

#### 8. MITA - Malta Information Technology Agency, Gattard House, National Road, Blata I-Bajda HMR 9010 Malta

Dates: April 2016 – December 2016  
Effective number of months worked on the project: 2

Business domain: Environment, Geomatics

Roles and responsibilities: Technical responsible for the contract “EC INSPIRE Directive Consultancy Service”, aimed at assessing the State of Play of the INSPIRE implementation in Malta.  
Technical responsible for the INSPIRE harmonization and validation of 24 datasets belonging to INSPIRE Annex I, II and III.

Technologies: Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork, PostGIS, SQL.

Methodologies / standards: INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

#### 9. Italian Ministry of Infrastructures and Transports, Rome (Italy)

The Geographic Information System of the dams and associated flood risk of the Adige and Tevere river basins.

Dates: March 2015 – December 2015  
Effective number of months worked on the project:: 1

Business domain: Environment, Geomatics

Roles and responsibilities: Project manager and technical responsible for the design and development of the Geographic Information System of the dams and associated flood risk of the Adige and Tevere river basins.

Technologies: QGIS, python

Methodologies / standards: Data modelling, digitization and georeferencing of paper maps, customization of QGIS forms for the editing of the attributes of the geometries

#### 10. MACPOFIN

“MACPOFIN - Materiali compositi di polimeri e fibre naturali”, co-funded by the Calabria Regional Government in the frame of the Structural Funds of the European Union, Regional Operative Programme – Measure related to the Scientific Research, Technological Innovation and Information Society.

Dates: September 2014 – December 2015  
 Effective number of months worked on the project:: 1

Business domain: Environment, Geomatics

Roles and responsibilities: Project manager and leader of WP2 “Development of remote sensing techniques for the detection of raw material for the production of natural fibers”

Technologies: Erdas, QGIS

Methodologies / standards: Classification of multispectral satellite images, confusion matrix.

#### 11. “GeoSmartCity - Open geo-data for innovative services and user applications towards Smart Cities” ([www.geosmartcity.eu](http://www.geosmartcity.eu))

European project, co-funded by DG CONNECT of the EC within the ICT-PSP (Policy Support Programme).

The project contributes to the Smart City implementation focusing on two different scenarios: Green-Energy scenario (aiming to support the implementation of energy efficiency policies lifecycle, with focus on energy performance of buildings) and Underground scenario (aiming to support integrated management of underground utility infrastructures). INSPIRE Directive is taken into consideration for the design of common (trans-national) data models. The GSC cross-platform open hub publishes geographic information and provides specialized services based on open standards.

Dates: March 2014 – February 2017  
 Effective number of months worked on the project: 5

Business domain: Environment, Geomatics

Roles and responsibilities:
 

- Leader of Task 2.2 “Data inventory”, consisting of a structured inventory of the GI data being used in the different pilots, focusing on the different data sources, the existing level of interoperability of data and services, and the eventual restrictions existing on data use.
- Leader of Work Package 3 “Data infrastructure and management functions”, consisting of INSPIRE data model extensions, data transformation and data validation.
- Leader of Task 6.2 “Validation and test”, consisting in the validation and test of the end-users applications developed by 11 pilots.

Technologies: Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork, PostGIS, SQL

Methodologies / standards: INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

#### 12. “LIFE+IMAGINE - Integrated coastal area Management Application implementing GMES, INSPIRE and SEIS data policies” ([www.life-imagine.eu](http://www.life-imagine.eu))

European project co-funded by the LIFE+ Programme Environmental Policy and Governance in the framework of the objective “strategic approaches”. The project deals with the integrated management of coastal zone and the implementation of the related environmental policies, aiming to support planning and decision-making and focusing on Landslides and Soil consumption in coastal zones and integrating specifications of INSPIRE Directive.

Dates: July 2013 – December 2016  
 Effective number of months worked on the project: 5,2

Business domain: Environment, Geomatics

Roles and responsibilities:	Responsible for the actions related to INSPIRE data transformation and validation, support to partners for metadata editing and validation, elaboration of a methodology to identify and populate environmental impact indicators.
Technologies:	Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork
Methodologies / standards:	INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

### 13. “eENVplus – eEnvironmental services for advanced application within INSPIRE” ([www.eenvplus.eu](http://www.eenvplus.eu))

European co-funded ICT-PSP (Policy Support Programme) project, supporting the implementation of INSPIRE and SEIS at European and national levels through deployment and integration of eEnvironmental services and application.

Dates:	January 2013 – December 2015 Effective number of months worked on the project: 5,3
Business domain:	Environment Geomatics
Roles and responsibilities:	<ul style="list-style-type: none"> <li>• Leader of Task 2.2 “Data/Metadata modelling requirements and legal constraints”.</li> <li>• Leader of Task 2.6 “Standards/regulation implementation gaps”, consisting in the identification of the existing misalignments between some GI standards/regulations implementation, to be properly tackled during the project.</li> <li>• Leader of Work Package 3 “Data and metadata harmonization and validation”, providing support to 20 data providers for INSPIRE data and metadata transformation and validation.</li> <li>• Responsible for the activities related to the design and development of the Validation Service, a webservice for INSPIRE data validation.</li> </ul>
Technologies:	Enterprise Architect, Oxygen, HALE studio, deegree, GeoServer, eENVplus Validation Service, GeoNetwork, PostGIS, SQL
Methodologies / standards:	INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards

### 14. “LINKVIT - Leveraging INspire Knowledge into Vocational Innovative Training” ([www.linkvit.eu](http://www.linkvit.eu))

European project co-funded under the LLP (Life Learning Programme) Leonardo da Vinci of the European Commission. The project addresses the vocational training aiming to support the practical implementation of the INSPIRE Directive.

Dates:	October 2013 – October 2015 Effective number of months worked on the project: 2
Business domain:	Vocational training
Roles and responsibilities:	Responsible for the production of vocational INSPIRE training modules related to procedures and examples of INSPIRE data and metadata harmonization and validation

### 15. Medina SDI

Design and development of the SDI of the Holy City of Medina, Saudi Arabia. Client: MDA (Medina Development Agency)

Dates:	October 2013 – October 2015 Effective number of months worked on the project: 2
Business domain:	Geomatics

Roles and responsibilities:	Responsible for the Users' requirements definition, interviewing representatives of 20 governmental agencies and departments based in Medina, and for the data gap analysis, analysing geospatial data provided by the interviewed organizations, identifying gaps with respect to reference standards and suggesting solutions to be adopted in order to fill-in the gaps.
Methodologies / standards:	Preparation of templates to collect Use Case description. Deep analysis of different data policies. ISO 191xx standards, OGC standards.

#### 16. **SG-Space Standards Familiarisation: ISO 19100s Training**

Intensive training and consulting project delivered by GSAREH (GeoSpatial Applied Research Expert House) to SLA (Singapore Land Authority), related to the application of the ISO 19100s Geographic Standards to the Singapore context

Dates:	May 2013 – July 2014 Effective number of months worked on the project: 1,9
Business domain:	Geomatics
Roles and responsibilities:	Main instructor of an 80 hours training course delivered to 40 representatives of different Singapore Governmental Agencies. Responsible for post-course remote technical assistance.
Methodologies / standards:	Design of training material related to ISO standards for Geographic Information.

#### 17. **“SmeSpire - A European Community of SMEs built on Environmental Digital Content and Languages” ([www.smespire.eu](http://www.smespire.eu))**

SmeSpire was an FP7 Support Action funded by DG CONNECT of the European Commission, aiming to turn the challenges of the INSPIRE implementation into business opportunities for the Geo-ICT European SMEs, led by Epsilon Italia with a consortium of 15 partners coming from 12 EU Member States

Dates:	May 2012 – April 2014 Effective number of months worked on the project: 2,9
Business domain:	Environment, Geomatics
Roles and responsibilities:	<ul style="list-style-type: none"> <li>• Project Coordinator</li> <li>• Leader of Work Package 2, related to the creation of training material for INSPIRE implementation</li> <li>• Leader of Work Package 4, related to dissemination and exploitation, including the creation of a network of 700 members active in the GeolCT sector.</li> </ul>

#### 18. **“ArcFUEL - Mediterranean Fuel Maps Geodatabase for Wildland & Forest Fire Safety” ([www.arcfuel.eu](http://www.arcfuel.eu))**

European project, co-funded by the LIFE+ 2010 Programme with the aim of producing updated fuel cover maps based on satellite data and field validation to fulfil the needs of local, regional or national users in forest fire management operations..

Dates:	October 2011 – December 2013 Effective number of months worked on the project: 4,4
Business domain:	Environment, Geomatics
Roles and responsibilities:	Responsible for the geodatabase design in conformity with the INSPIRE relevant data specifications and for the development and test of the remote sensing applications in Italy.
Technologies:	Enterprise Architect, Oxygen XML Editor, HALE studio
Methodologies / standards:	INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards. Field validation.

#### 19. **“SEIS MALTA”**

Implementation of the Maltese component of the SEIS (Shared Environmental Information System) for the themes Air, Water, Soil, Noise, Radiation

Dates:	July 2011 – April 2013 Effective number of months worked on the project: 4
Business domain:	Environment, Geomatics
Roles and responsibilities:	Responsible for the design of a SQL Server geodatabase enabling the datasets compliance against the relevant INSPIRE Data Specifications.
Technologies:	Enterprise Architect, HALE studio, ESRI and SQL Server Geodatabase.
Methodologies / standards	Datasets and metadata modelling, transformation and validation. Deep analysis of INSPIRE data specifications. ESRI and SQL Server Geodatabase design and administration tools.

## 20. “MED\_ISOLAE-3D – Mediterranean Islands 3D Aerial Navigation”

EU project co-funded by DG Information Society and Media of European Commission in the frame of the econtentplus Programme and co-ordinated by Epsilon International SA.

Dates:	December 2007 – November 2009 Effective number of months worked on the project: 15
Business domain:	Environment, Geomatics
Roles and responsibilities:	Responsible for the design and development of a SDI (Spatial Data Infrastructure) for the Mediterranean Islands, according to the INSPIRE, OGC and ISO-TC211 standards. Particular focus was on the harmonization of the different spatial datasets, on the development of the geodatabase, of the metadata catalogue and of the networking services.
Technologies:	Enterprise Architect, ESRI Geodatabase, GeoNetwork, Mapserver.
Methodologies / standards	Datasets and metadata modelling. INSPIRE data specifications, OGC and ISO-TC211 standards. ESRI Geodatabase design and administration tools.

## 21. 3D Aerodromes - 3-Dimensional Airport & Vicinity Geodatabase

3D-Aerodromes - 3-Dimensional Airport & Vicinity Geodatabase: A Product for the General Aviation Industry” was a project funded by the European Commission Eurostars Programme and the R&D funds contributed by the three Member States of Germany, Greece and Italy. 3D-Aerodromes delivered: (i) the software technology to produce three dimensional Aerodrome Navigational Databases for the General Aviation; a technology for the integration of satellite imagery and other remote sensing data, terrain and obstacle data, navigation data and CAD data of airports; and (ii) for 50 European airports template databases were created as the basis for a standardization of 3D airport and airport environment data ([www.3d-aerodromes.eu](http://www.3d-aerodromes.eu)).

Dates:	November 2010 – March 2013 Effective number of months worked on the project: 5,8
Business domain:	Environment, Geomatics
Roles and responsibilities:	Responsible for the standardization and integration of the geodatabases.
Technologies:	ESRI Geodatabase.
Methodologies / standards	Standardization and integration of geodatabases. ESRI Geodatabase design and administration tools.

## 22. Smart-Islands - 3D Smart Webservices for Mediterranean Islands

Smart-Islands - 3D Smart Webservices for Mediterranean Islands”, cofunded by DG Information Society and Media of the European Commission within the ICT-PSP (Policy Support Programme), coordinated by Epsilon International SA (GR) ([www.smart-islands.eu](http://www.smart-islands.eu)).

Dates:	August 2011 – January 2014 Effective number of months worked on the project: 8,8
Business domain:	Environment, Geomatics



Roles and responsibilities:	Responsible for the geodatabase design and for the development and test of the applications in Italy.
Technologies:	ESRI Geodatabase, Enterprise Architect.
Methodologies / standards	Datasets and metadata modelling. INSPIRE data specifications, OGC and ISO-TC211 standards. ESRI Geodatabase design and administration tools.

### 23. Other projects and clients

Dates:	1997 – 2013 Effective number of months worked on the project: 124,9
Business domain:	Environment, Geomatics
Roles and responsibilities:	Project manager on behalf of Epsilon Italia
	<ul style="list-style-type: none"> <li>• “SIPITEC2”, the design and development of the GIS and WEBGIS of the Territorial Coordination Plan of the Province of Cosenza, design and implementation of the Geoportal of the Planning Department of the Province of Cosenza (<a href="http://sipitec.provincia.cosenza.it">http://sipitec.provincia.cosenza.it</a>).</li> <li>• Enhancement of the Geoportal of the Planning Department of the Province of Cosenza, consisting in the creation of a data model for the PSC/PSA (Structural and Associated Municipality Plans) in conformity to the Regional Urban Law and related Guidelines and in the development of a procedure for the on-line editing of the PSC/PSA based on the use of the OGC WFS-T protocol.</li> <li>• “Galileo”, a technology transfer project in which he designed and developed a webgis platform for vessels near-real time position tracking and marine touristic geospatial information, based on the use of mashup technologies between ESRI ArcGIS Server and Google Maps API.</li> <li>• Many projects for the design and implementation of GIS to the Local Authorities.</li> <li>• “MIRASAT – A Methodology for the assessment of Indicators of Environmental Risks by means of Satellite Remote Sensing Techniques” – funded by the Scientific Research Department of the Calabria Region.</li> <li>• “ISPARIDE – Identification and Assessment of Parameters to evaluate the Desertification Risk”, a research project co-ordinated by the Italian National Research Council – Institute for the Hydrogeological Protection and funded by the Italian Ministry of Research and University.</li> <li>• “Development of a methodology for the detection of contaminated sites by means of satellite remotely sensed data and Artificial neural networks”, a Research project carried out in co-operation with the Department of Soil Protection of University of Calabria, funded by ASI (Italian Space Agency) in the frame of the Fundamental Research Programme 2000 and 1999.</li> <li>• “EOPOLE – Earth Observation Data Policy and Europe”, a Concerted Action funded by DG Research of the European Commission in the frame of the FP4, Programme CEO (Centre for Earth Observation), co-ordinated by UCL – University College London.</li> <li>• "Soil moisture assessment from microwave satellite remote sensing", carried out in the frame of the agreement signed with the Engineering Faculty of University of Calabria and finalised to host training stages for degree and PhD thesis.</li> <li>• Evapotranspiration assessment from optical satellite remote sensing, in the frame of the collaboration agreement with CAMILAB (Automatic Cartography and Hydrogeological Modelling Laboratory) of the Department of Soil Conservation of the University of Calabria (IT), addressed to R&amp;D activities related to remote sensing applied to hydrology.</li> <li>• "Spatial-temporal evolution of the vegetation cover by means of satellite remote sensing techniques", carried out in the frame of the agreement signed with the Engineering Faculty of University of Calabria and finalised to host training stages for degree and PhD thesis.</li> <li>• "Remote Sensing Thematic Laboratory for marine applications", funded by Calpark (Scientific and Technological Park of Calabria) and MIUR (Italian Ministry of University and Research).</li> <li>• “EPSILON – Environmental Policy via Sustainability Indicators on a European wide NUTS III level”, a Shared Cost Action funded in the frame of the IST Programme of FP5 of EC co-ordinated by Epsilon International SA.</li> <li>• Technical Assistance to the Province of Cosenza (IT) for the Strategic Environmental Assessment of the PTCP (Territorial Provincial Coordination Plan).</li> </ul>



2007 – 2011

## 24. External Senior Consultant

Provincia di Cosenza, Cosenza (Italy) (Local Authority)

- Responsible for the design and realisation of the Geographic Information System, the Environmental Strategic Assessment and the Incidence Assessment of the Fauna and-Hunting Plan of the Province of Cosenza.
- Responsible for a pilot study for the realisation of the Land Use Technical Chart of the Province of Cosenza based on SPOT satellite data processing. Responsible of the elaboration of the technical specifications for the procurement of the Land Use Technical Chart of the Province of Cosenza based on aerial images photo-interpretation.
- Responsible for the design and realisation of a SDI (Spatial Data Infrastructure) for Mediterranean pilot islands, using open-source software solutions (UMN Mapserver + pmapper). This activity has been carried out in the frame of the INTERREG III-B ARCHIMED “MED-ISOLAE” project.

Effective number of months worked on the project: 11

1991 – 1997

## Electrical Designer

Alenia Aerospazio spa, Rome (Italy) (now Thales Alenia Space)

Aerospace

Most relevant customers:

### **ASI (Italian Space Agency), ESA (European Space Agency), NASA (National Aeronautics and Space Administration)**

Business domain: Aerospace - Design and realisation of Satellite Telecommunication Systems

- Roles and responsibilities:
- Electrical design responsible of the overall Integration and Test campaign performed on the flight and protoflight models of the High Gain Antenna and Low Gain Antenna 1 of the deep space Cassini mission (program sponsored by NASA, ESA, ASI). The work has been done c/o facilities of Alenia Spazio in Rome and L'Aquila, Aerospaziale in Cannes (F), Jet Propulsion Laboratory (JPL) in Pasadena (CA - USA).
  - Electrical Design responsible of all the radiofrequency chains embarked on the multibeam multifrequency High Gain Antenna of the deep-space mission to Saturn Cassini.
  - Electrical Design responsible of the Cassini Low Gain Antenna 1.
  - Electrical Design responsible of the Artemis Ka band Beacon Antenna (ESA mission).

Technologies: Passive microwave components design tools.

## EDUCATION AND TRAINING

October 1983 – March 1991

### Master's degree in Electronic Engineering

University Training

Politecnico di Milano, Italy.

- Electronic Engineering – Telecommunications
- Subject of the thesis: Feasibility study and preliminary design of a Frequency Selective Surface employed as sub-reflector foreseen on board of the Italsat F2 satellite. For this work he obtained in 1991 a scholarship of the SIP (Italian society for the telephony) for innovative studies in the frame of advanced telecommunications.

June 2011 **GML fundamentals, GML Hand On** Professional Training

Snowflake Software Ltd, Southampton (United Kingdom)

UML Data Models, GML Application Schema creation and mapping, Schema Validation, WFS deployment, use of data modelling software such as Enterprise Architect, Shapechange, GO Publisher.

2006 **Certification “Intergraph Certified Developer for GeoMedia Desktop solutions” for the realisation and development of Geographic Information Systems (certification n° 1328)** Professional Training

Intergraph Corporation (USA)

Design and realisation of GIS

1999 **Intensive training course on the use of ERDAS software for the processing of satellite remotely sensed data.** Professional Training

ESYS Ltd (UK) and Remote Sensing Unit of University College of London UCL (UK)

Applications of Remote Sensing Technologies for the Environment

1998 **Qualification of "Expert ISO-9000 Quality Auditor" (Card FITA-CONFINDUSTRIA N. 464)** Professional Training

FITA (Italian Federation of Industries and Professional Services of the Tertiary Advanced Sector) (IT)

Design, Implementation and Audit of ISO 9000 Quality Systems

## PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user / Common European Framework of Reference for Languages

**Communication skills** Thanks to the role of Project Manager and Team Leader played in several international projects I acquired good communication skills and ability to work with other people.

I am able to interrelate with people of different culture and religion; in this respect I collaborated with the foundation “Europa, Mezzogiorno, Mediterraneo”, with focus on the Mediterranean countries of the eastern and southern side.

I am able to speak to the public since I am trainer and I presented several publications and work summaries both to expert and non-expert people.

**Organisational / managerial skills**

I am able to coordinate and administrate people, projects and budgets and to adapt to different work scenarios, aiming to enhance the skills of collaborators and the resources of organizations I work for.

**ADDITIONAL INFORMATION**

---

## Publications

### Books and Reviews:

- G. Martirano, F. Pignatelli, "INSPIRE Harmonisation of existing Energy Performance Certificate datasets", JRC Technical Report, 2016, Publications Office of the European Union, ISBN 978-92-79-64461-0 (pdf), [http://publications.jrc.ec.europa.eu/repository/handle/JRC\\_104587](http://publications.jrc.ec.europa.eu/repository/handle/JRC_104587)
- G. Martirano, R. Boguslawski, MT. Borzacchiello, F. Pignatelli, P. Zangheri, D. Paci, I. Maschio, P. Bertoldi "Buildings related datasets accessible through the INSPIRE geoportal", JRC Technical Report, 2016, Publications Office of the European Union, ISBN 978-92-79-59869-2 (pdf), [http://publications.jrc.ec.europa.eu/repository/handle/JRC\\_102276](http://publications.jrc.ec.europa.eu/repository/handle/JRC_102276)
- J. Bloem, R. Boguslawski, MT. Borzacchiello, P. Cipriano, A. Kona, G. Martirano, I. Maschio, F. Pignatelli, "Location data for buildings related energy efficiency policies", JRC Technical Report, 2015, Publications Office of the European Union, ISBN 978-92-79-50572-0 (pdf), <http://publications.jrc.ec.europa.eu/repository/handle/JRC96946>
- J. Bloem, R. Boguslawski, MT. Borzacchiello, P. Cipriano, A. Kona, G. Martirano, I. Maschio, F. Pignatelli, Spatial data for modelling building stock energy needs: Proceedings of the workshop: Ispra, 24-25-26 November 2015, JRC Technical Report, 2015, Publications Office of the European Union, ISBN 978-92-79-55083-6 (pdf), <http://publications.jrc.ec.europa.eu/repository/handle/JRC99902>
- Co-author of a chapter of the book "Future preparedness: thematic and spatial issues for the environment and sustainability", edited by Saviour Formosa – University of Malta and MEPA, Published in 2004 by University of Malta in conjunction with MEPA. ISBN 978-99957-834-6-4 (paperback) and 978-99957-834-7-1 (e-book).
- G. Martirano, M. Bonazountas, V. Gagliardi, "The Challenge of a Spatial Data Infrastructure for the Mediterranean Islands"; GeoSpatial Visual Analytics – Geographical Information Processing and Visual Analytics for Environmental Security, pagg. 377-386, edito da R. De Amicis, R. Stojanovic, G. Conti e pubblicato da Springer nel 2009; ISBN 978-90-481-2898-3; ISSN 1874-6519.
- M. Bonazountas, S. Kannelopoulos, J. Schaller, D. Kallidromitou, G. Martirano, "GIS & Visual Analytics on Grid Technology"; GeoSpatial Visual Analytics – Geographical Information Processing and Visual Analytics for Environmental Security, pagg. 287-298, edito da R. De Amicis, R. Stojanovic, G. Conti e pubblicato da Springer nel 2009; ISBN 978-90-481-2898-3; ISSN 1874-6519.
- co-author of the book "Identificazione e stima dei Parametri per la valutazione del rischio di desertificazione" a cura di Roberto Coscarelli, Consiglio Nazionale delle Ricerche, published by Nuova Bios in 2007.
- co-author of the book "Earth Observation Data Policy and Europe" edited by Ray Harris - University College London and published by Balkema in 2002.
- F. Alessandri, M. Chiodetti, A. Giugliarelli, D. Maiarelli, G. Martirano, D. Schmitt, L. Vanni, F. Vitulli, "The electric-field Integral-equation method for the analysis and design of a class of rectangular cavity filters loaded by dielectric and metallic cylindrical pucks" - Microwave Theory and Techniques, IEEE Transactions on Volume 52, Issue 8, Part 1, Aug. 2004 Page(s):1790 – 1797.
- F. Alessandri, M. Giordano, M. Guglielmi, G. Martirano, F. Vitulli, "A new multiple-tuned six-port Riblet-type directional coupler in rectangular waveguide"; Microwave Theory and Techniques, IEEE Transactions on Volume 51, Issue 5, May 2003 Page(s):1441 – 1448.

### Congresses and Conferences Proceedings:

- G. Martirano, F. Vinci, S. Morrone, "INSPIRE data usability beyond formal conformance", INSPIRE Conference 2016, Barcelona (E), 26-30 September 2016.
- S. Morrone, G. Martirano, F. Vinci, "INSPIRE data validation in action: the eENVplus Validation Service", INSPIRE Conference 2016, Barcelona (E), 26-30 September 2016.
- G. Martirano, MT. Borzacchiello, F. Pignatelli "Harmonisation of Energy Performance Certificates of buildings according to INSPIRE", INSPIRE Conference 2016, Barcelona (E), 26-30 September 2016.
- G. Martirano, "How INSPIRE can support the energy efficiency policies lifecycle: results of an analysis made on accessibility of buildings related datasets discoverable in the INSPIRE geoportal", INSPIRE Conference 2016, Barcelona (E), 26-30 September 2016.
- G. Martirano, "An On-line Executable Test Suite to Validate Annex I-II-III INSPIRE Datasets", INSPIRE & GWF Conference 2015, Lisbon (PT), 25-29 May 2015.
- G. Martirano, "The need for open and harmonized spatial data – Urban Energy workshop", INSPIRE & GWF Conference 2015, Lisbon (PT), 25-29 May 2015.

- G. Martirano, "The knowledge based economy", INSPIRE Conference 2014, Aalborg (DK), 16-20 June 2014.
- G. Martirano, "How to Assess the Degree of Conformity to the Requirements Specified by Commission Regulation (EU) No 1089/2010 Relevant to a Dataset Belonging to INSPIRE Annex I/III Data Themes", INSPIRE Conference 2014, Aalborg (DK), 16-20 June 2014.
- A. Astyakopoulos, G. Martirano, "INSPIRE Land Cover Data Specifications to Model Fire Access Time in Europe: the Experience of the eENVplus Project, INSPIRE Conference 2014, Aalborg (DK), 16-20 June 2014.
- G. Martirano, "SMEs as key players in geospatial-driven innovation", INSPIRE Conference 2013, Florence (IT), 23-27 June 2013.
- G. Martirano, F. Vinci, M. Bonazountas, A. Astyakopoulos, "INSPIRE Land Cover Data Specifications to model fuel maps in Europe: the experience of the ArcFUEL LIFE+ project", INSPIRE Conference 2013, Florence (IT), 23-27 June 2013.
- G. Martirano, F. Vinci, "Example of an Executable Test Suite to validate an INSPIRE WFS Download Service", INSPIRE Conference 2013, Florence (IT), 23-27 June 2013.
- G. Martirano, "Input from EU funded project relevant for INSPIRE & the SDOs", INSPIRE Conference 2013, Florence (IT), 23-27 June 2013.
- G. Vancauwenberghe, D. Vandenbroucke, P. Cipriano, G. Martirano, "Turning the challenges of INSPIRE implementation into business opportunities for European geo-ICT SMEs", INSPIRE Conference 2013, Florence (IT), 23-27 June 2013.
- G. Martirano, "SEIS & INSPIRE in action", Geospatial World Forum 2013 – Dialogue session Leveraging SMEs' strengths for INSPIRE, Rotterdam (NL), 16 May 2013.
- G. Martirano, M. Gaccione, V. Gagliardi, F. Vinci, "An open-source based SDI for local spatial planning compliant to policy requirements", INSPIRE Conference 2012, Istanbul (TR), 23 - 27 June 2012.
- G. Martirano, M. Bonazountas, S. Formosa, M. Nolle, E. Sciberras, F. Vinci, "Use of the INSPIRE EF Data Specifications to develop the SEIS-Malta Geodatabase for the Air Quality data management", INSPIRE Conference 2012, Istanbul (TR), 23 - 27 June 2012.
- M. Ford, G. Martirano, K. Schleidt, F. Vinci, "An INSPIRE validation briefcase for nature conservation and beyond", INSPIRE Conference 2011, Edinburgh (UK), 27 June – 1 July 2011.
- M. Burns, R. Rombouts, F. Vinci, G. Martirano, "Data Harmonisation And Publication For Nature Conservation", INSPIRE Conference, 2011 Edinburgh (UK), 27 June – 1 July 2011.
- G. Martirano, "The development of 3D Island models"; 3D Virtual islands workshop at the GI-Forum 2009; Salzburg (AT), 7-10 July 2009.
- G. Martirano, M. Bonazountas, J. Schaller, C. Mattos, "Medisolae-3D: Mediterranean Islands SDI & 3D Aerial web navigation"; GSDI 11 World Conference; Rotterdam (NL), 15-19 June 2009.
- M. Bonazountas, J. Schaller, G. Martirano, C. Mattos, L. Roumelliotis, D. Kallidromitou, "Medisolae-3D: Mediterranean Islands SDI & 3D Aerial web navigation"; Digital Landscape Conference; Valletta (MT), 21-23 May 2009.
- M. Maiolo, G. Martirano, P. Morrone, D. Pantusa, "Stato dell'arte sui modelli di sostenibilità nuovi orizzonti nella gestione delle risorse idriche" XXX Convegno di Idraulica e Costruzioni Idrauliche- IDRA 2006 – Roma settembre 2006
- G. Calcagno, F. Casacchia, G. Martirano, G. Mendicino, A. Senatore, P. Versace "Tecniche di telerilevamento satellitare per la stima spazio temporale di grandezze idrologiche" - XXVII Corso di Aggiornamento in "Tecniche per la difesa dall'inquinamento" – Guardia Piemontese (CS) 21-24 giugno 2006.
- G. Martirano, M. Maiolo, V. Gagliardi, P. Morrone, D. Pantusa "Un GIS per valutare la sostenibilità della gestione delle risorse idriche" – 9a Conferenza Utenti ESRI -Roma 5/6 Aprile 2006
- V. Gagliardi, G. Martirano, F. Guglielmelli, S. Falese "Il S.I.T. per la gestione delle reti idriche del Consorzio Intercomunale A.C.E.A. Calabria" – GeoEsplora Workshop 2005 – Roma 26.05.05M. Maiolo, G. Martirano, P. Morrone, D. Pantusa, "Assessment criteria for a sustainable management of water resources" – 10th International Conference on Urban Drainage, Copenhagen/Denmark, 21-26 August 2005.
- M. Maiolo, G. Martirano et al. "A Sustainability Synthetic Territorial Index (ISST) to assess the sustainable management of water resources", 3rd Dubrovnik Conference on Sustainable Development on Energy, Water and Environmental Systems, Dubrovnik (Croatia), 5-10 June 2005
- F. Alessandri, D. Maiarelli, G. Martirano, A. Toccaceli – "Rigorous modal analysis of dielectric loaded resonators and junctions in rectangular waveguide" - 2005 European Microwave Conference Volume 1, 4-6 Oct. 2005 Paris (F) Page(s):4 pp.
- R. Mizzoni, G. Martirano, G. Mascolo, S. Borchi "The Cassini antenna subsystem", Microwave and RF Conference 95, Wembley London (UK) 10-12 October 1995.

- F. Alessandri, G. Martirano et al. "A software tool for the design of dielectric loaded waveguide filters" - International Workshop on Microwave Filters, 13 - 15 September 2004, CNES, Toulouse (France).
- M. Maiolo, G. Martirano et al. "Criteri di valutazione della sostenibilità della gestione delle risorse idriche" – XXIX Convegno di Idraulica e Costruzioni Idrauliche – Trento 7-10 Settembre 2004.
- F. Alessandri, G. Martirano et al. "The Electric Field Integral Equation Method for the analysis of rectangular cavity filters loaded by dielectric and metallic pucks" - Piers (Progress in Electromagnetic Research Symposium) 2004, March 28-31, Pisa (Italy).
- Mahadevan, S. Ghosh, R. Mizzoni, G. Martirano "Precision analysis and design of a triple band feed for the High Gain Antenna of Cassini deep space Mission to Saturn", JINA (Journées Internationales sur les Antennes) '94, November 8-10, Nice (F).
- G. Martirano, R. Mizzoni, M. Lori, A. Spizzichino "The Ku band sub-system of the Cassini High Gain Antenna (HGA)", Piers (Progress in Electromagnetic Research Symposium) '94, July 11-15, Noordwijk (NL).

